EAGLE METAL

The truss designs referenced below have been prepared by me or under my direct supervision based on the truss design criteria and requirements ("design criteria") provided by **Valley Truss**.

These truss designs are intended for the fabrication of individual building components that will perform to the design criteria provided. Any variance from the design criteria will render the affected truss designs inapplicable.

Listed below are the truss designs included in this package and covered by this seal.

Job: **CBS0306SA-7-HIESCO COMPLETE** - 1218972
CG1, CG2, CG3, GE1, GE10, GE11, GE12, GE13, GE14, GE15, GE2, GE3, GE4, GE5, GE6, GE7, GE8, GR1, GR10, GR11, GR2, GR3, GR4, GR6, GR7, GR8, GR9, J1, J10, J11, J12, J13, J14, J2, J3, J4, J5, J6, J7, J8, J9, T1, T11, T12, T12A, T13, T14, T15, T16, T17, T18, T19, T2, T20, T21, T22, T23, T24, T25, T26, T27, T28, T29, T3, T30, T31, T32, T33, T34, T35, T36, T37, T38, T39, T4, T40, T41, T42, T43, T44, T45, T46, T47, T48, T49, T5, T50, T51, T52, T53, T54, T55, T56, T57, T58, T6, T7, T7A, T7G, T8, T9, T9A, V10, V11, V12, V13, V14, V15, V2, V3, V4, V5, V6, V7, V8, V9

Any location identification is for file reference only. No determination of the appropriateness of design criteria for any specific project has been made in preparing the truss designs.

Please refer to individual truss designs for specific design criteria.

09/12/2024

Arturo A. Hernandez (CO, PE-39632)
My license expiration date for the state of CO is 10/31/2025.

IMPORTANT NOTE: The responsibility of the engineer sealing this package, as a Truss Engineer, is solely for design of individual trusses as individual building components based upon design criteria provided by others and set forth in the referenced truss drawings. The truss design criteria for the components have not been verified as appropriate for any particular building, project or use. Adequacy and suitability of design criteria and requirements for the truss designs for any specific project are the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

EAGLE METAL

The truss designs referenced below have been prepared by me or under my direct supervision based on the truss design criteria and requirements ("design criteria") provided by **Valley Truss.**

These truss designs are intended for the fabrication of individual building components that will perform to the design criteria provided. Any variance from the design criteria will render the affected truss designs inapplicable.

Listed below are the truss designs included in this package and covered by this seal.

Job: **CBS0306SA-8-HIESCO COMPLETE** - 1219268
T12, T12A, T14, T19, T21, T22, T23, T24, T37, T4, T5, T57, T58

Any location identification is for file reference only. No determination of the appropriateness of design criteria for any specific project has been made in preparing the truss designs.

Please refer to individual truss designs for specific design criteria.

09/16/2024

These are the ones that were replaced.

Arturo A. Hernandez (CO, PE-39632)
My license expiration date for the state of CO is 10/31/2025.

IMPORTANT NOTE: The responsibility of the engineer sealing this package, as a Truss Engineer, is solely for design of individual trusses as individual building components based upon design criteria provided by others and set forth in the referenced truss drawings. The truss design criteria for the components have not been verified as appropriate for any particular building, project or use. Adequacy and suitability of design criteria and requirements for the truss designs for any specific project are the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

EAGLE METAL

⚠ **WARNING:** Failure to follow may result in property damage or personal injury.

DESIGN NOTES

1. The Truss Design Drawing(s) provided with these Design Notes have been prepared under and are subject to ANSI / TPI 1 published by the Truss Plate Institute, www.tpinst.org. Capitalized terms have the meanings provided in ANSI / TPI 1.
2. Copies of each Truss Design Drawing shall be furnished to the installation contractor, Building Designer, Owner and all persons fabricating, handling, installing, bracing, or erecting the trusses.

DESIGN LIMITATIONS

3. The Truss Design Drawing is based upon specifications provided by the Building Designer in accordance with ANS1 / TPI 1. Neither the Truss Designer, Eagle, nor an engineer who seals this design (if any) assumes any responsibility for the adequacy or accuracy of specifications provided by the Building Designer.
4. The Building Designer is solely responsible for the suitability based upon the Truss Design Drawing and shall be responsible for reviewing and verifying that the information shown is in general conformance with the design of the Building.
5. Each Truss Design Drawing is for the individual building component (a truss). A seal on the Truss Design Drawing indicates acceptance of professional engineering responsibility solely for the individual truss.
6. Each Truss Design Drawing assumes trusses will be suitably protected from the environment.

HANDLING, INSTALLING, & BRACING

7. Refer to Building Component Safety Information (BCSI) for handling, installing, restraining and bracing trusses. Copies can be obtained from the Structural Building Components Association, www.sbcindustry.com.
8. Bracing shown on each Truss Design Drawing is for lateral support of individual truss components only to reduce buckling lengths. All temporary and permanent bracing, including lateral load and diagonal or cross bracing, are the responsibility, respectively, of the erector and Building Designer.
9. Eagle is not responsible for improper truss fabrication, handling, erection or bracing.
10. Compression chords shall be laterally braced by the roof or floor sheathing, directly attached, or have purlins provided at spacing shown, unless noted otherwise.
11. Bottom chord required bracing shall be at 1Oft spacing or less, if no structural rated ceiling is installed, unless noted otherwise.
12. Strongbacking shall be installed on all parallel chord trusses, including flooring systems, to limit deflection and reduce vibration. Refer to BCSI-B7.
13. Never exceed the design loading shown. Never stack building or other materials on inadequately braced truss; refer to BCSI.
14. Concentration of construction loads greater than the design loads shall not be applied to the trusses at any time; refer to BCSI.
15. Trusses shall be handled with care prior to erection to avoid damage. Refer to BCSI for recommended truss handling and erection.

MATERIALS & FABRICATION

16. Lumber moisture content shall be 19% or less at the time of fabrication unless noted otherwise.
17. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
18. Unless expressly noted, the truss designs are not applicable for use with fire retardant or preservative treated lumber.
19. Plates shall be applied on both faces of truss at each joint and embedded fully. Knots and wane at joint locations shall be regulated in accordance with ANSI / TPI 1.
20. For a specified plate gauge and grade, the specified size is a minimum.
21. Connections not shown are the responsibility of others.
22. Adequate support shall be provided to resist gravity, lateral and uplift loads.
23. For 4X2 truss orientation, locate plates 0 - 1/16" from outside the edge of the truss.
24. Fabrication of truss shall be in accordance with ANSI / TPI 1.

OTHER NOTES

25. Camber is a non-structural consideration and is the responsibility of truss fabricator.
26. Do not cut or alter any truss member or plate without prior approval from a professional engineer.
27. Lumber design values are in accordance with ANSI / TPI 1; lumber design values are by others.
28. Install specified hangers per manufacturer recommendations.

SYMBOLS

PLATE SIZE

3X4 - The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

-, /, I, Indicates required direction of slots; Reference "Joint Details" for more information.

20 Ga Gr40 connectors required
3X10-20HS - 20 Ga Gr60 connectors required
8X10-18HS - 18 Ga Gr60 connectors required

LATERAL BRACING

When this symbol shown, continuous lateral bracing is required on the member of the truss.

BEARING

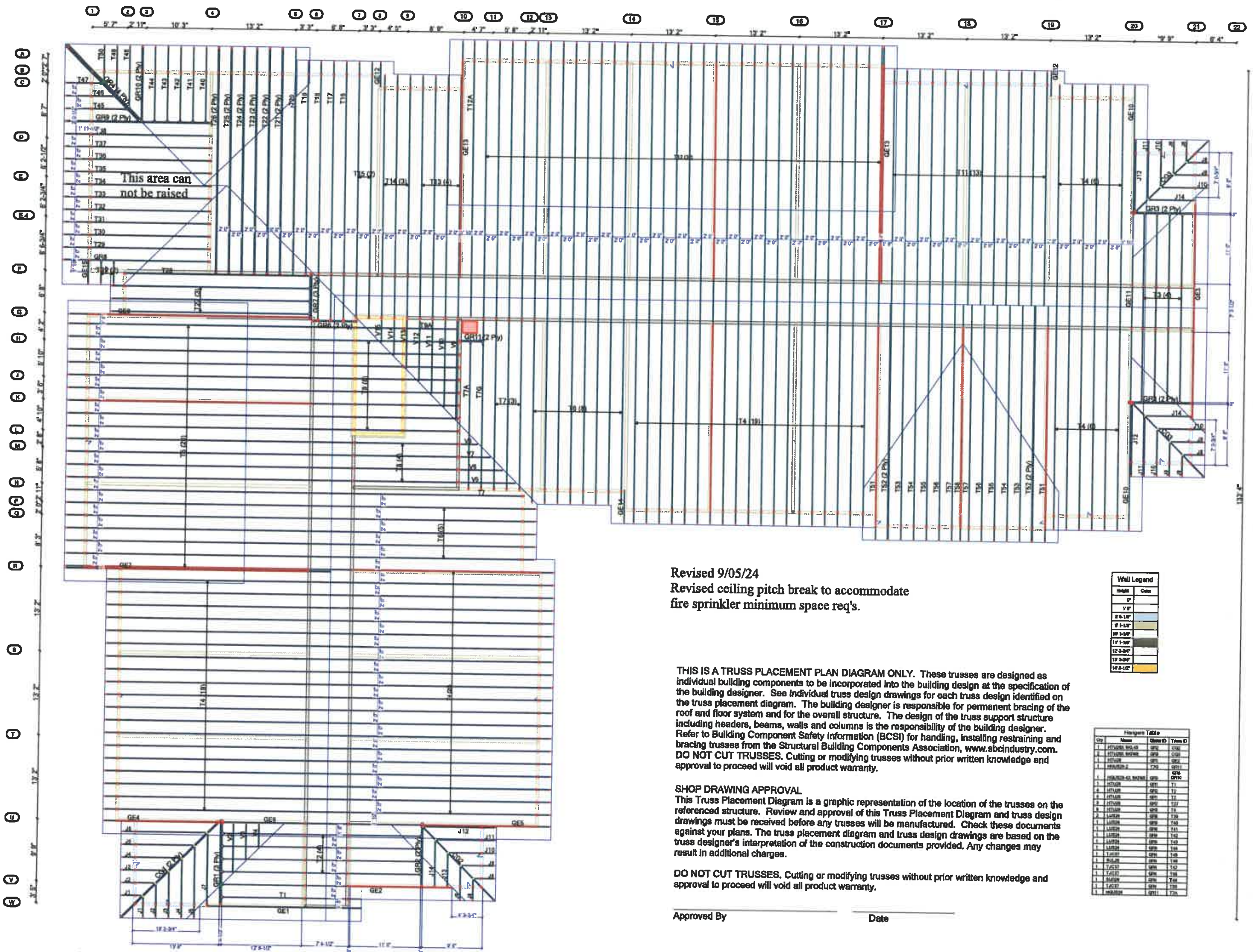
Indicates location where bearings (supports) occur.

PLATE LOCATION & ORIENTATION

The plate shall be centered on joint and/or placed in accordance with the design drawing/QC full scale details.

REFERENCES

- **ANSI / TPI 1:** National Design Standard for Metal Plate Connected Wood Trusses
- **BCSI:** Building Component & Safety Information - Guide to Good Practice for Handling, Installing, Restraining, & Bracing of Metal Plate Connected Wood Trusses.
- **NDS:** National Design Specification for Wood Construction
- **ESR:** 1082 published by the International Code Council. www.icc-es.org



Truss Placement Plan

Revised 9/05/24
Revised ceiling pitch break to accommodate
fire sprinkler minimum space req's.

Wall Legend	
Height	Color
0"	
1' 0"	
8' 6-1/8"	
9' 1-1/8"	
10' 1-1/8"	
11' 1-1/8"	
12' 3-3/4"	
13' 3-3/4"	
14' 3-1/2"	

THIS IS A TRUSS PLACEMENT PLAN DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual truss design drawings for each truss design identified on the truss placement diagram. The building designer is responsible for permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls and columns is the responsibility of the building designer. Refer to Building Component Safety Information (BCSI) for handling, installing restraining and bracing trusses from the Structural Building Components Association, www.sbcindustry.com. DO NOT CUT TRUSSES. Cutting or modifying trusses without prior written knowledge and approval to proceed will void all product warranty.

SHOP DRAWING APPROVAL
This Truss Placement Diagram is a graphic representation of the location of the trusses on the referenced structure. Review and approval of this Truss Placement Diagram and truss design drawings must be received before any trusses will be manufactured. Check these documents against your plans. The truss placement diagram and truss design drawings are based on the truss designer's interpretation of the construction documents provided. Any changes may result in additional charges.

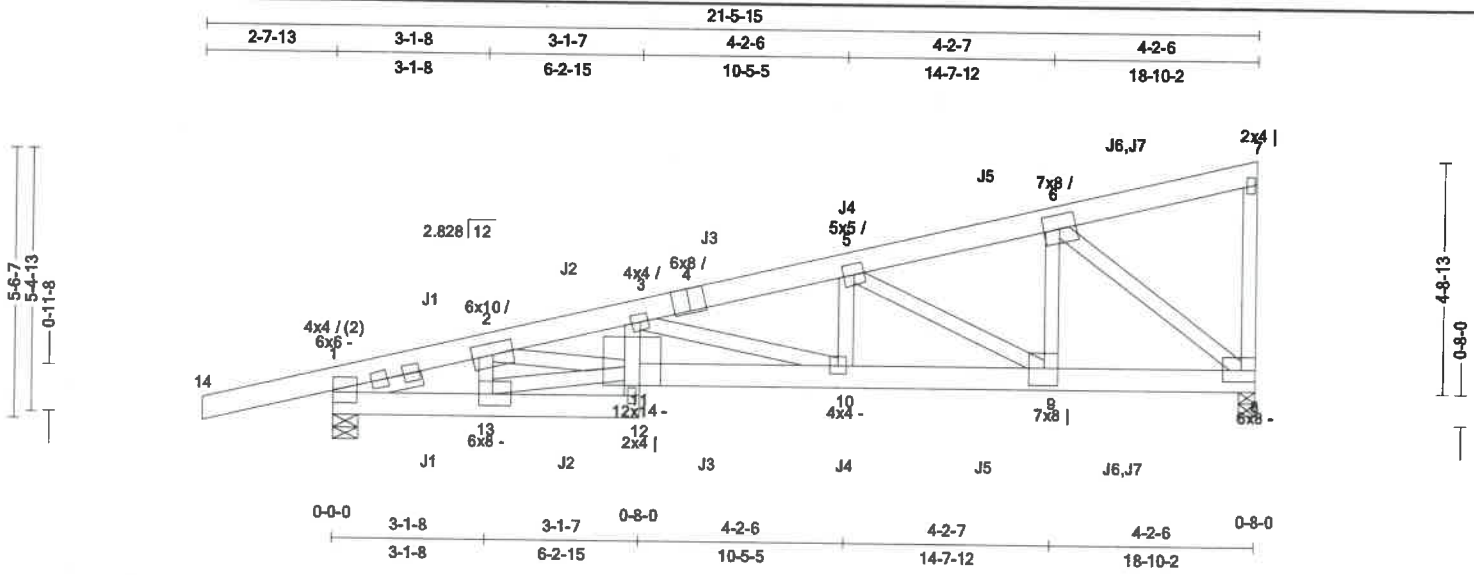
DO NOT CUT TRUSSES. Cutting or modifying trusses without prior written knowledge and approval to proceed will void all product warranty.

Hangers Table			
Qty	Name	Girder ID	Truss ID
1	[illegible]	GR2	[illegible]
2	[illegible]	GR3	[illegible]
1	HTU26	GR1	GR2
1	HGUS26-2	T7G	GR11
1	[illegible]	GR5	GR9 GR10
1	HTU26	GR11	T1
4	HTU26	GR2	T2
4	HTU26	GR1	T2
3	HTU26	GR7	T27
8	HTU26	GR3	T3
2	LUS26	GR9	T39
1	LUS26	GR9	T40
1	LUS26	GR9	T41
1	LUS26	GR9	T42
1	LUS26	GR9	T43
1	LUS26	GR9	T44
1	TJC37	GR9	T45
1	[illegible]	GR9	T46
1	TJC37	GR9	T47
1	TJC37	GR9	T38
1	[illegible]	GR9	T48
1	TJC37	GR9	T38
1	HGUS26	GR11	T7A

Approved By ____________ Date ____________

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: CG1 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:08 Page: 1 of 3

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
18-10-2	2.828 /12	1	2-7-13	0-0-0	0-0-0	0-0-0	2	12.78 in	146 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.59 (3-5)	Vert TL:	0.37 in	L/577	11	L/240
TCLL: 110	Rep Mbr: No	BC: 0.82 (9-10)	Vert LL:	0.29 in	L/750	11	L/360
TCDL: 10	Lumber D.O.L.: 100 %	Web: 0.85 (3-11)	Horz TL:	0.12 in		8	
BCLL: 0							
BCDL: 10							

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	6.278 in	1.56 in	3,589 lbs	-	-304 lbs	-	-304 lbs	54 lbs
8	1	4.157 in	2.58 in	5,915 lbs	-	-470 lbs	-	-470 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 2-11

Bracing

TC: Sheathed or Purlins at 6-0-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	-2-7-13	-1-6-0	Down	Proj	0 plf	24.31 plf	
Top	-1-6-0	2-1-0	Down	Proj	24.31 plf	0 plf	
Top	-2-7-13	-1-6-0	Down	Proj	0 plf	24.31 plf	
Top	-1-6-0	2-1-0	Down	Proj	24.31 plf	0 plf	
Top	17-1-4	18-10-2	Down	Proj	21.3 plf	3.9 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	-2-7-13	-1-6-0	Down	Proj	0 plf	12.15 plf	
Top	-1-6-0	2-1-0	Down	Proj	12.15 plf	0 plf	
Top	-2-7-13	-1-6-0	Down	Proj	0 plf	12.15 plf	
Top	-1-6-0	2-1-0	Down	Proj	12.15 plf	0 plf	
Top	17-1-4	18-10-2	Down	Proj	10.65 plf	1.95 plf	
Bot	17-1-4	18-10-2	Down	Proj	10.65 plf	1.95 plf	

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.490	-3,371 lbs	3-5	0.590	-5,668 lbs
	2-3	0.483	-6,823 lbs	5-6	0.455	-3,306 lbs

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
18-10-2	2.828 /12	1	2-7-13	0-0-0	0-0-0	0-0-0	2	12.78 in	146 lbs

BC	8-9	0.715	3,188 lbs	(-255 lbs)	10-11	0.608	6,827 lbs	(-546 lbs)	13-1	0.564	3,177 lbs	(-361 lbs)
	9-10	0.816	5,437 lbs	(-435 lbs)	12-13	0.247	378 lbs	(-30 lbs)				
Web	2-13	0.130	-1,053 lbs		3-10	0.214	-1,447 lbs		6-9	0.712	2,468 lbs	(-152 lbs)
	2-11	0.434	3,512 lbs	(-289 lbs)	5-10	0.295	1,021 lbs	(-58 lbs)	6-8	0.656	-4,101 lbs	
	13-11	0.828	2,869 lbs	(-221 lbs)	5-9	0.387	-2,561 lbs					

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
J1	TC	1-11-8
J1	TC	1-11-8
J2	TC	4-9-7
J2	TC	4-9-7
J2	BC	4-9-7
J2	BC	4-9-7
J3	TC	7-7-6
J3	TC	7-7-6
J3	BC	7-7-6
J3	BC	7-7-6
J4	TC	10-5-5
J4	TC	10-5-5
J4	BC	10-5-5
J4	BC	10-5-5
J5	TC	13-3-4
J5	TC	13-3-4
J5	BC	13-3-4
J5	BC	13-3-4
J7	TC	16-1-4
J7	BC	16-1-4
J6	TC	16-1-4
J6	BC	16-1-4
J1	BC	1-11-8
J1	BC	1-11-8

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
5) A creep factor of 1.50 has been applied for this truss analysis.

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
18-10-2	2.828 /12	1	2-7-13	0-0-0	0-0-0	0-0-0	2	12.78 in	146 lbs

6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 2 staggered rows @ 0-11-4 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.

Provided the hanger connections do not adequately transfer the applied load to all plies: in addition to connectors shown above, attach each pair of girder plies with supplemental 12d Nails or Gun Nails [min 0.135"x3"] as follows within 24" of the location shown:

TC: 1-11-8,(2)Connectors
TC: 4-9-7,(4)Connectors
TC: 7-7-6,(7)Connectors
TC: 10-5-5,(4)Connectors
TC: 13-3-4,(7)Connectors
TC: 16-1-4,(7)Connectors
BC: 1-11-8,(1)Connectors
BC: 4-9-7,(1)Connectors
BC: 7-7-6,(1)Connectors
BC: 10-5-5,(7)Connectors
BC: 13-3-4,(8)Connectors
BC: 16-1-4,(11)Connectors

Connectors shall not encroach on other girder ply connectors or truss-to-truss connectors in accordance with the NDS or the connector manufacturer recommendations.

7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.

8) Lateral bracing shall be attached to each ply.

9) All fasteners minimum 2-1/2" long, unless otherwise noted.

10) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.

11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.

12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.

13) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.

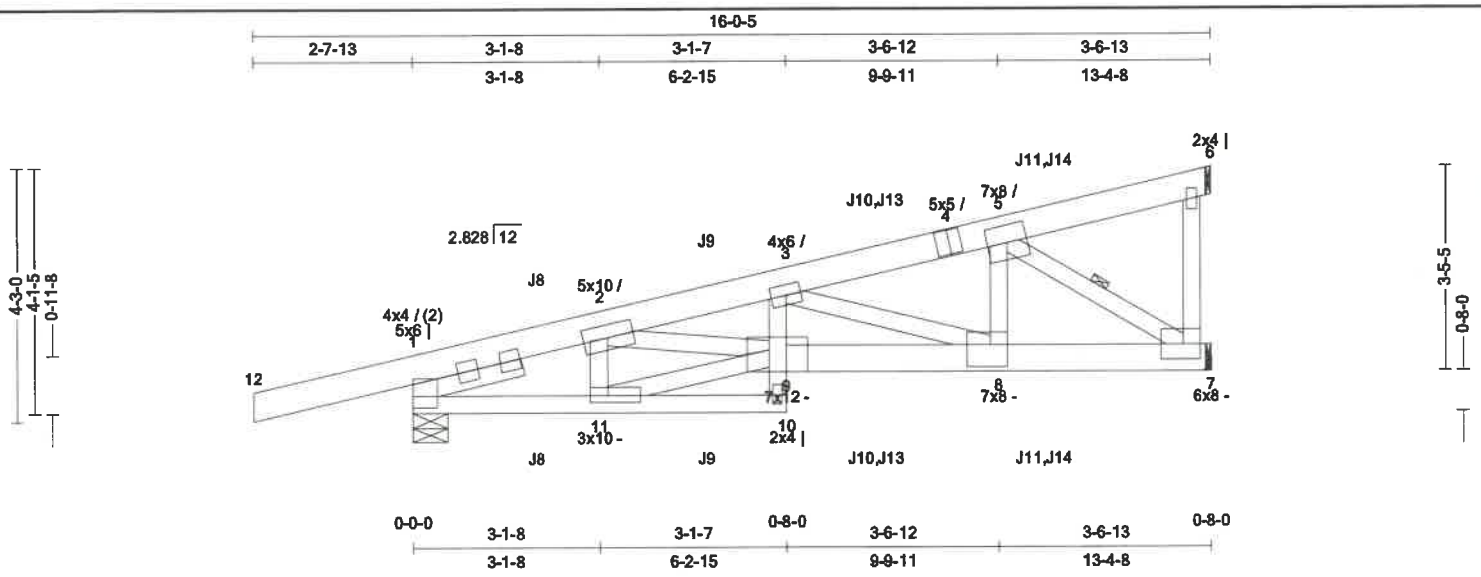
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.

15) Incising is not permitted.

16) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: CG2 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:09 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
13-4-8	2.828 /12	1	2-7-13	0-0-0	0-0-0	0-0-0	1	11.35 in	99 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code: IBC2018/ TPI 1-2014	TC: 1.00 (12-1)	Vert TL:	0.23 in	L/651	10	L/240
TCLL: 110	Rep Mbr: No	BC: 0.98 (7-8)	Vert LL:	0.18 in	L/855	9	L/360
TCDL: 10	Lumber D.O.L.: 100 %	Web: 0.88 (2-9)	Horz TL:	0.07 in		7	
BCLL: 0							
BCDL: 10							

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	7.028 in	1.65 in	1,895 lbs	-	-169 lbs	-84 lbs	-169 lbs	92 lbs
7	1	1.5 in	—	2,596 lbs	-	-202 lbs	-	-202 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 6: 7-9
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 3-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Web: One Midpoint Row: 5-7

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	-2-7-13	-1-5-10	Down	Proj	0 plf	24.31 plf	
Top	-1-5-10	2-1-12	Down	Proj	24.31 plf	0 plf	
Top	-2-7-13	-1-5-10	Down	Proj	0 plf	24.31 plf	
Top	-1-5-10	2-1-12	Down	Proj	24.31 plf	0 plf	
Top	11-6-13	13-1-12	Down	Proj	18.91 plf	3.14 plf	
Top	13-1-12	13-4-4	Down	Proj	3.14 plf	3.14 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	-2-7-13	-1-5-10	Down	Proj	0 plf	12.15 plf	
Top	-1-5-10	2-1-12	Down	Proj	12.15 plf	0 plf	
Top	-2-7-13	-1-5-10	Down	Proj	0 plf	12.15 plf	
Top	-1-5-10	2-1-12	Down	Proj	12.15 plf	0 plf	
Top	11-6-13	13-1-12	Down	Proj	9.45 plf	1.57 plf	
Top	13-1-12	13-4-4	Down	Proj	1.57 plf	1.57 plf	
Bot	11-6-13	13-1-12	Down	Proj	9.45 plf	1.57 plf	
Bot	13-1-12	13-4-4	Down	Proj	1.57 plf	1.57 plf	

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: CG2
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:10
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
13-4-8	2.828 /12	1	2-7-13	0-0-0	0-0-0	0-0-0	1	11.35 in	99 lbs

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.987	-2,510 lbs		3-5	0.526	-3,624 lbs					
	2-3	0.544	-5,445 lbs									
BC	7-8	0.981	3,430 lbs	(-267 lbs)	8-9	0.647	5,431 lbs	(-431 lbs)	11-1	0.564	2,289 lbs	(-882 lbs)
Web	2-11	0.082	-648 lbs		3-8	0.537	-2,115 lbs					
	2-9	0.878	3,044 lbs	(-257 lbs)	5-8	0.539	1,869 lbs	(-92 lbs)				
	11-9	0.605	2,097 lbs	(-276 lbs)	5-7	0.563	-4,106 lbs					

Truss to Truss Connection Summary

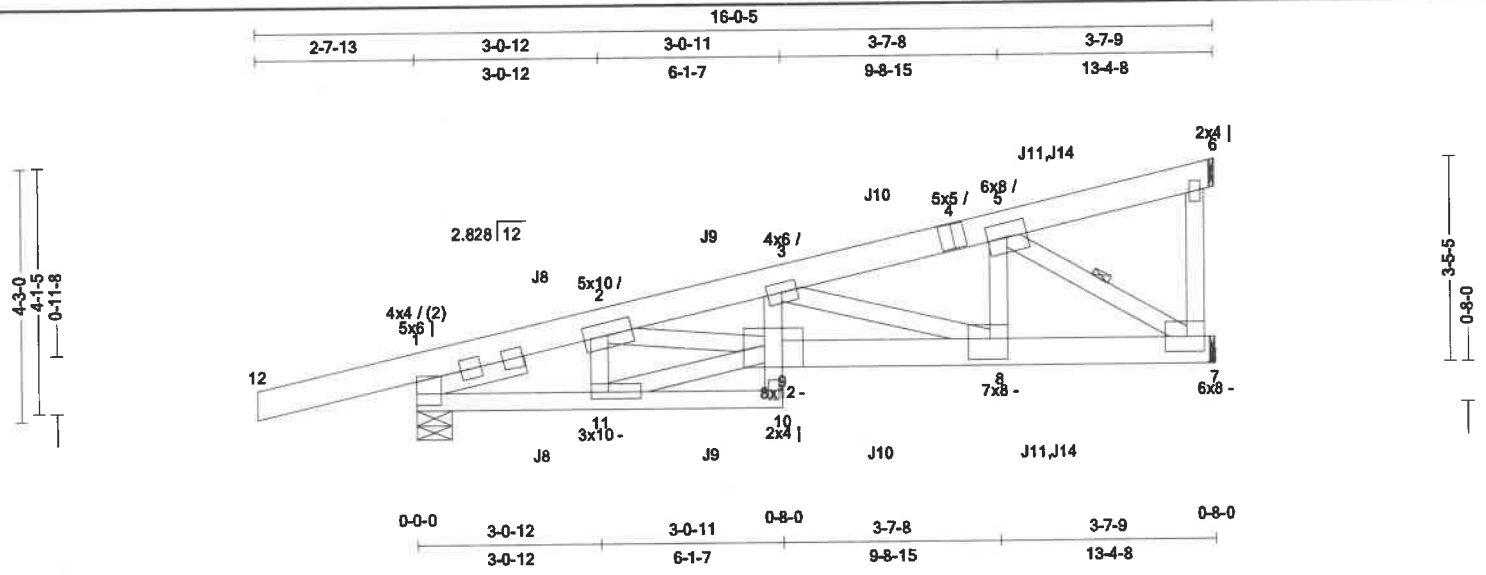
Caried Truss	Carrying Chord	Carrying Offset
J8	TC	2-1-0
J8	TC	2-1-0
J8	BC	2-1-0
J8	BC	2-1-0
J9	TC	4-10-15
J9	TC	4-10-15
J9	BC	4-10-15
J9	BC	4-10-15
J13	TC	7-8-14
J13	BC	7-8-14
J10	TC	7-8-14
J10	BC	7-8-14
J14	TC	10-6-13
J14	BC	10-6-13
J11	TC	10-6-13
J11	BC	10-6-13

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
6) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
7) A creep factor of 1.50 has been applied for this truss analysis.
8) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: CG3 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:11 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
13-4-8	2.828 /12	2	2-7-13	0-0-0	0-0-0	0-0-0	1	11.35 in	99 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code: IBC2018/ TPI 1-2014	TC: 1.00 (12-1)	Vert TL:	0.23 in	L/655	10	L/240
TCLL: 110	Rep Mbr: No	BC: 0.93 (7-8)	Vert LL:	0.18 in	L/866	9	L/360
TCDL: 10	Lumber D.O.L.: 100 %	Web: 0.62 (9-10)	Horz TL:	0.07 in		7	
BCLL: 0							
BCDL: 10							

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	7.028 in	1.63 in	1,871 lbs	·	-167 lbs	-86 lbs	-167 lbs	81 lbs
7	1	1.5 in	—	2,562 lbs	·	-200 lbs	·	-200 lbs	·

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 6: 7-9
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 2-9

Bracing

TC: Sheathed or Purlins at 3-4-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Web: One Midpoint Row: 5-7

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	-2-7-13	-1-5-10	Down	Proj	0 plf	24.31 plf	
Top	-1-5-10	2-1-12	Down	Proj	24.31 plf	0 plf	
Top	-2-7-13	-1-5-10	Down	Proj	0 plf	24.31 plf	
Top	-1-5-10	2-1-12	Down	Proj	24.31 plf	0 plf	
Top	11-6-13	13-1-12	Down	Proj	18.91 plf	3.14 plf	
Top	13-1-12	13-4-8	Down	Proj	3.14 plf	3.14 plf	

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: CG3
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
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Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
13-4-8	2.828 /12	2	2-7-13	0-0-0	0-0-0	0-0-0	1	11.35 in	99 lbs

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	-2-7-13	-1-5-10	Down	Proj	0 plf	12.15 plf	
Top	-1-5-10	2-1-12	Down	Proj	12.15 plf	0 plf	
Top	-2-7-13	-1-5-10	Down	Proj	0 plf	12.15 plf	
Top	-1-5-10	2-1-12	Down	Proj	12.15 plf	0 plf	
Top	11-6-13	13-1-12	Down	Proj	9.45 plf	1.57 plf	
Top	13-1-12	13-4-8	Down	Proj	1.57 plf	1.57 plf	
Bot	11-6-13	13-1-12	Down	Proj	9.45 plf	1.57 plf	
Bot	13-1-12	13-4-4	Down	Proj	1.57 plf	1.57 plf	

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.987	-2,400 lbs		3-5	0.682	-3,648 lbs					
	2-3	0.479	-5,451 lbs									
BC	7-8	0.929	3,422 lbs	(-268 lbs)	8-9	0.538	5,448 lbs	(-431 lbs)	11-1	0.540	2,183 lbs	(-883 lbs)
Web	2-11	0.080	-636 lbs		3-8	0.555	-2,133 lbs					
	2-9	0.392	3,171 lbs	(-265 lbs)	5-8	0.463	1,603 lbs	(-78 lbs)				
	11-9	0.577	2,000 lbs	(-297 lbs)	5-7	0.560	-4,064 lbs					

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
J8	TC	2-1-0
J8	TC	2-1-0
J8	BC	2-1-0
J8	BC	2-1-0
J9	TC	4-10-15
J9	TC	4-10-15
J9	BC	4-10-15
J9	BC	4-10-15
J10	TC	7-8-14
J10	TC	7-8-14
J10	BC	7-8-14
J10	BC	7-8-14
J14	TC	10-6-13
J14	BC	10-6-13
J11	TC	10-6-13
J11	BC	10-6-13

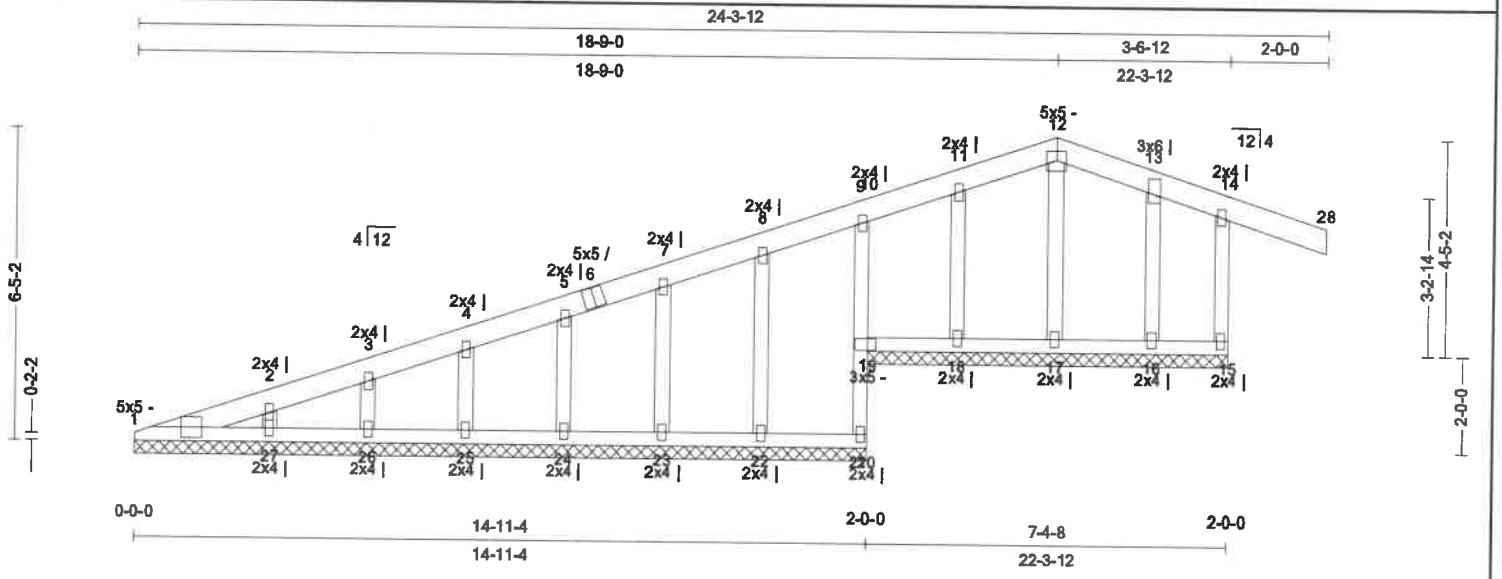
Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
6) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
7) A creep factor of 1.50 has been applied for this truss analysis.
8) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GE1 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:12 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
22-3-12	4/12	1	0-0-0	2-0-0	0-0-0	0-0-0	1	24 in	131 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.91 (14-28)	Vert TL:	0 in UP	L/999	15	L/240
TCDL: 10	TPI 1-2014	BC: 0.04 (20-22)	Vert LL:	0 in	L/999	15	L/360
BCLL: 0	Rep Mbr: No	Web: 0.63 (14-15)	Horz TL:	0 in			
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	-	1,509 lbs	358 plf	-463 lbs	-120 lbs	-298 lbs	-463 lbs	-149 lbs

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC													
BC													
Web	2-27	0.050	-406 lbs	5-24	0.106	-673 lbs	10-19	0.125	-689 lbs	13-16	0.145	501 lbs	(222 lbs)
	3-26	0.062	-492 lbs	7-23	0.136	-672 lbs	11-18	0.136	-671 lbs	14-15	0.634	-1,496 lbs	
	4-25	0.083	-612 lbs	8-22	0.177	-657 lbs	12-17	0.128	-476 lbs				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable requires continuous bottom chord bearing.
3) Gable webs placed at 24 " OC, U.N.O.
4) Attach gable webs with 2x4 20ga plates, U.N.O.
5) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
6) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
7) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
8) A creep factor of 1.50 has been applied for this truss analysis.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

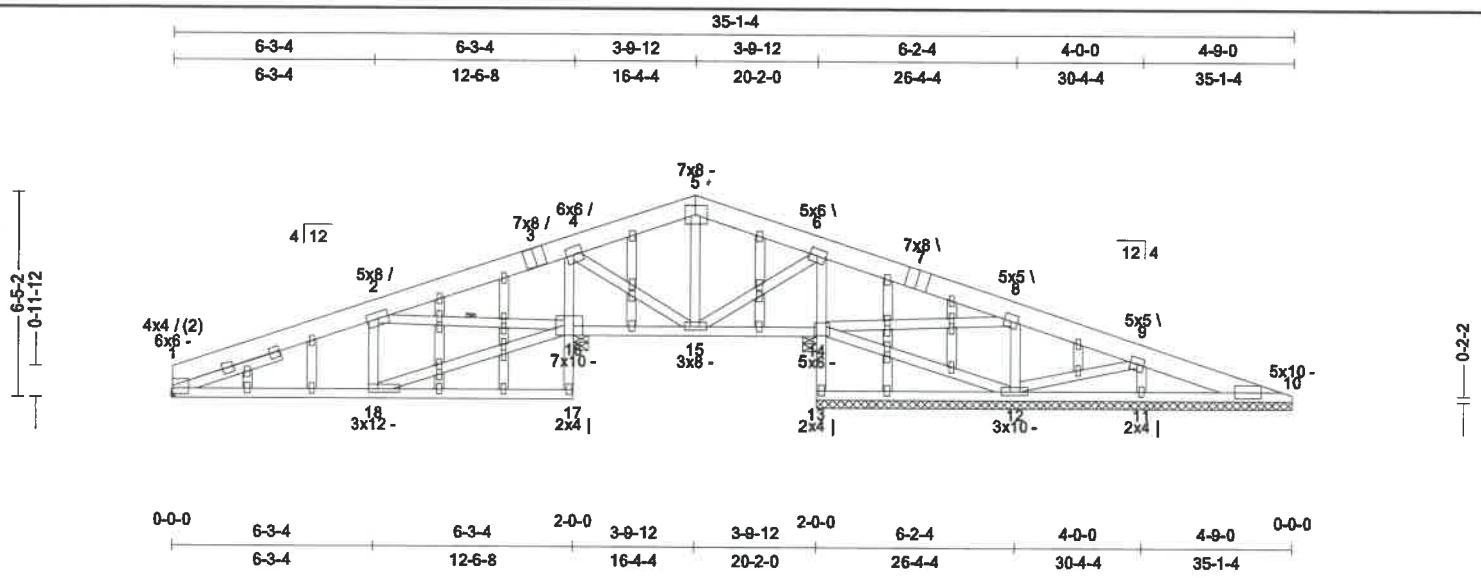
Truss: GE1
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:12

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
22-3-12	4/12	1	0-0-0	2-0-0	0-0-0	0-0-0	1	24 in	131 lbs

9) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 16 may need to be considered.
10) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
11) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
12) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
13) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
14) Incising is not permitted.
15) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GE2 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:20 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
35-1-4	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	278 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC2018/	TC: 0.82 (2-4)	Vert TL:	0.12 in	L/999	(17-18)	L/240
TCDL: 10		TPI 1-2014	BC: 0.40 (18-1)	Vert LL:	0.07 in	L/999	(18-1)	L/360
BCLL: 0	Rep Mbr:	No	Web: 0.72 (18-16)	Horz TL:	0.02 in		16	
BCDL: 10	Lumber D.O.L.: 100 %							

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	1.5 in	—	1,724 lbs	-	-106 lbs	-221 lbs	-221 lbs	-30 lbs
16	1	5.5 in	3.17 in	3,632 lbs	-	-151 lbs	-348 lbs	-348 lbs	-
14	1	5.5 in	1.90 in	2,178 lbs	-	-112 lbs	-223 lbs	-223 lbs	-
11	1	179.25 in	N/A	861 lbs	-	-56 lbs	-115 lbs	-115 lbs	-
12	1	179.25 in	N/A	1,845 lbs	-	-92 lbs	-200 lbs	-200 lbs	-
13	1	179.25 in	N/A	98 lbs	-	-	-	-	-
10	1	179.25 in	N/A	129 lbs	-	-12 lbs	-21 lbs	-21 lbs	-
10	1	179.25 in	N/A	719 lbs	-	-56 lbs	-111 lbs	-111 lbs	-
10	1	179.25 in	N/A	31 lbs	-	-	-	-	-

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 2-16

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
3) This truss has been designed for the effects of TCLL=20 psf.
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.637	-2,537 lbs		4-5	0.695	-503 lbs		6-8	0.764	-433 lbs
	2-4	0.822	691 lbs		5-6	0.645	-620 lbs				
BC	15-16	0.160	-324 lbs								
	18-1	0.397	2,358 lbs	(-235 lbs)							
Web	2-18	0.095	-636 lbs		4-15	0.184	636 lbs		8-12	0.268	-1,769 lbs
	2-16	0.530	-2,697 lbs		5-15	0.112	-443 lbs		9-11	0.101	-805 lbs
	18-16	0.715	2,478 lbs	(-247 lbs)	6-15	0.095	329 lbs				
	4-16	0.443	-2,513 lbs		6-14	0.370	-2,099 lbs				

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GE2
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:21

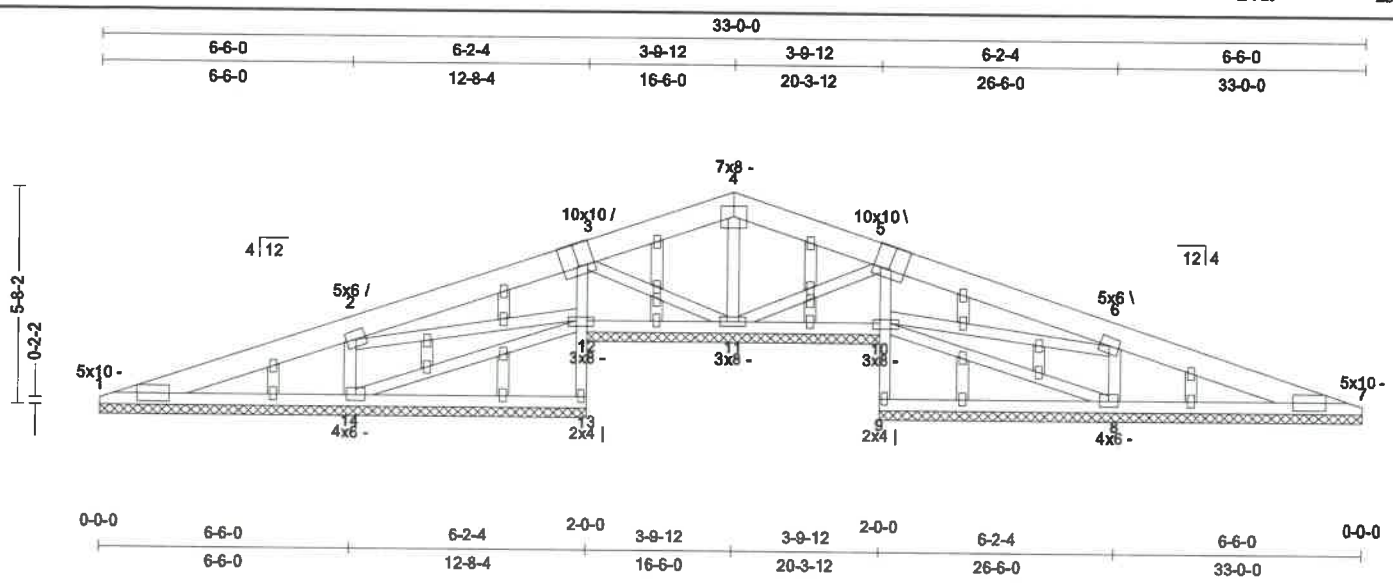
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
35-1-4	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	278 lbs

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable webs placed at 24 "OC, U.N.O.
3) Attach structural gable blocks with 2x4 20ga plates, U.N.O.
4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
5) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
6) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
7) Gable must be sheathed on one side or lateral bracing applied appropriately.
8) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 "of each web panel point.
9) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
10) A creep factor of 1.50 has been applied for this truss analysis.
11) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
12) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
13) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
14) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
15) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
16) Incising is not permitted.
17) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GE3 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:22 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
33-0-0	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	235 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.73 (2-3)	Vert TL:	0.07 in	L/999	(8-9)	L/240
TCDL: 10	Rep Mbr: No	BC: 0.29 (8-9)	Vert LL:	0.04 in	L/999	(8-9)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.24 (2-14)	Horz TL:	0 in			
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	396 in	N/A	1,922 lbs	.	-91 lbs	-202 lbs	-202 lbs	.
1	396 in	N/A	97 lbs	.	.	.	.	.
1	396 in	N/A	1,653 lbs	.	-116 lbs	-205 lbs	-205 lbs	246 lbs
1	396 in	N/A	1,066 lbs	.	-41 lbs	-110 lbs	-110 lbs	-127 lbs
1	396 in	N/A	1,653 lbs	.	-116 lbs	-205 lbs	-205 lbs	-246 lbs
1	396 in	N/A	97 lbs	.	.	.	.	.
1	396 in	N/A	1,922 lbs	.	-91 lbs	-202 lbs	-202 lbs	.
1	396 in	N/A	54 lbs	-14 lbs	.	.	-14 lbs	-442 lbs
1	396 in	N/A	54 lbs	-14 lbs	.	.	-14 lbs	442 lbs
1	396 in	N/A	1,109 lbs	.	-79 lbs	-156 lbs	-156 lbs	836 lbs
1	396 in	N/A	29 lbs	-18 lbs	.	.	-18 lbs	.
1	396 in	N/A	1,109 lbs	.	-79 lbs	-156 lbs	-156 lbs	-836 lbs
1	396 in	N/A	29 lbs	-18 lbs	.	.	-18 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
3) This truss has been designed for the effects of TCLL=20 psf.
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.629	-591 lbs	5-6	0.732	-631 lbs					
	2-3	0.732	-631 lbs	6-7	0.629	-591 lbs					
BC											
Web	2-14	0.235	-1,789 lbs	6-8	0.235	-1,789 lbs					
	3-12	0.229	-1,632 lbs								
	4-11	0.155	-847 lbs								
	5-10	0.229	-1,632 lbs								

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GE3
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:22
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
33-0-0	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	235 lbs

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable webs placed at 24 " OC, U.N.O.
3) Attach structural gable blocks with 2x4 20g a plates, U.N.O.
4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
5) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
6) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
7) A creep factor of 1.50 has been applied for this truss analysis.
8) Due to negative reactions in gravity load cases, special connections to the bearing surface at joints 1, 7, 1, 7 may need to be considered.
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

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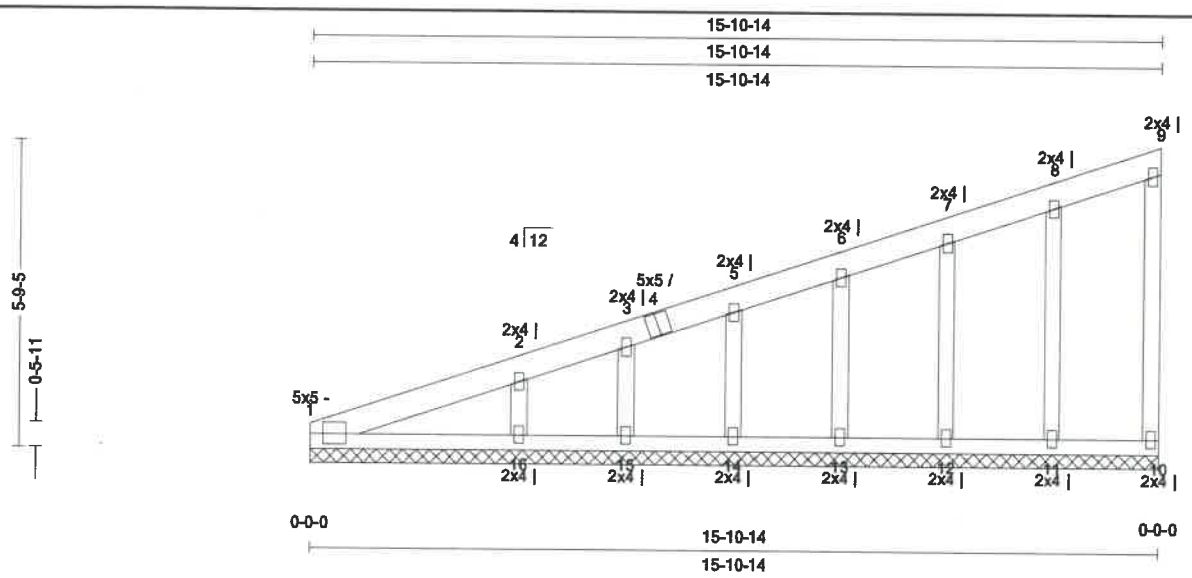
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GE4 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:23 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
15-10-14	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	91 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.56 (1-2)	Vert TL:	0 in	L/999	(16-1)	L/240
TCDL: 10	TPI 1-2014	BC: 0.08 (16-1)	Vert LL:	0 in UP	L/999	10	L/360
BCLL: 0	Rep Mbr: No	Web: 0.28 (9-10)	Horz TL:	0 in			
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	-	1,178 lbs	332 plf	-342 lbs	-81 lbs	-163 lbs	-342 lbs	711 lbs

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
3) This truss has been designed for the effects of TCLL=20 psf.

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.559	869 lbs	(-251 lbs)							
BC											
Web	2-16	0.114	-899 lbs		5-14	0.077	-483 lbs		7-12	0.133	-489 lbs
	3-15	0.086	-630 lbs		6-13	0.100	-489 lbs		8-11	0.174	-486 lbs

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable requires continuous bottom chord bearing.
3) Gable webs placed at 24 " OC, U.N.O.
4) Attach gable webs with 2x4 20g a plates, U.N.O.
5) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
6) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
7) A creep factor of 1.50 has been applied for this truss analysis.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GE4
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:23
Page: 2 of 2

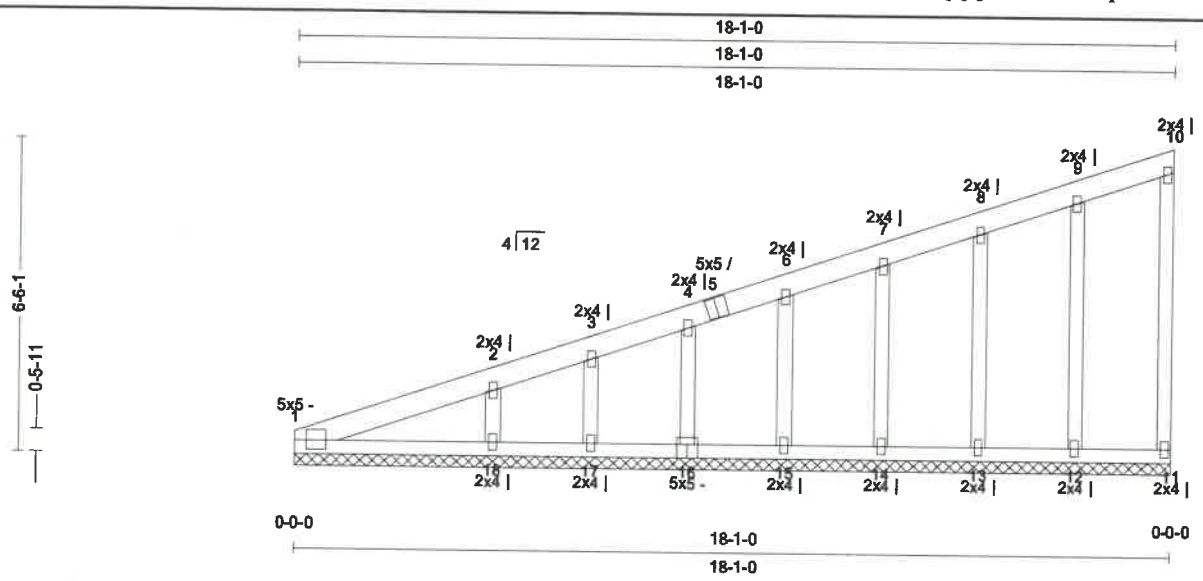
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
15-10-14	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	91 lbs

8) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 1 may need to be considered.
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GE5
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:24
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
18-1-0	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	108 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC 2018/ TPI 1-2014	TC: 0.59 (1-2)	Vert TL: 0 in	L/999	(18-1)	L/240
TCDL: 10	Rep Mbr: No	BC: 0.08 (18-1)	Vert LL: 0 in	L/999	11	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.35 (10-11)	Horz TL: 0 in			
BCDL: 10						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	-	1,268 lbs	334 plf	-398 lbs	-88 lbs	-160 lbs	-398 lbs	800 lbs

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DCL = 1.60
3) This truss has been designed for the effects of TCLL = 20 psf.

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.592	971 lbs	(-261 lbs)							
BC											
Web	2-18	0.119	-935 lbs	4-16	0.098	-607 lbs	7-14	0.135	-486 lbs	9-12	0.229	-484 lbs
	3-17	0.084	-612 lbs	6-15	0.100	-480 lbs	8-13	0.180	-489 lbs			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable requires continuous bottom chord bearing.
3) Gable webs placed at 24 " OC, U.N.O.
4) Attach gable webs with 2x4 20ga plates, U.N.O.
5) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
6) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
7) A creep factor of 1.50 has been applied for this truss analysis.

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Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GE5
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:24

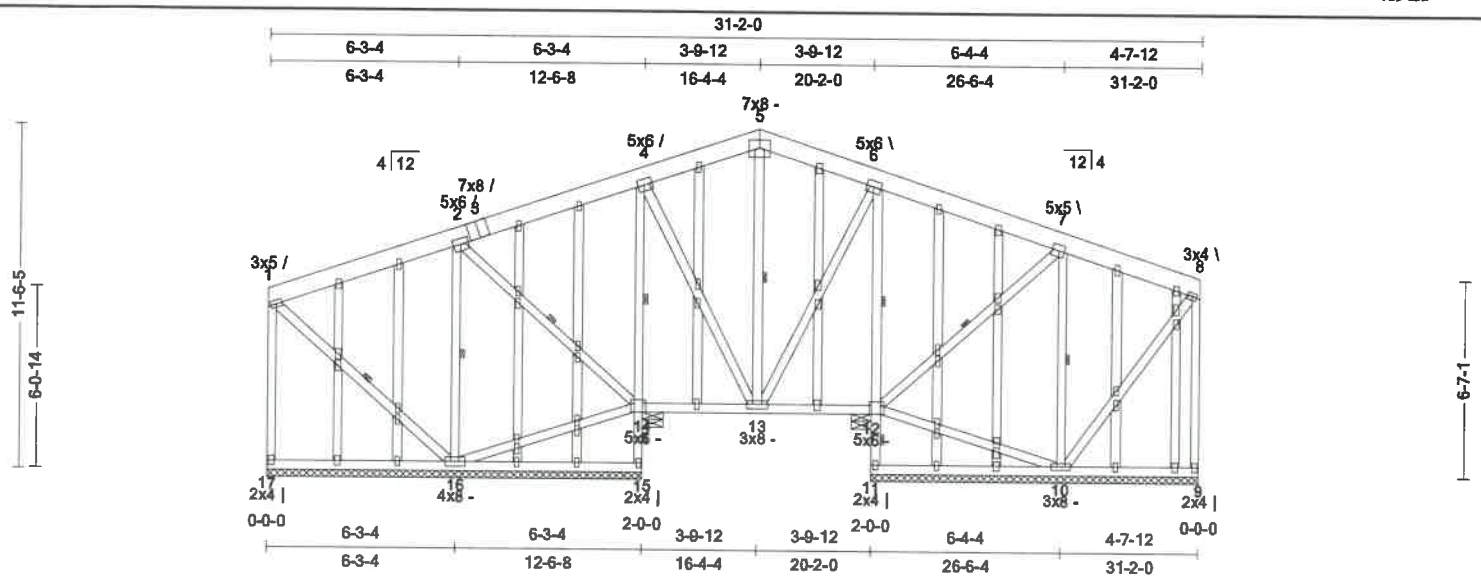
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
18-1-0	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	108 lbs

8) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 1 may need to be considered.
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GE6
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:25
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
31-2-0	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	409 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC 2018/	TC: 0.83 (1-2)	Vert TL:	0.03 in	L/999	(12-13)	L/240
TCDL: 10	TPI 1-2014	BC: 0.38 (16-17)	Vert LL:	0.02 in	L/999	13	L/360
BCLL: 0	Rep Mbr: No	Web: 0.62 (6-12)	Horz TL:	0.01 in		9	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
14	1	8 in	2.12 in	2,437 lbs	.	-189 lbs	-290 lbs	-290 lbs	.
12	1	8 in	2.07 in	2,378 lbs	.	-180 lbs	-278 lbs	-278 lbs	.
15	1	150.5 in	N/A	92 lbs	.	.	.	.	-2 lbs
16	1	150.5 in	N/A	1,647 lbs	.	-60 lbs	-184 lbs	-184 lbs	145 lbs
17	1	150.5 in	N/A	988 lbs	.	-46 lbs	-112 lbs	-112 lbs	93 lbs
9	1	132 in	N/A	751 lbs	.	-26 lbs	-89 lbs	-89 lbs	.
10	1	132 in	N/A	1,526 lbs	.	-53 lbs	-166 lbs	-166 lbs	.
11	1	132 in	N/A	100 lbs	.	.	.	.	.

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 1-16, 2-16, 2-14, 4-15, 5-13, 6-11, 7-12, 7-10

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads, in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DCL=1.60
3) This truss has been designed for the effects of TCLL=20 psf.
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.828	-453 lbs		4-5	0.636	-331 lbs		6-7	0.773	382 lbs	(-292 lbs)
	2-4	0.808	386 lbs	(-297 lbs)	5-6	0.655	-329 lbs		7-8	0.678	-306 lbs	
BC												
Web	1-17	0.467	-939 lbs		4-13	0.151	524 lbs		8-9	0.427	-720 lbs	
	1-16	0.100	345 lbs	(-51 lbs)	5-13	0.230	-652 lbs					
	2-16	0.480	-1,811 lbs		6-13	0.144	501 lbs					
	2-14	0.123	-404 lbs		6-12	0.620	-2,098 lbs					
	4-14	0.605	-2,044 lbs		7-10	0.444	-1,684 lbs					

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable webs placed at 24 " OC, U.N.O.
3) Attach structural gable blocks with 2x4 20ga plates, U.N.O.
4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
5) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).

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Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GE6
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:26
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
31-2-0	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	409 lbs

6) Gable must be sheathed on one side or lateral bracing applied appropriately.
7) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
8) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
9) A creep factor of 1.50 has been applied for this truss analysis.
10) ⊠ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

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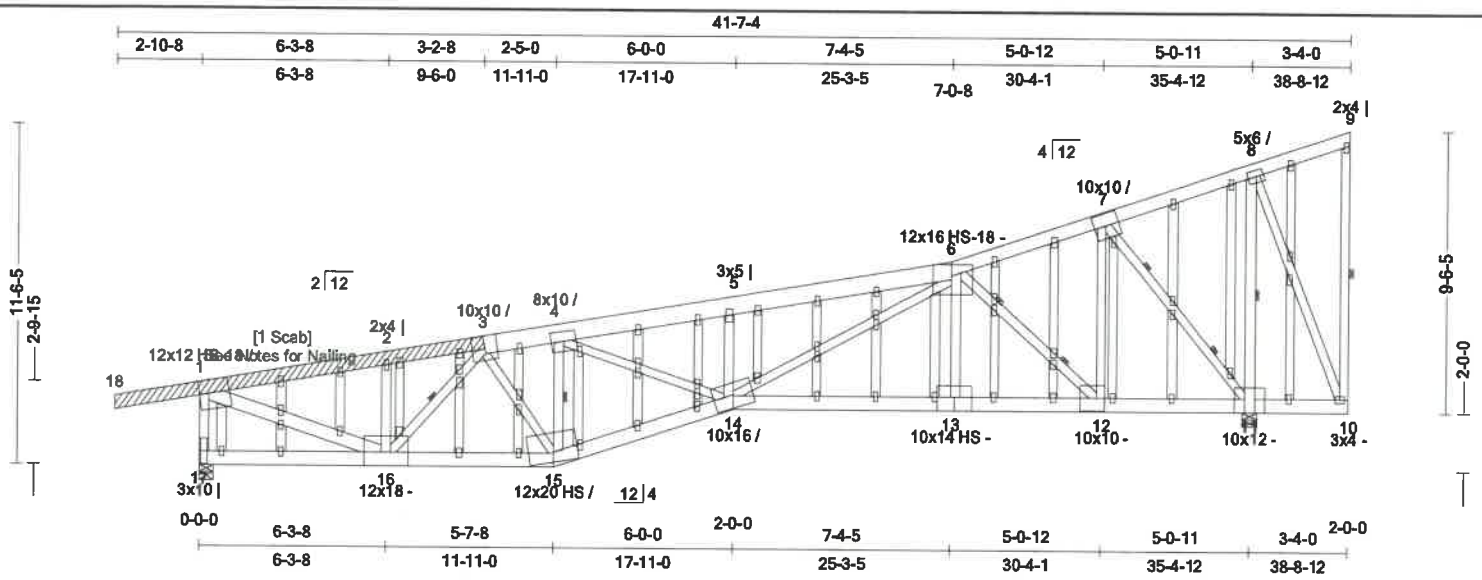
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GE7 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:27 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
38-8-12	2/12	1	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	466 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.93 (5-6)	Vert TL:	1.05 in	L/398	(13-14)	L/240
TCDL: 10	TPI 1-2014	BC: 0.91 (14-15)	Vert LL:	0.84 in	L/497	14	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.84 (6-12)	Cant/OH TL:	0.19 in UP	2L/401	10	2L/120
BCDL: 10	Lumber D.O.L.: 100 %		Cant/OH LL:	0.15 in UP	2L/496	10	2L/120
			Horz TL:	0.28 in		11	

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
17	1	5.5 in	4.99 in	5,726 lbs	.	-288 lbs	-727 lbs	-727 lbs	428 lbs
11	1	5.5 in	2.88 in	5,459 lbs	.	-389 lbs	-855 lbs	-855 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 3-6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 4-14, 6-14, 6-12, 7-12, 7-11
SP-FT/PG 2400/1.8 2 x 6: 1-16
Scabs 18-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed

BC: Sheathed or Purlins at 8-11-0, Purlin design by Others.
Web: One Midpoint Row: 3-16, 4-15, 8-11, 9-10
Two Third Point Rows: 6-12, 7-11

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.589	-7,545 lbs		4-5	0.676	-13,639 lbs		7-8	0.838	385 lbs	(-152 lbs)			
	2-3	0.222	-7,463 lbs		5-6	0.931	-13,610 lbs								
	3-4	0.422	-9,381 lbs		6-7	0.894	-3,404 lbs								
BC	11-12	0.389	3,023 lbs	(-302 lbs)	13-14	0.759	7,623 lbs	(-937 lbs)	15-16	0.698	8,759 lbs	(-1,123 lbs)			
	12-13	0.624	7,647 lbs	(-930 lbs)	14-15	0.912	9,900 lbs	(-1,235 lbs)	16-17	0.096	-402 lbs				
Web	1-17	0.808	-5,652 lbs		3-15	0.268	928 lbs	(-43 lbs)	6-14	0.824	6,661 lbs	(-775 lbs)	8-11	0.565	-1,836 lbs
	1-16	0.617	7,834 lbs	(-728 lbs)	4-15	0.523	-3,723 lbs		6-12	0.839	-6,323 lbs		8-10	0.105	365 lbs (-49 lbs)
	2-16	0.200	-1,002 lbs		4-14	0.522	4,219 lbs	(-471 lbs)	7-12	0.496	4,007 lbs	(-438 lbs)	9-10	0.649	-373 lbs
	3-16	0.362	-2,284 lbs		5-14	0.360	-1,967 lbs		7-11	0.781	-4,951 lbs				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable webs placed at 24 " OC, U.N.O.
3) Attach structural gable blocks with 2x4 20g a plates, U.N.O.
4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
5) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

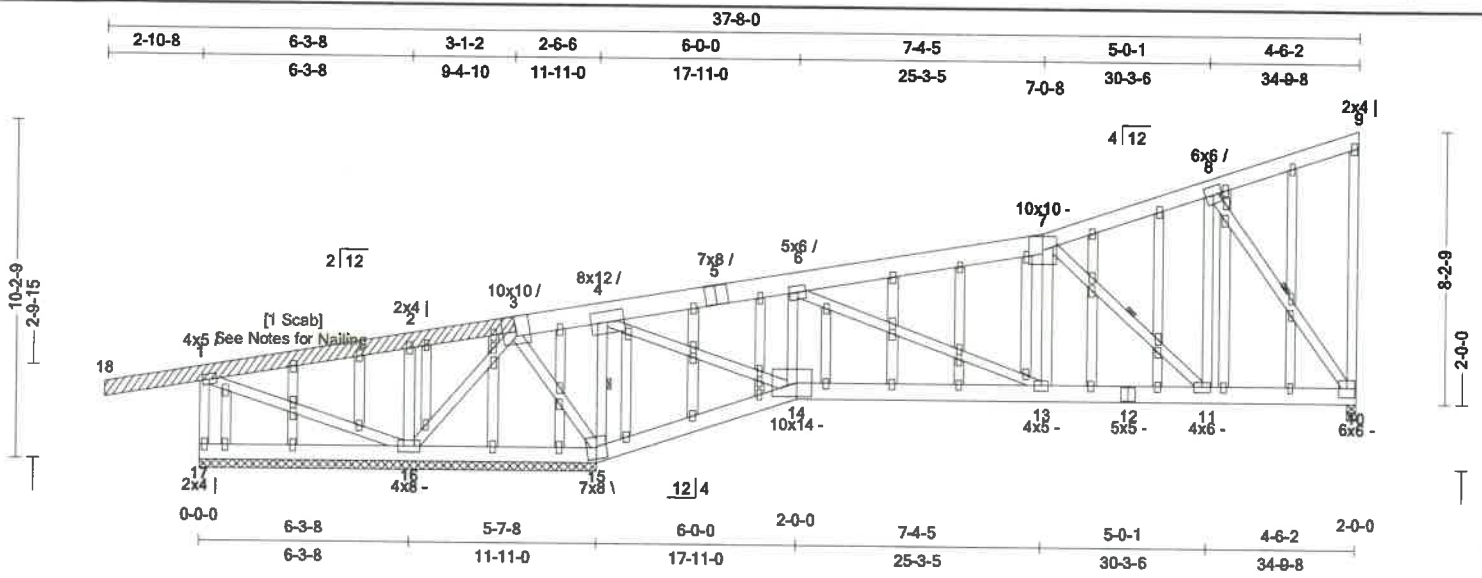
Truss: GE7
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:27

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
38-8-12	2/12	1	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	466 lbs

6) Gable must be sheathed on one side or lateral bracing applied appropriately.
7) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
8) A creep factor of 1.50 has been applied for this truss analysis.
9) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
10) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
11) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
12) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
13) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
14) Incising is not permitted.
15) Scab 3 - 18 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GE8 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:28 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
34-9-8	2/12	1	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	377 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC 2018/	TC: 0.89 (7-8)	Vert TL:	0.19 in	L/999	(13-14)	L/240
TCDL: 10	TPI 1-2014	BC: 0.27 (11-13)	Vert LL:	0.13 in	L/999	(13-14)	L/360
BCLL: 0	Rep Mbr: No	Web: 0.80 (1-16)	Horz TL:	0.06 in		10	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
10	1	3.5 in	2.36 in	2,712 lbs	-	-197 lbs	-364 lbs	-364 lbs	-
15	1	143 in	N/A	5,996 lbs	-	-360 lbs	-736 lbs	-736 lbs	1,721 lbs
16	1	143 in	N/A	829 lbs	-270 lbs	-15 lbs	-48 lbs	-270 lbs	-1,721 lbs
17	1	143 in	N/A	1,707 lbs	-	-133 lbs	-211 lbs	-211 lbs	42 lbs

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 3-5, 5-7
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 4-14
Scabs 18-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed or Purlins at 5-6-0, Purlin design by Others.

BC: Sheathed or Purlins at 5-9-0, Purlin design by Others.
Web: One Midpoint Row: 4-15, 7-11, 8-10

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DCL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.874	1,204 lbs	(-137 lbs)	3-4	0.473	2,622 lbs	(-339 lbs)	6-7	0.681	-3,078 lbs				
	2-3	0.242	1,162 lbs	(-94 lbs)	4-6	0.741	-2,180 lbs		7-8	0.888	-1,777 lbs				
BC	10-11	0.163	1,468 lbs	(-113 lbs)	13-14	0.260	1,941 lbs	(-268 lbs)							
	11-13	0.270	2,854 lbs	(-338 lbs)	14-15	0.169	-2,506 lbs								
Web	1-17	0.236	-1,654 lbs		3-15	0.490	-1,485 lbs		6-13	0.413	1,431 lbs	(-90 lbs)	8-10	0.660	-2,560 lbs
	1-16	0.800	-1,164 lbs		4-15	0.533	-3,789 lbs		7-13	0.144	-435 lbs		9-10	0.524	-563 lbs
	2-16	0.218	-1,096 lbs		4-14	0.582	4,702 lbs	(-544 lbs)	7-11	0.410	-1,935 lbs				
	3-16	0.293	1,014 lbs	(-197 lbs)	6-14	0.442	-2,416 lbs		8-11	0.381	1,319 lbs	(-131 lbs)			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable webs placed at 24 " OC, U.N.O.
3) Attach structural gable blocks with 2x4 20g a plates, U.N.O.
4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
5) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GE8
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:28

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
34-9-8	2/12	1	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	377 lbs

6) Gable must be sheathed on one side or lateral bracing applied appropriately.
7) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
8) A creep factor of 1.50 has been applied for this truss analysis.
9) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
10) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 16 may need to be considered.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Scab 3 - 18 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
17) Listed wind uplift reactions based on MWFRS & C&C loading.

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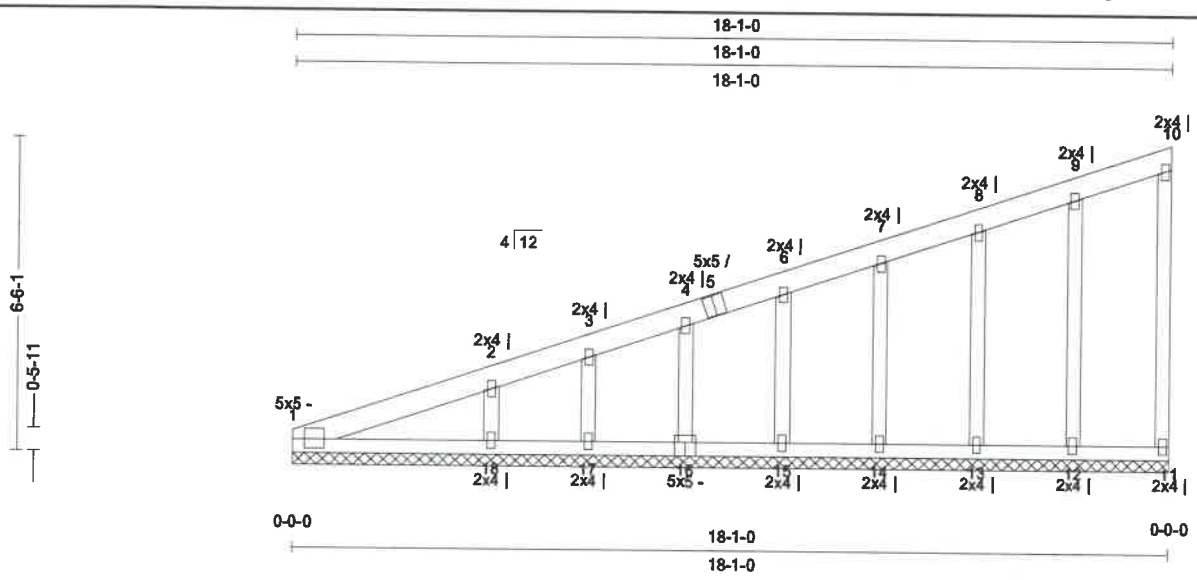
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GE10 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:13 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
18-1-0	4/12	2	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	108 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.59 (1-2)	Vert TL: 0 in	L/999	(18-1)	L/240
TCDL: 10	TPI 1-2014	BC: 0.08 (18-1)	Vert LL: 0 in	L/999	11	L/360
BCLL: 0	Rep Mbr: No	Web: 0.35 (10-11)	Horz TL: 0 in			
BCDL: 10	Lumber D.O.L.: 100 %					

09/12/2024

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	-	1,268 lbs	334 plf	-398 lbs	-88 lbs	-160 lbs	-398 lbs	800 lbs

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
3) This truss has been designed for the effects of TCLL = 20 psf.

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.592	971 lbs	(-261 lbs)								
BC												
Web	2-18	0.119	-935 lbs	4-16	0.098	-607 lbs	7-14	0.135	-486 lbs	9-12	0.229	-484 lbs
	3-17	0.084	-612 lbs	6-15	0.100	-480 lbs	8-13	0.180	-489 lbs			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable requires continuous bottom chord bearing.
3) Gable webs placed at 24 " OC, U.N.O.
4) Attach gable webs with 2x4 20g a plates, U.N.O.
5) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
6) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
7) A creep factor of 1.50 has been applied for this truss analysis.

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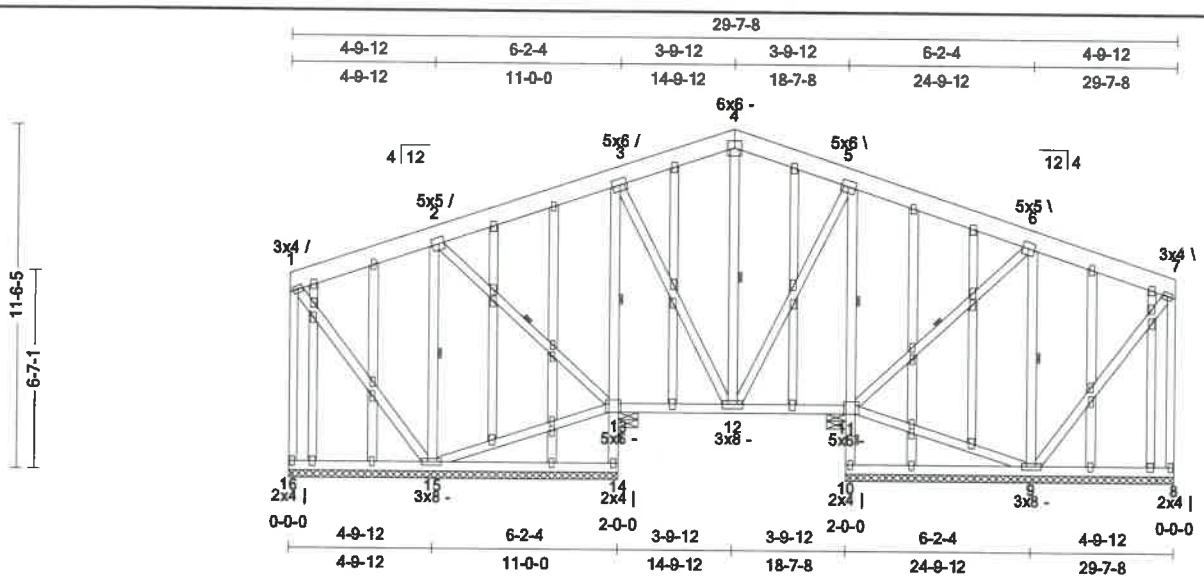
Eagle Metal Products

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
18-1-0	4/12	2	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	108 lbs

8) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 1 may need to be considered.
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GE11 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:14 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
29-7-8	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	397 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.75 (2-3)	Vert TL:	0.03 in	L/999	(11-12)	L/240
TCDL: 10	Rep Mbr: No	BC: 0.30 (8-9)	Vert LL:	0.02 in	L/999	12	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.61 (5-11)	Horz TL:	0.01 in		8	
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
13	1	8 in	2.07 in	2,372 lbs	.	-179 lbs	-275 lbs	-275 lbs	.
11	1	8 in	2.07 in	2,372 lbs	.	-179 lbs	-275 lbs	-275 lbs	.
14	1	132 in	N/A	96 lbs	.	.	.	.	-2 lbs
15	1	132 in	N/A	1,504 lbs	.	-52 lbs	-167 lbs	-167 lbs	-148 lbs
16	1	132 in	N/A	790 lbs	.	-53 lbs	-92 lbs	-92 lbs	103 lbs
8	1	132 in	N/A	789 lbs	.	-26 lbs	-92 lbs	-92 lbs	.
9	1	132 in	N/A	1,504 lbs	.	-52 lbs	-167 lbs	-167 lbs	.
10	1	132 in	N/A	96 lbs	.	.	.	.	.

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 2-15, 2-13, 3-14, 4-12, 5-10, 6-11, 6-9

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
3) This truss has been designed for the effects of TCLL = 20 psf.
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.693	-323 lbs		3-4	0.644	-333 lbs		5-6	0.748	375 lbs	(-283 lbs)	
	2-3	0.748	375 lbs	(-283 lbs)	4-5	0.644	-333 lbs		6-7	0.693	-323 lbs		
BC													
Web	1-16	0.448	-756 lbs		4-12	0.227	-644 lbs		7-8	0.448	-756 lbs		
	2-15	0.444	-1,665 lbs		5-12	0.146	508 lbs						
	2-13	0.090	-300 lbs		5-11	0.613	-2,074 lbs						
	3-13	0.613	-2,074 lbs		6-11	0.090	-300 lbs						
	3-12	0.146	508 lbs		6-9	0.444	-1,665 lbs						

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable webs placed at 24 " OC, U.N.O.
3) Attach structural gable blocks with 2x4 20g a plates, U.N.O.
4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
5) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).

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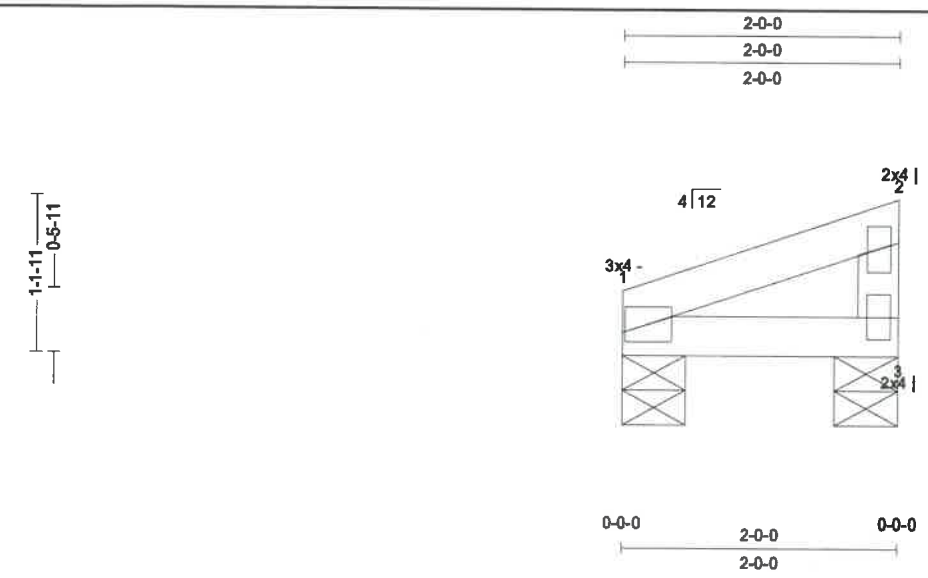
Eagle Metal Products

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
29-7-8	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	397 lbs

6) Gable must be sheathed on one side or lateral bracing applied appropriately.
7) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
8) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
9) A creep factor of 1.50 has been applied for this truss analysis.
10) ⊠ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GE12 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:15 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
2-0-0	4/12	2	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	7 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.10 (1-2)	Vert TL: 0 in	L/999	(3-1)	L/240
TCDL: 10	TPI 1-2014	BC: 0.09 (3-1)	Vert LL: 0 in	L/999	(3-1)	L/360
BCLL: 0	Rep Mbr: No	Web: 0.15 (2-3)	Horz TL: 0 in		3	
BCDL: 10	Lumber D.O.L.: 100 %					

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	240 lbs	-	-	-7 lbs	-69 lbs	-69 lbs	40 lbs
3	1	5.5 in	280 lbs	-	-	-24 lbs	-102 lbs	-102 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 4
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC				
BC				
Web				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable webs placed at 24 " OC, U.N.O.
3) Attach gable webs with 2x4 20ga plates, U.N.O.
4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
5) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
6) A creep factor of 1.50 has been applied for this truss analysis.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GE12
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:16

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
2-0-0	4/12	2	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	7 lbs

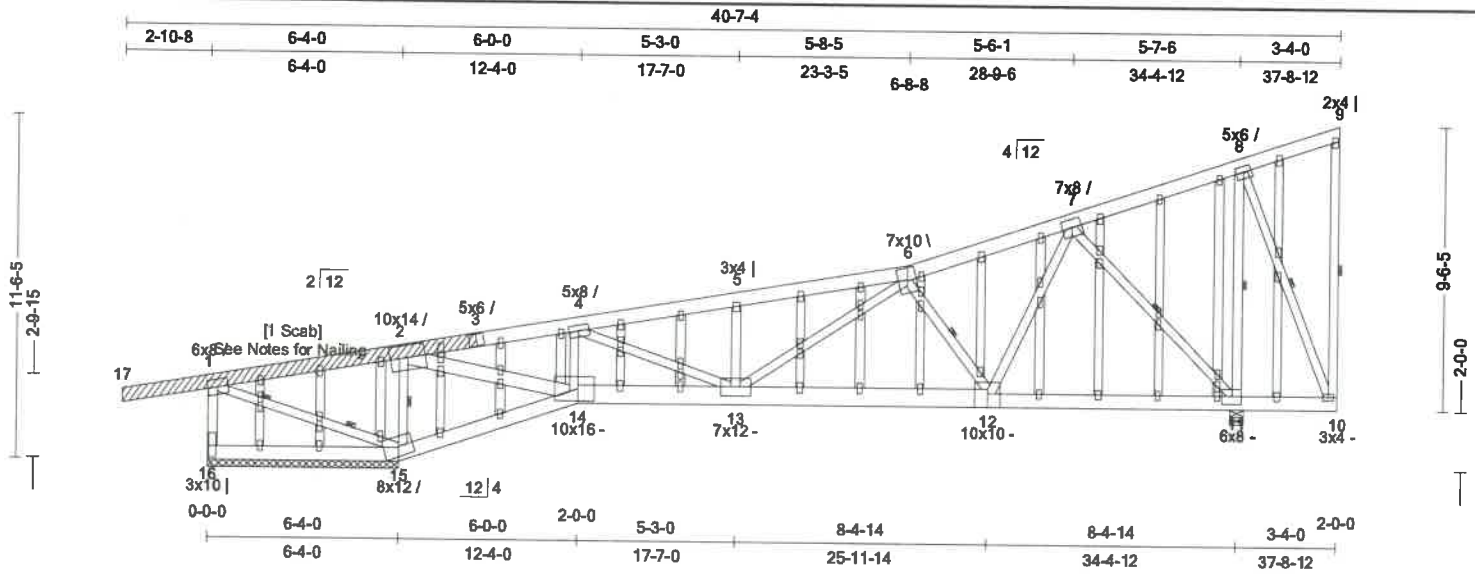
7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GE13
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:17
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
37-8-12	2/12	2	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	412 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC2018/ TPI 1-2014	TC: 0.94 (5-6)	Vert TL:	0.38 in	L/886	(12-13)	L/240
TCDL: 10			BC: 0.35 (12-13)	Vert LL:	0.29 in	L/999	(12-13)	L/360
BCLL: 0	Rep Mbr:	Yes	Web: 0.78 (1-15)	Cant/OH TL:	0.07 in UP	2L/999	10	2L/120
BCDL: 10	Lumber D.O.L.:	100 %		Cant/OH LL:	0.05 in UP	2L/999	10	2L/120
				Horz TL:	0.11 in		11	

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
11	1	5.5 in	3.87 in	4,438 lbs	-	-307 lbs	-677 lbs	-677 lbs	-
15	1	76 in	N/A	7,696 lbs	-	-426 lbs	-910 lbs	-910 lbs	400 lbs
16	1	76 in	N/A	1,428 lbs	-720 lbs	-127 lbs	-	-720 lbs	41 lbs

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 12-14
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 7-11
SP-FT/PG 2400/1.8 2 x 6: 2-14
Scabs 17-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed or Purlins at 3-6-0, Purlin design by Others.
BC: Sheathed or Purlins at 4-7-0, Purlin design by Others.

Web: One Midpoint Row: 2-15, 6-12, 7-11, 8-11, 8-10, 9-10
Two Third Point Rows: 1-15

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.776	4,171 lbs	(-560 lbs)	4-5	0.871	-5,417 lbs		6-7	0.926	-3,539 lbs					
	2-4	0.791	-3,650 lbs		5-6	0.942	-5,436 lbs		7-8	0.921	401 lbs	(-166 lbs)				
BC	11-12	0.288	2,191 lbs	(-210 lbs)	13-14	0.268	3,048 lbs	(-473 lbs)								
	12-13	0.352	4,418 lbs	(-553 lbs)	14-15	0.244	-3,974 lbs									
Web	1-16	0.213	-1,382 lbs		4-14	0.407	-2,829 lbs		6-12	0.379	-2,439 lbs		8-10	0.095	328 lbs	(-59 lbs)
	1-15	0.775	-4,270 lbs		4-13	0.735	2,547 lbs	(-226 lbs)	7-12	0.715	2,476 lbs	(-276 lbs)	9-10	0.655	-331 lbs	
	2-15	0.618	-4,677 lbs		5-13	0.317	-1,767 lbs		7-11	0.677	-3,327 lbs					
	2-14	0.579	7,357 lbs	(-866 lbs)	6-13	0.452	1,567 lbs	(-349 lbs)	8-11	0.538	-1,928 lbs					

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable webs placed at 24 " OC, U.N.O.
3) Attach structural gable blocks with 2x4 20g a plates, U.N.O.
4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
5) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

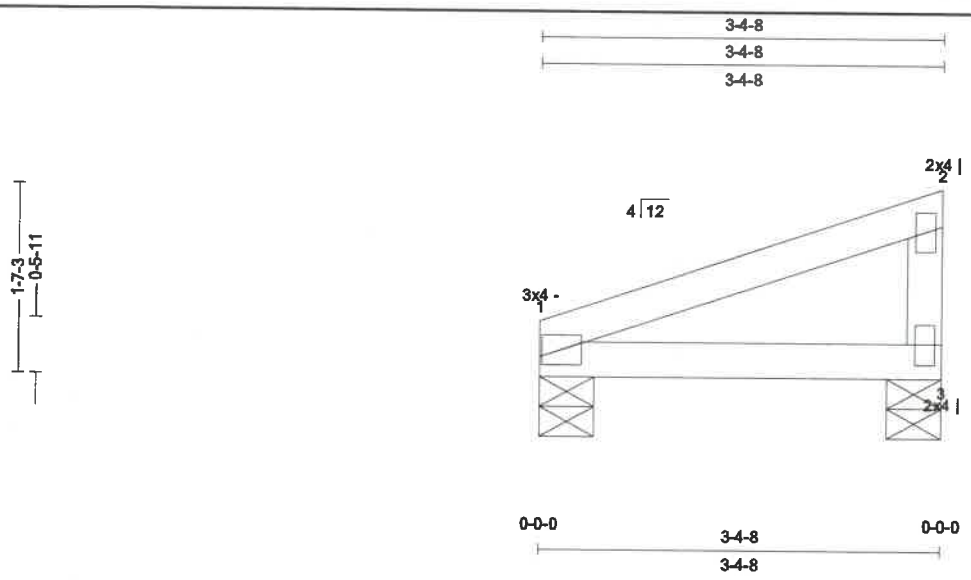
Truss: GE13
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:17

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
37-8-12	2/12	2	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	412 lbs

6) Gable must be sheathed on one side or lateral bracing applied appropriately.
7) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
8) A creep factor of 1.50 has been applied for this truss analysis.
9) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
10) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 16 may need to be considered.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Scab 3 - 17 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
17) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GE14 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:18 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
3-4-8	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	12 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC2018/ TPI 1-2014	TC: 0.61 (1-2)	Vert TL:	0.02 in	L/999	(3-1)	L/240
TCDL: 10			BC: 0.24 (3-1)	Vert LL:	0.02 in	L/999	(3-1)	L/360
BCLL: 0	Rep Mbr:	No	Web: 0.55 (2-3)	Horz TL:	0 in		3	
BCDL: 10	Lumber D.O.L.:	100 %						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	419 lbs	.	.	-15 lbs	-124 lbs	-124 lbs	69 lbs
3	1	5.5 in	459 lbs	.	.	-38 lbs	-166 lbs	-166 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 4
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.614	-448 lbs
BC			
Web	2-3	0.552	-387 lbs

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable webs placed at 24 " OC, U.N.O.
3) Attach gable webs with 2x4 20ga plates, U.N.O.
4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
5) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
6) A creep factor of 1.50 has been applied for this truss analysis.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

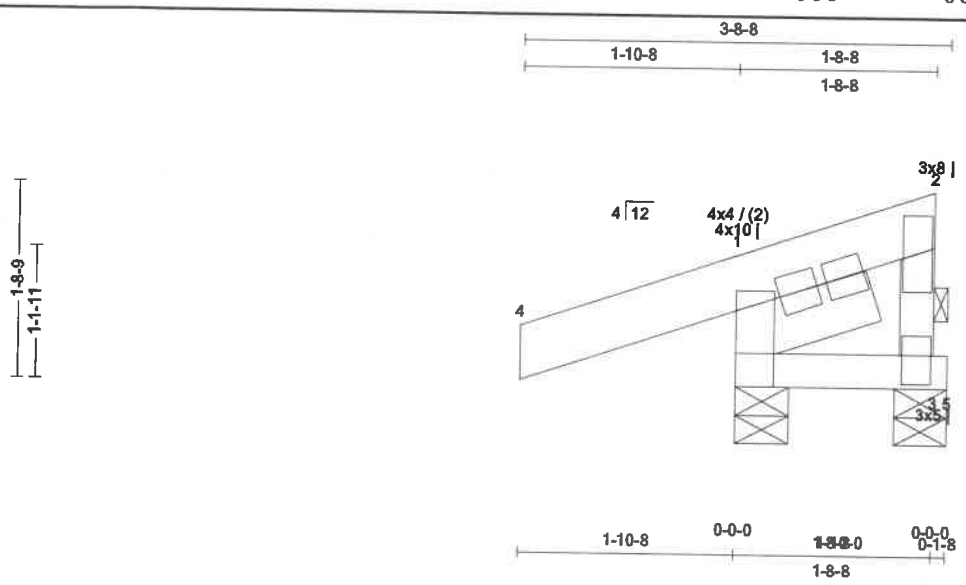
Truss: GE14
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:18

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
3-4-8	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	12 lbs

7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permited.
12) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GE15 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:19 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
1-8-8	4/12	1	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	18 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.85 (4-1)
TCDL: 10	Rep Mbr: No	BC: 0.67 (5-3)
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.36 (2-3)
BCDL: 10		

Deflection		L/	(loc)	Allowed
Vert TL:	0.01 in UP	L/999	(3-1)	L/240
Vert LL:	0.01 in UP	L/999	(3-1)	L/360
Cant/OH TL:	0 in UP	2L/999	(1-1)	2L/120
Cant/OH LL:	0 in UP	2L/999	(1-1)	2L/120
Horz TL:	0 in		5	

Reaction

JT	Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	1,340 lbs	-	-	-90 lbs	-384 lbs	-384 lbs	126 lbs
5	1	5.5 in	47 lbs	-	-407 lbs	-10 lbs	-	-407 lbs	-

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 2-3

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed to account for the effects of ice dams forming at the eaves.
4) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
5) This truss has been designed for the effects of TCLL = 20 psf.

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.726	501 lbs	(-334 lbs)
BC	3-1	0.179	-590 lbs	
Web	2-3	0.364	446 lbs	(-41 lbs)

Notes

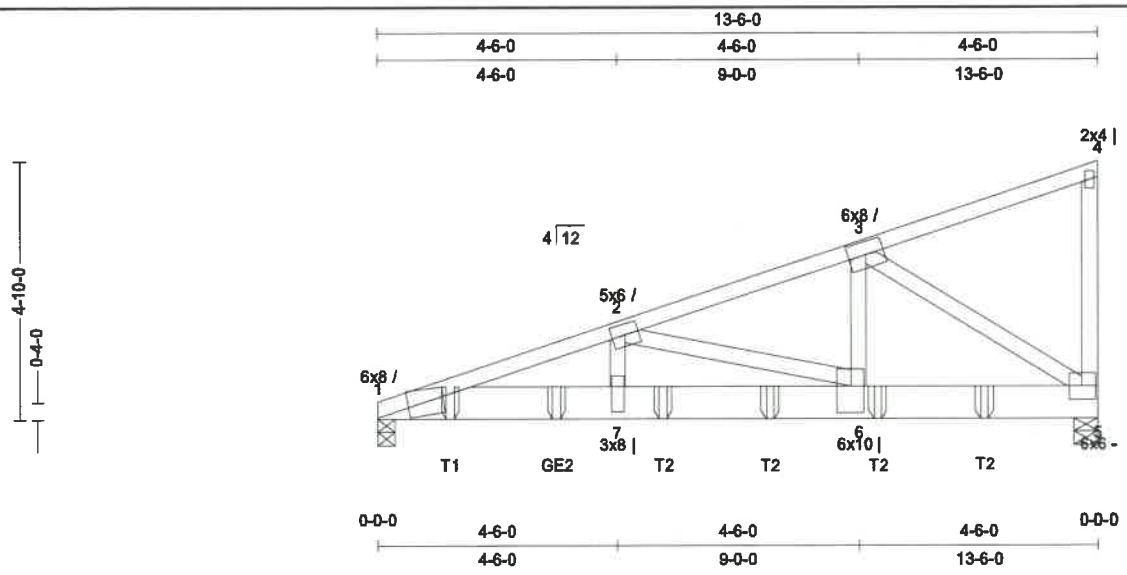
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable webs placed at 24 " OC, U.N.O.
3) Attach gable webs with 4x4 20ga plates, U.N.O.
4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
5) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
6) Gable must be sheathed on one side or lateral bracing applied appropriately.
7) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
8) A creep factor of 1.50 has been applied for this truss analysis.
9) ⊠ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
1-8-8	4/12	1	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	18 lbs

10) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 5 may need to be considered.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GR1 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:29 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
13-6-0	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	3	12.75 in	86 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code: IBC2018/	TC: 0.47 (1-2)	Vert TL:	0.21 in	L/711	(6-7)	L/240
TCLL: 110	TPI 1-2014	BC: 0.79 (7-1)	Vert LL:	0.17 in	L/879	(6-7)	L/360
TCDL: 10	Rep Mbr: Yes	Web: 0.63 (3-6)	Horz TL:	0.05 in		5	
BCLL: 0	Lumber D.O.L.: 100 %						
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	4 in	1.87 in	6,437 lbs	·	-304 lbs	·	-304 lbs	150 lbs
5	1	5.5 in	1.58 in	5,433 lbs	·	-316 lbs	·	-316 lbs	·

Material

TC: SP-FT/PG 2400/1.8 2 x 4
BC: SP-FT/PG 2400/1.8 2 x 8
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
3) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	11-5-4	Down	Proj	21.25 plf	21.25 plf	
Top	11-5-4	13-6-0	Down	Proj	21.25 plf	0.62 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	11-5-4	Down	Proj	10.63 plf	10.63 plf	
Top	11-5-4	13-6-0	Down	Proj	10.63 plf	0.31 plf	
Bot	0-0-0	11-5-4	Down	Proj	10.63 plf	10.63 plf	
Bot	11-5-4	13-6-0	Down	Proj	10.63 plf	0.31 plf	

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.473	-4,961 lbs		2-3	0.246	-2,472 lbs					
BC	5-6	0.551	2,314 lbs	(-133 lbs)	6-7	0.496	4,691 lbs	(-260 lbs)	7-1	0.789	4,691 lbs	(-260 lbs)
Web	2-7	0.369	1,278 lbs	(-58 lbs)	3-6	0.634	2,198 lbs	(-104 lbs)				
	2-6	0.349	-2,486 lbs		3-5	0.406	-2,774 lbs					

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR1
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:29

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
13-6-0	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	3	12.75 in	86 lbs

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
T1	BC	1-4-4
GE2	BC	3-4-4
T2	BC	5-4-4
T2	BC	7-4-4
T2	BC	9-4-4
T2	BC	11-4-4

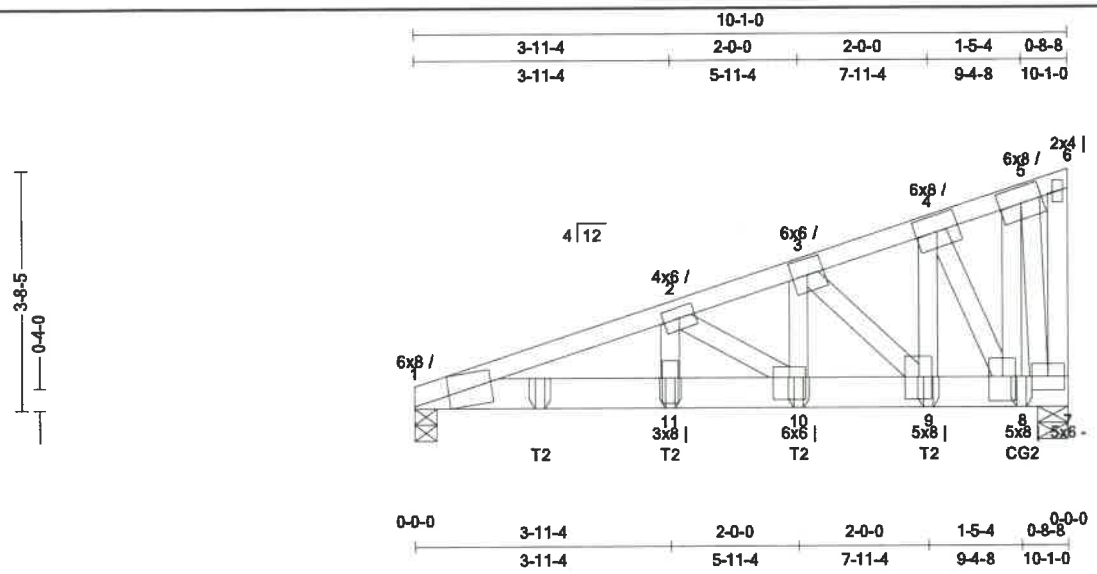
Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) A creep factor of 1.50 has been applied for this truss analysis.
5) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Three identical trusses shall be built and attached as follows: TrussLoc - Z(TSLZ412, 3 - ply) Screws TC - 1 row @ 1-10-8 oc, BC - 2 staggered rows @ 0-9-4 oc, Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 2-0-0 oc, per ply.
6) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
7) Lateral bracing shall be attached to each ply.
8) Install screws per manufacturer recommendations.
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR2
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:33
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
10-1-0	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	2	12.38 in	73 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code: IBC 2018/	TC: 0.57 (1-2)	Vert TL:	0.16 in	L/717	(11-1)	L/240
TCLL: 110	TPI 1-2014	BC: 0.86 (11-1)	Vert LL:	0.12 in	L/900	(11-1)	L/360
TCDL: 10	Rep Mbr: No	Web: 0.70 (5-8)	Horz TL:	0.03 in		7	
BCLL: 0	Lumber D.O.L.: 100 %						
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	4 in	1.58 in	3,636 lbs	-	-207 lbs	-	-207 lbs	117 lbs
7	1	5.5 in	2.37 in	5,430 lbs	-	-383 lbs	-	-383 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 4
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 5-9-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
3) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	7-5-4	Down	Proj	20.63 plf	20.63 plf	
Top	7-5-4	8-8-4	Down	Proj	20.63 plf	8.12 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	7-5-4	Down	Proj	10.31 plf	10.31 plf	
Top	7-5-4	8-8-4	Down	Proj	10.31 plf	4.06 plf	
Bot	0-0-0	7-5-4	Down	Proj	10.31 plf	10.31 plf	
Bot	7-5-4	8-8-4	Down	Proj	10.31 plf	4.06 plf	

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.571	-4,368 lbs		3-4	0.152	-1,475 lbs					
	2-3	0.301	-2,916 lbs		4-5	0.057	-553 lbs					
BC	7-8	0.490	440 lbs	(-31 lbs)	9-10	0.393	2,757 lbs	(-170 lbs)	11-1	0.860	4,153 lbs	(-254 lbs)
	8-9	0.382	1,380 lbs	(-91 lbs)	10-11	0.448	4,153 lbs	(-254 lbs)				
Web	2-11	0.351	1,218 lbs	(-56 lbs)	3-9	0.245	-1,912 lbs		5-8	0.697	2,415 lbs	(-169 lbs)
	2-10	0.209	-1,651 lbs		4-9	0.606	2,101 lbs	(-119 lbs)	5-7	0.295	-2,250 lbs	
	3-10	0.484	1,677 lbs	(-86 lbs)	4-8	0.270	-2,087 lbs					

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR2
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:33

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
10-1-0	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	2	12.38 in	73 lbs

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
T2	BC	1-11-4
T2	BC	3-11-4
T2	BC	5-11-4
T2	BC	7-11-4
CG2	BC	9-4-8

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) A creep factor of 1.50 has been applied for this truss analysis.
5) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows: TrussLoc - Z(TSLZ278, 2 - ply) Screws TC - 1 row @ 2-0-0 oc, BC - 2 staggered rows @ 0-10-8 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 2-0-0 oc.

Provided the hanger connections do not adequately transfer the applied load to all plies: in addition to connectors shown above, attach girder plies with supplemental TrussLoc - Z(TSLZ278, 2 - ply) Screws as follows within 24" of the location shown:
BC: 9-4-8,(8)Connectors

Connectors shall not encroach on other girder ply connectors or truss-to-truss connectors in accordance with the NDS or the connector manufacturer recommendations.
6) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
7) Lateral bracing shall be attached to each ply.
8) Install screws per manufacturer recommendations.
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

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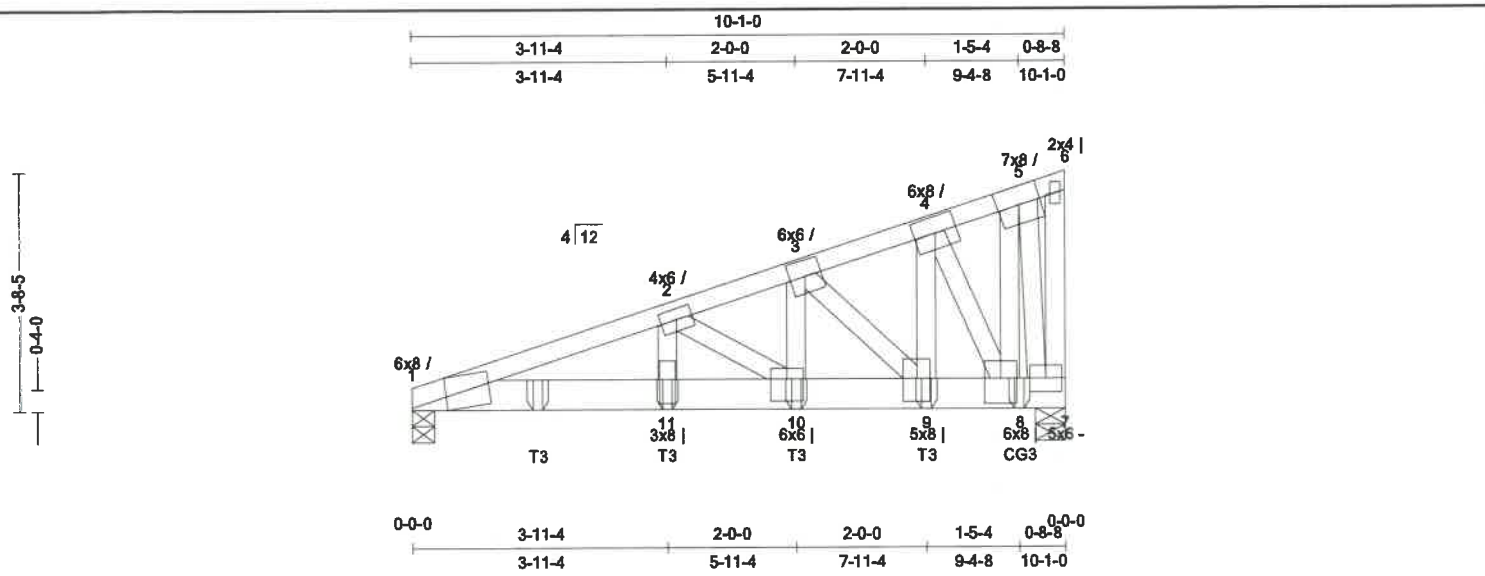
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR3
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:34
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
10-1-0	4/12	2	0-0-0	0-0-0	0-0-0	0-0-0	2	12.7 in	73 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code: IBC2018/	TC: 0.56 (1-2)	Vert TL:	0.15 in	L/725	(11-1)	L/240
TCLL: 110	TPI 1-2014	BC: 0.85 (11-1)	Vert LL:	0.12 in	L/912	(11-1)	L/360
TCDL: 10	Rep Mbr: No	Web: 0.70 (5-8)	Horz TL:	0.03 in		7	
BCLL: 0	Lumber D.O.L.: 100 %						
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	4 in	1.57 in	3,596 lbs	·	-232 lbs	·	-232 lbs	115 lbs
7	1	5.5 in	2.36 in	5,426 lbs	·	-405 lbs	·	-405 lbs	·

Material

TC: SP-FT/PG 2400/1.8 2 x 4
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 5-10-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DCL = 1.60
3) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	7-4-3	Down	Proj	20.63 plf	20.63 plf	
Top	7-4-10	8-5-4	Down	Proj	21.17 plf	10.63 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	7-4-3	Down	Proj	10.31 plf	10.31 plf	
Top	7-4-10	8-5-4	Down	Proj	10.59 plf	5.31 plf	
Bot	0-0-0	7-4-3	Down	Proj	10.31 plf	10.31 plf	
Bot	7-4-10	8-5-4	Down	Proj	10.59 plf	5.31 plf	

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.562	-4,319 lbs		3-4	0.150	-1,458 lbs					
	2-3	0.298	-2,883 lbs		4-5	0.057	-552 lbs					
BC	7-8	0.487	440 lbs	(-33 lbs)	9-10	0.389	2,725 lbs	(-188 lbs)	11-1	0.850	4,106 lbs	(-282 lbs)
	8-9	0.381	1,363 lbs	(-100 lbs)	10-11	0.443	4,106 lbs	(-282 lbs)				
Web	2-11	0.348	1,204 lbs	(-65 lbs)	3-9	0.243	-1,892 lbs		5-8	0.698	2,418 lbs	(-180 lbs)
	2-10	0.207	-1,634 lbs		4-9	0.600	2,079 lbs	(-134 lbs)	5-7	0.295	-2,249 lbs	
	3-10	0.479	1,658 lbs	(-99 lbs)	4-8	0.266	-2,060 lbs					

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Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR3
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:35

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
10-1-0	4/12	2	0-0-0	0-0-0	0-0-0	0-0-0	2	12.7 in	73 lbs

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
T3	BC	1-11-4
T3	BC	3-11-4
T3	BC	5-11-4
T3	BC	7-11-4
CG3	BC	9-4-8

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (C_q = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) A creep factor of 1.50 has been applied for this truss analysis.
5) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows: TrussLoc - Z(TSLZ278, 2 - ply) Screws TC - 1 row @ 2-0-0 oc, BC - 2 staggered rows @ 0-10-8 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 2-0-0 oc.

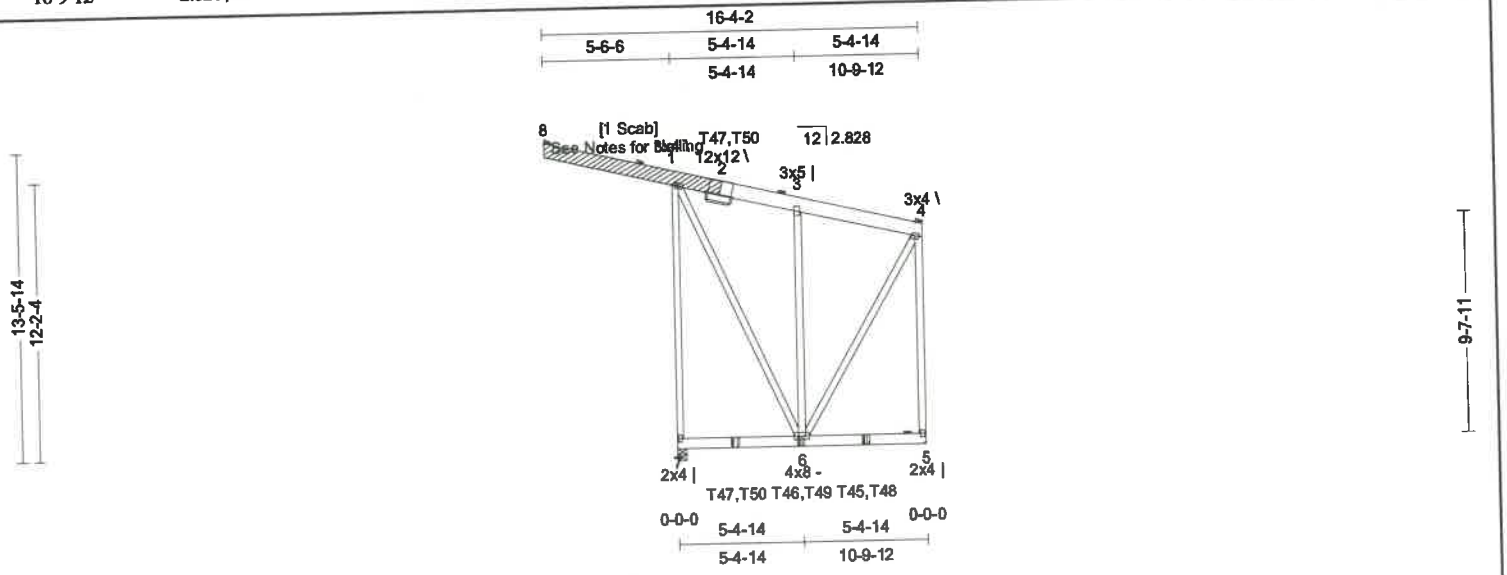
Provided the hanger connections do not adequately transfer the applied load to all plies: in addition to connectors shown above, attach girder plies with supplemental TrussLoc - Z(TSLZ278, 2 - ply) Screws as follows within 24" of the location shown:
BC: 9-4-8,(8)Connectors

Connectors shall not encroach on other girder ply connectors or truss-to-truss connectors in accordance with the NDS or the connector manufacturer recommendations.
6) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
7) Lateral bracing shall be attached to each ply.
8) Install screws per manufacturer recommendations.
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR4
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:36
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
10-9-12	-2.828 /12	1	5-6-6	0-0-0	0-0-0	0-0-0	4	24.63 in	149 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.92 (1-3)	Vert TL: 0.04 in	L/999	(5-6)	L/240
TCLL: 110	Rep Mbr: No	BC: 0.13 (5-6)	Vert LL: 0.02 in UP	L/999	(5-6)	L/360
TCDL: 10	Lumber D.O.L.: 100 %	Web: 0.45 (1-7)	Horz TL: 0 in		5	
BCLL: 0						
BCDL: 10						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
7	1	4.778 in	1.50 in	4,315 lbs	·	-3,233 lbs	-1,004 lbs	-3,233 lbs	-260 lbs
5	1	1.5 in	—	2,128 lbs	-757 lbs	-1,754 lbs	·	-1,754 lbs	·

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4
Scabs 8-2 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	-5-6-6	-3-6-1	Down	Proj	0 plf	42.61 plf	
Top	-3-6-1	2-9-7	Down	Proj	42.61 plf	0 plf	
Top	-5-6-6	-3-6-1	Down	Proj	0 plf	42.54 plf	
Top	-3-6-1	2-9-5	Down	Proj	42.54 plf	0 plf	
Top	9-2-5	10-9-12	Down	Proj	20.49 plf	4.27 plf	
Top	9-2-3	10-9-12	Down	Proj	20.56 plf	4.27 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	-5-6-6	-3-6-1	Down	Proj	0 plf	21.31 plf	
Top	-3-6-1	2-9-7	Down	Proj	21.31 plf	0 plf	
Top	-5-6-6	-3-6-1	Down	Proj	0 plf	21.27 plf	
Top	-3-6-1	2-9-5	Down	Proj	21.27 plf	0 plf	
Top	9-2-5	10-9-12	Down	Proj	10.24 plf	2.13 plf	
Top	9-2-3	10-9-12	Down	Proj	10.28 plf	2.13 plf	
Bot	9-2-5	10-9-12	Down	Proj	10.24 plf	2.13 plf	
Bot	9-2-3	10-9-12	Down	Proj	10.28 plf	2.13 plf	

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Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR4
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:36
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
10-9-12	-2.828 /12	1	5-6-6	0-0-0	0-0-0	0-0-0	4	24.63 in	149 lbs

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-3	0.921	-372 lbs								
BC											
Web	1-7	0.454	-1,078 lbs		3-6	0.203	704 lbs	(-551 lbs)	4-5	0.114	-446 lbs
	1-6	0.222	533 lbs	(-460 lbs)	4-6	0.135	516 lbs	(-406 lbs)			

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
T50	BC	2-6-5
T47	BC	2-6-7
T49	BC	5-4-4
T46	BC	5-4-6
T48	BC	8-2-3
T45	BC	8-2-5
T50	TC	2-6-5
T47	TC	2-6-7

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 5 may need to be considered.
7) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Four identical trusses shall be built and attached as follows: SDS Simpson 0.250"x6" (4 - ply) Screws TC - 2 staggered rows @ 0-11-8 oc, BC - 2 staggered rows @ 2-0-0 oc , Webs - 1 row @ 2-0-0 oc.
8) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
9) Lateral bracing shall be attached to each ply.
10) Install screws per manufacturer recommendations.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Scab 2 - 8 to match size and grade of member to which it is attached. Attach with 2 staggered rows of 12d Nails or Gun Nails [min 0.135"x3"] @ 6 oc.
17) Listed wind uplift reactions based on MWFRS & C&C loading.

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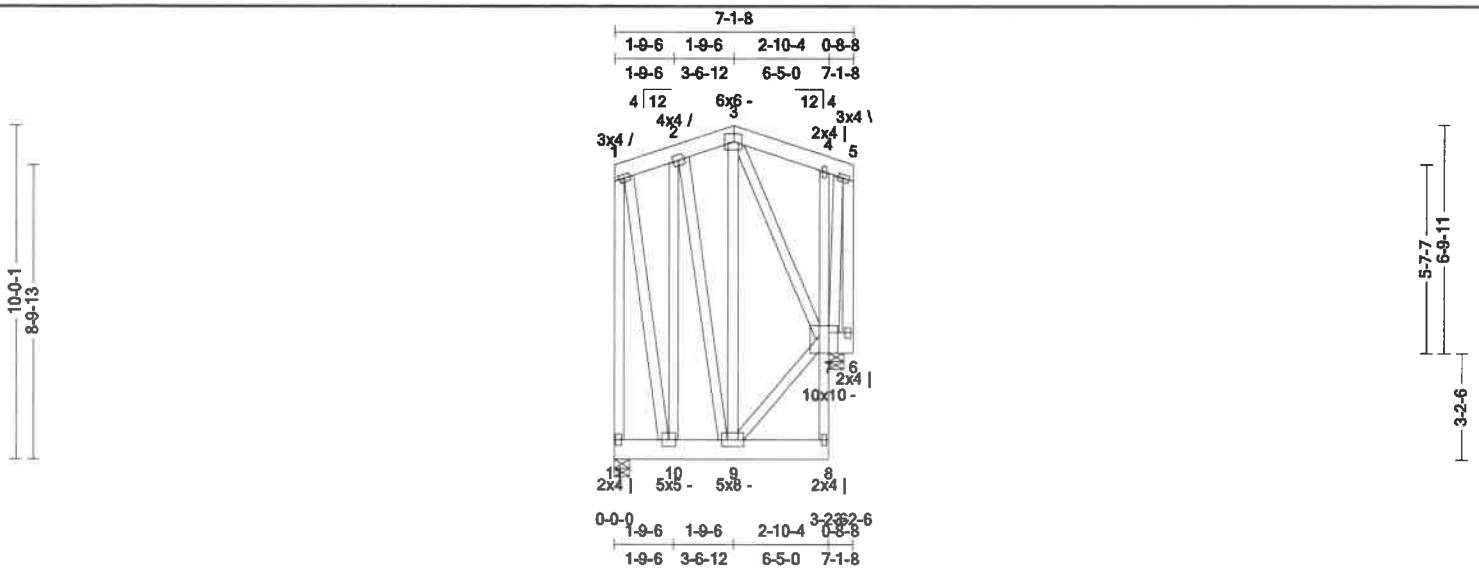
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GR6 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:37 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
7-1-8	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	2	11 in	138 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC2018/	TC: 0.06 (2-3)	Vert TL:	0 in	L/999	(9-10)	L/240
TCDL: 10		TPI 1-2014	BC: 0.01 (9-10)	Vert LL:	0 in	L/999	(9-10)	L/360
BCLL: 0	Rep Mbr:	No	Web: 0.21 (1-11)	Cant/OH TL:	0 in UP	2L/999	6	2L/120
BCDL: 10	Lumber D.O.L.:	100 %		Cant/OH LL:	0 in UP	2L/999	6	2L/120
				Horz TL:	0 in		7	

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
11	1	5.5 in	1.50 in	375 lbs	-	-86 lbs	-93 lbs	-93 lbs	112 lbs
7	1	5.5 in	1.50 in	474 lbs	-	-89 lbs	-156 lbs	-156 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 8
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DCL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC		
BC		
Web		

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
5) A creep factor of 1.50 has been applied for this truss analysis.

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Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR6
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:38
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
7-1-8	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	2	11 in	138 lbs

6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows: TrussLoc - Z(TSLZ278, 2 - ply) Screws TC - 2 staggered rows @ 2-0-0 oc, BC - 2 staggered rows @ 2-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 2-0-0 oc.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) Install screws per manufacturer recommendations.
10) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
11) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
12) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
13) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
14) Incising is not permitted.
15) Listed wind uplift reactions based on MWFRS & C&C loading.

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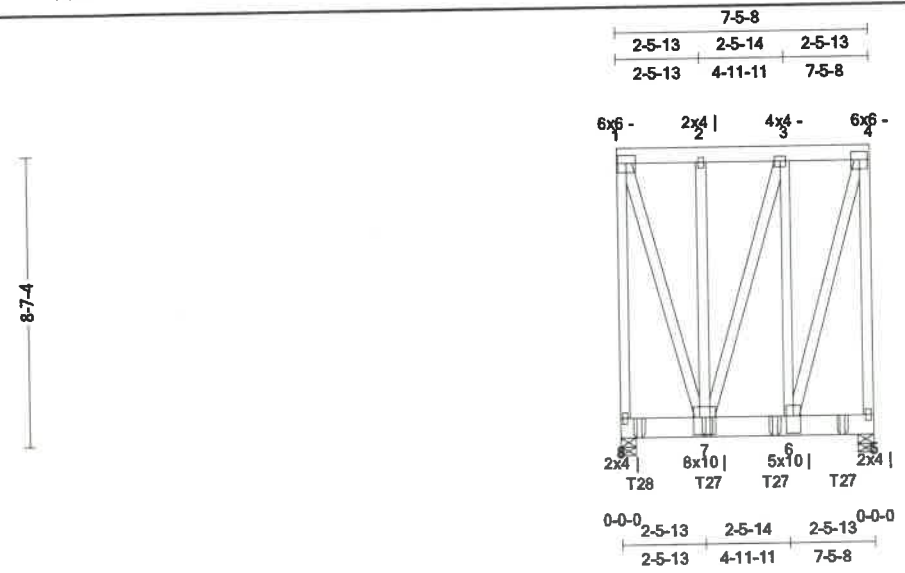
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GR7 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:38 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
7-5-8	0/12	1	0-0-0	0-0-0	0-0-0	0-0-0	3	7.375 in	116 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code: IBC 2018/ TPI 1-2014	TC: 0.06 (2-3)	Vert TL: 0.06 in	L/999	(6-7)	L/240
TCLL: 110	Rep Mbr: Yes	BC: 0.92 (7-8)	Vert LL: 0.04 in	L/999	(6-7)	L/360
TCDL: 10	Lumber D.O.L.: 100 %	Web: 0.47 (4-6)	Horz TL: 0 in		5	
BCLL: 0						
BCDL: 10						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
8	1	5.5 in	2.42 in	8,324 lbs	·	-642 lbs	·	-642 lbs	90 lbs
5	1	5.5 in	2.18 in	7,509 lbs	·	-578 lbs	·	-578 lbs	·

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 8
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case L r1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	7-5-8	Down	Proj	12.29 plf	12.29 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	7-5-8	Down	Proj	6.15 plf	6.15 plf	
Bot	0-0-0	7-5-8	Down	Proj	6.15 plf	6.15 plf	

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.046	-448 lbs		2-3	0.054	-448 lbs		3-4	0.045	-450 lbs
BC	6-7	0.239	450 lbs	(-35 lbs)							
Web	1-8	0.361	-1,611 lbs		4-6	0.467	1,617 lbs	(-125 lbs)			
	1-7	0.464	1,609 lbs	(-124 lbs)	4-5	0.363	-1,618 lbs				

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
T28	BC	0-6-12
T27	BC	2-6-12
T27	BC	4-6-12
T27	BC	6-6-12

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR7
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:39
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
7-5-8	0/12	1	0-0-0	0-0-0	0-0-0	0-0-0	3	7.375 in	116 lbs

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Three identical trusses shall be built and attached as follows: TrussLoc - Z(TSLZ412, 3 - ply) Screws TC - 2 staggered rows @ 2-0-0 oc, BC - 2 staggered rows @ 2-0-0 oc , Webs - 1 row @ 2-0-0 oc.

Provided the hanger connections do not adequately transfer the applied load to all plies: in addition to connectors shown above, attach girder plies with supplemental TrussLoc - Z(TSLZ412, 3 - ply) Screws as follows within 24" of the location shown:
BC: 0-6-12,(12)Connectors
BC: 2-6-12,(12)Connectors
BC: 4-6-12,(12)Connectors
BC: 6-6-12,(12)Connectors

Connectors shall not encroach on other girder ply connectors or truss-to-truss connectors in accordance with the NDS or the connector manufacturer recommendations.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) Install screws per manufacturer recommendations.
10) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
11) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
12) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
13) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
14) Incising is not permitted.
15) Listed wind uplift reactions based on MWFRS & C&C loading.

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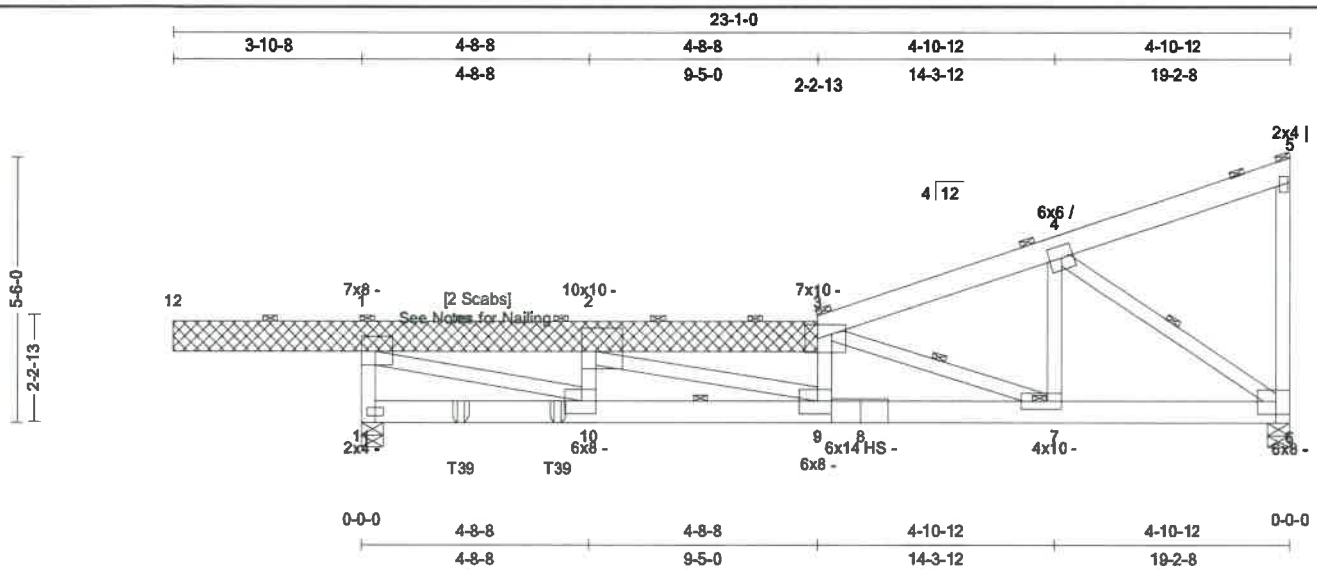
	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GR8 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:40 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	36 in	155 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code: IBC2018/	TC: 0.96 (3-4)	Vert TL:	0.3 in	L/743	9	L/240
TCLL: 110	TPI 1-2014	BC: 0.65 (7-9)	Vert LL:	0.23 in	L/969	9	L/360
TCDL: 10	Rep Mbr: No	Web: 0.83 (2-9)	Horz TL:	0.05 in		6	
BCLL: 0	Lumber D.O.L.: 100 %						
BCDL: 10							

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COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
11	1	5.5 in	1.95 in	3,706 lbs	·	-254 lbs	-529 lbs	-529 lbs	182 lbs
6	1	5.5 in	1.45 in	2,748 lbs	·	-153 lbs	-311 lbs	-311 lbs	·

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 12-3
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-10
Scabs 12-3 [Qty: 2] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 4-7-0, Purlin design by Others.

BC: Sheathed or Purlins at 7-0-0, Purlin design by Others.
Web: One Midpoint Row: 3-7, 4-6

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	-3-10-8	-3-1-11	Down	Proj	40 plf	40 plf	
Top	-3-1-11	-0-11-4	Down	Proj	40 plf	40 plf	
Top	5-0-12	19-2-8	Down	Proj	20 plf	20 plf	
Top	-3-10-8	19-2-8	Down	Proj	20 plf	20 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	-3-10-8	-3-1-11	Down	Proj	20 plf	20 plf	
Top	-3-1-11	-0-11-4	Down	Proj	20 plf	20 plf	
Top	5-0-12	19-2-8	Down	Proj	10 plf	10 plf	
Top	-3-10-8	19-2-8	Down	Proj	10 plf	10 plf	
Bot	5-0-12	19-2-8	Down	Proj	10 plf	10 plf	
Bot	0-0-0	19-2-8	Down	Proj	10 plf	10 plf	

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR8
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
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Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	36 in	155 lbs

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.877	-2,983 lbs		3-4	0.964	-3,254 lbs					
	2-3	0.181	-5,706 lbs		4-5	0.962	-308 lbs					
BC	6-7	0.261	2,864 lbs	(-271 lbs)	7-9	0.647	5,624 lbs	(-695 lbs)	9-10	0.439	2,983 lbs	(-1,790 lbs)
Web	1-11	0.489	-3,679 lbs		2-9	0.825	2,859 lbs	(-369 lbs)	4-7	0.332	1,150 lbs	(-90 lbs)
	1-10	0.452	3,155 lbs	(-1,893 lbs)	3-9	0.118	-906 lbs		4-6	0.629	-3,522 lbs	
	2-10	0.220	-975 lbs		3-7	0.485	-3,053 lbs		5-6	0.301	-657 lbs	

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
T39	BC	2-0-12
T39	BC	4-0-12

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 3 - 12 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc, One Each Side, Stagger Rows on Opposing Sides.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

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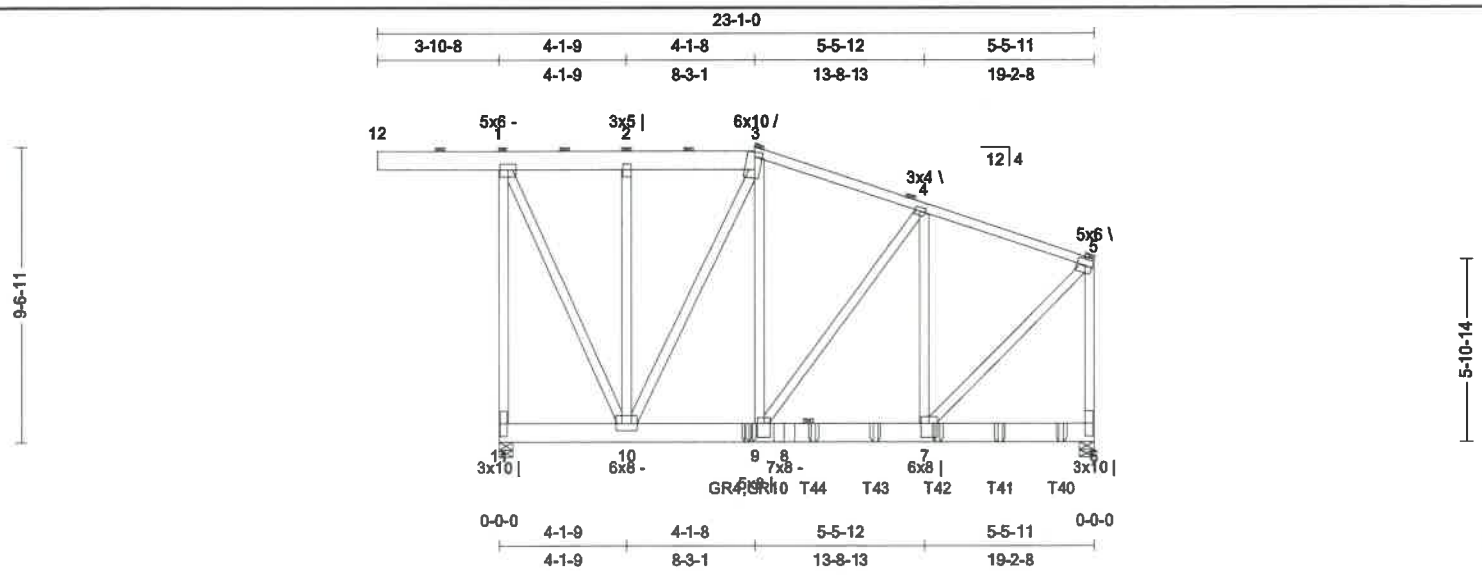
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GR9 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:41 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	26.38 in	211 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code: IBC2018/	TC: 0.89 (1-2)	Vert TL:	0.1 in	L/999	(7-8)	L/240
TCLL: 110	TPI 1-2014	BC: 0.50 (6-7)	Vert LL:	0.07 in	L/999	(7-8)	L/360
TCDL: 10	Rep Mbr: No	Web: 0.69 (1-11)	Horz TL:	0.01 in		6	
BCLL: 0	Lumber D.O.L.: 100 %						
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
11	1	5.5 in	1.88 in	4,317 lbs	-	-1,504 lbs	-287 lbs	-1,504 lbs	-240 lbs
6	1	5.5 in	1.93 in	4,430 lbs	-	-1,479 lbs	-	-1,479 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 8: 12-3
BC: SP-FT/PG 2400/1.8 2 x 8
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	-3-10-8	19-2-8	Down	Proj	20.21 plf	20.21 plf	
Top	-3-10-8	5-8-13	Down	Proj	19.79 plf	19.79 plf	
Top	5-9-1	7-1-9	Down	Proj	23.76 plf	10 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	-3-10-8	19-2-8	Down	Proj	10.1 plf	10.1 plf	
Top	-3-10-8	5-8-13	Down	Proj	9.9 plf	9.9 plf	
Top	5-9-1	7-1-9	Down	Proj	11.88 plf	5 plf	
Bot	0-0-0	19-2-8	Down	Proj	10.1 plf	10.1 plf	
Bot	0-0-0	6-1-13	Down	Proj	9.9 plf	9.9 plf	
Bot	6-1-13	7-1-9	Down	Proj	9.9 plf	5 plf	

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.887	-516 lbs		3-4	0.404	-1,073 lbs	
	2-3	0.120	-522 lbs		4-5	0.422	-1,291 lbs	
BC	7-9	0.474	1,186 lbs	(-499 lbs)	9-10	0.149	963 lbs	(-646 lbs)

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR9
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:42
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	26.38 in	211 lbs

Web	1-11	0.692	-2,116 lbs		3-10	0.420	-1,069 lbs		4-7	0.093	-383 lbs		
	1-10	0.362	1,253 lbs	(-785 lbs)	3-9	0.264	904 lbs	(-781 lbs)	5-7	0.492	1,704 lbs	(-700 lbs)	
	2-10	0.159	553 lbs	(-299 lbs)	4-9	0.123	360 lbs	(-353 lbs)	5-6	0.296	-1,757 lbs		

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
GR4	BC	8-0-1
GR10	BC	8-1-9
T44	BC	10-1-12
T43	BC	12-1-12
T42	BC	14-1-12
T41	BC	16-1-12
T40	BC	18-1-12

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows: TrussLoc - Z(TSLZ278, 2 - ply) Screws TC - 1 row @ 0-9-8 oc, BC - 2 staggered rows @ 1-8-12 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 2-0-0 oc.

Provided the hanger connections do not adequately transfer the applied load to all plies: in addition to connectors shown above, attach girder plies with supplemental TrussLoc - Z(TSLZ278, 2 - ply) Screws as follows within 24" of the location shown:
BC 8-0-1,(7)Connectors

Connectors shall not encroach on other girder ply connectors or truss-to-truss connectors in accordance with the NDS or the connector manufacturer recommendations.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) Install screws per manufacturer recommendations.
10) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
11) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
12) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
13) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
14) Incising is not permitted.
15) Listed wind uplift reactions based on MWFRS & C&C loading.

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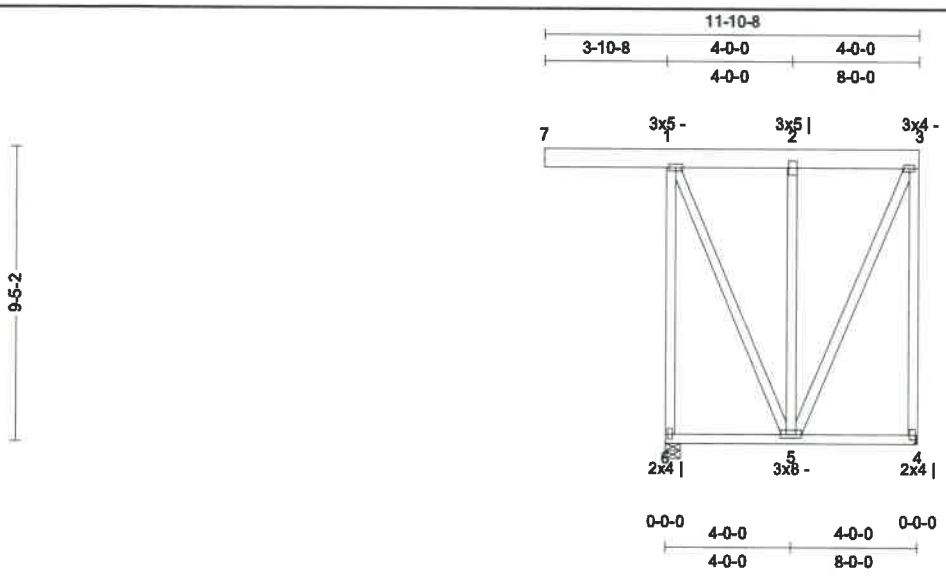
	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: GR10 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:30 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
8-0-0	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	107 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.89 (1-2)	Vert TL:	0.01 in	L/999	(4-5)	L/240
TCDL: 10	TPI 1-2014	BC: 0.08 (5-6)	Vert LL:	0.01 in	L/999	5	L/360
BCLL: 0	Rep Mbr: No	Web: 0.52 (3-4)	Horz TL:	0 in		4	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
6	1	5.5 in	1.50 in	2,424 lbs	-	-366 lbs	-567 lbs	-567 lbs	322 lbs
4	1	1.5 in	---	789 lbs	-322 lbs	-237 lbs	-160 lbs	-322 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed to account for the effects of ice dams forming at the eaves.
4) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
5) This truss has been designed for the effects of TCLL = 20 psf.
6) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC											
BC											
Web	1-6	0.516	-1,195 lbs		3-4	0.520	-375 lbs				
	2-5	0.162	562 lbs	(-199 lbs)							

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
4) Provide adequate drainage to prevent ponding.
5) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
6) A creep factor of 1.50 has been applied for this truss analysis.

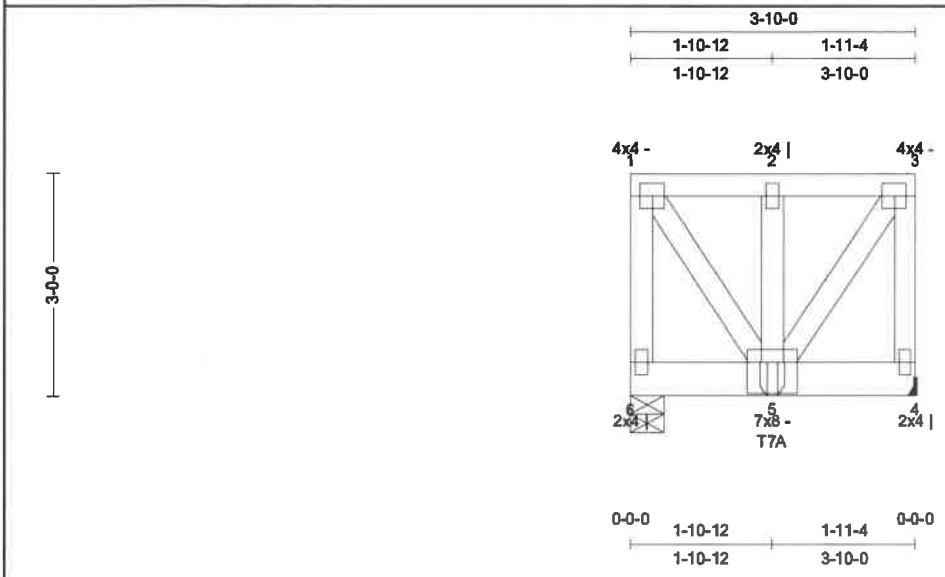
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
8-0-0	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	107 lbs

7) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 4 may need to be considered.
8) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 2 staggered rows @ 0-9-8 oc, BC - 1 row @ 1-0-0 oc, Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.
9) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
10) Lateral bracing shall be attached to each ply.
11) All fasteners minimum 2-1/2" long, unless otherwise noted.
12) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.
13) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
14) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
15) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
16) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
17) Incising is not permitted.
18) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR11
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:31
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
3-10-0	0/12	1	0-0-0	0-0-0	0-0-0	0-0-0	2	20.88 in	33 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code:	IBC2018/	TC:	0.07 (2-3)	Vert TL:	0.01 in	L/999	5	L/240
TCLL: 110		TPI 1-2014	BC:	0.13 (5-6)	Vert LL:	0.01 in	L/999	5	L/360
TCDL: 10	Rep Mbr:	No	Web:	0.27 (1-5)	Horz TL:	0 in		4	
BCLL: 0	Lumber D.O.L.:	100 %							
BCDL: 10									

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
6	1	5.5 in	1.50 in	1,966 lbs	-	-152 lbs	-	-152 lbs	89 lbs
4	1	1.5 in	—	1,930 lbs	-	-149 lbs	-	-149 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 4
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	3-4-15	Down	Proj	34.79 plf	34.79 plf	
Top	3-4-15	3-10-0	Down	Proj	34.79 plf	34.79 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	3-4-15	Down	Proj	17.4 plf	17.4 plf	
Top	3-4-15	3-10-0	Down	Proj	17.4 plf	17.4 plf	
Bot	0-0-0	3-10-0	Down	Proj	17.4 plf	17.4 plf	

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.065	-522 lbs		2-3	0.068	-522 lbs					
BC												
Web	1-6	0.114	-888 lbs		3-5	0.267	926 lbs	(-73 lbs)				
	1-5	0.272	941 lbs	(-75 lbs)	3-4	0.111	-872 lbs					

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
T7A	BC	1-10-12

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Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: GR11
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:32
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
3-10-0	0/12	1	0-0-0	0-0-0	0-0-0	0-0-0	2	20.88 in	33 lbs

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (C_q = 0.90).
3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
4) Provide adequate drainage to prevent ponding.
5) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 1 row @ 0-10-0 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.

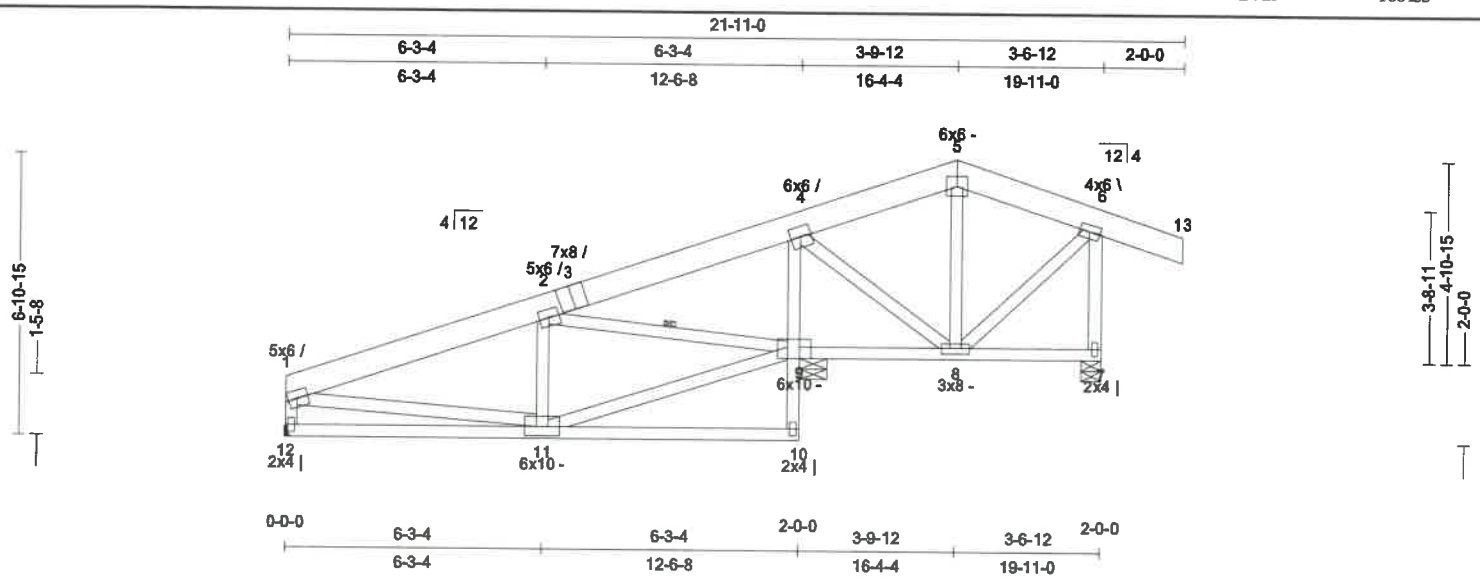
Provided the hanger connections do not adequately transfer the applied load to all plies: in addition to connectors shown above, attach each pair of girder plies with supplemental 12d Nails or Gun Nails [min 0.135"x3"] as follows within 24" of the location shown:
BC: 1-10-12, Ensure hanger fasteners engage all plies

Connectors shall not encroach on other girder ply connectors or truss-to-truss connectors in accordance with the NDS or the connector manufacturer recommendations.
8) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
9) Lateral bracing shall be attached to each ply.
10) All fasteners minimum 2-1/2" long, unless otherwise noted.
11) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.
12) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
13) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
14) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
15) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
16) Incising is not permitted.
17) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T1
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:56
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-11-0	4/12	1	0-0-0	2-0-0	0-0-0	0-0-0	1	24 in	160 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.80 (1-2)	Vert TL:	0.1 in	L/999	(10-11)	L/240
TCDL: 10	Rep Mbr: No	BC: 0.37 (11-12)	Vert LL:	0.06 in	L/999	11	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.61 (11-9)	Horz TL:	0 in		7	
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
12	1	1.5 in	—	1,726 lbs	·	-57 lbs	-184 lbs	-184 lbs	142 lbs
9	1	8 in	3.20 in	3,670 lbs	·	-194 lbs	-382 lbs	-382 lbs	·
7	1	5.5 in	1.52 in	1,738 lbs	·	-111 lbs	-234 lbs	-234 lbs	·

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 2-9

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DCL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.796	-2,310 lbs		4-5	0.673	-423 lbs						
	2-4	0.776	728 lbs	(-34 lbs)	5-6	0.582	-420 lbs						
BC	8-9	0.156	-378 lbs										
Web	1-12	0.207	-1,672 lbs		2-9	0.479	-2,420 lbs		4-8	0.189	657 lbs	(-8 lbs)	
	1-11	0.587	2,032 lbs	(-132 lbs)	11-9	0.607	2,104 lbs	(-236 lbs)	5-8	0.147	-475 lbs		
	2-11	0.149	-852 lbs		4-9	0.538	-2,509 lbs		6-7	0.325	-1,708 lbs		

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
6) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
7) A creep factor of 1.50 has been applied for this truss analysis.
8) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

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Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T1
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:56
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-11-0	4/12	1	0-0-0	2-0-0	0-0-0	0-0-0	1	24 in	160 lbs

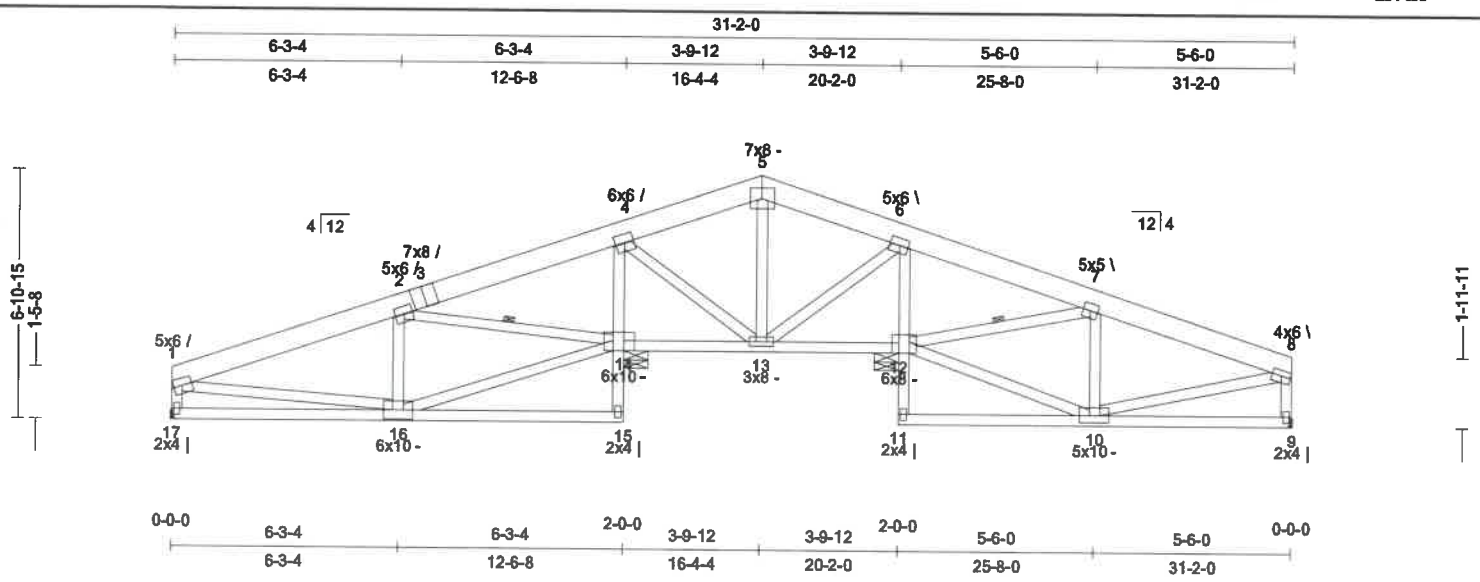
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T2
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:11
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
31-2-0	4/12	4	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	237 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.80 (1-2)	Vert TL:	0.1 in	L/999	(15-16)	L/240
TCDL: 10	TPI 1-2014	BC: 0.32 (16-17)	Vert LL:	0.06 in	L/999	16	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.60 (16-14)	Horz TL:	0.01 in		9	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
17	1	1.5 in	—	1,706 lbs	·	-89 lbs	-209 lbs	-209 lbs	44 lbs
14	1	8 in	3.17 in	3,639 lbs	·	-167 lbs	-356 lbs	-356 lbs	·
12	1	8 in	2.82 in	3,240 lbs	·	-145 lbs	-306 lbs	-306 lbs	·
9	1	1.5 in	—	1,595 lbs	·	-80 lbs	-190 lbs	-190 lbs	·

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 2-14, 7-12

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
3) This truss has been designed for the effects of TCLL=20 psf.
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.797	-2,270 lbs		4-5	0.673	-320 lbs		6-7	0.674	558 lbs	(-7 lbs)
	2-4	0.777	808 lbs		5-6	0.625	-403 lbs		7-8	0.742	-1,748 lbs	
BC	12-13	0.160	-313 lbs									
	13-14	0.160	-453 lbs									
Web	1-17	0.205	-1,653 lbs		4-14	0.533	-2,486 lbs		7-12	0.308	-1,795 lbs	
	1-16	0.575	1,993 lbs	(-184 lbs)	4-13	0.189	654 lbs		12-10	0.456	1,580 lbs	(-109 lbs)
	2-16	0.146	-833 lbs		5-13	0.193	-622 lbs		7-10	0.166	-859 lbs	
	2-14	0.486	-2,458 lbs		6-13	0.144	498 lbs		8-10	0.446	1,544 lbs	(-138 lbs)
	16-14	0.596	2,065 lbs	(-182 lbs)	6-12	0.466	-2,173 lbs		8-9	0.197	-1,548 lbs	

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Hangers are for graphical interpretation only. Install hangers per manufacturer's recommendations.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
6) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
7) A creep factor of 1.50 has been applied for this truss analysis.
8) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

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Westcliffe, CO 81252
Phone (719) 371-8508

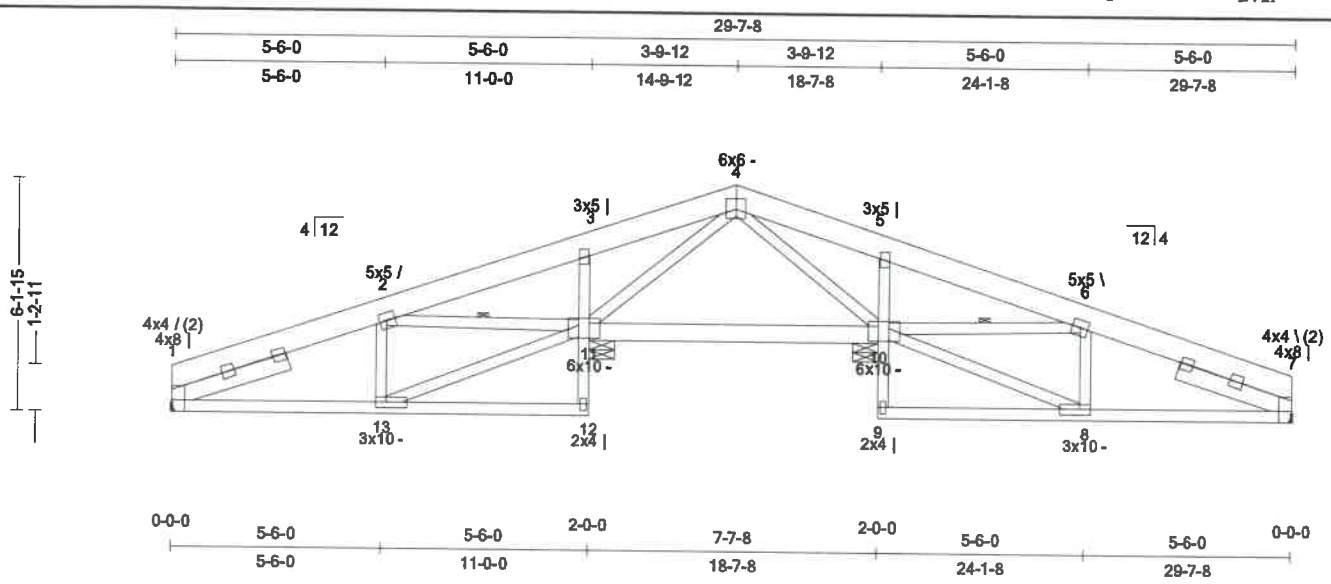
Truss: T2
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:11

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
31-2-0	4/12	4	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	237 lbs

9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T3 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:00:27 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
29-7-8	4/12	4	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	219 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.73 (2-3)	Vert TL:	0.1 in	L/724	(10-11)	L/240
TCDL: 10	TPI 1-2014	BC: 0.27 (13-1)	Vert LL:	0.05 in	L/999	(10-11)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.57 (13-11)	Horz TL:	0.02 in		7	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	1.5 in	—	1,577 lbs	-	-93 lbs	-194 lbs	-194 lbs	29 lbs
11	1	8 in	2.90 in	3,328 lbs	-	-136 lbs	-310 lbs	-310 lbs	-
10	1	8 in	2.90 in	3,328 lbs	-	-136 lbs	-310 lbs	-310 lbs	-
7	1	1.5 in	—	1,577 lbs	-	-93 lbs	-194 lbs	-194 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 6: 10-11
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Web: One Midpoint Row: 2-11, 6-10

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
3) This truss has been designed for the effects of TCLL=20 psf.
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.528	-2,019 lbs		3-4	0.640	456 lbs	(-13 lbs)	5-6	0.732	618 lbs			
	2-3	0.732	618 lbs		4-5	0.640	456 lbs	(-13 lbs)	6-7	0.528	-2,019 lbs			
BC	7-8	0.270	1,836 lbs	(-163 lbs)										
	13-1	0.270	1,836 lbs	(-163 lbs)										
Web	2-13	0.090	-601 lbs		3-11	0.287	-1,833 lbs		5-10	0.287	-1,833 lbs		6-8	0.090	-601 lbs
	2-11	0.362	-2,139 lbs		4-11	0.298	-670 lbs		6-10	0.362	-2,139 lbs			
	13-11	0.568	1,970 lbs	(-175 lbs)	4-10	0.298	-670 lbs		10-8	0.568	1,970 lbs	(-175 lbs)		

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Hangers are for graphical interpretation only. Install hangers per manufacturer's recommendations.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
6) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
7) A creep factor of 1.50 has been applied for this truss analysis.
8) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T3
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:28
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
29-7-8	4/12	4	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	219 lbs

9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

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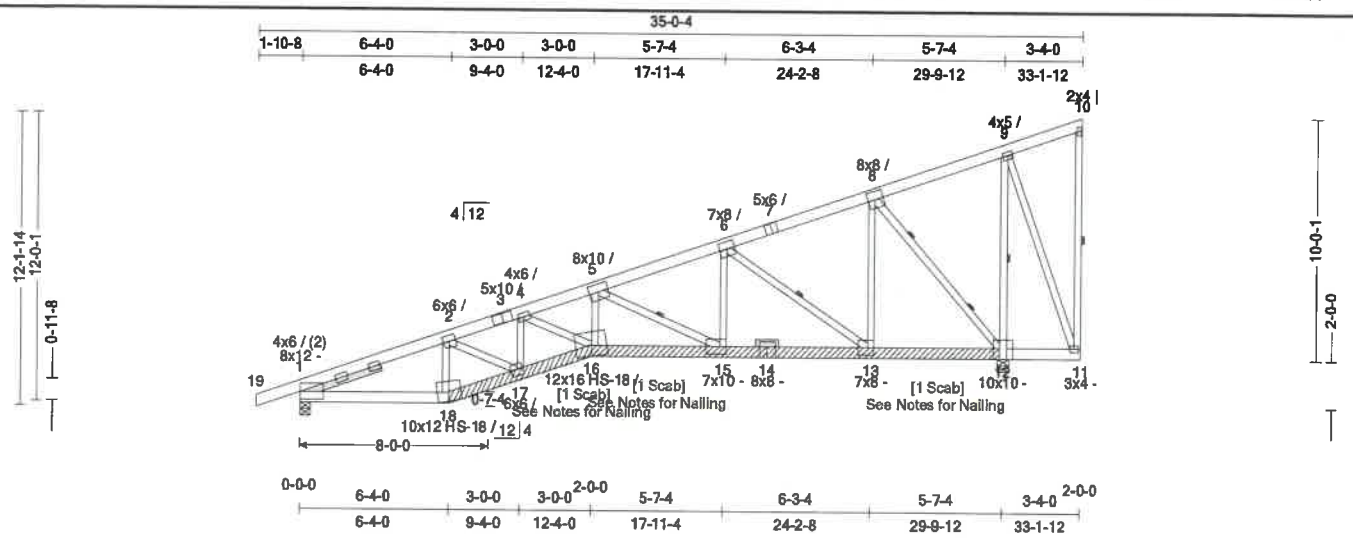
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T4
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:09:09
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
33-1-12	4/12	70	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	283 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC 2018/	TC:	0.85 (19-1)	Vert TL:	0.68 in	L/510	(15-16)	L/240
TCDL: 10		TPI 1-2014	BC:	0.73 (18-1)	Vert LL:	0.54 in	L/652	16	L/360
BCLL: 0	Rep Mbr:	Yes	Web:	0.79 (5-16)	Cant / OH TL:	0.11 in UP	2L/676	11	2L/120
BCDL: 10	Lumber D.O.L.:	100 %			Cant / OH LL:	0.09 in UP	2L/853	11	2L/120
					Horz TL:	0.19 in		12	

09/16/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	4.01 in	4,597 lbs	-	-193 lbs	-517 lbs	-517 lbs	480 lbs
12	1	5.5 in	2.52 in	4,777 lbs	-	-371 lbs	-734 lbs	-734 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 5-15, 6-13, 8-12
Scabs 12-14 [Qty: 1] SP-FT/PG 2400/1.8 2x4 16 [Qty: 1] SP-FT/PG 2400/1.8 2x6 18 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed or Purlins at 2-4-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 5-15, 6-13, 9-12, 10-11
Two Third Point Rows: 8-12

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL= 157 psf), Terrain C, Exposure (Ce= 1.0), Thermal (Ct= 1.00), DOL= 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL= 1.60
4) This truss has been designed for the effects of TC LL= 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.726	-8,285 lbs		4-5	0.657	-11,011 lbs		6-8	0.769	-2,978 lbs		
	2-4	0.623	-10,369 lbs		5-6	0.743	-6,649 lbs						
BC	12-13	0.189	2,601 lbs	(-209 lbs)	15-16	0.573	10,167 lbs	(-1,195 lbs)	17-18	0.376	7,972 lbs	(-985 lbs)	
	13-15	0.264	6,141 lbs	(-658 lbs)	16-17	0.575	10,189 lbs	(-1,223 lbs)	18-1	0.731	7,659 lbs	(-943 lbs)	
Web	2-18	0.376	-2,543 lbs		5-16	0.793	2,746 lbs	(-277 lbs)	8-13	0.737	2,555 lbs	(-227 lbs)	
	2-17	0.744	2,578 lbs	(-259 lbs)	5-15	0.757	-5,489 lbs		8-12	0.712	-4,124 lbs		
	4-17	0.254	-1,709 lbs		6-15	0.766	2,655 lbs	(-203 lbs)	9-12	0.481	-1,412 lbs		
	4-16	0.349	1,211 lbs	(-83 lbs)	6-13	0.788	-4,346 lbs						

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
7) ☐ Indicates non-structural members.

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Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

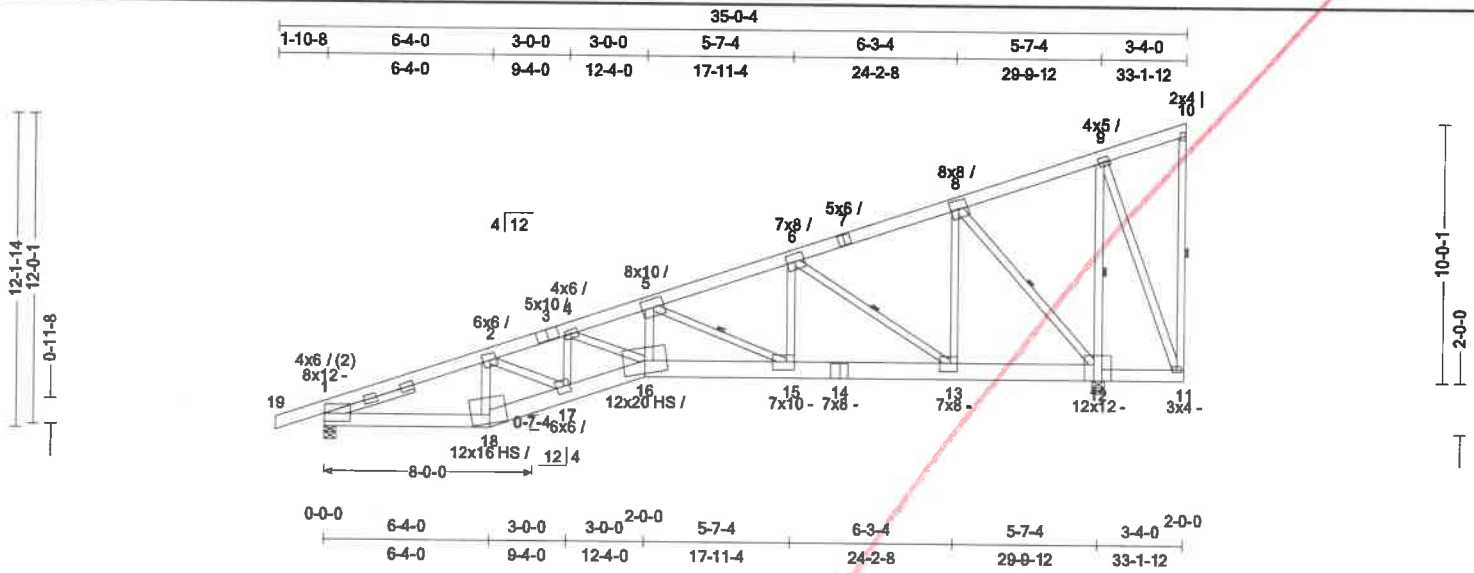
Truss: T4
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:09:09

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
33-1-12	4/12	70	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	283 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 12 - 14 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Scab 14 - 16 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
15) Scab 16 - 18 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T4 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:00:42 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
33-1-12	4/12	70	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	298 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.85 (19-1)	Vert TL:	0.77 in	L/451	(15-16)	L/240
TCDL: 10	Rep Mbr: Yes	BC: 0.88 (16-17)	Vert LL:	0.61 in	L/576	16	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.86 (8-12)	Cant/OH TL:	0.14 in UP	2L/542	11	2L/120
BCDL: 10			Cant/OH LL:	0.11 in UP	2L/685	11	2L/120
			Horz TL:	0.24 in		12	

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	4.00 in	4,583 lbs	-	-191 lbs	-514 lbs	-514 lbs	480 lbs
12	1	5.5 in	2.53 in	4,800 lbs	-	-372 lbs	-738 lbs	-738 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 8 except:
SP-FT/PG 2400/1.8 2 x 6: 11-12, 18-1
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 5-15, 6-13, 8-12

Bracing

TC: Sheathed or Purlins at 2-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Web: One Midpoint Row: 5-15, 6-13, 8-12, 9-12, 10-11

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.726	-8,228 lbs		4-5	0.667	-11,181 lbs		6-8	0.769	-2,914 lbs	
	2-4	0.646	-10,577 lbs		5-6	0.749	-6,648 lbs		8-9	0.714	314 lbs	(-158 lbs)
BC	12-13	0.250	2,541 lbs	(-200 lbs)	15-16	0.869	10,267 lbs	(-1,200 lbs)	17-18	0.575	8,156 lbs	(-1,005 lbs)
	13-15	0.391	6,142 lbs	(-651 lbs)	16-17	0.876	10,387 lbs	(-1,236 lbs)	18-1	0.741	7,606 lbs	(-930 lbs)
Web	2-18	0.384	-2,596 lbs		5-16	0.806	2,792 lbs	(-282 lbs)	8-13	0.736	2,552 lbs	(-226 lbs)
	2-17	0.740	2,565 lbs	(-250 lbs)	5-15	0.765	-5,587 lbs		8-12	0.865	-4,109 lbs	
	4-17	0.237	-1,652 lbs		6-15	0.771	2,671 lbs	(-204 lbs)	9-12	0.480	-1,427 lbs	
	4-16	0.335	1,162 lbs	(-80 lbs)	6-13	0.785	-4,397 lbs					

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ⊠ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

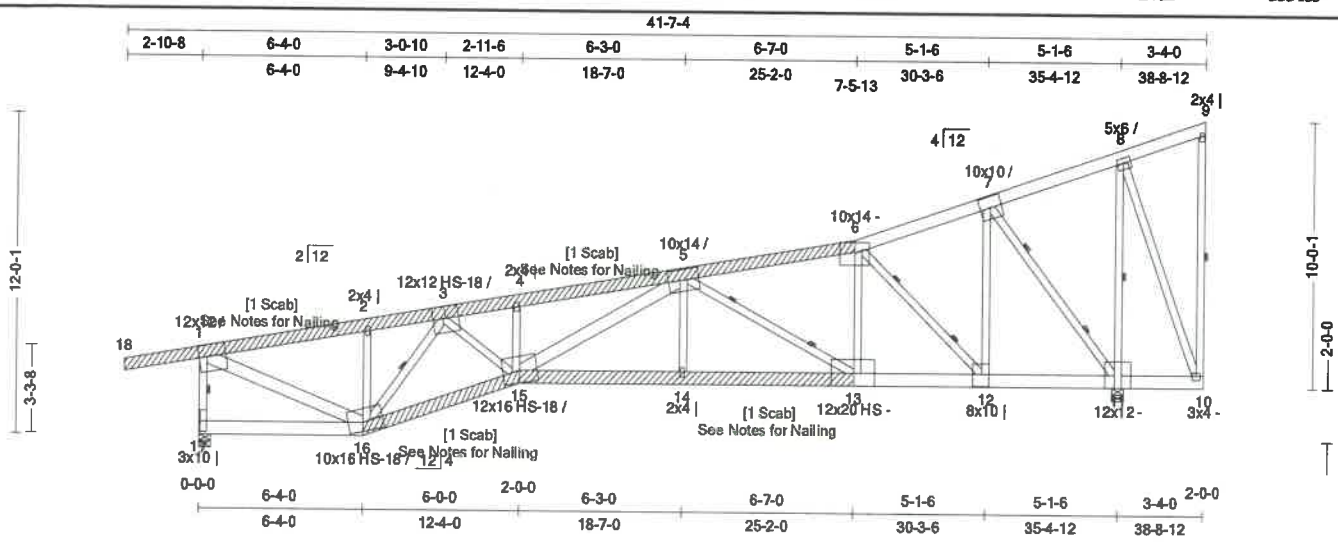
Truss: T4
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:42

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
33-1-12	4 /12	70	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	298 lbs

7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	**Truss: T5** Job: CBS0306SA-8-HIESCO COMPLETE Designer: Shane Allen Date: 09/16/24 08:09:14 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
38-8-12	2/12	20	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	353 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC 2018/	TC: 0.86 (6-7)		Vert TL:	0.77 in	L/541	(14-15)	L/240
TCDL: 10		TPI 1-2014	BC: 0.55 (14-15)		Vert LL:	0.62 in	L/677	(14-15)	L/360
BCLL: 0	Rep Mbr:	Yes	Web: 0.84 (6-13)		Cant / OH TL:	0.12 in UP	2L/624	10	2L/120
BCDL: 10	Lumber D.O.L.:	100 %			Cant / OH LL:	0.1 in UP	2L/768	10	2L/120
					Horz TL:	0.25 in		11	

09/16/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
17	1	5.5 in	4.99 in	5,725 lbs	-	-283 lbs	-723 lbs	-723 lbs	443 lbs
11	1	5.5 in	2.88 in	5,459 lbs	-	-394 lbs	-859 lbs	-859 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG #2 2 x 6: 5-15
SP-FT/PG 2400/1.8 2 x 4: 3-16, 3-15, 5-13, 6-12, 7-12, 7-11
SP-FT/PG 2400/1.8 2 x 6: 1-16

Scabs 18-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6
15-16 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed or Purlins at 5-4-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 1-17, 3-16, 8-11, 9-10
Two Third Point Rows: 5-13, 6-12, 7-11

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL= 157 psf), Terrain C, Exposure (Ce= 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL= 1.60
4) This truss has been designed for the effects of TC LL= 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.591	-6,728 lbs		4-5	0.578	-14,015 lbs		7-8	0.834	380 lbs	(-155 lbs)			
	2-3	0.317	-6,757 lbs		5-6	0.578	-6,776 lbs								
	3-4	0.417	-13,976 lbs		6-7	0.858	-3,190 lbs								
BC	11-12	0.374	2,844 lbs	(-274 lbs)	13-14	0.451	11,191 lbs	(-1,355 lbs)	15-16	0.522	10,502 lbs	(-1,383 lbs)			
	12-13	0.534	6,469 lbs	(-790 lbs)	14-15	0.547	11,191 lbs	(-1,355 lbs)	16-17	0.155	-413 lbs				
Web	1-17	0.730	-5,673 lbs		3-15	0.608	4,917 lbs	(-543 lbs)	6-13	0.843	2,923 lbs	(-268 lbs)	8-11	0.630	-1,852 lbs
	1-16	0.564	7,164 lbs	(-657 lbs)	4-15	0.230	-1,406 lbs		6-12	0.759	-5,486 lbs		8-10	0.102	354 lbs (-50 lbs)
	2-16	0.317	-1,328 lbs		5-15	0.616	2,946 lbs	(-421 lbs)	7-12	0.486	3,926 lbs	(-439 lbs)	9-10	0.721	-365 lbs
	3-16	0.723	-5,886 lbs		5-13	0.835	-5,461 lbs		7-11	0.811	-4,836 lbs				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ✉ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T5
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:09:14

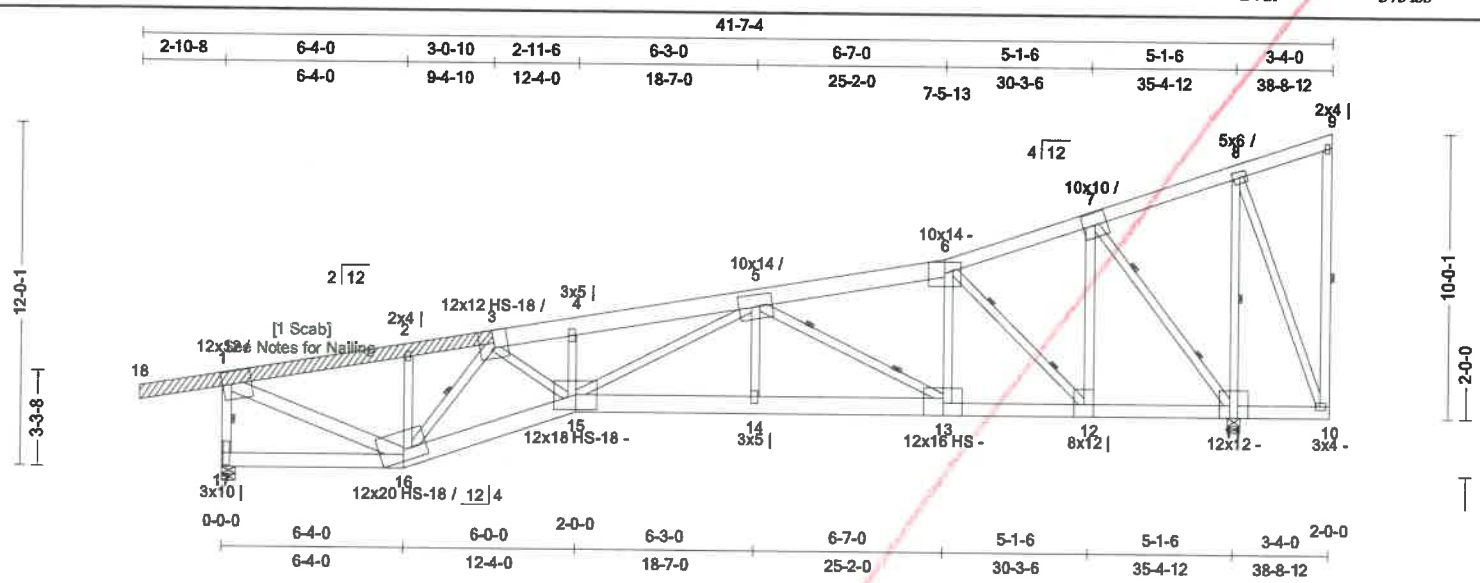
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
38-8-12	2/12	20	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	353 lbs

7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Scab 3 - 18 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
13) Scab 3 - 6 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Scab 13 - 15 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
15) Scab 15 - 16 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.13
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T5 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:00:56 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
38-8-12	2/12	20	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	373 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.92 (6-7)	Vert TL:	1.03 in	L/403	(14-15)	L/240
TCDL: 10	Rep Mbr: Yes	BC: 0.92 (14-15)	Vert LL:	0.83 in	L/504	(14-15)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.84 (6-13)	Cant/OH TL:	0.17 in UP	2L/443	10	2L/120
BCDL: 10			Cant/OH LL:	0.14 in UP	2L/547	10	2L/120
			Horz TL:	0.36 in		11	

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
17	1	5.5 in	4.99 in	5,725 lbs	-	-283 lbs	-723 lbs	-723 lbs	444 lbs
11	1	5.5 in	2.88 in	5,459 lbs	-	-394 lbs	-859 lbs	-859 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 3-6
BC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 13-15, 15-16
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 3-16, 3-15, 5-15, 5-13, 6-12, 7-12, 7-11
SP-FT/PG 2400/1.8 2 x 6: 1-16
Scabs 18-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed
BC: Sheathed or Purlins at 9-6-0, Purlin design by Others.
Web: One Midpoint Row: 1-17, 3-16, 8-11, 9-10
Two Third Point Rows: 5-13, 6-12, 7-11

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.592	-6,567 lbs		4-5	0.877	-14,559 lbs		7-8	0.852	377 lbs	(-155 lbs)			
	2-3	0.367	-6,668 lbs		5-6	0.820	-6,969 lbs								
	3-4	0.655	-14,496 lbs		6-7	0.916	-3,218 lbs								
BC	11-12	0.371	2,858 lbs	(-276 lbs)	13-14	0.705	11,569 lbs	(-1,399 lbs)	15-16	0.872	10,763 lbs	(-1,417 lbs)			
	12-13	0.570	6,937 lbs	(-846 lbs)	14-15	0.916	11,569 lbs	(-1,399 lbs)	16-17	0.151	-414 lbs				
Web	1-17	0.731	-5,679 lbs		3-15	0.643	5,196 lbs	(-573 lbs)	6-13	0.845	2,928 lbs	(-263 lbs)	8-11	0.625	-1,836 lbs
	1-16	0.554	7,040 lbs	(-643 lbs)	4-15	0.230	-1,537 lbs		6-12	0.804	-5,812 lbs		8-10	0.104	362 lbs
	2-16	0.300	-1,344 lbs		5-15	0.384	3,102 lbs	(-440 lbs)	7-12	0.481	3,885 lbs	(-427 lbs)	9-10	0.721	-371 lbs
	3-16	0.746	-6,141 lbs		5-13	0.844	-5,624 lbs		7-11	0.816	-4,863 lbs				

(-50 lbs)

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (C_q = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T5
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:57
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
38-8-12	2/12	20	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	373 lbs

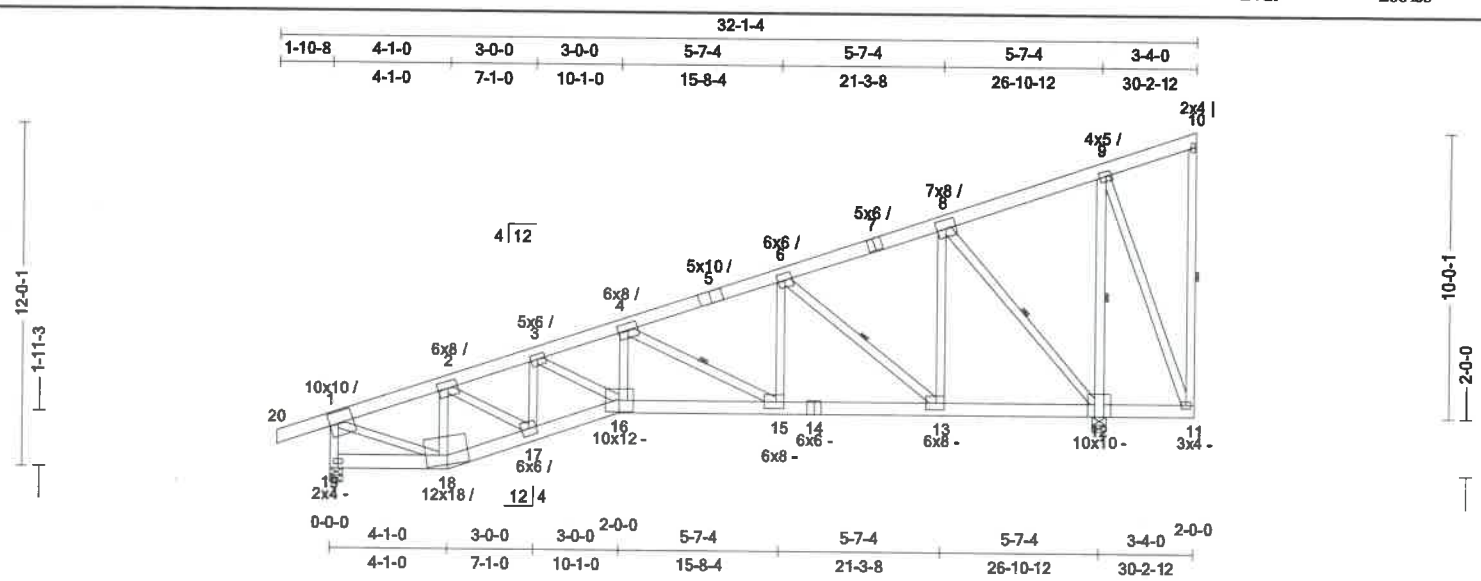
6) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Scab 3 - 18 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
13) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss

133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T6
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:01:13
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
30-2-12	4/12	13	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	266 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.85 (20-1)
TCDL: 10	Rep Mbr: Yes	BC: 0.72 (15-16)
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.79 (6-13)
BCDL: 10		

Deflection		L/	(loc)	Allowed
Vert TL:	0.49 in	L/645	(15-16)	L/240
Vert LL:	0.38 in	L/825	(15-16)	L/360
Cant/OH TL:	0.08 in UP	2L/942	11	2L/120
Cant/OH LL:	0.06 in UP	2L/999	11	2L/120
Horz TL:	0.18 in		12	

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
19	1	5.5 in	2.28 in	4,319 lbs	.	-162 lbs	-467 lbs	-467 lbs	422 lbs
12	1	5.5 in	2.31 in	4,381 lbs	.	-356 lbs	-692 lbs	-692 lbs	

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-18, 8-12

Bracing

TC: Sheathed or Purlins at 3-1-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 4-15, 6-13, 8-12, 9-12, 10-11

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads, in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.584	-4,855 lbs		3-4	0.490	-8,217 lbs		6-8	0.707	-2,588 lbs			
	2-3	0.561	-7,115 lbs		4-6	0.711	-5,191 lbs							
BC	12-13	0.301	2,256 lbs	(-191 lbs)	15-16	0.720	7,577 lbs	(-907 lbs)	17-18	0.393	4,547 lbs	(-638 lbs)		
	13-15	0.393	4,748 lbs	(-497 lbs)	16-17	0.673	6,928 lbs	(-883 lbs)	18-19	0.050	-422 lbs			
Web	1-19	0.567	-4,266 lbs		3-17	0.304	-1,924 lbs		6-15	0.574	1,990 lbs	(-155 lbs)	9-12	0.495	-1,454 lbs
	1-18	0.587	4,748 lbs	(-311 lbs)	3-16	0.448	1,553 lbs	(-94 lbs)	6-13	0.786	-3,248 lbs			
	2-18	0.485	-3,084 lbs		4-16	0.433	1,501 lbs	(-160 lbs)	8-13	0.619	2,144 lbs	(-195 lbs)		
	2-17	0.752	2,604 lbs	(-272 lbs)	4-15	0.746	-3,892 lbs		8-12	0.774	-3,603 lbs			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T6
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:01:13

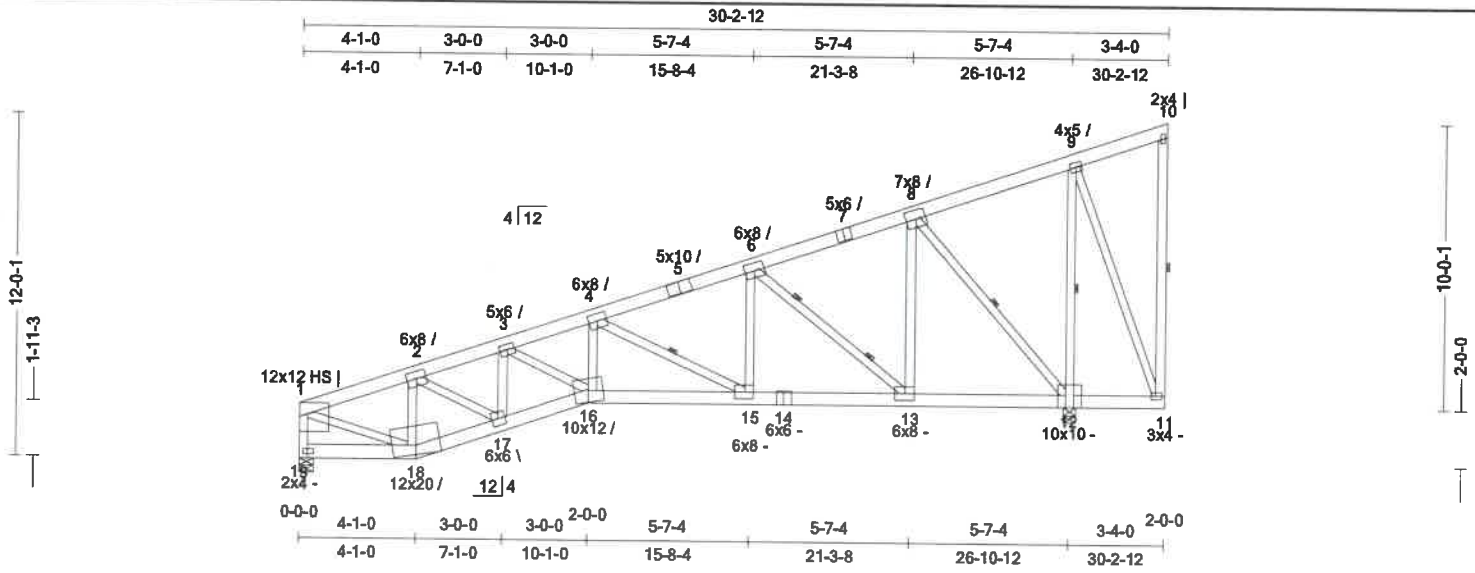
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
30-2-12	4/12	13	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	266 lbs

7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T7
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:01:14
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
30-2-12	4/12	4	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	264 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.72 (6-8)	Vert TL:	0.51 in	L/612	(15-16)	L/240
TCDL: 10	Rep Mbr: Yes	BC: 0.76 (15-16)	Vert LL:	0.41 in	L/774	(15-16)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.78 (8-12)	Cant/OH TL:	0.08 in UP	2L/884	11	2L/120
BCDL: 10			Cant/OH LL:	0.07 in UP	2L/999	11	2L/120
			Horz TL:	0.19 in		12	

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
19	1	5.5 in	2.04 in	3,876 lbs	-	-110 lbs	-369 lbs	-369 lbs	405 lbs
12	1	5.5 in	2.32 in	4,400 lbs	-	-357 lbs	-720 lbs	-720 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-18, 8-12

Bracing

TC: Sheathed or Purlins at 2-11-0, Purlin design by Others.
BC: Sheathed or Purlins at 9-10-0, Purlin design by Others.
Web: One Midpoint Row: 4-15, 8-12, 9-12, 10-11
Two Third Point Rows: 6-13

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DCL=1.60
3) This truss has been designed for the effects of TCLL=20 psf.
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.324	-5,082 lbs		3-4	0.518	-8,686 lbs		6-8	0.716	-2,605 lbs			
	2-3	0.595	-7,476 lbs		4-6	0.711	-5,237 lbs							
BC	12-13	0.302	2,272 lbs	(-192 lbs)	15-16	0.761	8,028 lbs	(-1,019 lbs)	17-18	0.415	4,825 lbs	(-715 lbs)		
	13-15	0.396	4,791 lbs	(-567 lbs)	16-17	0.707	7,276 lbs	(-968 lbs)	18-19	0.051	-397 lbs			
Web	1-19	0.508	-3,822 lbs		3-17	0.313	-1,981 lbs		6-15	0.591	2,048 lbs	(-178 lbs)	9-12	0.495	-1,454 lbs
	1-18	0.623	5,039 lbs	(-424 lbs)	3-16	0.444	1,540 lbs	(-132 lbs)	6-13	0.688	-3,502 lbs			
	2-18	0.515	-3,278 lbs		4-16	0.442	1,532 lbs	(-166 lbs)	8-13	0.671	2,325 lbs	(-234 lbs)		
	2-17	0.774	2,681 lbs	(-282 lbs)	4-15	0.769	-4,014 lbs		8-12	0.779	-3,627 lbs			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T7
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:01:15

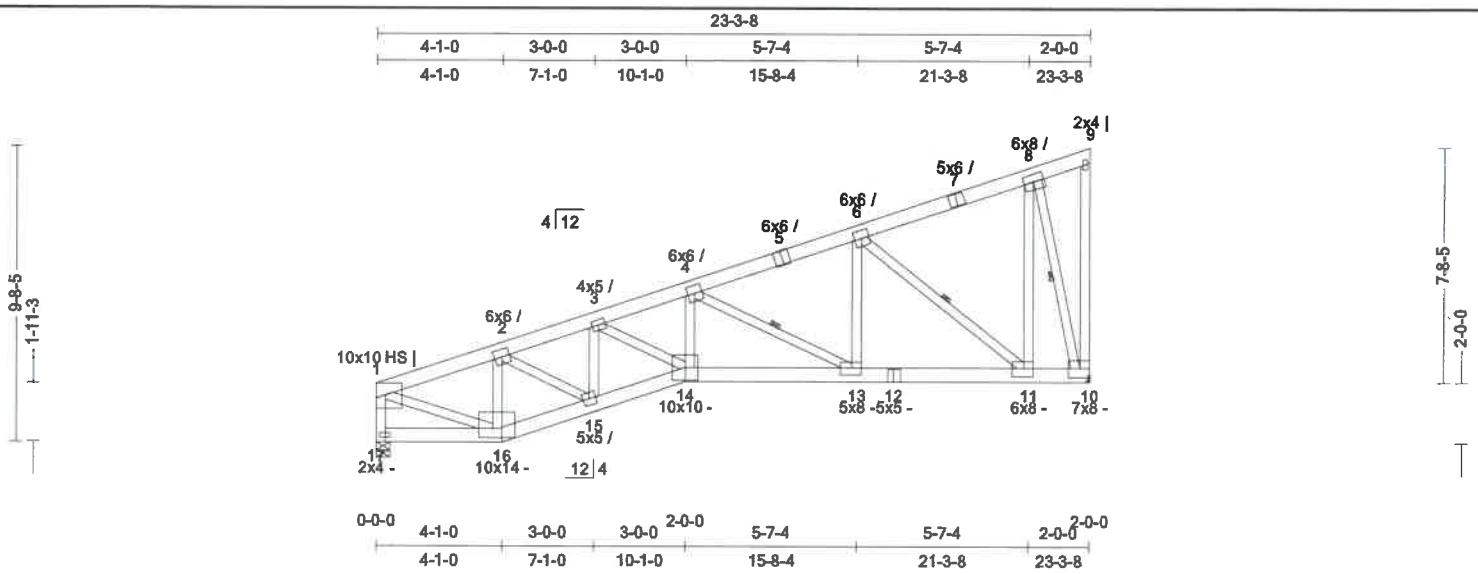
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
30-2-12	4/12	4	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	264 lbs

7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T7A Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:01:16 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
23-3-8	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	197 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC2018/	TC: 0.76 (6-8)	Vert TL:	0.36 in	L/764	(13-14)	L/240
TCDL: 10		TPI 1-2014	BC: 0.62 (13-14)	Vert LL:	0.28 in	L/983	(13-14)	L/360
BCLL: 0	Rep Mbr:	No	Web: 0.82 (6-11)	Horz TL:	0.13 in		10	
BCDL: 10	Lumber D.O.L.: 100 %							

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
17	1	5.5 in	1.79 in	3,403 lbs	-	-110 lbs	-344 lbs	-344 lbs	320 lbs
10	1	1.5 in	—	3,029 lbs	-	-250 lbs	-428 lbs	-428 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-16

Bracing

TC: Sheathed or Purlins at 3-5-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 4-13, 6-11, 8-10

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
3) This truss has been designed for the effects of TCLL=20 psf.
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.395	-4,210 lbs		3-4	0.421	-6,420 lbs		6-8	0.756	-1,074 lbs	
	2-3	0.585	-5,744 lbs		4-6	0.736	-3,751 lbs					
BC	10-11	0.167	670 lbs	(-65 lbs)	13-14	0.621	5,922 lbs	(-803 lbs)	15-16	0.382	3,935 lbs	(-602 lbs)
	11-13	0.387	3,389 lbs	(-398 lbs)	14-15	0.590	5,554 lbs	(-799 lbs)	16-17	0.055	-306 lbs	
Web	1-17	0.445	-3,352 lbs		3-15	0.226	-1,428 lbs		6-13	0.509	1,765 lbs	(-152 lbs)
	1-16	0.508	4,107 lbs	(-386 lbs)	3-14	0.290	1,004 lbs	(-66 lbs)	6-11	0.821	-3,391 lbs	
	2-16	0.418	-2,659 lbs		4-14	0.447	1,550 lbs	(-150 lbs)	8-11	0.618	2,141 lbs	(-266 lbs)
	2-15	0.563	1,952 lbs	(-220 lbs)	4-13	0.647	-3,377 lbs		8-10	0.671	-3,092 lbs	

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

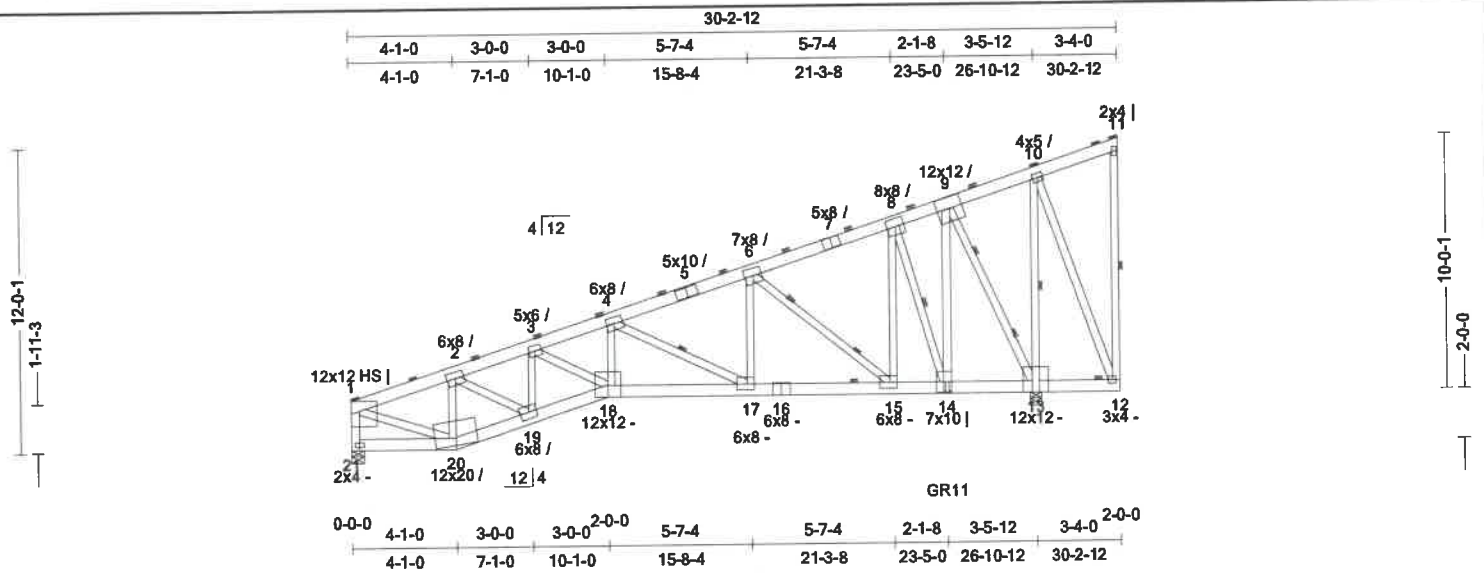
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
23-3-8	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	197 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T7G
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:01:18
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
30-2-12	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	36 in	289 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI
Carried Loads (psf)	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.75 (6-8)
TCLL: 110	Rep Mbr: No	BC: 0.90 (17-18)
TCDL: 10	Lumber D.O.L.: 100 %	Web: 0.83 (9-13)
BCLL: 0		
BCDL: 10		

Deflection		L/	(loc)	Allowed
Vert TL:	0.57 in	L/549	(17-18)	L/240
Vert LL:	0.44 in	L/707	(17-18)	L/360
Cant/OH TL:	0.09 in UP	2L/789	12	2L/120
Cant/OH LL:	0.07 in UP	2L/995	12	2L/120
Horz TL:	0.22 in		13	

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
21	1	5.5 in	2.12 in	4,020 lbs	-	-123 lbs	-337 lbs	-337 lbs	419 lbs
13	1	5.5 in	3.42 in	6,484 lbs	-	-519 lbs	-631 lbs	-631 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-20, 9-14, 9-13

Bracing

TC: Sheathed or Purlins at 2-7-0, Purlin design by Others.
BC: Sheathed or Purlins at 9-8-0, Purlin design by Others.
Web: One Midpoint Row: 4-17, 8-14, 10-13, 11-12
Two Third Point Rows: 6-15, 9-13

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
3) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	30-2-12	Down	Proj	20 plf	20 plf	
Top	0-0-0	23-5-0	Down	Proj	20 plf	20 plf	
Top	23-5-0	25-11-11	Down	Proj	36.67 plf	36.67 plf	
Top	25-11-11	27-3-0	Down	Proj	36.67 plf	40 plf	
Top	27-3-0	30-2-12	Down	Proj	20 plf	20 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	30-2-12	Down	Proj	10 plf	10 plf	
Top	0-0-0	23-5-0	Down	Proj	10 plf	10 plf	
Top	23-5-0	25-11-11	Down	Proj	18.33 plf	18.33 plf	
Top	25-11-11	27-3-0	Down	Proj	18.33 plf	20 plf	
Top	27-3-0	30-2-12	Down	Proj	10 plf	10 plf	
Bot	0-0-0	30-2-12	Down	Proj	10 plf	10 plf	
Bot	0-0-0	23-5-0	Down	Proj	10 plf	10 plf	
Bot	23-5-0	25-11-11	Down	Proj	18.33 plf	18.33 plf	
Bot	25-11-11	27-3-0	Down	Proj	18.33 plf	20 plf	
Bot	27-3-0	30-2-12	Down	Proj	10 plf	10 plf	

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Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T7G
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:01:18
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
30-2-12	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	36 in	289 lbs

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.367	-5,290 lbs		3-4	0.648	-9,207 lbs		6-8	0.751	-3,488 lbs			
	2-3	0.512	-7,848 lbs		4-6	0.739	-6,216 lbs		8-9	0.333	-2,363 lbs			
BC	13-14	0.482	2,190 lbs	(-179 lbs)	15-17	0.552	5,728 lbs	(-510 lbs)	18-19	0.831	7,647 lbs	(-932 lbs)	20-21	0.060	-419 lbs
	14-15	0.372	3,080 lbs	(-255 lbs)	17-18	0.900	8,518 lbs	(-961 lbs)	19-20	0.478	5,028 lbs	(-703 lbs)			
Web	1-21	0.527	-3,965 lbs		3-18	0.535	1,855 lbs	(-107 lbs)	8-15	0.677	2,345 lbs	(-262 lbs)			
	1-20	0.649	5,251 lbs	(-377 lbs)	4-18	0.449	1,554 lbs	(-170 lbs)	8-14	0.640	-2,889 lbs				
	2-20	0.537	-3,419 lbs		4-17	0.769	-4,011 lbs		9-14	0.565	4,572 lbs	(-336 lbs)			
	2-19	0.827	2,865 lbs	(-255 lbs)	6-17	0.597	2,070 lbs	(-175 lbs)	9-13	0.830	-5,250 lbs				
	3-19	0.335	-2,119 lbs		6-15	0.709	-3,609 lbs		10-13	0.485	-1,424 lbs				

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
GR11	BC	23-5-0

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Listed wind uplift reactions based on MWFRS & C&C loading.

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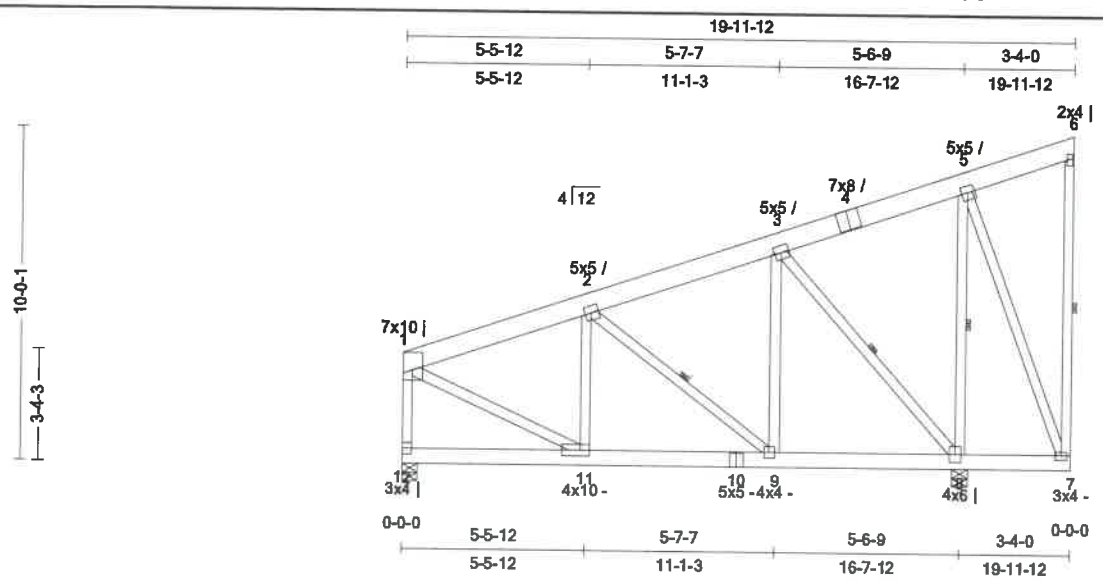
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T8 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:01:19 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-11-12	4/12	4	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	190 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI
TCLL: 110	Bldg Code: IBC2018/	TC: 0.79 (1-2)
TCDL: 10	TPI 1-2014	BC: 0.20 (9-11)
BCLL: 0	Rep Mbr: Yes	Web: 0.86 (6-7)
BCDL: 10	Lumber D.O.L.: 100 %	

Deflection		L/	(loc)	Allowed
Vert TL:	0.08 in	L/999	(10-11)	L/240
Vert LL:	0.06 in	L/999	(10-11)	L/360
Cant/OH TL:	0.02 in	2L/999	7	2L/120
Cant/OH LL:	0.02 in	2L/999	7	2L/120
Horz TL:	0.02 in		8	

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
12	1	5.5 in	2.27 in	2,600 lbs	-	-27 lbs	-205 lbs	-205 lbs	359 lbs
8	1	5.5 in	2.70 in	3,099 lbs	-	-282 lbs	-571 lbs	-571 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 2-9, 3-8, 5-8, 6-7

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
3) This truss has been designed for the effects of TCLL=20 psf.
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.789	-2,381 lbs		2-3	0.735	-1,502 lbs		3-5	0.511	311 lbs	(-157 lbs)
BC	8-9	0.189	1,164 lbs	(-128 lbs)	9-11	0.199	2,042 lbs	(-240 lbs)	11-12	0.132	-329 lbs	
Web	1-12	0.400	-2,543 lbs		2-9	0.281	-1,180 lbs		5-8	0.451	-1,506 lbs	
	1-11	0.668	2,315 lbs	(-117 lbs)	3-9	0.244	846 lbs	(-53 lbs)				
	2-11	0.317	-983 lbs		3-8	0.601	-1,931 lbs					

Notes

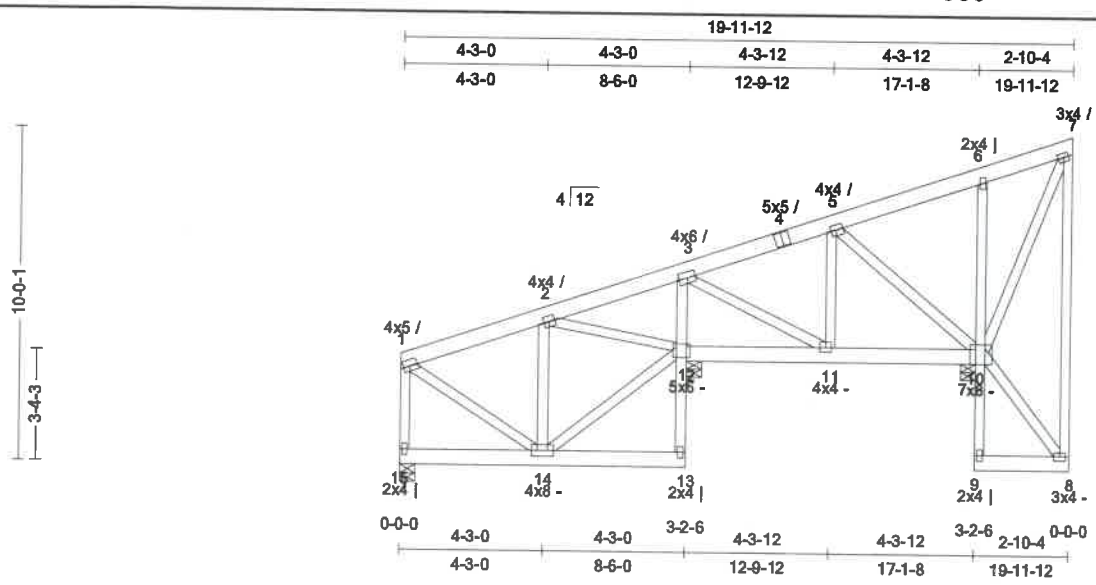
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-11-12	4/12	4	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	190 lbs

7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T9 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:01:21 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-11-12	4/12	8	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	186 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.80 (1-2)	Vert TL: 0.02 in	L/999	(10-11)	L/240
TCDL: 10	TPI 1-2014	BC: 0.11 (10-11)	Vert LL: 0.01 in	L/999	11	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.70 (7-8)	Cant/OH TL: 0.01 in UP	2L/999	8	2L/120
BCDL: 10	Lumber D.O.L.: 100 %		Cant/OH LL: 0.01 in UP	2L/999	8	2L/109/12/2024
			Horz TL: 0 in		10	

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
15	1	5.5 in	1.50 in	1,399 lbs	-	-18 lbs	-89 lbs	-89 lbs	359 lbs
12	1	5.5 in	2.13 in	2,445 lbs	-	-217 lbs	-260 lbs	-260 lbs	-
10	1	5.5 in	1.68 in	1,923 lbs	-	-168 lbs	-418 lbs	-418 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 7-8

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
3) This truss has been designed for the effects of TCLL=20 psf.
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.803	-931 lbs		3-5	0.575	-759 lbs				
	2-3	0.703	392 lbs	(-118 lbs)							
BC	10-11	0.112	581 lbs	(-112 lbs)							
	14-15	0.104	-329 lbs								
Web	1-15	0.223	-1,353 lbs		14-12	0.262	908 lbs	(-194 lbs)	6-10	0.511	-944 lbs
	1-14	0.254	881 lbs	(-19 lbs)	3-12	0.265	-1,601 lbs		7-10	0.217	-315 lbs
	2-14	0.287	-991 lbs		3-11	0.212	735 lbs				
	2-12	0.274	-924 lbs		5-10	0.510	-935 lbs				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
5) A creep factor of 1.50 has been applied for this truss analysis.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T9
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:01:21

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-11-12	4/12	8	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	186 lbs

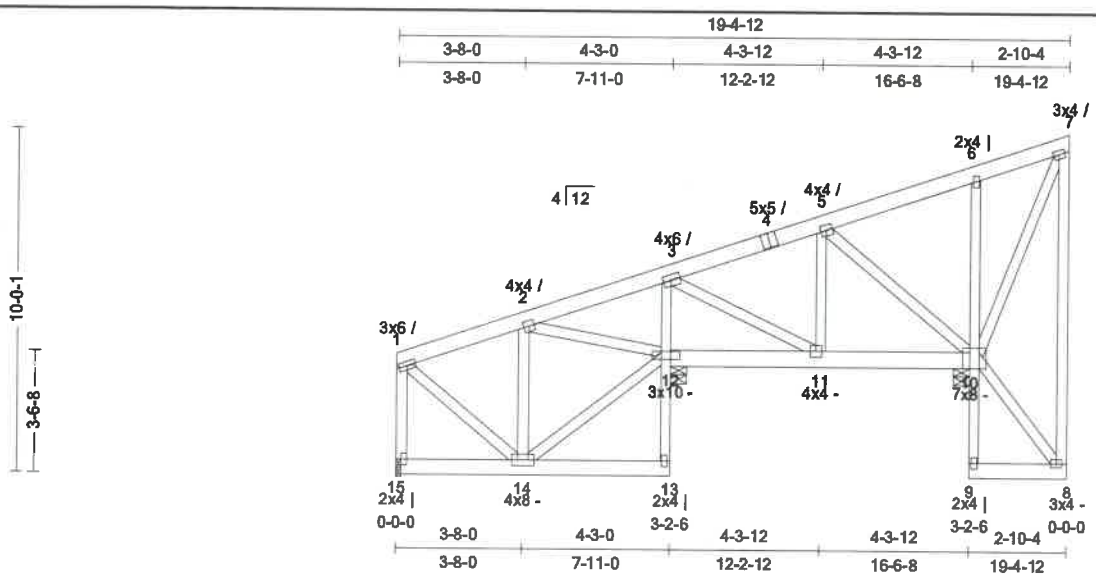
6) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
7) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
8) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
9) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
10) Incising is not permitted.
11) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild®Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T9A
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:01:22
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-4-12	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	183 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.70 (1-2)	Vert TL:	0.02 in	L/999	(10-11)	L/240
TCDL: 10	Rep Mbr: Yes	BC: 0.11 (10-11)	Vert LL:	0.01 in	L/999	11	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.70 (7-8)	Cant/OH TL:	0.01 in UP	2L/999	8	2L/120
BCDL: 10			Cant/OH LL:	0.01 in UP	2L/999	(8-8)	2L/120
			Horz TL:	0 in		10	

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
15	1	1.5 in	1.50 in	1,294 lbs	-	-22 lbs	-80 lbs	-80 lbs	359 lbs
12	1	5.5 in	2.09 in	2,394 lbs	-	-218 lbs	-250 lbs	-250 lbs	-
10	1	5.5 in	1.67 in	1,918 lbs	-	-169 lbs	-419 lbs	-419 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 7-8

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
3) This truss has been designed for the effects of TCLL=20 psf.
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.700	-788 lbs		3-5	0.624	-766 lbs				
	2-3	0.682	359 lbs	(-116 lbs)							
BC	10-11	0.113	571 lbs	(-113 lbs)							
	14-15	0.092	-326 lbs								
Web	1-15	0.222	-1,255 lbs		14-12	0.222	771 lbs	(-208 lbs)	6-10	0.513	-949 lbs
	1-14	0.235	813 lbs	(-23 lbs)	3-12	0.271	-1,639 lbs		7-10	0.217	-314 lbs
	2-14	0.273	-942 lbs		3-11	0.206	714 lbs				
	2-12	0.228	-768 lbs		5-10	0.502	-920 lbs				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (C_q=0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
5) A creep factor of 1.50 has been applied for this truss analysis.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T9A
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:01:23

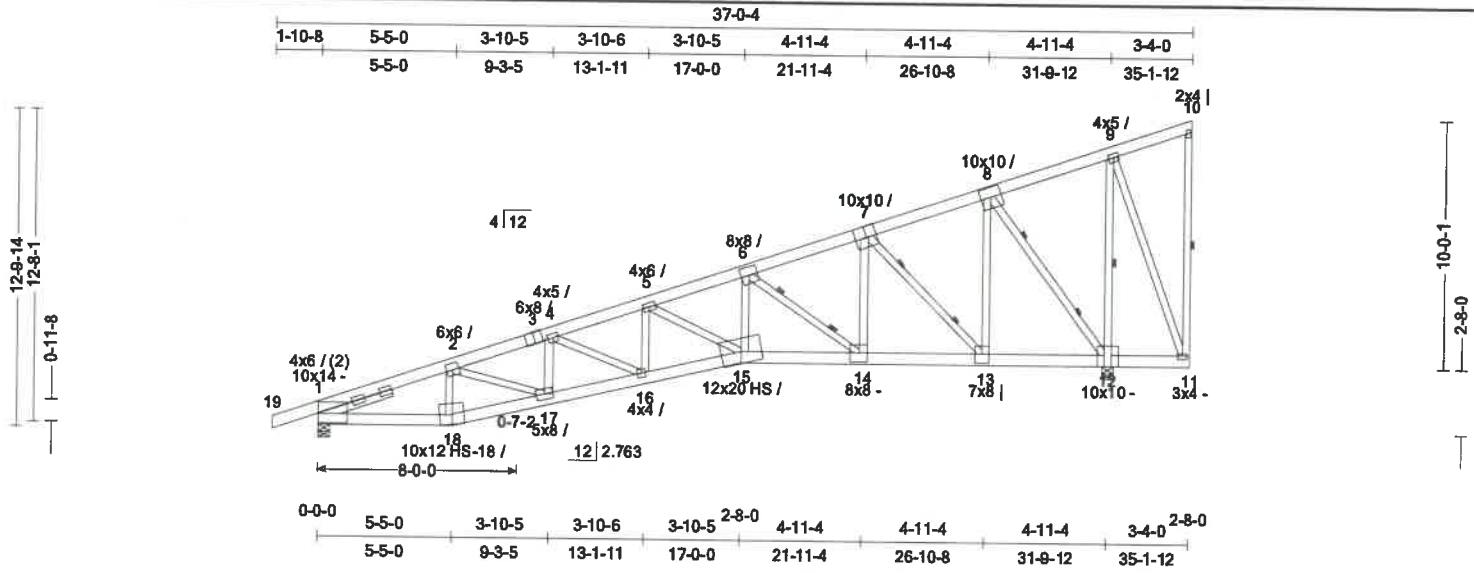
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-4-12	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	183 lbs

6) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
7) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
8) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
9) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
10) Incising is not permitted.
11) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T11
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:57
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
35-1-12	4/12	13	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	302 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC 2018/ TPI 1-2014	TC: 0.88 (1-2)	Vert TL: 0.9 in	L/416	(15-16)	L/240
TCDL: 10	Rep Mbr: Yes	BC: 0.92 (18-1)	Vert LL: 0.7 in	L/532	(15-16)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.80 (7-13)	Cant/OH TL: 0.16 in UP	2L/469	11	2L/120
BCDL: 10			Cant/OH LL: 0.12 in UP	2L/600	11	2L/120
			Horz TL: 0.29 in		12	

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	4.19 in	4,806 lbs	.	-204 lbs	-545 lbs	-545 lbs	506 lbs
12	1	5.5 in	2.65 in	5,034 lbs	.	-390 lbs	-770 lbs	-770 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 6-15, 7-14, 8-13, 8-12

Bracing

TC: Sheathed
BC: Sheathed or Purlins at 8-7-0, Purlin design by Others.
Web: One Midpoint Row: 9-12, 10-11
Two Third Point Rows: 6-14, 7-13, 8-12

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.878	-8,810 lbs		5-6	0.584	-9,758 lbs										
	2-4	0.872	-11,078 lbs		6-7	0.622	-5,813 lbs										
	4-5	0.644	-10,776 lbs		7-8	0.603	-2,738 lbs										
BC	12-13	0.334	2,425 lbs	(-190 lbs)	14-15	0.780	8,980 lbs	(-1,023 lbs)	16-17	0.879	10,637 lbs	(-1,321 lbs)	18-1	0.915	8,135 lbs	(-1,051 lbs)	
	13-14	0.441	5,355 lbs	(-577 lbs)	15-16	0.882	10,342 lbs	(-1,267 lbs)	17-18	0.834	8,259 lbs	(-1,068 lbs)					
Web	2-18	0.280	-2,017 lbs		5-16	0.102	352 lbs	(-237 lbs)	7-14	0.364	2,946 lbs	(-276 lbs)	9-12	0.471	-1,384 lbs		
	2-17	0.737	2,555 lbs	(-261 lbs)	5-15	0.696	-2,124 lbs		7-13	0.803	-4,227 lbs						
	4-17	0.192	-1,252 lbs		6-15	0.420	3,394 lbs	(-334 lbs)	8-13	0.380	3,076 lbs	(-329 lbs)					
	4-16	0.153	529 lbs	(-416 lbs)	6-14	0.750	-4,710 lbs		8-12	0.710	-4,272 lbs						

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T11
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:57
Page: 2 of 2

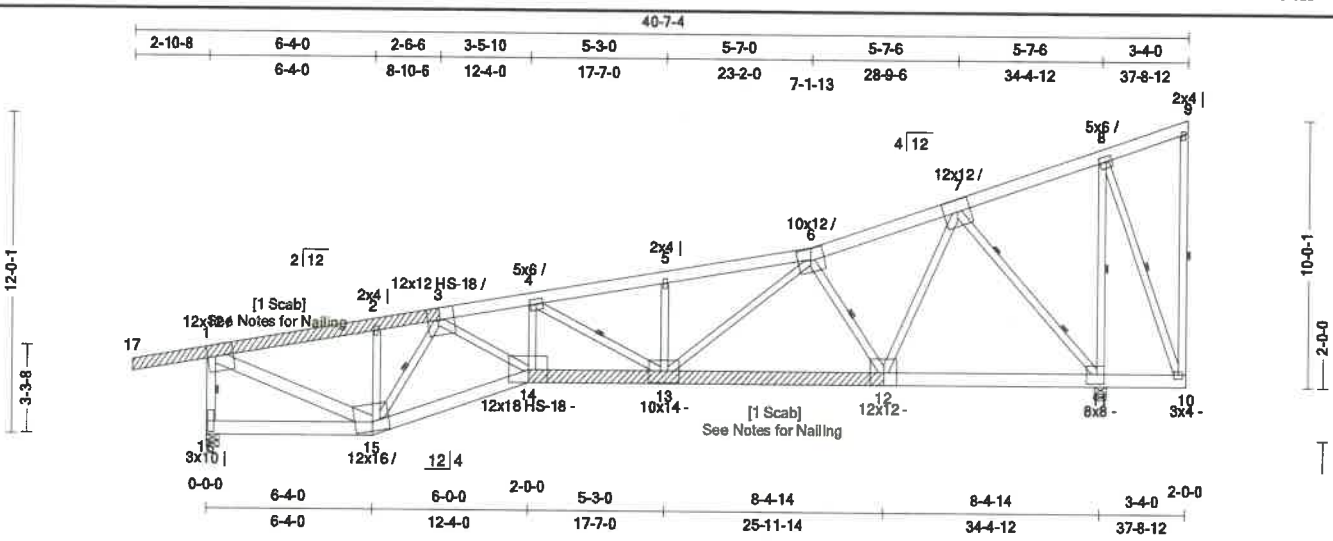
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
35-1-12	4/12	13	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	302 lbs

7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T12 Job: CBS0306SA-8-HIESCO COMPLETE Designer:Shane Allen Date: 09/16/24 08:08:28 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
37-8-12	2/12	32	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	329 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
TCLL:	110	Bldg Code:	IBC 2018/	TC:	0.94 (6-7)	Vert TL:	0.88 in	L/460	(13-14)	L/240
TCDL:	10		TPI 1-2014	BC:	0.91 (14-15)	Vert LL:	0.7 in	L/574	(13-14)	L/360
BCLL:	0	Rep Mbr:	Yes	Web:	0.85 (7-11)	Cant / OH TL:	0.15 in UP	2L/500	10	2L/120
BCDL:	10	Lumber D.O.L.:	100 %			Cant / OH LL:	0.12 in UP	2L/622	10	2L/120
						Horz TL:	0.26 in		11	

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
16	1	5.5 in	4.88 in	5,592 lbs	-	-273 lbs	-705 lbs	-705 lbs	443 lbs
11	1	5.5 in	4.65 in	5,329 lbs	-	-388 lbs	-844 lbs	-844 lbs	-

09/16/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 3-14, 6-13, 6-12, 7-12, 7-11
SP-FT/PG 2400/1.8 2 x 6: 1-15
Scabs 17-3 [Qty: 1] SP-FT/PG 2400/1.8 2|2:6|4 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed
BC: Sheathed or Purlins at 8-9-0, Purlin design by Others.
Web: One Midpoint Row: 1-16, 3-15, 4-13, 6-12, 8-11, 8-10, 9-10
Two Third Point Rows: 7-11

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL= 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL= 1.60
4) This truss has been designed for the effects of TC LL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.591	-6,512 lbs		4-5	0.871	-10,876 lbs		7-8	0.922	391 lbs	(-177 lbs)			
	2-3	0.306	-6,541 lbs		5-6	0.850	-10,905 lbs								
	3-4	0.869	-13,168 lbs		6-7	0.937	-5,199 lbs								
BC	11-12	0.371	3,110 lbs	(-326 lbs)	13-14	0.583	12,900 lbs	(-1,637 lbs)	15-16	0.086	-412 lbs				
	12-13	0.334	6,936 lbs	(-882 lbs)	14-15	0.906	9,446 lbs	(-1,264 lbs)							
Web	1-16	0.713	-5,543 lbs		3-14	0.592	4,786 lbs	(-542 lbs)	6-13	0.614	4,962 lbs	(-565 lbs)	8-11	0.594	-1,919 lbs
	1-15	0.545	6,929 lbs	(-625 lbs)	4-14	0.090	312 lbs	(-20 lbs)	6-12	0.596	-4,656 lbs		8-10	0.092	319 lbs
	2-15	0.327	-1,370 lbs		4-13	0.475	-2,633 lbs		7-12	0.563	4,551 lbs	(-528 lbs)	9-10	0.728	-329 lbs
	3-15	0.766	-5,060 lbs		5-13	0.402	-1,740 lbs		7-11	0.846	-4,855 lbs				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ⊠ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T12
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:08:29

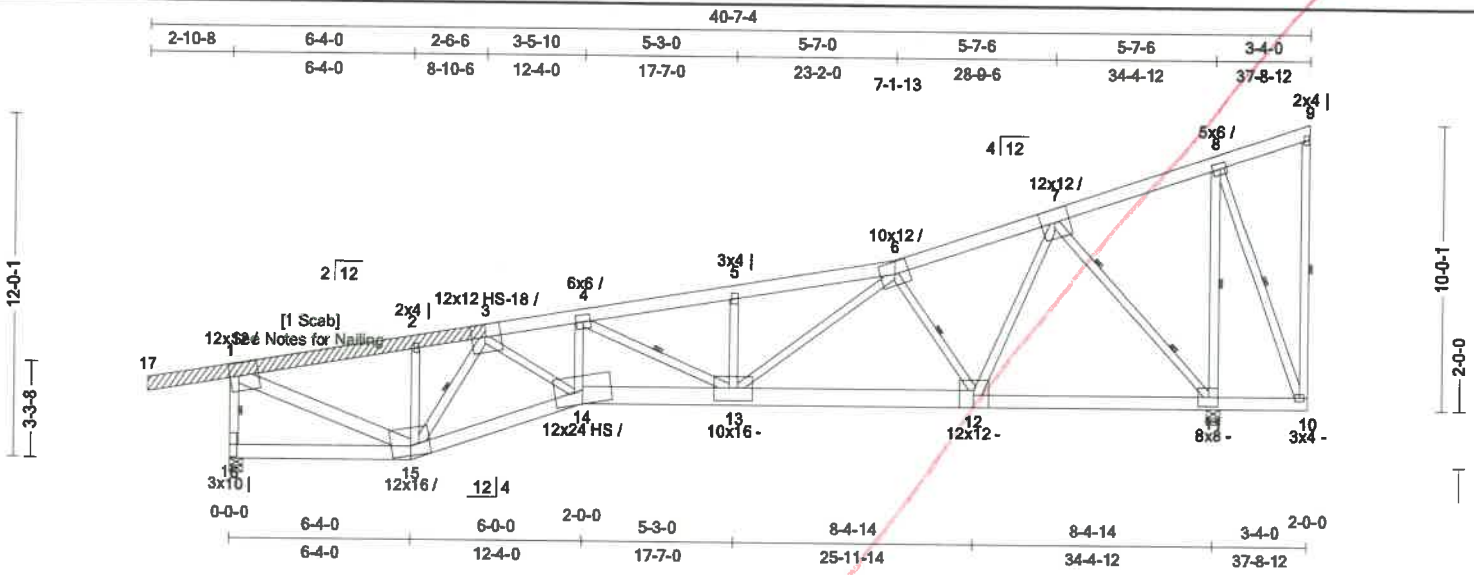
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
37-8-12	2/12	32	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	329 lbs

7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Scab 3 - 17 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
13) Scab 12 - 14 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.13
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T12 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 07:59:58 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
37-8-12	2/12	32	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	339 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.94 (6-7)	Vert TL:	0.96 in	L/419	(13-14)	L/240
TCDL: 10	Rep Mbr: Yes	BC: 0.96 (14-15)	Vert LL:	0.77 in	L/524	(13-14)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.85 (7-11)	Cant/OH TL:	0.17 in UP	2L/444	10	2L/120
BCDL: 10			Cant/OH LL:	0.13 in UP	2L/553	10	2L/120
			Horz TL:	0.31 in		11	

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
16	1	5.5 in	4.88 in	5,592 lbs	-	-273 lbs	-705 lbs	-705 lbs	443 lbs
11	1	5.5 in	4.65 in	5,329 lbs	-	-388 lbs	-844 lbs	-844 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 12-14
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 3-14, 6-13, 6-12, 7-12, 7-11
SP-FT/PG 2400/1.8 2 x 6: 1-15
Scabs 17-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed
BC: Sheathed or Purlins at 8-8-0, Purlin design by Others.

Web: One Midpoint Row: 1-16, 3-15, 4-13, 6-12, 8-11, 8-10, 9-10
Two Third Point Rows: 7-11

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.591	-6,518 lbs		4-5	0.934	-11,098 lbs		7-8	0.923	390 lbs	(-177 lbs)		
	2-3	0.309	-6,547 lbs		5-6	0.932	-11,126 lbs							
	3-4	0.865	-13,503 lbs		6-7	0.941	-5,225 lbs							
BC	11-12	0.376	3,122 lbs	(-327 lbs)	13-14	0.887	13,294 lbs	(-1,683 lbs)	15-16	0.087	-412 lbs			
	12-13	0.494	6,997 lbs	(-890 lbs)	14-15	0.957	9,434 lbs	(-1,262 lbs)						
Web	1-16	0.714	-5,547 lbs		3-14	0.626	5,060 lbs	(-580 lbs)	6-13	0.635	5,132 lbs	(-587 lbs)	8-11	0.593	-1,917 lbs	
	1-15	0.546	6,935 lbs	(-625 lbs)	4-14	0.092	320 lbs	(-16 lbs)	6-12	0.593	-4,697 lbs		8-10	0.092	318 lbs	(-59 lbs)
	2-15	0.328	-1,375 lbs		4-13	0.519	-2,777 lbs		7-12	0.565	4,567 lbs	(-530 lbs)	9-10	0.728	-329 lbs	
	3-15	0.762	-5,032 lbs		5-13	0.394	-1,819 lbs		7-11	0.849	-4,872 lbs					

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T12
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:58
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
37-8-12	2/12	32	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	339 lbs

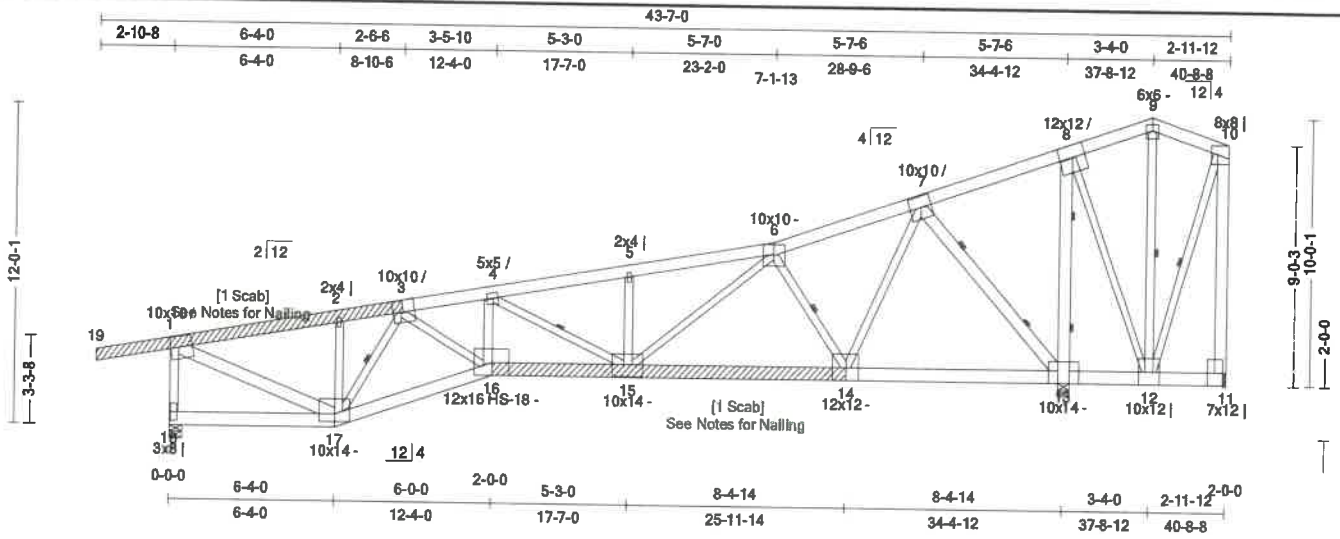
7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Scab 3 - 17 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
13) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T12A
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:08:33
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
40-8-8	2/12	1	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	389 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC 2018/ TPI 1-2014	TC: 0.88 (5-6)		Vert TL:	0.69 in	L/588	(15-16)	L/240
TCDL: 10			BC: 0.70 (16-17)		Vert LL:	0.55 in	L/737	(15-16)	L/360
BCLL: 0	Rep Mbr:	Yes	Web: 0.82 (7-13)		Horz TL:	0.19 in		13	
BCDL: 10	Lumber D.O.L.:	100 %							

Reaction

JT	Brg Combo	Brg Width	Rod Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
18	1	5.5 in	4.15 in	4,758 lbs	·	-253 lbs	-643 lbs	-643 lbs	401 lbs
13	1	5.5 in	3.72 in	10,346 lbs	·	-599 lbs	-1,256 lbs	-1,256 lbs	·
11	1	1.5 in	1.50 in	339 lbs	-3,125 lbs	·	·	-3,125 lbs	·

09/16/2024

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG #2 2 x 6: 7-13, 10-11
SP-FT/PG 2400/1.8 2 x 4: 3-16, 6-15, 6-14, 7-14, 8-12, 10-12
SP-FT/PG 2400/1.8 2 x 6: 1-17, 8-13
Scabs 19-3 [Qty: 1] SP-FT/PG 2400/1.8 2x4-6 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed or Purlins at 2-6-0, Purlin design by Others.
BC: Sheathed or Purlins at 5-10-0, Purlin design by Others.
Web: One Midpoint Row: 3-17, 4-15, 6-14, 9-12, 10-12
Two Third Point Rows: 7-13, 8-13

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL= 157 psf), Terrain C, Exposure (Ce= 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL= 1.60
4) This truss has been designed for the effects of TC LL= 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.590	-5,167 lbs		4-5	0.717	-8,213 lbs		7-8	0.852	2,921 lbs	(-266 lbs)			
	2-3	0.276	-5,172 lbs		5-6	0.879	-8,231 lbs		8-9	0.751	1,095 lbs	(-75 lbs)			
	3-4	0.609	-10,172 lbs		6-7	0.850	-3,021 lbs		9-10	0.226	1,048 lbs	(-78 lbs)			
BC	12-13	0.219	-2,512 lbs		14-15	0.252	4,873 lbs	(-544 lbs)	16-17	0.702	7,333 lbs	(-1,065 lbs)			
	13-14	0.325	969 lbs	(-101 lbs)	15-16	0.452	9,999 lbs	(-1,349 lbs)	17-18	0.086	-371 lbs				
Web	1-18	0.761	-4,708 lbs		4-16	0.093	323 lbs	(-25 lbs)	7-14	0.532	4,298 lbs	(-488 lbs)	10-12	0.739	-3,162 lbs
	1-17	0.430	5,466 lbs	(-517 lbs)	4-15	0.443	-2,342 lbs		7-13	0.815	-5,299 lbs		10-11	0.666	3,186 lbs
	2-17	0.290	-1,214 lbs		5-15	0.324	-1,401 lbs		8-13	0.672	-6,060 lbs				
	3-17	0.569	-3,755 lbs		6-15	0.504	4,077 lbs	(-587 lbs)	8-12	0.521	4,214 lbs	(-495 lbs)			
	3-16	0.454	3,671 lbs	(-421 lbs)	6-14	0.568	-4,439 lbs		9-12	0.432	-1,112 lbs				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

TrueBuild® Truss Software v5.7.13
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T12A
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:08:34

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
40-8-8	2/12	1	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	389 lbs

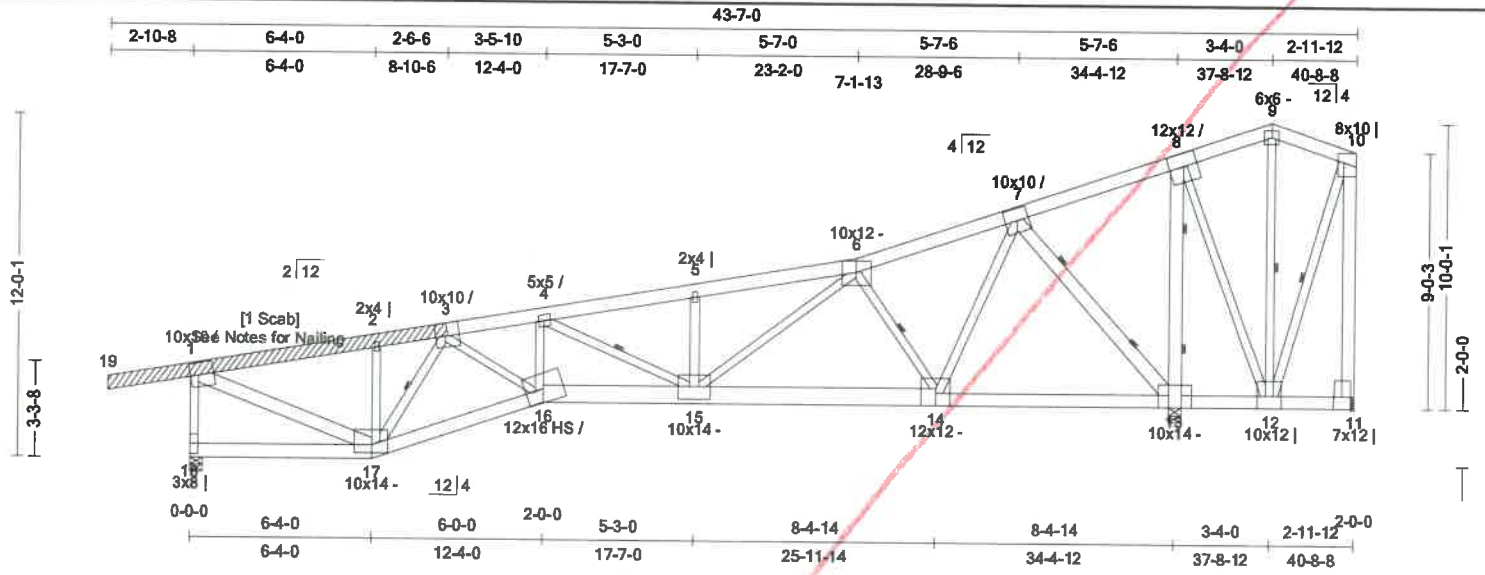
7) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 11 may need to be considered.
8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 3 - 19 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Scab 14 - 16 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
15) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.13
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T12A
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 07:59:59
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
40-8-8	2/12	1	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	397 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.88 (5-6)	Vert TL:	0.73 in	L/551	(15-16)	L/240
TCDL: 10	TPI 1-2014	BC: 0.72 (16-17)	Vert LL:	0.59 in	L/690	(15-16)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.81 (7-13)	Horz TL:	0.22 in		13	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
18	1	5.5 in	4.10 in	4,705 lbs	.	-249 lbs	-637 lbs	-637 lbs	401 lbs
13	1	5.5 in	3.84 in	10,699 lbs	.	-625 lbs	-1,300 lbs	-1,300 lbs	.
11	1	1.5 in	1.50 in	377 lbs	-3,425 lbs	.	.	-3,425 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 14-16
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG #2 2 x 6: 7-13, 10-11
SP-FT/PG 2400/1.8 2 x 4: 3-16, 6-15, 6-14, 7-14, 8-12, 10-12
SP-FT/PG 2400/1.8 2 x 6: 1-17, 8-13
Scabs 19-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed or Purlins at 2-6-0, Purlin design by Others.
BC: Sheathed or Purlins at 5-7-0, Purlin design by Others.

Web: One Midpoint Row: 3-17, 4-15, 6-14, 9-12, 10-12
Two Third Point Rows: 7-13, 8-13

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.590	-5,084 lbs		4-5	0.729	-8,111 lbs		7-8	0.853	3,146 lbs	(-294 lbs)			
	2-3	0.269	-5,086 lbs		5-6	0.875	-8,131 lbs		8-9	0.755	1,186 lbs	(-79 lbs)			
	3-4	0.607	-10,145 lbs		6-7	0.853	-2,776 lbs		9-10	0.229	1,139 lbs	(-81 lbs)			
BC	12-13	0.232	-2,725 lbs		14-15	0.353	4,654 lbs	(-517 lbs)	16-17	0.724	7,195 lbs	(-1,048 lbs)			
	13-14	0.320	739 lbs	(-92 lbs)	15-16	0.666	10,000 lbs	(-1,348 lbs)	17-18	0.087	-371 lbs				
Web	1-18	0.753	-4,657 lbs		4-16	0.113	391 lbs	(-32 lbs)	7-14	0.528	4,273 lbs	(-484 lbs)	10-12	0.805	-3,449 lbs
	1-17	0.423	5,376 lbs	(-505 lbs)	4-15	0.455	-2,438 lbs		7-13	0.811	-5,274 lbs		10-11	0.729	3,486 lbs
	2-17	0.286	-1,198 lbs		5-15	0.307	-1,416 lbs		8-13	0.713	-6,426 lbs				
	3-17	0.555	-3,665 lbs		6-15	0.520	4,207 lbs	(-604 lbs)	8-12	0.564	4,557 lbs	(-537 lbs)			
	3-16	0.456	3,685 lbs	(-423 lbs)	6-14	0.560	-4,438 lbs		9-12	0.450	-1,159 lbs				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T12A
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:00
Page: 2 of 2

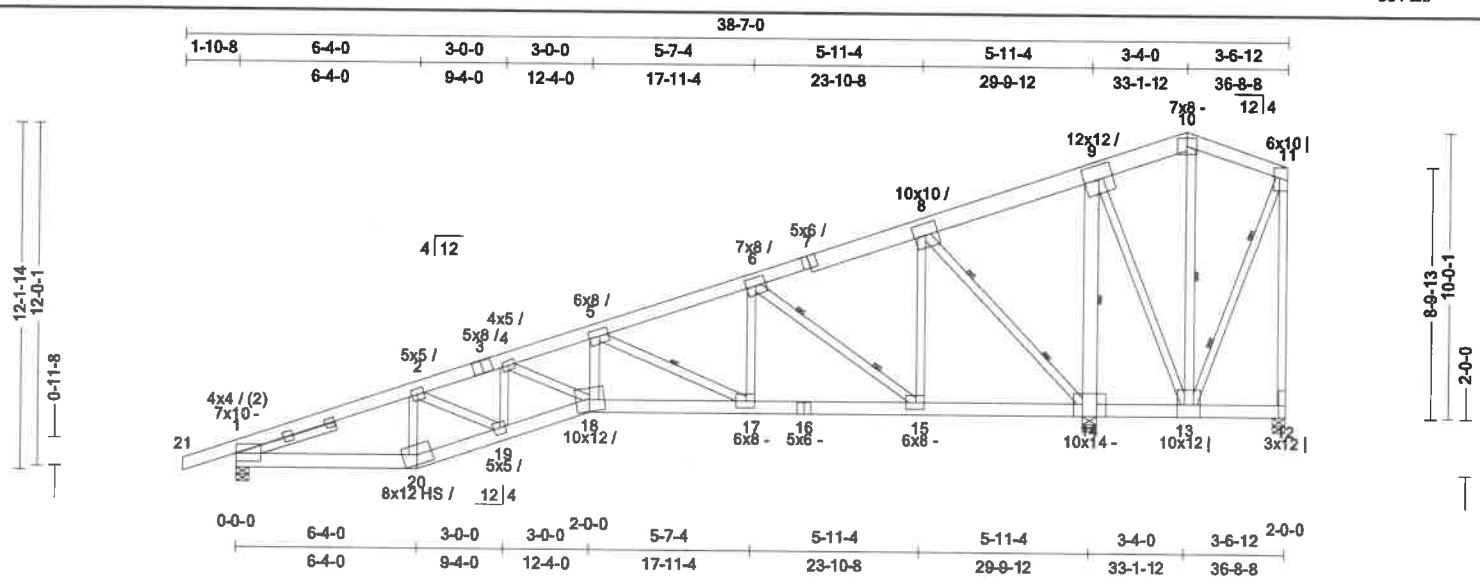
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
40-8-8	2/12	1	2-10-8	0-0-0	0-0-0	0-0-0	1	24 in	397 lbs

3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
7) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 11 may need to be considered.
8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 3 - 19 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T13 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:00:00 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
36-8-8	4/12	4	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	337 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.85 (21-1)	Vert TL:	0.65 in	L/537	(17-18)	L/240
TCDL: 10	Rep Mbr: Yes	BC: 0.73 (18-19)	Vert LL:	0.51 in	L/679	(17-18)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.85 (9-14)	Horz TL:	0.2 in		14	
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	3.23 in	3,710 lbs	.	-167 lbs	-475 lbs	-475 lbs	433 lbs
14	1	5.5 in	3.48 in	9,677 lbs	.	-600 lbs	-1,194 lbs	-1,194 lbs	.
12	1	5.5 in	1.50 in	310 lbs	-2,779 lbs	-29 lbs	.	-2,779 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 7-10
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 8-14, 9-13
SP-FT/PG 2400/1.8 2 x 6: 9-14

Bracing

TC: Sheathed or Purlins at 3-1-0, Purlin design by Others.

BC: Sheathed or Purlins at 5-9-0, Purlin design by Others.
Web: One Midpoint Row: 5-17, 9-14, 10-13
Two Third Point Rows: 6-15, 8-14, 11-13

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.721	-6,183 lbs		5-6	0.725	-4,182 lbs		9-10	0.674	1,155 lbs	(-44 lbs)			
	2-4	0.460	-7,706 lbs		6-8	0.749	-852 lbs		10-11	0.311	1,132 lbs	(-50 lbs)			
	4-5	0.490	-8,204 lbs		8-9	0.750	2,990 lbs	(-279 lbs)							
BC	13-14	0.228	-2,537 lbs		15-17	0.336	3,794 lbs	(-447 lbs)	18-19	0.731	7,585 lbs	(-1,067 lbs)	20-1	0.525	5,725 lbs	(-849 lbs)
	14-15	0.310	600 lbs	(-92 lbs)	17-18	0.727	7,541 lbs	(-1,023 lbs)	19-20	0.523	5,966 lbs	(-887 lbs)				
Web	2-20	0.277	-1,873 lbs		5-18	0.610	2,112 lbs	(-250 lbs)	8-15	0.700	2,427 lbs	(-274 lbs)	10-13	0.475	-1,234 lbs	
	2-19	0.501	1,735 lbs	(-197 lbs)	5-17	0.784	-4,164 lbs		8-14	0.790	-4,600 lbs		11-13	0.765	-2,845 lbs	
	4-19	0.170	-1,146 lbs		6-17	0.582	2,016 lbs	(-219 lbs)	9-14	0.846	-6,021 lbs		11-12	0.818	2,834 lbs	(-295 lbs)
	4-18	0.158	548 lbs	(-37 lbs)	6-15	0.804	-3,997 lbs		9-13	0.485	3,918 lbs	(-473 lbs)				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T13
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:01

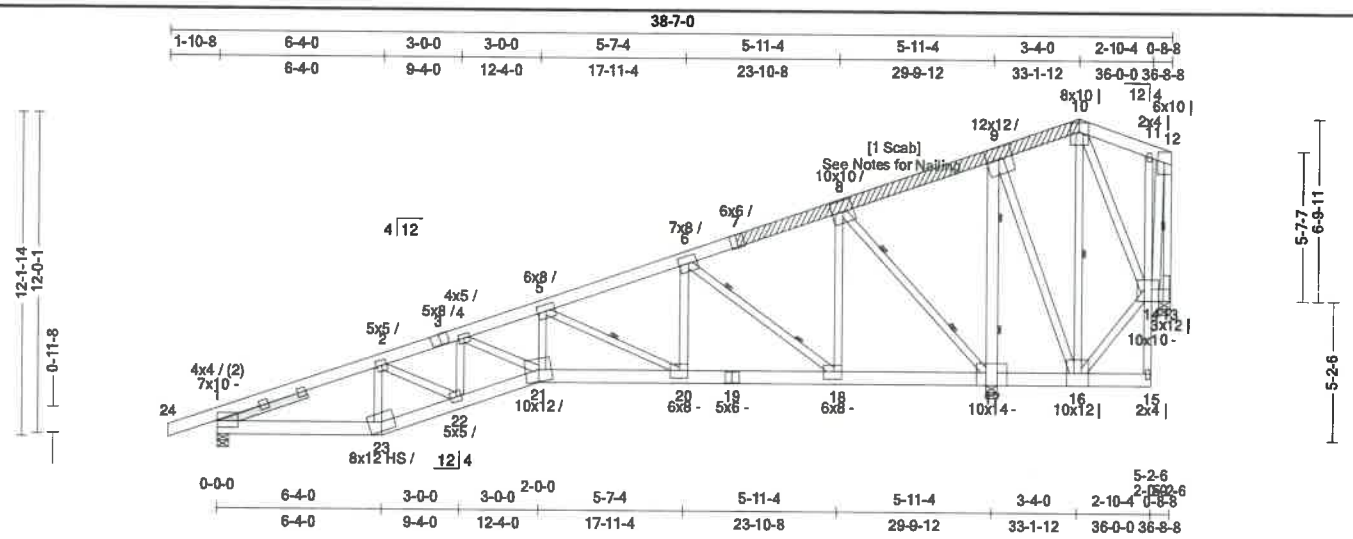
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
36-8-8	4/12	4	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	337 lbs

7) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 12 may need to be considered.
8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T14
Job: CBS0306SA-8-HIESCO COMPLETE
Designer:Shane Allen
Date: 09/16/24 08:08:39
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
36-8-8	4/12	3	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	347 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC 2018/	TC: 0.85 (24-1)	Vert TL:	0.65 in	L/540	(20-21)	L/240
TCDL: 10		TPI 1-2014	BC: 0.73 (21-22)	Vert LL:	0.51 in	L/681	(20-21)	L/360
BCLL: 0	Rep Mbr:	Yes	Web: 0.82 (12-13)	Horz TL:	0.2 in		17	
BCDL: 10	Lumber D.O.L.:	100 %						

09/16/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	3.23 in	3,702 lbs	-	-167 lbs	-458 lbs	-458 lbs	480 lbs
17	1	5.5 in	3.49 in	9,721 lbs	-	-599 lbs	-1,241 lbs	-1,241 lbs	-
13	1	5.5 in	1.50 in	340 lbs	-2,815 lbs	-47 lbs	-	-2,815 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 8-17, 9-16, 10-16
SP-FT/PG 2400/1.8 2 x 6: 9-17
Scabs 7-10 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed or Purlins at 3-1-0, Purlin design by Others.
BC: Sheathed or Purlins at 5-9-0, Purlin design by Others.
Web: One Midpoint Row: 5-20, 10-16, 12-14
Two Third Point Rows: 6-18, 8-17, 9-17

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL= 157 psf), Terrain C, Exposure (Ce= 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL= 1.60
4) This truss has been designed for the effects of TC LL= 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.720	-6,163 lbs		5-6	0.726	-4,149 lbs		9-10	0.479	1,224 lbs	(-43 lbs)			
	2-4	0.458	-7,675 lbs		6-8	0.720	-820 lbs		10-11	0.184	364 lbs	(-106 lbs)			
	4-5	0.487	-8,164 lbs		8-9	0.525	2,990 lbs	(-313 lbs)	11-12	0.374	469 lbs	(-34 lbs)			
BC	16-17	0.240	-2,532 lbs		20-21	0.724	7,502 lbs	(-1,104 lbs)	23-1	0.523	5,707 lbs	(-902 lbs)			
	17-18	0.323	559 lbs	(-63 lbs)	21-22	0.728	7,554 lbs	(-1,138 lbs)							
	18-20	0.336	3,764 lbs	(-513 lbs)	22-23	0.522	5,946 lbs	(-943 lbs)							
Web	2-23	0.276	-1,866 lbs		5-20	0.782	-4,156 lbs		9-17	0.669	-6,030 lbs		11-14	0.448	-829 lbs
	2-22	0.497	1,723 lbs	(-213 lbs)	6-20	0.581	2,013 lbs	(-227 lbs)	9-16	0.475	3,842 lbs	(-493 lbs)	12-14	0.396	-2,434 lbs
	4-22	0.169	-1,137 lbs		6-18	0.807	-4,010 lbs		10-16	0.631	-2,455 lbs		12-13	0.815	2,825 lbs
	4-21	0.155	537 lbs	(-49 lbs)	8-18	0.701	2,429 lbs	(-280 lbs)	10-14	0.574	1,988 lbs	(-228 lbs)			
	5-21	0.608	2,108 lbs	(-263 lbs)	8-17	0.798	-4,563 lbs		16-14	0.507	-1,744 lbs				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.

TrueBuild® Truss Software v5.7.13
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T14
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:08:39

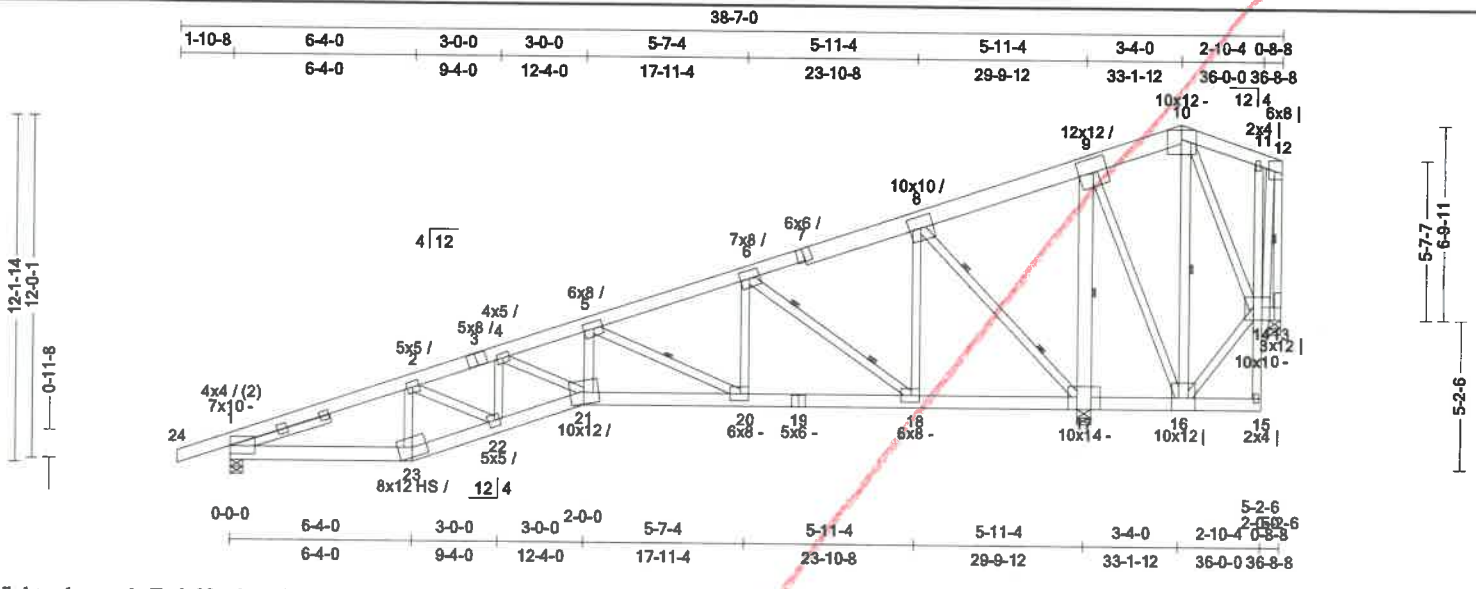
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
36-8-8	4/12	3	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	347 lbs

7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
8) ☐ Indicates non-structural members.
9) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 13 may need to be considered.
10) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
11) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
12) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
13) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
14) Incising is not permitted.
15) Scab 7 - 10 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.13
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	**Truss: T14** Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:00:02 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
36-8-8	4/12	3	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	357 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.85 (24-1)	Vert TL:	0.65 in	L/538	(20-21)	L/240
TCDL: 10	Rep Mbr: Yes	BC: 0.73 (21-22)	Vert LL:	0.51 in	L/680	(20-21)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.85 (9-17)	Horz TL:	0.2 in		17	
BCDL: 10							

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	3.23 in	3,708 lbs	·	-168 lbs	-459 lbs	-459 lbs	480 lbs
17	1	5.5 in	3.48 in	9,690 lbs	·	-595 lbs	-1,237 lbs	-1,237 lbs	·
13	1	5.5 in	1.50 in	337 lbs	-2,789 lbs	-49 lbs	·	-2,789 lbs	·

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 7-10
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 8-17, 9-16, 10-16
SP-FT/PG 2400/1.8 2 x 6: 9-17

Bracing

TC: Sheathed or Purlins at 3-1-0, Purlin design by Others.

BC: Sheathed or Purlins at 5-9-0, Purlin design by Others.
Web: One Midpoint Row: 5-20, 9-17, 10-16, 12-14
Two Third Point Rows: 6-18, 8-17

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.721	-6,178 lbs		5-6	0.725	-4,173 lbs		9-10	0.731	1,164 lbs	(-41 lbs)			
	2-4	0.460	-7,697 lbs		6-8	0.747	-840 lbs		10-11	0.267	359 lbs	(-98 lbs)			
	4-5	0.489	-8,193 lbs		8-9	0.762	2,993 lbs	(-317 lbs)	11-12	0.358	463 lbs	(-33 lbs)			
BC	16-17	0.234	-2,533 lbs		20-21	0.726	7,530 lbs	(-1,108 lbs)	23-1	0.525	5,720 lbs	(-904 lbs)			
	17-18	0.317	588 lbs	(-64 lbs)	21-22	0.730	7,576 lbs	(-1,140 lbs)							
	18-20	0.337	3,786 lbs	(-516 lbs)	22-23	0.523	5,960 lbs	(-944 lbs)							
Web	2-23	0.277	-1,871 lbs		5-20	0.783	-4,161 lbs		9-17	0.846	-6,020 lbs		11-14	0.430	-795 lbs
	2-22	0.500	1,732 lbs	(-214 lbs)	6-20	0.582	2,015 lbs	(-227 lbs)	9-16	0.474	3,829 lbs	(-493 lbs)	12-14	0.394	-2,420 lbs
	4-22	0.170	-1,143 lbs		6-18	0.805	-4,002 lbs		10-16	0.609	-2,393 lbs		12-13	0.808	2,799 lbs
	4-21	0.157	544 lbs	(-50 lbs)	8-18	0.700	2,427 lbs	(-280 lbs)	10-14	0.555	1,923 lbs	(-215 lbs)			
	5-21	0.609	2,111 lbs	(-263 lbs)	8-17	0.787	-4,578 lbs		16-14	0.481	-1,721 lbs				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T14
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:02
Page: 2 of 2

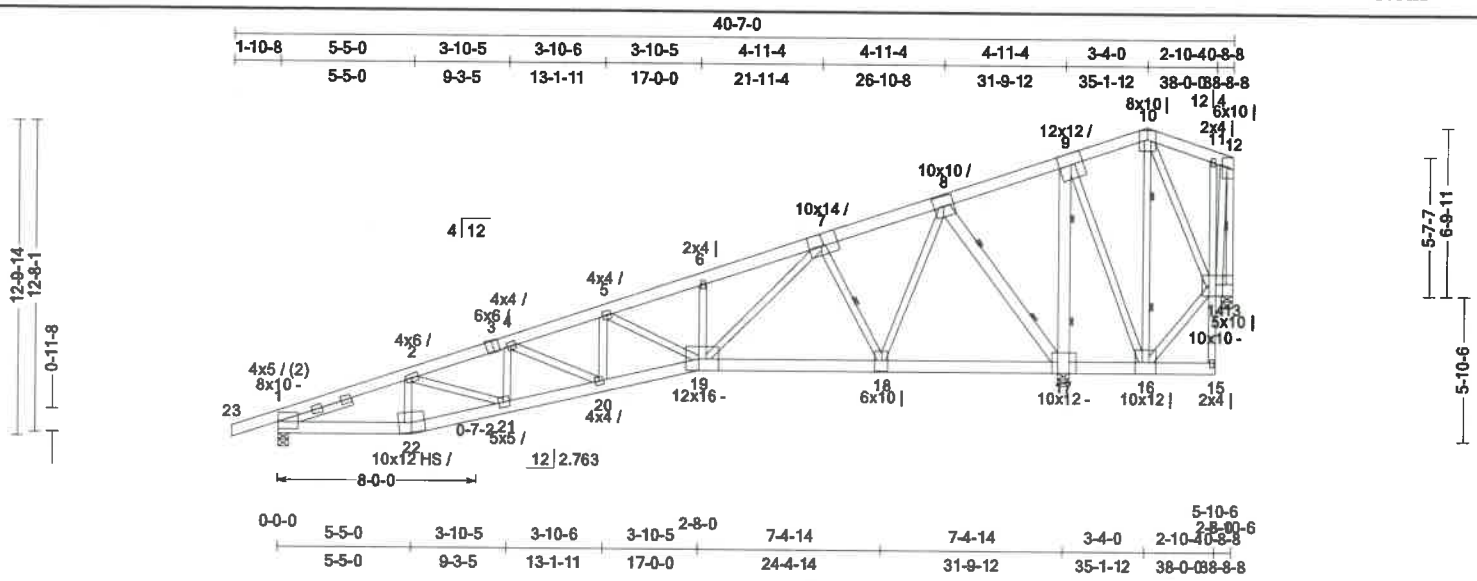
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
36-8-8	4/12	3	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	357 lbs

3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
8) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 13 may need to be considered.
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T15 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:00:03 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
38-8-8	4/12	2	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	370 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.93 (8-9)	Vert TL:	0.68 in	L/547	(19-20)	L/240
TCDL: 10	TPI 1-2014	BC: 0.75 (22-1)	Vert LL:	0.54 in	L/688	(19-20)	L/360
BCLL: 0	Rep Mbr: No	Web: 0.82 (10-16)	Horz TL:	0.18 in		17	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	3.44 in	3,941 lbs	-	-177 lbs	-483 lbs	-483 lbs	521 lbs
17	1	5.5 in	3.69 in	10,286 lbs	-	-635 lbs	-1,322 lbs	-1,322 lbs	-
13	1	5.5 in	1.50 in	380 lbs	-3,098 lbs	-56 lbs	-	-3,098 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG #2 2 x 6: 8-17
SP-FT/PG 2400/1.8 2 x 4: 7-19, 8-18, 9-16, 12-13
SP-FT/PG 2400/1.8 2 x 6: 9-17

Bracing

TC: Sheathed or Purlins at 2-6-0, Purlin design by Others.
BC: Sheathed or Purlins at 5-2-0, Purlin design by Others.
Web: One Midpoint Row: 7-18, 12-14
Two Third Point Rows: 8-17, 9-17, 10-16

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.723	-6,744 lbs		5-6	0.435	-6,637 lbs		8-9	0.926	3,227 lbs	(-346 lbs)	11-12	0.398	511 lbs	(-32 lbs)
	2-4	0.647	-8,333 lbs		6-7	0.653	-6,685 lbs		9-10	0.830	1,361 lbs	(-50 lbs)				
	4-5	0.529	-8,057 lbs		7-8	0.828	-1,456 lbs		10-11	0.435	403 lbs	(-98 lbs)				
BC	16-17	0.255	-2,806 lbs		20-21	0.737	8,005 lbs	(-1,223 lbs)								
	18-19	0.349	2,741 lbs	(-366 lbs)	21-22	0.688	6,322 lbs	(-1,020 lbs)								
	19-20	0.710	7,709 lbs	(-1,149 lbs)	22-1	0.750	6,225 lbs	(-1,004 lbs)								
Web	2-22	0.208	-1,502 lbs		5-19	0.529	-1,614 lbs		8-17	0.683	-4,647 lbs		16-14	0.548	-1,887 lbs	
	2-21	0.502	1,739 lbs	(-208 lbs)	6-19	0.209	-999 lbs		9-17	0.694	-6,259 lbs		11-14	0.455	-842 lbs	
	4-21	0.126	-821 lbs		7-19	0.615	4,969 lbs	(-746 lbs)	9-16	0.537	4,340 lbs	(-567 lbs)	12-14	0.438	-2,689 lbs	
	4-20	0.115	-394 lbs		7-18	0.639	-3,630 lbs		10-16	0.816	-2,741 lbs		12-13	0.384	3,108 lbs	(-375 lbs)
	5-20	0.093	322 lbs	(-14 lbs)	8-18	0.446	3,605 lbs	(-468 lbs)	10-14	0.614	2,128 lbs	(-250 lbs)				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

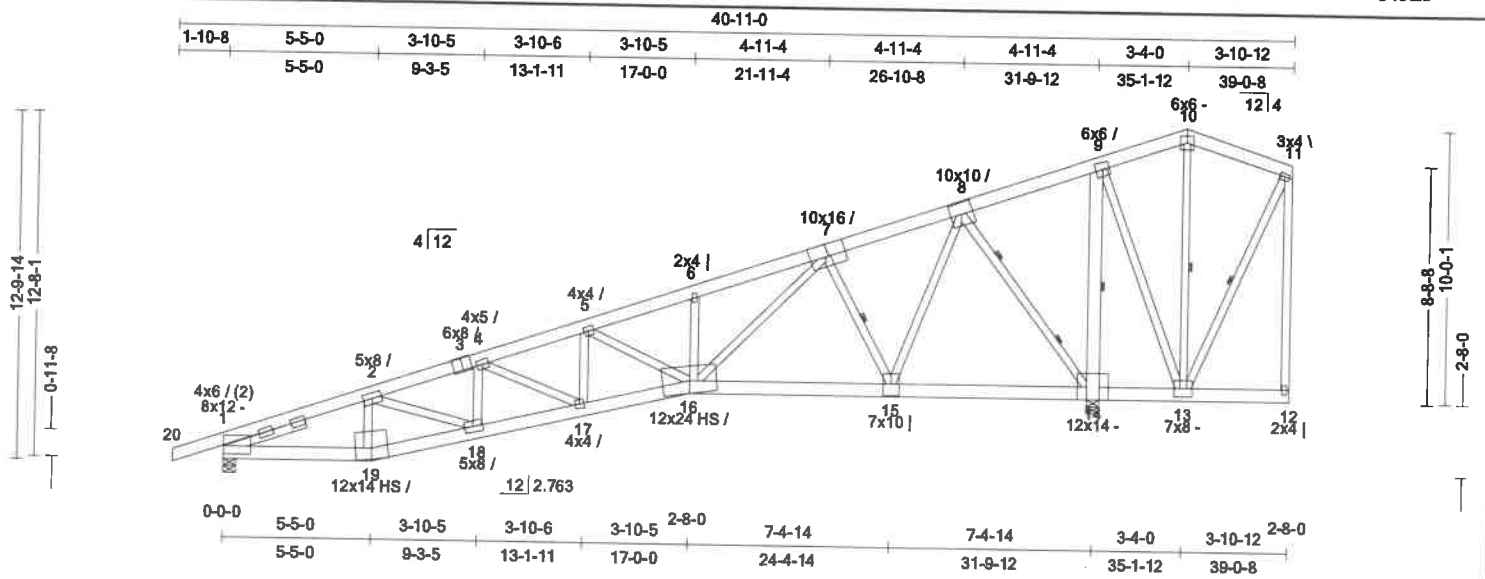
Truss: T15
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:03
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
38-8-8	4/12	2	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	370 lbs

3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) At least one web of this truss has been designed with a panel point in the web. All panel points on such webs shall be braced laterally perpendicular to the plane of the truss. Lateral braces shall be installed within 6 " of each web panel point.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
8) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 13 may need to be considered.
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T16 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:00:04 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
39-0-8	4/12	1	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	346 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.95 (2-4)
TCDL: 10	Rep Mbr: No	BC: 0.97 (16-17)
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.81 (8-14)
BCDL: 10		

Deflection		L/	(loc)	Allowed
Vert TL:	0.91 in	L/409	(16-17)	L/240
Vert LL:	0.73 in	L/510	(16-17)	L/360
Cant/OH TL:	0.35 in UP	2L/482	12	2L/120
Cant/OH LL:	0.28 in UP	2L/590	12	2L/120
Horz TL:	0.27 in		14	

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	4.00 in	4,591 lbs	.	-212 lbs	-553 lbs	-553 lbs	455 lbs
14	1	5.5 in	2.36 in	6,574 lbs	.	-442 lbs	-1,091 lbs	-1,091 lbs	.

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 7-16, 8-15, 8-14
SP-FT/PG 2400/1.8 2 x 6: 9-14

Bracing

TC: Sheathed
BC: Sheathed or Purlins at 8-1-0, Purlin design by Others.
Web: One Midpoint Row: 7-15, 9-14, 10-13, 11-13
Two Third Point Rows: 8-14

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.938	-8,296 lbs		5-6	0.675	-9,940 lbs		8-9	0.819	1,088 lbs	(-143 lbs)			
	2-4	0.953	-10,674 lbs		6-7	0.760	-9,980 lbs		9-10	0.720	354 lbs	(-145 lbs)			
	4-5	0.721	-10,954 lbs		7-8	0.820	-4,263 lbs		10-11	0.461	543 lbs	(-68 lbs)			
BC	13-14	0.140	-967 lbs		15-16	0.600	5,514 lbs	(-516 lbs)	17-18	0.940	10,293 lbs	(-1,344 lbs)	19-1	0.952	7,658 lbs	(-1,067 lbs)
	14-15	0.368	2,528 lbs	(-163 lbs)	16-17	0.973	10,524 lbs	(-1,304 lbs)	18-19	0.863	7,775 lbs	(-1,084 lbs)				
Web	2-19	0.261	-1,884 lbs		6-16	0.205	-983 lbs		8-14	0.813	-4,894 lbs		11-13	0.249	-704 lbs	
	2-18	0.750	2,600 lbs	(-268 lbs)	7-16	0.678	5,484 lbs	(-782 lbs)	9-14	0.376	-2,602 lbs					
	4-18	0.194	-1,271 lbs		7-15	0.684	-3,889 lbs		9-13	0.531	1,838 lbs	(-324 lbs)				
	5-16	0.411	-1,253 lbs		8-15	0.481	3,888 lbs	(-485 lbs)	10-13	0.425	-1,095 lbs					

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
5) A creep factor of 1.50 has been applied for this truss analysis.
6) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T16
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:05
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
39-0-8	4 /12	1	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	346 lbs

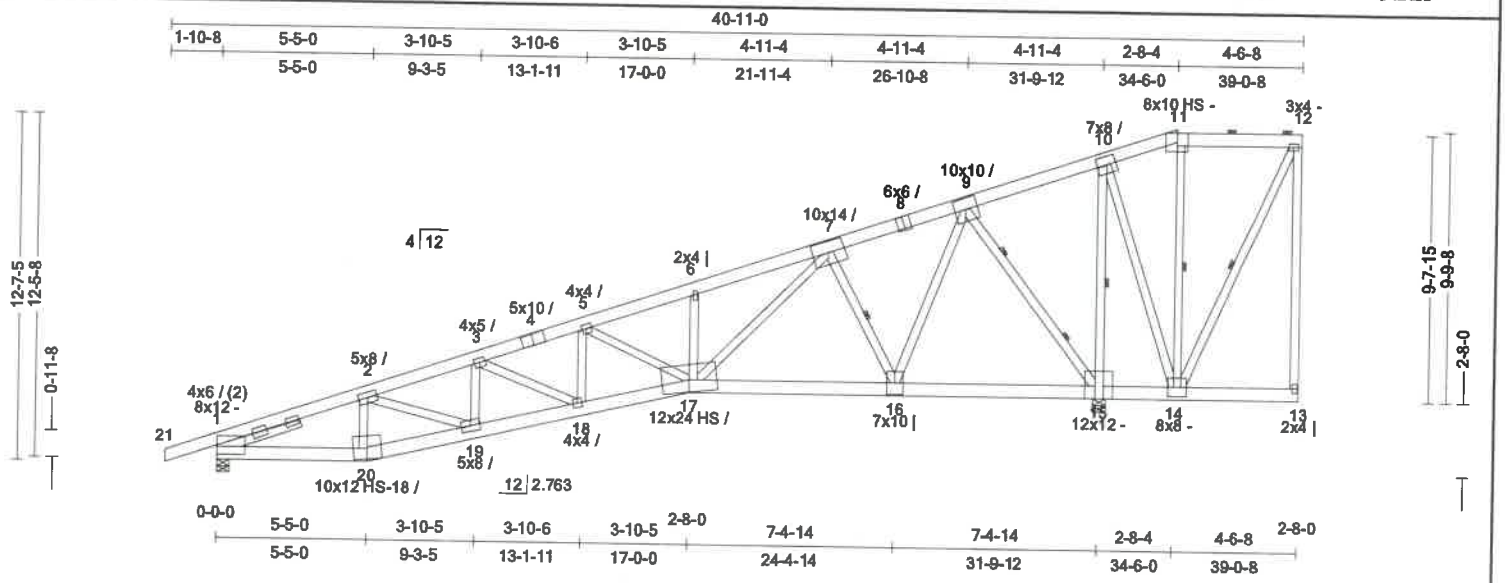
7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild®Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T17
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:06
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT'L	CANT'R	PLYS	SPACING	WGT/PLY
39-0-8	4/12	1	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	342 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.85 (21-1)
TCDL: 10	Rep Mbr: Yes	BC: 0.89 (17-18)
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.86 (10-15)
BCDL: 10		

Deflection		L/	(loc)	Allowed
Vert TL:	0.92 in	L/405	(17-18)	L/240
Vert LL:	0.74 in	L/504	(17-18)	L/360
Cant/OH TL:	0.34 in UP	2L/494	13	2L/120
Cant/OH LL:	0.28 in UP	2L/598	13	2L/120
Horz TL:	0.28 in		15	

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	4.03 in	4,624 lbs	.	-199 lbs	-552 lbs	-552 lbs	493 lbs
15	1	5.5 in	3.39 in	6,441 lbs	.	-455 lbs	-1,039 lbs	-1,039 lbs	.

09/12/2024

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 7-17, 9-16, 9-15

Bracing

TC: Sheathed
BC: Sheathed or Purlins at 8-5-0, Purlin design by Others.
Web: One Midpoint Row: 7-16, 10-15, 11-14, 12-14
Two Third Point Rows: 9-15

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.811	-8,374 lbs		5-6	0.605	-10,108 lbs		9-10	0.850	1,144 lbs	(-227 lbs)			
	2-3	0.819	-10,793 lbs		6-7	0.663	-10,141 lbs		10-11	0.601	433 lbs	(-124 lbs)			
	3-5	0.664	-11,101 lbs		7-9	0.844	-4,396 lbs		11-12	0.603	413 lbs	(-110 lbs)			
BC	14-15	0.178	-1,020 lbs		16-17	0.554	5,702 lbs	(-556 lbs)	18-19	0.859	10,409 lbs	(-1,374 lbs)	20-1	0.861	7,731 lbs (-1,089 lbs)
	15-16	0.364	2,626 lbs	(-163 lbs)	17-18	0.889	10,668 lbs	(-1,339 lbs)	19-20	0.782	7,849 lbs	(-1,107 lbs)			
Web	2-20	0.264	-1,904 lbs		6-17	0.203	-970 lbs		9-15	0.832	-4,967 lbs		12-14	0.424	-986 lbs
	2-19	0.763	2,644 lbs	(-275 lbs)	7-17	0.676	5,467 lbs	(-783 lbs)	10-15	0.865	-2,540 lbs				
	3-19	0.198	-1,293 lbs		7-16	0.697	-3,961 lbs		10-14	0.608	2,108 lbs	(-291 lbs)			
	5-17	0.411	-1,254 lbs		9-16	0.485	3,923 lbs	(-484 lbs)	11-14	0.438	-1,202 lbs				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ⊠ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T17
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:06

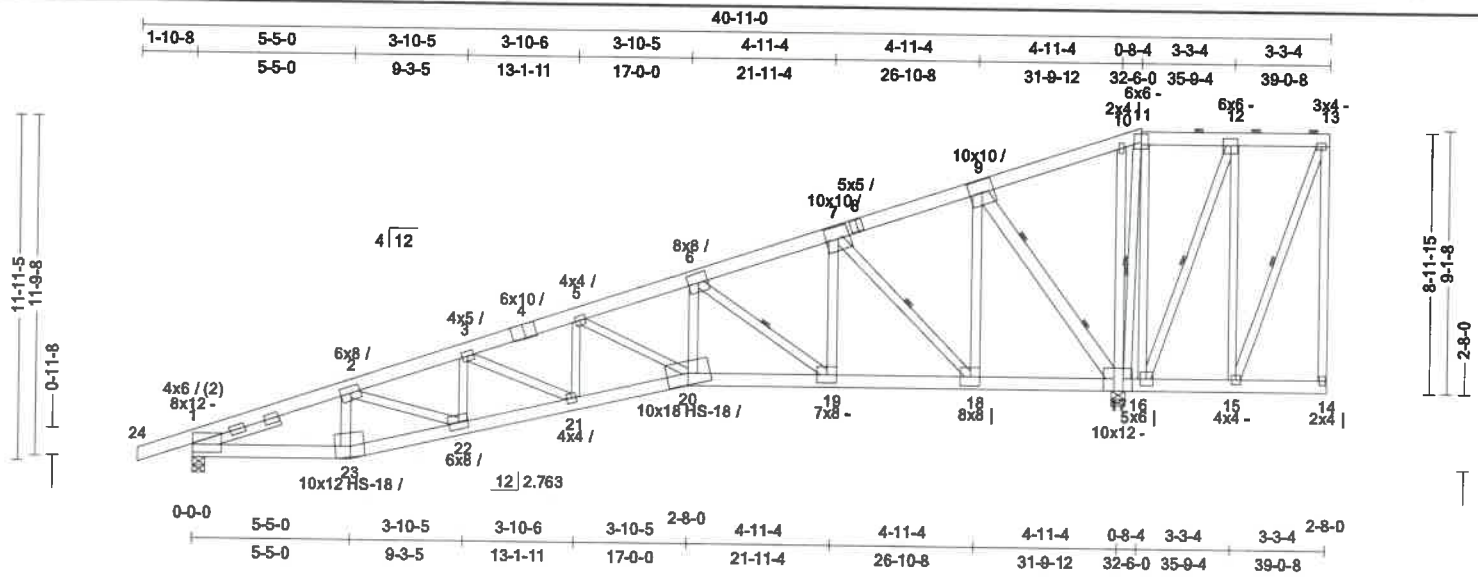
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
39-0-8	4/12	1	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	342 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T18
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:08
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
39-0-8	4/12	1	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	372 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI
TCLL: 110	Bldg Code: IBC 2018/ TPI 1-2014	TC: 0.88 (9-10)
TCDL: 10	Rep Mbr: Yes	BC: 0.94 (20-21)
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.86 (6-20)
BCDL: 10		

Deflection		L/	(loc)	Allowed
Vert TL:	0.94 in	L/396	(20-21)	L/240
Vert LL:	0.76 in	L/490	(20-21)	L/360
Cant/OH TL:	0.39 in UP	2L/436	14	2L/120
Cant/OH LL:	0.33 in UP	2L/517	14	2L/120
Horz TL:	0.31 in		17	

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	4.11 in	4,713 lbs	-	-208 lbs	-560 lbs	-560 lbs	466 lbs
17	1	5.5 in	3.28 in	6,216 lbs	-	-446 lbs	-1,008 lbs	-1,008 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG #2 2 x 6: 9-17
SP-FT/PG 2400/1.8 2 x 4: 7-18, 9-18

Bracing

TC: Sheathed
BC: Sheathed or Purlins at 8-5-0, Purlin design by Others.
Web: One Midpoint Row: 6-19, 7-18, 10-17, 11-17, 12-16, 13-15
Two Third Point Rows: 9-17

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.842	-8,588 lbs		5-6	0.635	-10,571 lbs		9-10	0.877	1,215 lbs	(-202 lbs)			
	2-3	0.855	-11,118 lbs		6-7	0.778	-6,527 lbs		10-11	0.546	965 lbs	(-154 lbs)			
	3-5	0.687	-11,487 lbs		7-9	0.855	-3,170 lbs		11-12	0.719	949 lbs	(-150 lbs)			
BC	16-17	0.926	-1,016 lbs		19-20	0.849	9,748 lbs	(-1,084 lbs)	22-23	0.803	8,048 lbs	(-1,105 lbs)			
	17-18	0.423	2,773 lbs	(-190 lbs)	20-21	0.944	11,033 lbs	(-1,340 lbs)	23-1	0.885	7,928 lbs	(-1,088 lbs)			
	18-19	0.493	6,030 lbs	(-547 lbs)	21-22	0.882	10,730 lbs	(-1,377 lbs)							
Web	2-23	0.271	-1,955 lbs		6-20	0.862	2,986 lbs	(-352 lbs)	9-17	0.755	-5,134 lbs		12-15	0.195	677 lbs	(-146 lbs)
	2-22	0.799	2,768 lbs	(-280 lbs)	6-19	0.844	-4,620 lbs		10-17	0.329	-968 lbs		13-15	0.202	-575 lbs	
	3-22	0.209	-1,364 lbs		7-19	0.838	2,904 lbs	(-346 lbs)	11-17	0.479	-1,488 lbs					
	3-21	0.096	332 lbs	(-177 lbs)	7-18	0.762	-4,698 lbs		11-16	0.327	1,133 lbs	(-171 lbs)				
	5-20	0.400	-1,220 lbs		9-18	0.421	3,403 lbs	(-375 lbs)	12-16	0.767	-2,186 lbs					

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T18
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:08
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
39-0-8	4/12	1	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	372 lbs

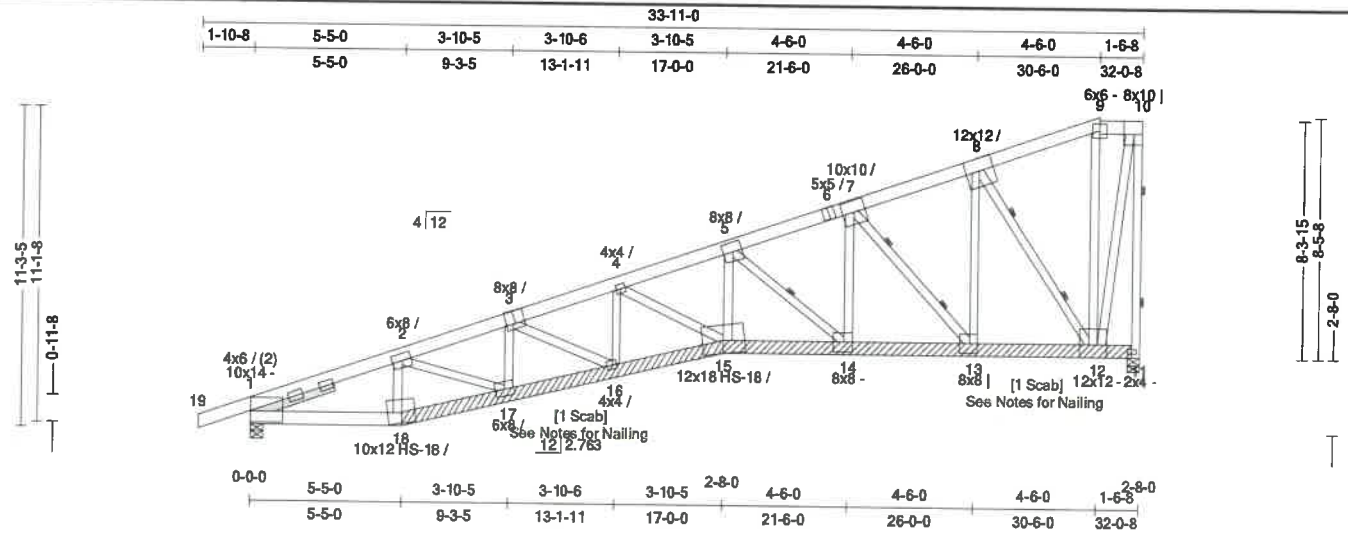
8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T19
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:08:44
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	4/12	1	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	288 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC 2018/ TPI 1-2014	TC: 0.91 (2-3)		Vert TL:	0.88 in	L/427	(15-16)	L/240
TCDL: 10			BC: 0.95 (18-1)		Vert LL:	0.7 in	L/531	(15-16)	L/360
BCLL: 0	Rep Mbr:	Yes	Web: 0.83 (7-13)		Horz TL:	0.22 in		11	
BCDL: 10	Lumber D.O.L.:	100 %							

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max UpLift	Max Horiz
1	1	5.5 in	4.26 in	4,885 lbs	-	-230 lbs	-589 lbs	-589 lbs	440 lbs
11	1	5.5 in	2.20 in	4,822 lbs	-	-316 lbs	-559 lbs	-559 lbs	-

09/16/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 2-17, 5-15, 7-14, 8-13, 8-12, 10-12, 10-11
Scabs 11-15 [Qty: 1] SP-FT/PG 2400/1.8 2165/18 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed
BC: Sheathed or Purlins at 9-5-0, Purlin design by Others.
Web: One Midpoint Row: 5-14
Two Third Point Rows: 7-13, 8-12, 10-11

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL= 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TC LL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.901	-8,978 lbs		4-5	0.685	-11,401 lbs		8-9	0.799	-1,156 lbs				
	2-3	0.906	-11,675 lbs		5-7	0.759	-7,511 lbs		9-10	0.264	-840 lbs				
	3-4	0.731	-12,225 lbs		7-8	0.768	-4,238 lbs								
BC	12-13	0.407	3,804 lbs	(-321 lbs)	14-15	0.517	10,534 lbs	(-1,172 lbs)	16-17	0.504	11,358 lbs	(-1,416 lbs)	18-1	0.953	8,295 lbs	(-1,103 lbs)
	13-14	0.282	6,946 lbs	(-710 lbs)	15-16	0.561	11,747 lbs	(-1,380 lbs)	17-18	0.452	8,417 lbs	(-1,120 lbs)				
Web	2-18	0.287	-2,068 lbs		4-15	0.358	-1,094 lbs		7-13	0.832	-4,689 lbs		10-12	0.540	4,370 lbs	(-487 lbs)
	2-17	0.363	2,938 lbs	(-292 lbs)	5-15	0.377	3,047 lbs	(-333 lbs)	8-13	0.469	3,791 lbs	(-401 lbs)	10-11	0.717	-4,318 lbs	
	3-17	0.229	-1,498 lbs		5-14	0.791	-4,623 lbs		8-12	0.807	-5,294 lbs					
	3-16	0.127	440 lbs	(-4 lbs)	7-14	0.376	3,038 lbs	(-324 lbs)	9-12	0.505	-509 lbs					

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
8) ☐ Indicates non-structural members.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T19
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:08:44
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	4/12	1	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	288 lbs

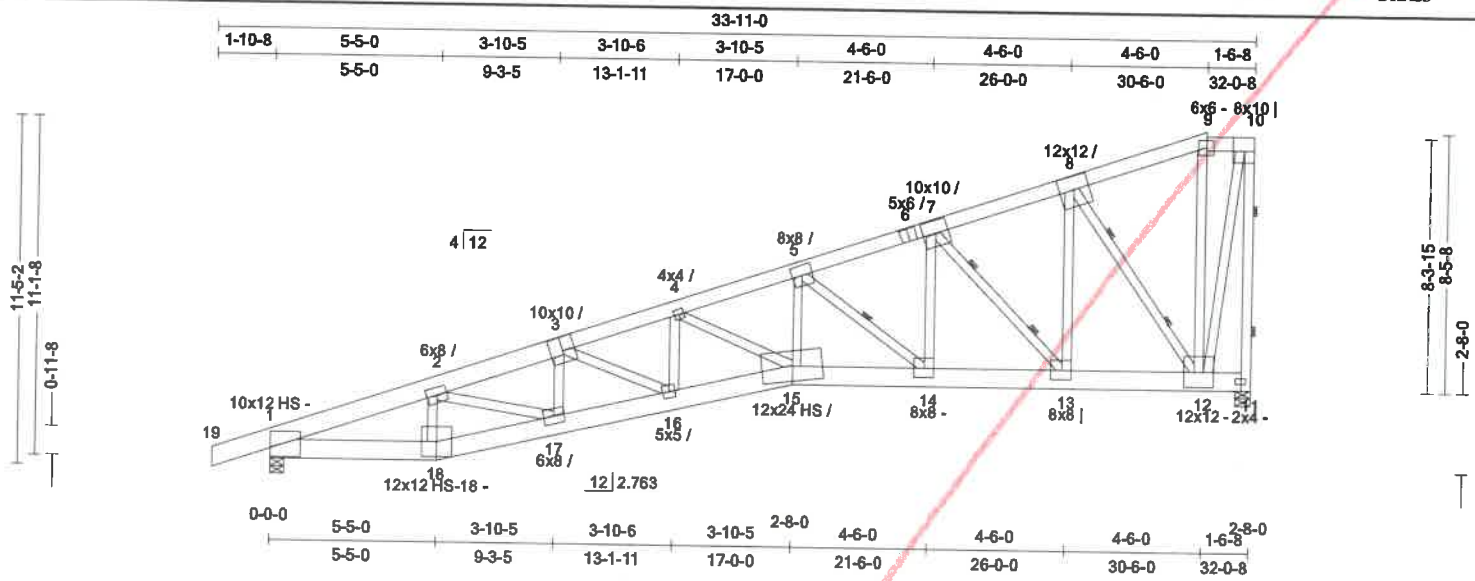
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Scab 11 - 15 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
15) Scab 15 - 18 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.13
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T19
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:09
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	4/12	1	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	312 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.80 (8-9)	Vert TL:	0.97 in	L/386	(15-16)	L/240
TCDL: 10	TPI 1-2014	BC: 0.86 (15-16)	Vert LL:	0.78 in	L/480	(15-16)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.83 (2-17)	Horz TL:	0.28 in		11	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	4.26 in	4,885 lbs	.	-231 lbs	-590 lbs	-590 lbs	437 lbs
11	1	5.5 in	2.20 in	4,822 lbs	.	-315 lbs	-558 lbs	-558 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 19-3
BC: SP-FT/PG 2400/1.8 2 x 8
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 5-15, 7-14, 8-13, 8-12, 10-12, 10-11

Bracing

TC: Sheathed

BC: Sheathed or Purlins at 9-4-0, Purlin design by Others.
Web: One Midpoint Row: 5-14
Two Third Point Rows: 7-13, 8-12, 10-11

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.706	-9,569 lbs		4-5	0.695	-11,612 lbs		8-9	0.797	-1,160 lbs								
	2-3	0.554	-12,212 lbs		5-7	0.765	-7,610 lbs		9-10	0.266	-845 lbs								
	3-4	0.751	-12,518 lbs		7-8	0.768	-4,278 lbs												
BC	12-13	0.532	3,842 lbs	(-325 lbs)	14-15	0.787	10,718 lbs	(-1,191 lbs)	16-17	0.778	11,758 lbs	(-1,458 lbs)	18-1	0.805	8,795 lbs	(-1,149 lbs)			
	13-14	0.434	7,042 lbs	(-720 lbs)	15-16	0.857	12,009 lbs	(-1,408 lbs)	17-18	0.738	8,924 lbs	(-1,167 lbs)							
Web	2-18	0.309	-2,335 lbs		5-15	0.384	3,108 lbs	(-338 lbs)	8-13	0.470	3,803 lbs	(-401 lbs)	10-11	0.706	-4,299 lbs				
	2-17	0.827	2,867 lbs	(-294 lbs)	5-14	0.791	-4,698 lbs		8-12	0.796	-5,311 lbs								
	3-17	0.180	-1,265 lbs		7-14	0.379	3,065 lbs	(-325 lbs)	9-12	0.488	-512 lbs								
	4-15	0.367	-1,150 lbs		7-13	0.827	-4,739 lbs		10-12	0.539	4,354 lbs	(-484 lbs)							

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T19
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:10
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	4/12	1	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	312 lbs

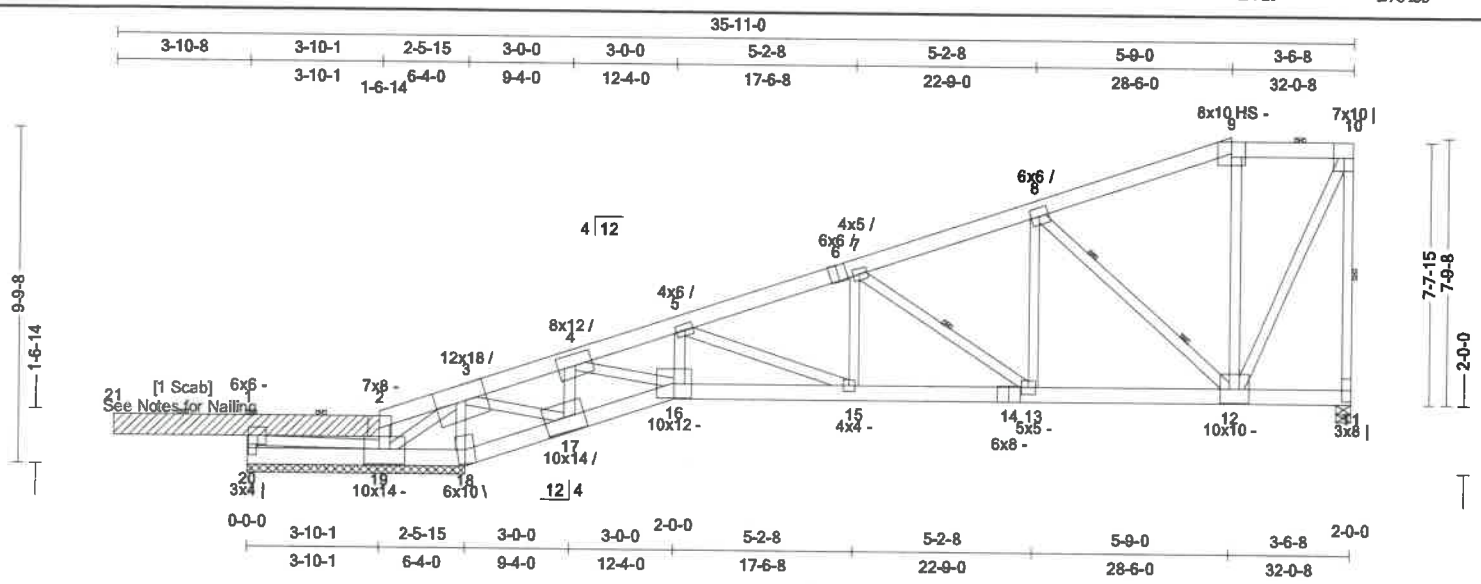
8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T20
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:12
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	276 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
TCLL:	110	Bldg Code:	IBC2018/ TPI 1-2014	TC:	0.95 (8-9)	Vert TL:	0.35 in	L/877	(15-16)	L/240
TCDL:	10	Rep Mbr:	No	BC:	0.49 (15-16)	Vert LL:	0.28 in	L/999	15	L/360
BCLL:	0	Lumber D.O.L.:	100 %	Web:	0.80 (3-18)	Horz TL:	0.14 in		11	
BCDL:	10									

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
11	1	5.5 in	2.71 in	3,111 lbs	.	-222 lbs	-395 lbs	-395 lbs	.
18	1	76 in	N/A	8,510 lbs	.	-562 lbs	-1,070 lbs	-1,070 lbs	5,639 lbs
19	1	76 in	N/A	439 lbs	-2,990 lbs	.	.	-2,990 lbs	-5,639 lbs
20	1	76 in	N/A	2,817 lbs	.	-187 lbs	-138 lbs	-187 lbs	24 lbs

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 21-2
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 3-19, 3-17, 4-16, 10-12
Scabs 21-2 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 3-5-0, Purlin design by Others.

BC: Sheathed or Purlins at 3-1-0, Purlin design by Others.
Web: One Midpoint Row: 7-13, 10-11
Two Third Point Rows: 8-12

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.896	2,720 lbs	(-381 lbs)	4-5	0.313	-4,785 lbs		8-9	0.950	-1,795 lbs				
	2-3	0.652	2,934 lbs	(-380 lbs)	5-7	0.785	-5,698 lbs		9-10	0.597	-1,362 lbs				
	3-4	0.510	348 lbs	(-150 lbs)	7-8	0.904	-4,283 lbs								
BC	12-13	0.384	3,817 lbs	(-349 lbs)	15-16	0.487	4,583 lbs	(-603 lbs)							
	13-15	0.480	5,238 lbs	(-569 lbs)	17-18	0.477	-6,380 lbs								
Web	1-20	0.343	-2,780 lbs		3-17	0.735	5,944 lbs	(-713 lbs)	7-13	0.345	-1,737 lbs		10-11	0.731	-3,065 lbs
	1-19	0.720	-2,796 lbs		4-17	0.476	-3,606 lbs		8-13	0.325	1,126 lbs	(-88 lbs)			
	2-19	0.371	1,284 lbs	(-80 lbs)	4-16	0.610	4,929 lbs	(-546 lbs)	8-12	0.726	-3,260 lbs				
	3-19	0.495	4,004 lbs	(-587 lbs)	5-16	0.202	-1,520 lbs		9-12	0.654	-803 lbs				
	3-18	0.798	-6,066 lbs		5-15	0.203	703 lbs		10-12	0.410	3,311 lbs	(-384 lbs)			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Provide adequate drainage to prevent ponding.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

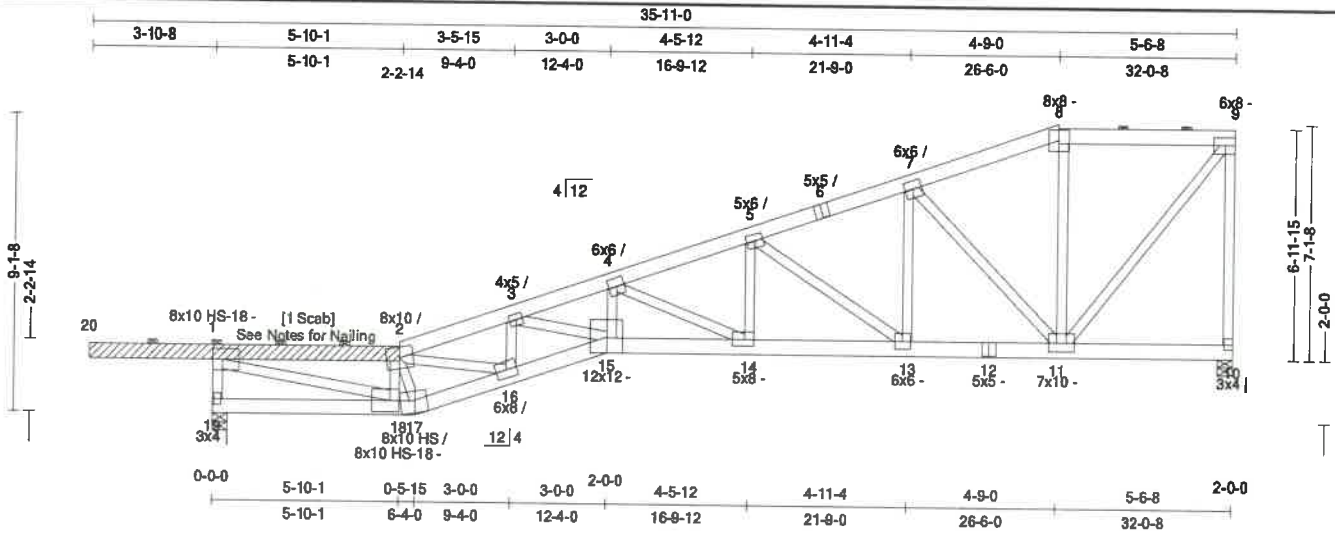
Truss: T20
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:13

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	276 lbs

4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
8) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 19 may need to be considered.
9) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
10) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
11) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
12) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
13) Incising is not permitted.
14) Scab 2 - 21 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
15) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T21 Job: CBS0306SA-8-HIESCO COMPLETE Designer: Shane Allen Date: 09/16/24 08:08:48 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	259 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC 2018/	TC:	0.90 (1-2)	Vert TL:	0.89 in	L/418	(14-15)	L/240
TCDL: 10		TPI 1-2014	BC:	0.85 (14-15)	Vert LL:	0.72 in	L/520	15	L/360
BCLL: 0	Rep Mbr:	Yes	Web:	0.77 (2-16)	Horz TL:	0.21 in		10	
BCDL: 10	Lumber D.O.L.:	100 %							

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
19	1	5.5 in	2.40 in	5,512 lbs	-	-317 lbs	-607 lbs	-607 lbs	301 lbs
10	1	5.5 in	1.79 in	4,104 lbs	-	-284 lbs	-530 lbs	-530 lbs	-

09/16/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-18
Scabs 20-2 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed or Purlins at 5-6-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL= 157 psf), Terrain C, Exposure (Ce= 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL= 1.60
4) This truss has been designed for the effects of TC LL= 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.903	-5,541 lbs		3-4	0.547	-9,146 lbs		5-7	0.258	-3,592 lbs		8-9	0.361	-1,532 lbs	
	2-3	0.479	-7,852 lbs		4-5	0.355	-5,893 lbs		7-8	0.382	-1,740 lbs					
BC	11-13	0.266	3,285 lbs	(-340 lbs)	14-15	0.846	8,422 lbs	(-1,002 lbs)	16-17	0.502	5,004 lbs	(-616 lbs)				
	13-14	0.430	5,531 lbs	(-622 lbs)	15-16	0.801	7,787 lbs	(-954 lbs)	17-18	0.583	5,262 lbs	(-646 lbs)				
Web	1-19	0.332	-2,675 lbs		2-16	0.770	2,669 lbs	(-325 lbs)	4-14	0.481	-3,178 lbs		7-11	0.575	-2,520 lbs	
	1-18	0.715	5,780 lbs	(-597 lbs)	3-16	0.163	-1,305 lbs		5-14	0.418	1,448 lbs	(-153 lbs)	8-11	0.090	-438 lbs	
	2-18	0.270	-2,177 lbs		3-15	0.366	1,268 lbs	(-124 lbs)	5-13	0.505	-2,735 lbs		9-11	0.706	2,446 lbs	(-293 lbs)
	2-17	0.140	-1,125 lbs		4-15	0.580	2,010 lbs	(-228 lbs)	7-13	0.461	1,596 lbs	(-167 lbs)	9-10	0.418	-2,025 lbs	

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.

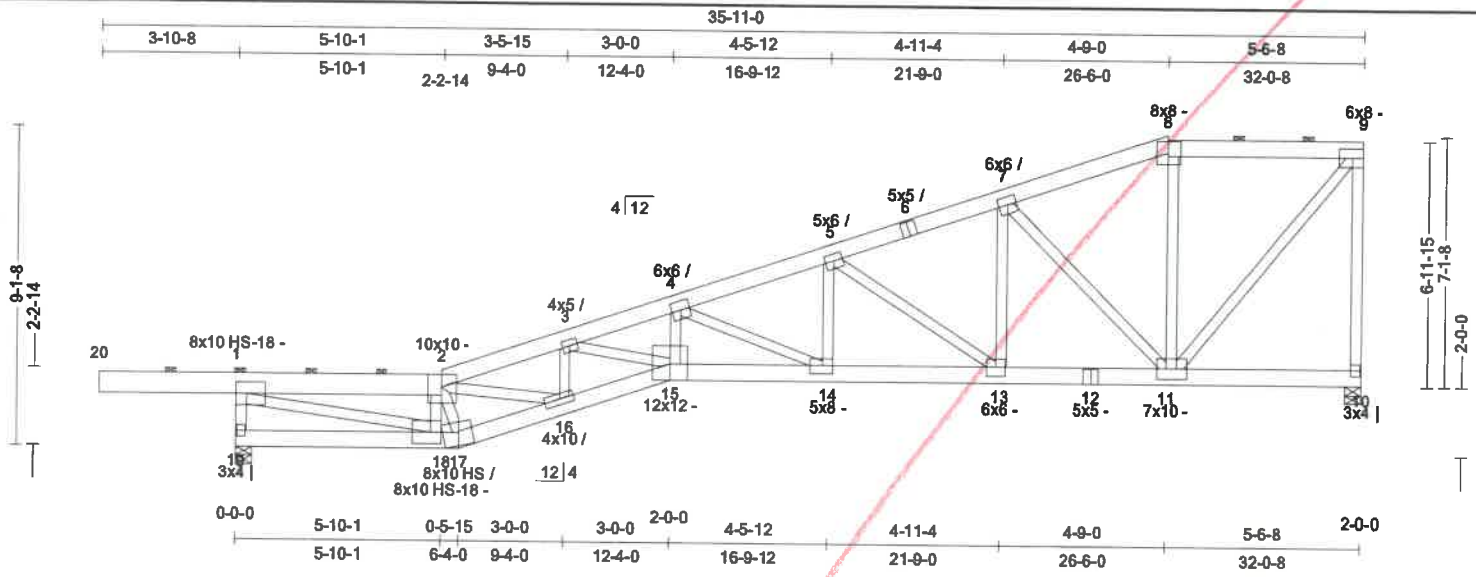
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	259 lbs

6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 2 staggered rows @ 0-9-8 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) All fasteners minimum 2-1/2" long, unless otherwise noted.
10) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Scab 2 - 20 to match size and grade of member to which it is attached. Attach with 2 staggered rows of 12d Nails or Gun Nails [min 0.135"x3"] @ 6 oc.
17) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T21
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:14
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	266 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC2018/	TC:	0.78 (1-2)	Vert TL:	0.89 in	L/421	(14-15)	L/240
TCDL: 10		TPI 1-2014	BC:	0.85 (14-15)	Vert LL:	0.71 in	L/524	15	L/360
BCLL: 0	Rep Mbr:	Yes	Web:	0.71 (9-11)	Horz TL:	0.21 in		10	
BCDL: 10	Lumber D.O.L.:	100 %							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
19	1	5.5 in	2.40 in	5,512 lbs	-	-317 lbs	-607 lbs	-607 lbs	302 lbs
10	1	5.5 in	1.79 in	4,104 lbs	-	-284 lbs	-530 lbs	-530 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 20-2
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-18

Bracing

TC: Sheathed or Purlins at 5-6-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.777	-5,417 lbs		3-4	0.547	-9,144 lbs		5-7	0.258	-3,592 lbs		8-9	0.361	-1,532 lbs	
	2-3	0.488	-7,930 lbs		4-5	0.355	-5,894 lbs		7-8	0.382	-1,740 lbs					
BC	11-13	0.266	3,285 lbs	(-340 lbs)	14-15	0.849	8,420 lbs	(-1,002 lbs)	16-17	0.511	5,508 lbs	(-679 lbs)				
	13-14	0.430	5,532 lbs	(-623 lbs)	15-16	0.805	7,805 lbs	(-956 lbs)	17-18	0.612	5,579 lbs	(-686 lbs)				
Web	1-19	0.331	-2,673 lbs		2-16	0.642	2,224 lbs	(-269 lbs)	4-14	0.480	-3,175 lbs		7-11	0.575	-2,520 lbs	
	1-18	0.695	5,620 lbs	(-575 lbs)	3-16	0.136	-1,089 lbs		5-14	0.418	1,448 lbs	(-154 lbs)	8-11	0.090	-438 lbs	
	2-18	0.246	-1,988 lbs		3-15	0.359	1,243 lbs	(-121 lbs)	5-13	0.505	-2,735 lbs		9-11	0.706	2,446 lbs	(-294 lbs)
	2-17	0.163	-1,310 lbs		4-15	0.580	2,009 lbs	(-228 lbs)	7-13	0.461	1,596 lbs	(-167 lbs)	9-10	0.418	-2,025 lbs	

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T21
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:14
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	266 lbs

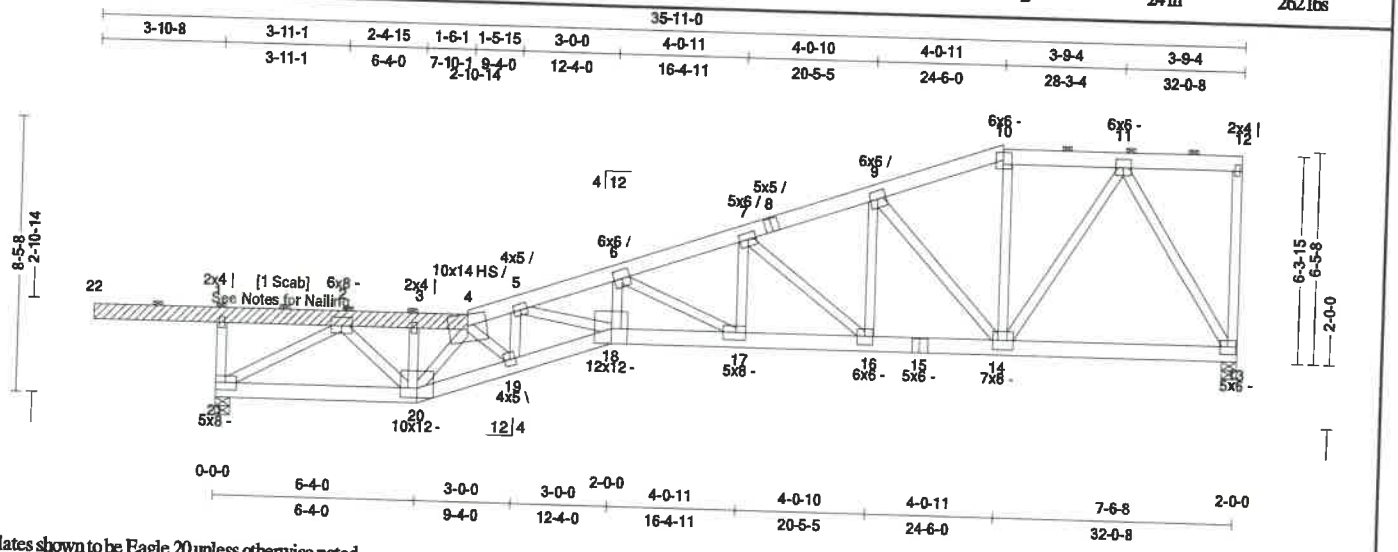
6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 2 staggered rows @ 0-9-8 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) All fasteners minimum 2-1/2" long, unless otherwise noted.
10) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, ie. nails, screws , bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild®Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T22
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:08:53
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	262 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC 2018/ TPI 1-2014	TC: 0.89 (1-2)	Vert TL:	0.76 in	L/490	(17-18)	L/240
TCDL: 10	Rep Mbr: Yes	BC: 0.86 (17-18)	Vert LL:	0.61 in	L/608	(17-18)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.73 (2-20)	Horz TL:	0.23 in		13	
BCDL: 10							

09/16/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
21	1	5.5 in	2.41 in	5,523 lbs	-	-326 lbs	-600 lbs	-600 lbs	274 lbs
13	1	5.5 in	1.79 in	4,104 lbs	-	-275 lbs	-511 lbs	-511 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4
Scabs 22-4 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed or Purlins at 5-6-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TC LL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	2-3	0.182	-4,579 lbs		5-6	0.548	-9,172 lbs		9-10	0.317	-2,277 lbs				
	3-4	0.223	-4,552 lbs		6-7	0.363	-6,056 lbs		10-11	0.403	-2,084 lbs				
	4-5	0.464	-7,818 lbs		7-9	0.236	-3,965 lbs								
BC	13-14	0.114	1,128 lbs	(-101 lbs)	16-17	0.448	5,673 lbs	(-629 lbs)	18-19	0.810	7,803 lbs	(-919 lbs)	20-21	0.252	2,772 lbs	(-422 lbs)
	14-16	0.301	3,658 lbs	(-390 lbs)	17-18	0.857	8,457 lbs	(-972 lbs)	19-20	0.569	6,498 lbs	(-766 lbs)				
Web	1-21	0.190	-1,504 lbs		4-19	0.440	1,526 lbs	(-183 lbs)	7-17	0.446	1,546 lbs	(-158 lbs)	11-13	0.478	-2,147 lbs	
	2-21	0.476	-3,252 lbs		5-19	0.153	-1,226 lbs		7-16	0.415	-2,593 lbs					
	2-20	0.728	2,523 lbs	(-241 lbs)	5-18	0.369	1,279 lbs	(-125 lbs)	9-16	0.472	1,637 lbs	(-174 lbs)				
	3-20	0.074	-586 lbs		6-18	0.571	1,979 lbs	(-214 lbs)	9-14	0.458	-2,374 lbs					
	4-20	0.456	-3,551 lbs		6-17	0.450	-3,120 lbs		11-14	0.547	1,895 lbs	(-188 lbs)				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.

TrueBuild® Truss Software v5.7.13
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T22
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:08:53

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	262 lbs

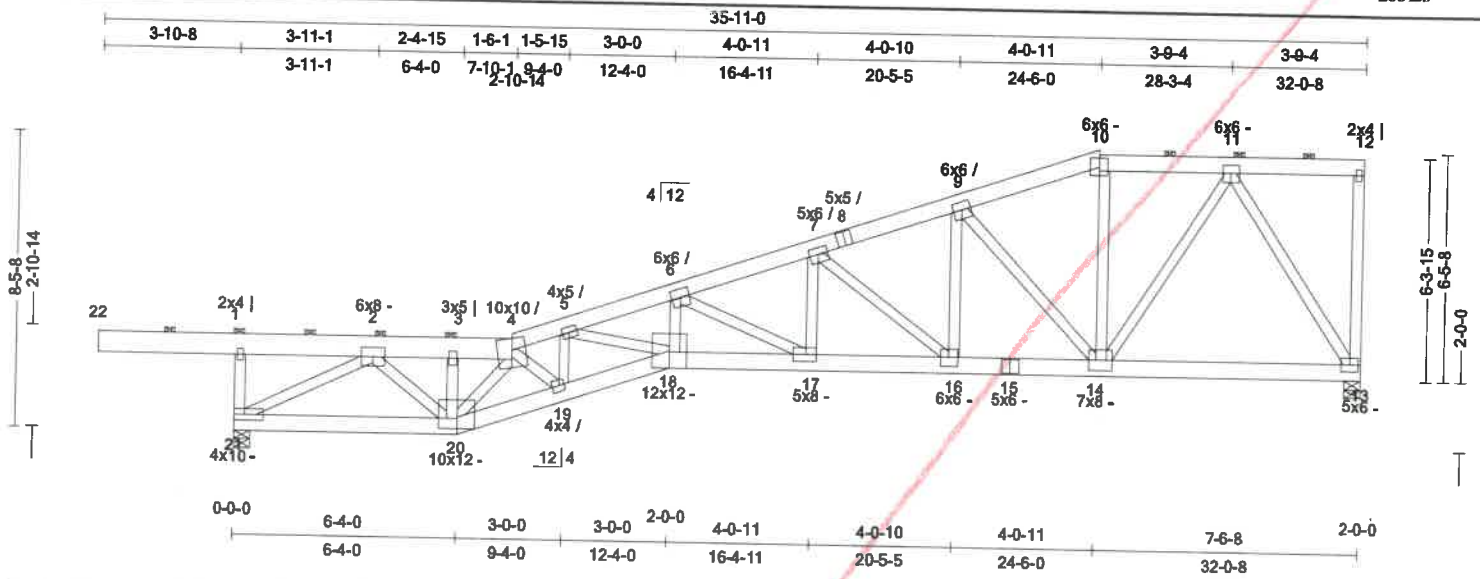
6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 2 staggered rows @ 0-9-8 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) All fasteners minimum 2-1/2" long, unless otherwise noted.
10) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Scab 4 - 22 to match size and grade of member to which it is attached. Attach with 2 staggered rows of 12d Nails or Gun Nails [min 0.135"x3"] @ 6 oc.
17) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.13
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T22
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:15
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	268 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.88 (22-1)	Vert TL:	0.77 in	L/484	(17-18)	L/240
TCDL: 10	Rep Mbr: No	BC: 0.95 (17-18)	Vert LL:	0.62 in	L/600	(17-18)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.73 (2-20)	Horz TL:	0.23 in		13	
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
21	1	5.5 in	2.41 in	5,523 lbs		-325 lbs	-600 lbs	-600 lbs	275 lbs
13	1	5.5 in	1.79 in	4,104 lbs		-276 lbs	-512 lbs	-512 lbs	

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 22-4
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 5-0-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	2-3	0.233	-4,686 lbs		5-6	0.603	-9,176 lbs		9-10	0.317	-2,277 lbs				
	3-4	0.239	-4,673 lbs		6-7	0.400	-6,055 lbs		10-11	0.403	-2,084 lbs				
	4-5	0.533	-7,930 lbs		7-9	0.260	-3,965 lbs								
BC	13-14	0.127	1,128 lbs	(-101 lbs)	16-17	0.495	5,673 lbs	(-630 lbs)	18-19	0.899	7,805 lbs	(-920 lbs)	20-21	0.287	2,853 lbs	(-392 lbs)
	14-16	0.333	3,658 lbs	(-390 lbs)	17-18	0.950	8,458 lbs	(-973 lbs)	19-20	0.687	7,028 lbs	(-828 lbs)				
Web	1-21	0.186	-1,478 lbs		4-19	0.287	994 lbs	(-122 lbs)	7-17	0.446	1,545 lbs	(-158 lbs)	11-13	0.478	-2,147 lbs	
	2-21	0.482	-3,318 lbs		5-19	0.105	-853 lbs		7-16	0.415	-2,592 lbs					
	2-20	0.727	2,520 lbs	(-241 lbs)	5-18	0.370	1,282 lbs	(-125 lbs)	9-16	0.472	1,637 lbs	(-174 lbs)				
	3-20	0.101	-807 lbs		6-18	0.574	1,988 lbs	(-215 lbs)	9-14	0.458	-2,374 lbs					
	4-20	0.471	-3,681 lbs		6-17	0.450	-3,122 lbs		11-14	0.547	1,895 lbs	(-189 lbs)				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T22
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:16
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	268 lbs

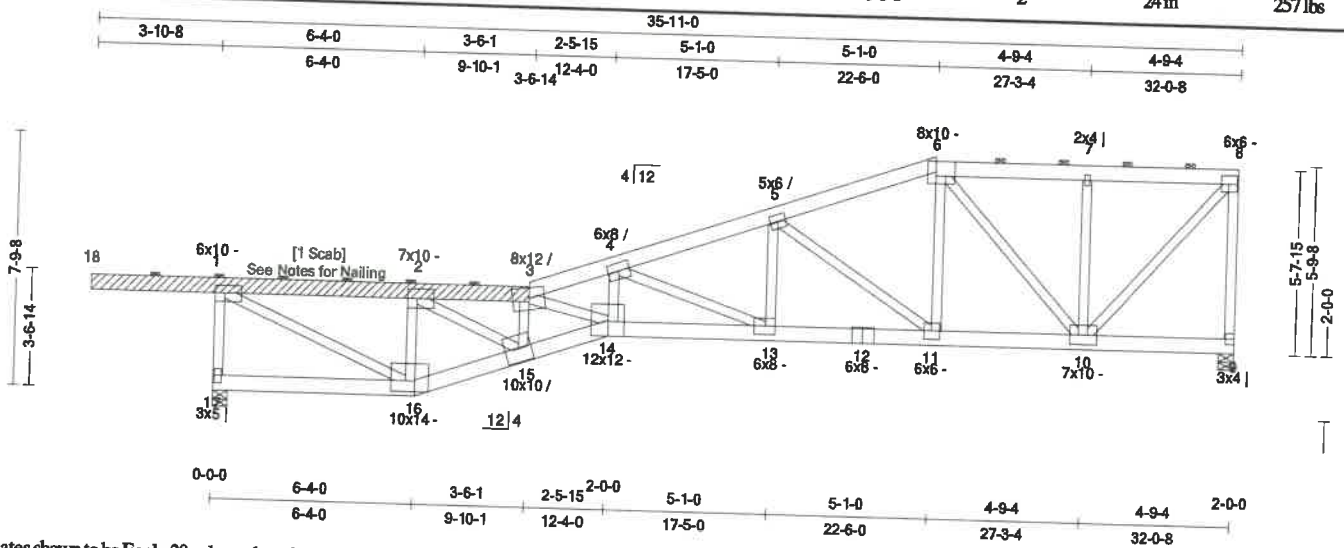
6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 2 staggered rows @ 0-9-8 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) All fasteners minimum 2-1/2" long, unless otherwise noted.
10) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permited.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T23
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:08:57
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	257 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
TCLL:	110	Bldg Code:	IBC 2018/ TPI 1-2014	TC:	0.90 (1-2)	Vert TL:	0.83 in	L/451	(13-14)	L/240
TCDL:	10	Rep Mbr:	Yes	BC:	0.88 (13-14)	Vert LL:	0.67 in	L/560	(13-14)	L/360
BCLL:	0	Lumber D.O.L.:	100 %	Web:	0.69 (8-10)	Horz TL:	0.22 in		9	
BCDL:	10									

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
17	1	5.5 in	2.40 in	5,515 lbs	.	-334 lbs	-592 lbs	-592 lbs	248 lbs
9	1	5.5 in	1.79 in	4,104 lbs	.	-267 lbs	-492 lbs	-492 lbs	.

09/16/2024

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-16, 2-15
Scabs 18-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed or Purlins at 5-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TC LL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.896	-3,564 lbs		3-4	0.546	-9,083 lbs		5-6	0.419	-2,873 lbs		7-8	0.505	-1,586 lbs	
	2-3	0.309	-7,752 lbs		4-5	0.347	-5,344 lbs		6-7	0.493	-1,586 lbs					
BC	10-11	0.222	2,761 lbs	(-293 lbs)	13-14	0.878	8,398 lbs	(-936 lbs)	15-16	0.413	3,636 lbs	(-426 lbs)				
	11-13	0.381	4,969 lbs	(-543 lbs)	14-15	0.830	7,728 lbs	(-867 lbs)								
Web	1-17	0.353	-2,726 lbs		3-15	0.442	-3,547 lbs		5-13	0.439	1,520 lbs	(-135 lbs)	7-10	0.154	-960 lbs	
	1-16	0.490	3,961 lbs	(-391 lbs)	3-14	0.375	1,300 lbs	(-137 lbs)	5-11	0.573	-2,886 lbs		8-10	0.689	2,387 lbs	(-291 lbs)
	2-16	0.359	-2,772 lbs		4-14	0.554	1,920 lbs	(-188 lbs)	6-11	0.485	1,682 lbs	(-155 lbs)	8-9	0.325	-2,026 lbs	
	2-15	0.600	4,848 lbs	(-529 lbs)	4-13	0.608	-3,694 lbs		6-10	0.422	-1,899 lbs					

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.

TrueBuild® Truss Software v5.7.13
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T23
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:08:58

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	257 lbs

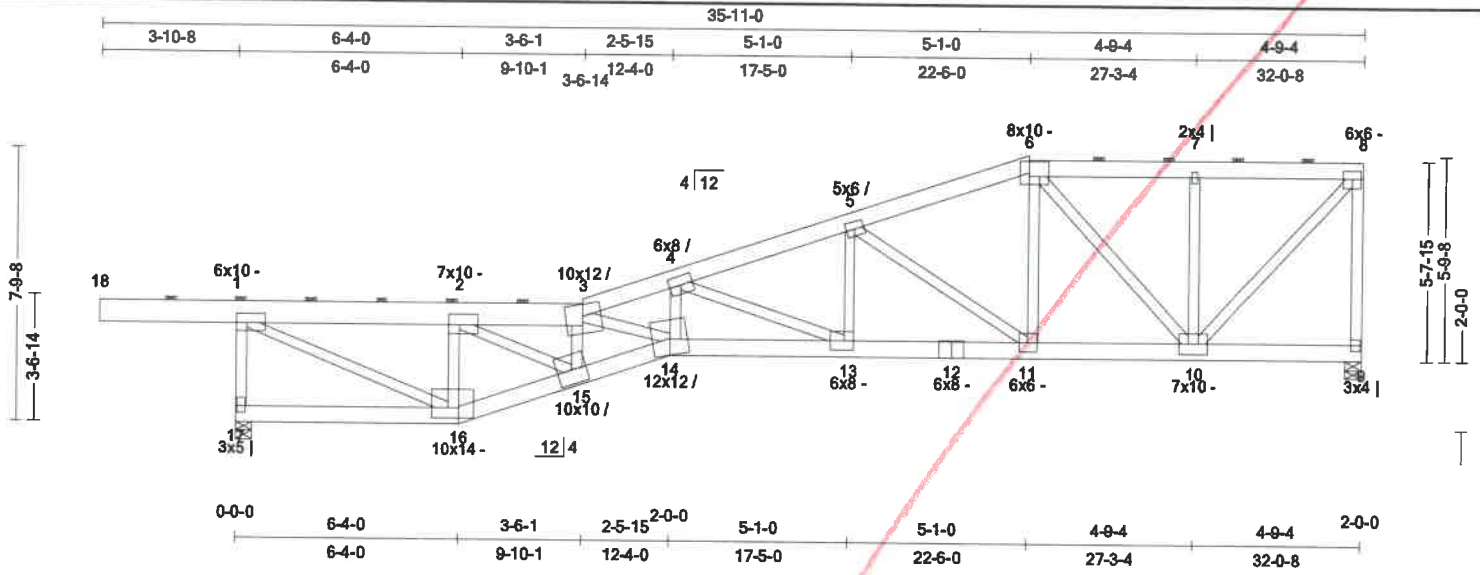
6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 2 staggered rows @ 0-9-8 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) All fasteners minimum 2-1/2" long, unless otherwise noted.
10) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Scab 3 - 18 to match size and grade of member to which it is attached. Attach with 2 staggered rows of 12d Nails or Gun Nails [min 0.135"x3"] @ 6 oc.
17) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss

133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T23
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:17
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	267 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC2018/	TC: 0.77 (1-2)	Vert TL:	0.84 in	L/446	(13-14)	L/240
TCDL: 10		TPI 1-2014	BC: 0.87 (13-14)	Vert LL:	0.67 in	L/554	(13-14)	L/360
BCLL: 0	Rep Mbr:	Yes	Web: 0.69 (8-10)	Horz TL:	0.22 in		9	
BCDL: 10	Lumber D.O.L.:	100 %						

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
17	1	5.5 in	2.40 in	5,515 lbs	.	-334 lbs	-592 lbs	-592 lbs	249 lbs
9	1	5.5 in	1.79 in	4,104 lbs	.	-267 lbs	-493 lbs	-493 lbs	

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 18-3
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-16, 2-15

Bracing

TC: Sheathed or Purlins at 5-1-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.775	-3,624 lbs		3-4	0.582	-9,205 lbs		5-6	0.419	-2,873 lbs		7-8	0.505	-1,586 lbs	
	2-3	0.344	-7,602 lbs		4-5	0.345	-5,344 lbs		6-7	0.493	-1,586 lbs					
BC	10-11	0.222	2,761 lbs	(-293 lbs)	13-14	0.874	8,405 lbs	(-938 lbs)	15-16	0.426	3,695 lbs	(-434 lbs)				
	11-13	0.381	4,969 lbs	(-543 lbs)	14-15	0.865	8,273 lbs	(-929 lbs)								
Web	1-17	0.350	-2,724 lbs		3-15	0.434	-3,495 lbs		5-13	0.439	1,522 lbs	(-135 lbs)	7-10	0.154	-960 lbs	
	1-16	0.496	4,008 lbs	(-396 lbs)	3-14	0.233	807 lbs	(-82 lbs)	5-11	0.572	-2,885 lbs		8-10	0.689	2,387 lbs	(-291 lbs)
	2-16	0.357	-2,777 lbs		4-14	0.642	2,223 lbs	(-222 lbs)	6-11	0.485	1,681 lbs	(-155 lbs)	8-9	0.325	-2,026 lbs	
	2-15	0.564	4,563 lbs	(-497 lbs)	4-13	0.610	-3,702 lbs		6-10	0.422	-1,899 lbs					

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

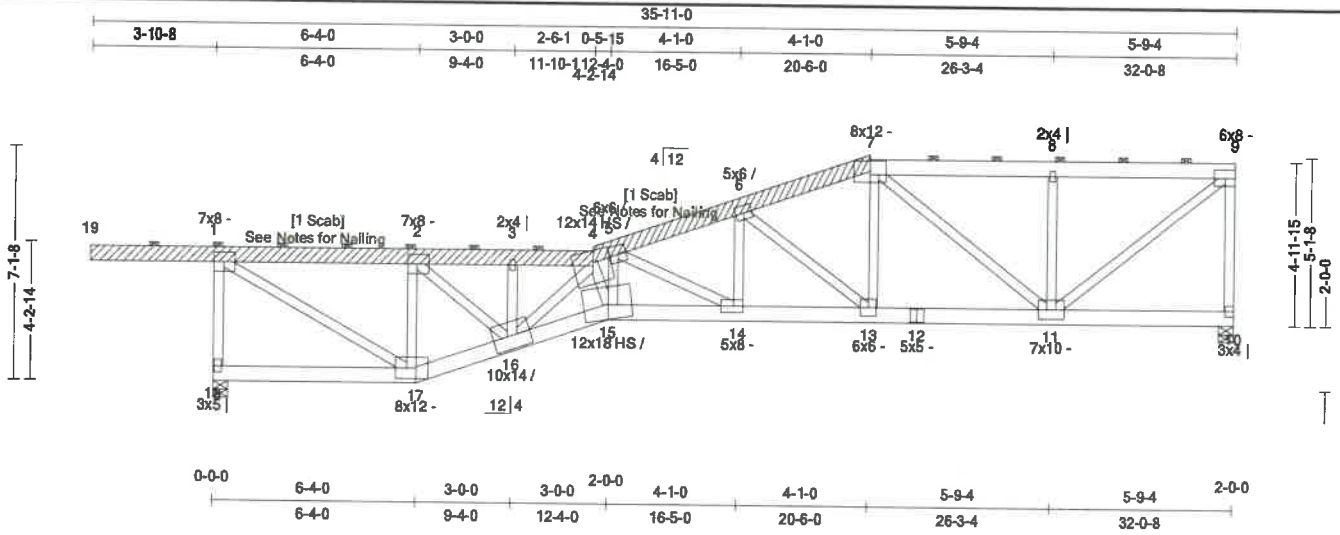
Truss: T23
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:17

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	267 lbs

6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 2 staggered rows @ 0-9-8 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) All fasteners minimum 2-1/2" long, unless otherwise noted.
10) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T24 Job: CBS0306SA-8-HIESCO COMPLETE Designer:Shane Allen Date: 09/16/24 08:09:02 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	261 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC 2018/	TC: 0.90 (1-2)		Vert TL:	0.67 in	L/555	(14-15)	L/240
TCDL: 10		TPI 1-2014	BC: 0.88 (15-16)		Vert LL:	0.54 in	L/695	(14-15)	L/360
BCLL: 0	Rep Mbr:	Yes	Web: 0.80 (9-11)		Horz TL:	0.2 in		10	
BCDL: 10	Lumber D.O.L.:	100 %							

09/16/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
18	1	5.5 in	2.39 in	5,487 lbs	-	-342 lbs	-585 lbs	-585 lbs	222 lbs
10	1	5.5 in	1.80 in	4,120 lbs	-	-259 lbs	-474 lbs	-474 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-17, 2-16
Scabs 19-4 [Qty: 1] SP-FT/PG 2400/1.8 2 x 4 [Qty: 1] SP-FT/PG 2400/1.8 2 x 6

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL= 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL= 1.60
4) This truss has been designed for the effects of TC LL= 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.895	-2,871 lbs		4-5	0.360	-8,523 lbs		7-8	0.579	-2,152 lbs				
	2-3	0.217	-5,441 lbs		5-6	0.239	-5,558 lbs		8-9	0.607	-2,152 lbs				
	3-4	0.294	-5,441 lbs		6-7	0.149	-3,434 lbs								
BC	11-13	0.275	3,355 lbs	(-367 lbs)	14-15	0.868	8,023 lbs	(-871 lbs)	16-17	0.239	2,946 lbs	(-329 lbs)			
	13-14	0.393	5,208 lbs	(-570 lbs)	15-16	0.882	8,219 lbs	(-890 lbs)							
Web	1-18	0.365	-2,711 lbs		3-16	0.105	-821 lbs		5-14	0.456	-3,152 lbs		7-11	0.442	-1,868 lbs
	1-17	0.413	3,337 lbs	(-324 lbs)	4-16	0.509	-3,782 lbs		6-14	0.453	1,571 lbs	(-139 lbs)	8-11	0.167	-1,141 lbs
	2-17	0.347	-2,578 lbs		4-15	0.228	791 lbs	(-89 lbs)	6-13	0.435	-2,656 lbs		9-11	0.798	2,764 lbs (-324 lbs)
	2-16	0.427	3,454 lbs	(-363 lbs)	5-15	0.495	1,715 lbs	(-155 lbs)	7-13	0.483	1,675 lbs	(-142 lbs)	9-10	0.297	-2,026 lbs

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T24
Job: CBS0306SA-8-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/16/24 08:09:02

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	261 lbs

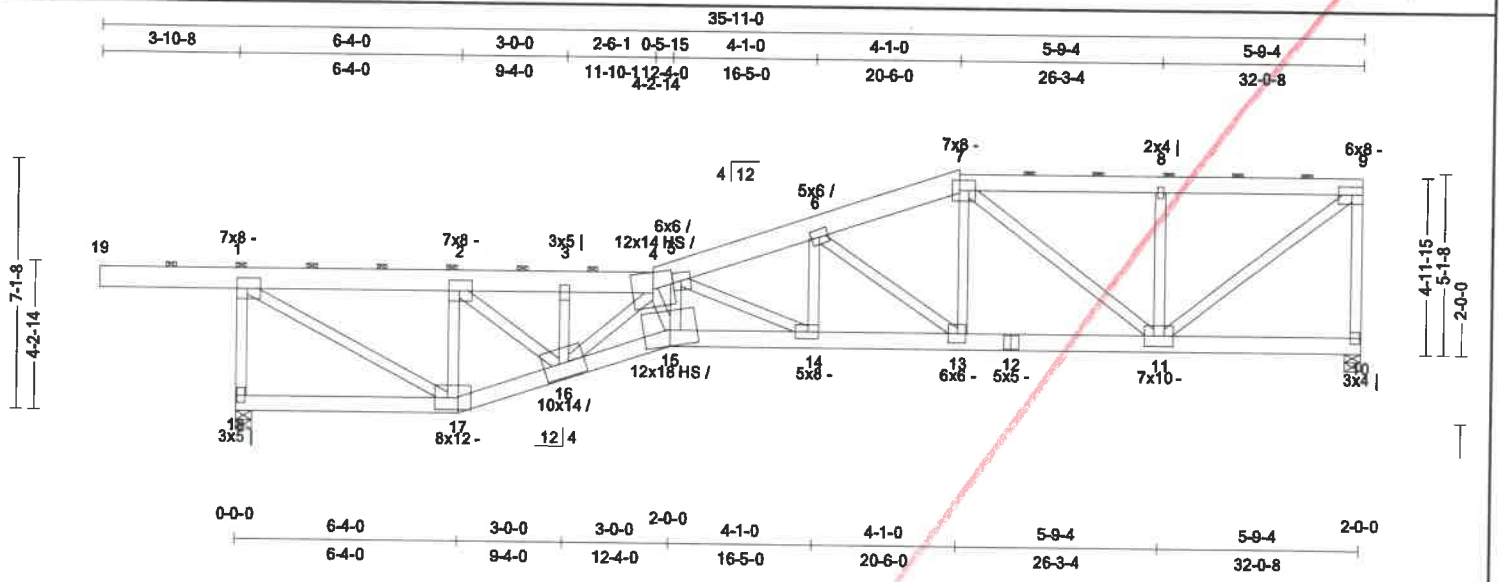
6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 2 staggered rows @ 0-9-8 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) All fasteners minimum 2-1/2" long, unless otherwise noted.
10) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Scab 4 - 19 to match size and grade of member to which it is attached. Attach with 2 staggered rows of 12d Nails or Gun Nails [min 0.135"x3"] @ 6 oc.
17) Scab 4 - 7 to match size and grade of member to which it is attached. Attach with 2 staggered rows of 12d Nails or Gun Nails [min 0.135"x3"] @ 6 oc.
18) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.13
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T24
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:19
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	275 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC 2018/ TPI 1-2014	TC: 0.77 (1-2)	Vert TL:	0.71 in	L/524	(14-15)	L/240
TCDL: 10	Rep Mbr: Yes	BC: 0.91 (15-16)	Vert LL:	0.57 in	L/655	(14-15)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.80 (9-11)	Horz TL:	0.2 in		10	
BCDL: 10							

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
18	1	5.5 in	2.39 in	5,487 lbs	-	-342 lbs	-584 lbs	-584 lbs	223 lbs
10	1	5.5 in	1.80 in	4,120 lbs	-	-259 lbs	-474 lbs	-474 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 8 except:
SP-FT/PG 2400/1.8 2 x 6: 7-9
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-17, 2-16

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.774	-2,916 lbs		4-5	0.459	-8,705 lbs		7-8	0.557	-2,147 lbs				
	2-3	0.251	-5,557 lbs		5-6	0.310	-5,661 lbs		8-9	0.602	-2,147 lbs				
	3-4	0.369	-5,557 lbs		6-7	0.251	-3,477 lbs								
BC	11-13	0.273	3,326 lbs	(-364 lbs)	14-15	0.893	8,190 lbs	(-891 lbs)	16-17	0.249	2,992 lbs	(-335 lbs)			
	13-14	0.401	5,326 lbs	(-585 lbs)	15-16	0.907	8,391 lbs	(-910 lbs)							
Web	1-18	0.361	-2,711 lbs		3-16	0.114	-897 lbs		5-14	0.457	-3,181 lbs		7-11	0.434	-1,835 lbs
	1-17	0.417	3,373 lbs	(-327 lbs)	4-16	0.505	-3,782 lbs		6-14	0.445	1,541 lbs	(-135 lbs)	8-11	0.163	-1,115 lbs
	2-17	0.344	-2,583 lbs		4-15	0.231	802 lbs	(-89 lbs)	6-13	0.443	-2,740 lbs		9-11	0.796	2,758 lbs (-323 lbs)
	2-16	0.434	3,507 lbs	(-370 lbs)	5-15	0.508	1,759 lbs	(-162 lbs)	7-13	0.490	1,697 lbs	(-146 lbs)	9-10	0.297	-2,026 lbs

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T24
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:19

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	275 lbs

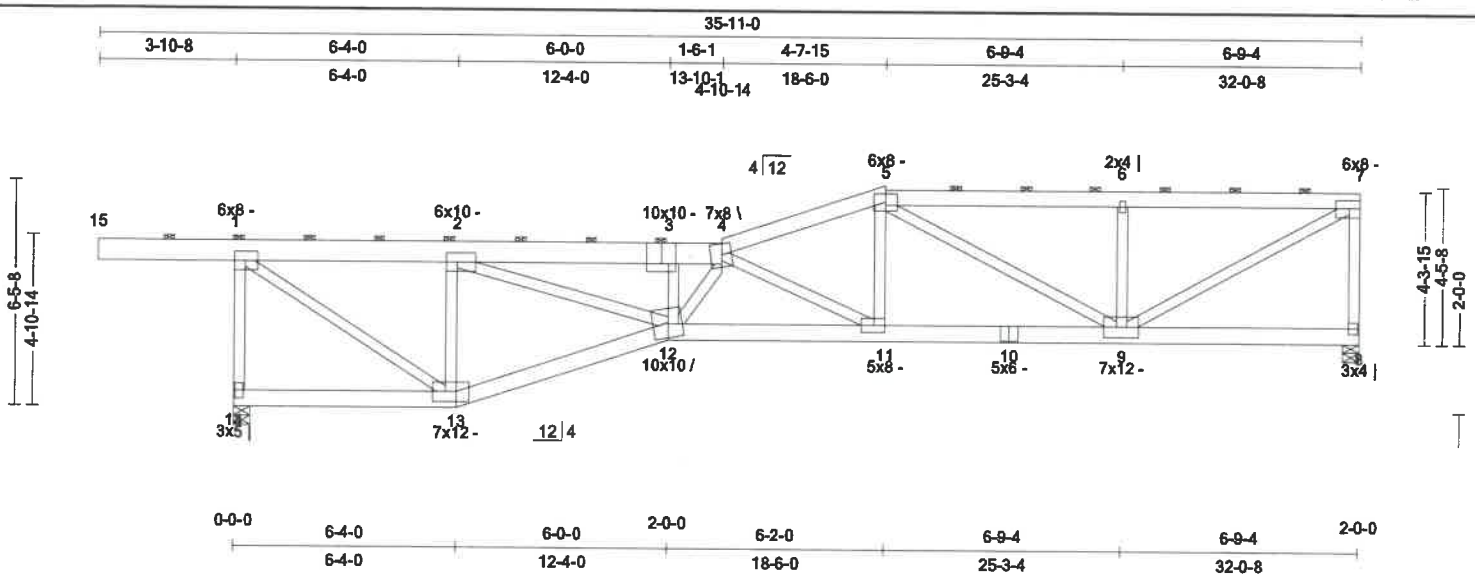
6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 2 staggered rows @ 0-9-8 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) All fasteners minimum 2-1/2" long, unless otherwise noted.
10) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T25
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:20
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	251 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC 2018/	TC: 0.89 (1-2)	Vert TL:	0.63 in	L/593	(11-12)	L/240
TCDL: 10	TPI 1-2014	BC: 0.75 (11-12)	Vert LL:	0.5 in	L/753	(11-12)	L/360
BCLL: 0	Rep Mbr: No	Web: 0.57 (2-12)	Horz TL:	0.17 in		8	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
14	1	5.5 in	2.37 in	5,440 lbs	.	-350 lbs	-577 lbs	-577 lbs	197 lbs
8	1	5.5 in	1.90 in	4,353 lbs	.	-251 lbs	-455 lbs	-455 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 15-3, 3-4
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-13, 2-12, 7-9

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.887	-2,546 lbs		3-4	0.336	-6,773 lbs		5-6	0.674	-2,889 lbs				
	2-3	0.411	-6,823 lbs		4-5	0.391	-4,379 lbs		6-7	0.707	-2,889 lbs				
BC	9-11	0.374	4,163 lbs	(444 lbs)	12-13	0.421	2,609 lbs	(-272 lbs)							
	11-12	0.746	6,731 lbs	(-732 lbs)											
Web	1-14	0.380	-2,701 lbs		2-12	0.572	4,623 lbs	(-494 lbs)	4-11	0.532	-3,291 lbs		6-9	0.182	-1,328 lbs	
	1-13	0.383	3,093 lbs	(-298 lbs)	3-12	0.107	-851 lbs		5-11	0.469	1,625 lbs	(-120 lbs)	7-9	0.414	3,345 lbs	(-373 lbs)
	2-13	0.345	-2,453 lbs		4-12	0.045	-355 lbs		5-9	0.533	-1,916 lbs		7-8	0.293	-2,137 lbs	

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T25
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:21
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	251 lbs

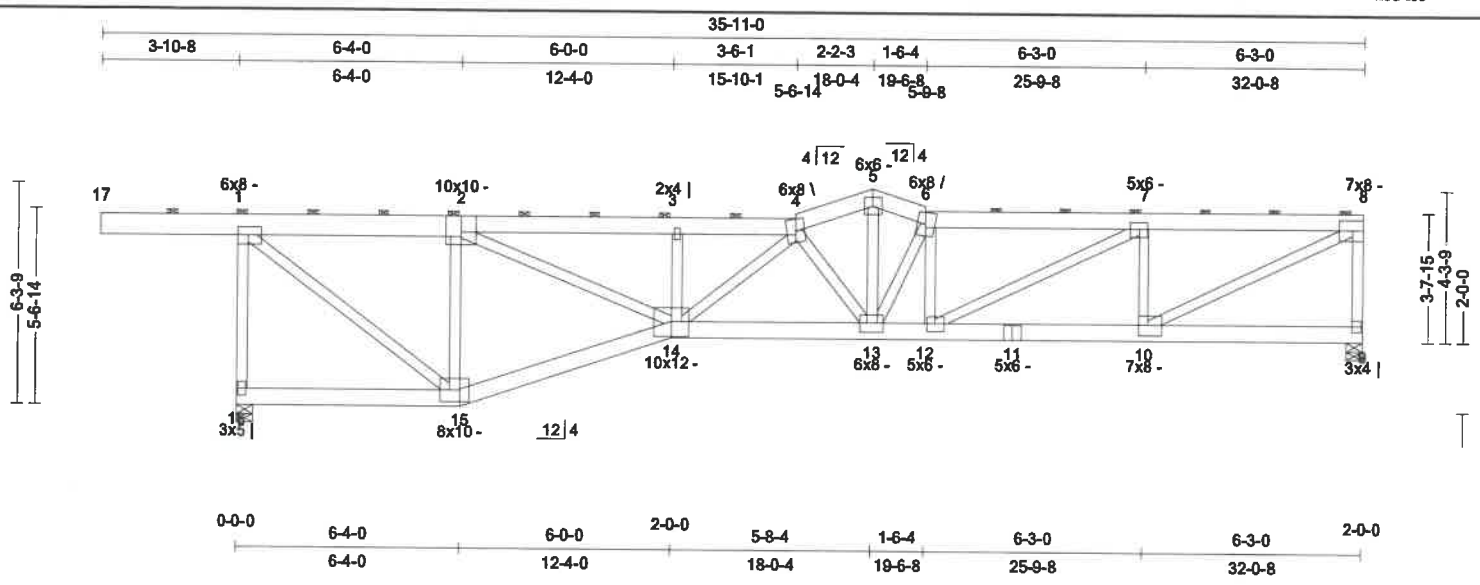
6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 2 staggered rows @ 0-9-8 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) All fasteners minimum 2-1/2" long, unless otherwise noted.
10) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, ie. nails, screws , bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T26
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:22
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	255 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC2018/	TC: 0.88 (1-2)	Vert TL:	0.51 in	L/730	(13-14)	L/240
TCDL: 10		TPI 1-2014	BC: 0.53 (13-14)	Vert LL:	0.4 in	L/938	(13-14)	L/360
BCLL: 0	Rep Mbr:	No	Web: 0.80 (1-15)	Horz TL:	0.14 in		9	
BCDL: 10	Lumber D.O.L.:	100 %						

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
16	1	5.5 in	2.37 in	5,426 lbs	.	-359 lbs	-578 lbs	-578 lbs	168 lbs
9	1	5.5 in	1.90 in	4,350 lbs	.	-242 lbs	-448 lbs	-448 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 17-2
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 2-14, 8-10

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DCL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.884	-2,170 lbs		3-4	0.380	-5,257 lbs		5-6	0.287	-4,388 lbs		7-8	0.638	-3,323 lbs	
	2-3	0.476	-5,209 lbs		4-5	0.287	-4,391 lbs		6-7	0.603	-4,717 lbs					
BC	10-12	0.352	3,323 lbs	(-328 lbs)	13-14	0.527	5,231 lbs	(-561 lbs)								
	12-13	0.447	4,664 lbs	(-489 lbs)	14-15	0.302	2,303 lbs	(-220 lbs)								
Web	1-16	0.409	-2,689 lbs		3-14	0.110	-851 lbs		6-13	0.186	-1,380 lbs		8-10	0.464	3,752 lbs	(-403 lbs)
	1-15	0.800	2,773 lbs	(-267 lbs)	4-14	0.095	-645 lbs		6-12	0.117	-895 lbs		8-9	0.280	-2,138 lbs	
	2-15	0.359	-2,358 lbs		4-13	0.275	-2,023 lbs		7-12	0.538	1,865 lbs	(-190 lbs)				
	2-14	0.417	3,368 lbs	(-355 lbs)	5-13	0.637	2,206 lbs	(-245 lbs)	7-10	0.220	-1,678 lbs					

Notes

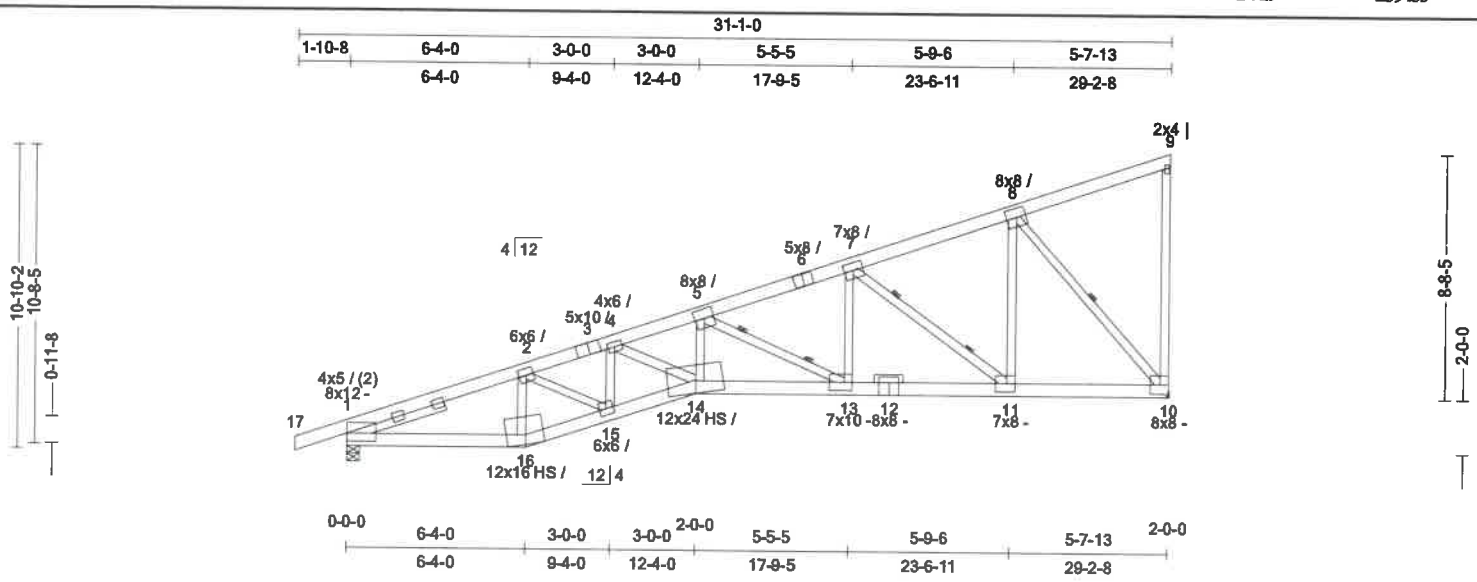
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	2	24 in	255 lbs

6) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows, per ply: 12d Nails or Gun Nails [min 0.135"x3"] TC - 2 staggered rows @ 0-9-8 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row 10d Nails or Gun Nails [min 0.120"x2.875"] @ 1-0-0 oc.
7) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
8) Lateral bracing shall be attached to each ply.
9) All fasteners minimum 2-1/2" long, unless otherwise noted.
10) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.
11) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
12) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
13) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
14) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
15) Incising is not permitted.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T27 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:00:23 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
29-2-8	4/12	3	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	239 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.85 (17-1)	Vert TL:	0.8 in	L/431	(13-14)	L/240
TCDL: 10	TPI 1-2014	BC: 0.95 (13-14)	Vert LL:	0.62 in	L/552	(13-14)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.87 (8-10)	Horz TL:	0.27 in		10	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	3.91 in	4,480 lbs	-	-207 lbs	-528 lbs	-528 lbs	428 lbs
10	1	1.5 in	—	3,802 lbs	-	-296 lbs	-501 lbs	-501 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 8-10

Bracing

TC: Sheathed or Purlins at 2-5-0, Purlin design by Others.
BC: Sheathed or Purlins at 9-0-0, Purlin design by Others.
Web: One Midpoint Row: 8-10
Two Third Point Rows: 5-13, 7-11

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads, in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.726	-7,734 lbs		4-5	0.646	-10,818 lbs		7-8	0.719	-3,131 lbs				
	2-4	0.581	-9,707 lbs		5-7	0.715	-6,514 lbs								
BC	10-11	0.249	2,772 lbs	(-257 lbs)	13-14	0.953	9,993 lbs	(-1,176 lbs)	15-16	0.656	7,457 lbs	(-964 lbs)			
	11-13	0.471	6,016 lbs	(-681 lbs)	14-15	0.924	9,592 lbs	(-1,200 lbs)	16-1	0.675	7,162 lbs	(-923 lbs)			
Web	2-16	0.345	-2,335 lbs		4-14	0.382	1,324 lbs	(-82 lbs)	7-13	0.686	2,378 lbs	(-188 lbs)	8-10	0.870	-4,228 lbs
	2-15	0.730	2,530 lbs	(-257 lbs)	5-14	0.799	2,768 lbs	(-278 lbs)	7-11	0.798	-4,082 lbs		9-10	0.622	-554 lbs
	4-15	0.253	-1,697 lbs		5-13	0.781	-4,898 lbs		8-11	0.747	2,587 lbs	(-246 lbs)			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T27
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:24

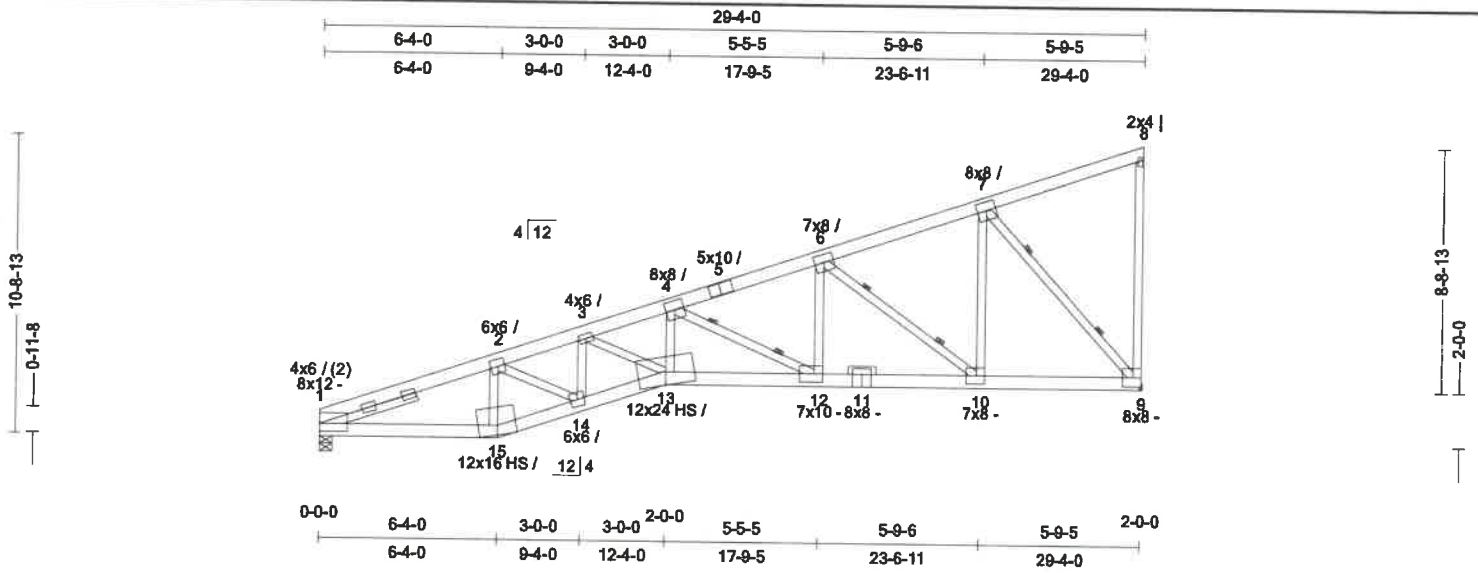
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
29-2-8	4/12	3	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	239 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T28
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:25
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
29-4-0	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	235 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC2018/	TC: 0.81 (7-8)		Vert TL:	0.81 in	L/426	(12-13)	L/240
TCDL: 10		TPI 1-2014	BC: 0.97 (12-13)		Vert LL:	0.63 in	L/544	(12-13)	L/360
BCLL: 0	Rep Mbr:	Yes	Web: 0.84 (4-12)		Horz TL:	0.28 in		9	
BCDL: 10	Lumber D.O.L.:	100 %							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	3.54 in	4,065 lbs	.	-154 lbs	-434 lbs	-434 lbs	405 lbs
9	1	1.5 in	—	3,832 lbs	.	-299 lbs	-530 lbs	-530 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 7-9

Bracing

TC: Sheathed or Purlins at 2-4-0, Purlin design by Others.
BC: Sheathed or Purlins at 8-6-0, Purlin design by Others.
Web: Two Third Point Rows: 4-12, 6-10, 7-9

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
3) This truss has been designed for the effects of TCLL = 20 psf.
4) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.572	-8,171 lbs		3-4	0.657	-10,995 lbs		6-7	0.732	-3,211 lbs				
	2-3	0.598	-10,024 lbs		4-6	0.714	-6,621 lbs								
BC	9-10	0.256	2,849 lbs	(-289 lbs)	12-13	0.968	10,158 lbs	(-1,341 lbs)	14-15	0.676	7,889 lbs	(-1,086 lbs)			
	10-12	0.477	6,117 lbs	(-757 lbs)	13-14	0.948	9,849 lbs	(-1,344 lbs)	15-1	0.644	7,578 lbs	(-1,040 lbs)			
Web	2-15	0.364	-2,464 lbs		3-13	0.349	1,208 lbs	(-99 lbs)	6-12	0.737	2,555 lbs	(-234 lbs)	7-9	0.724	-4,290 lbs
	2-14	0.717	2,485 lbs	(-279 lbs)	4-13	0.819	2,836 lbs	(-304 lbs)	6-10	0.804	-4,112 lbs		8-9	0.628	-568 lbs
	3-14	0.250	-1,679 lbs		4-12	0.842	-5,283 lbs		7-10	0.752	2,607 lbs	(-279 lbs)			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (C_q = 0.90).
3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

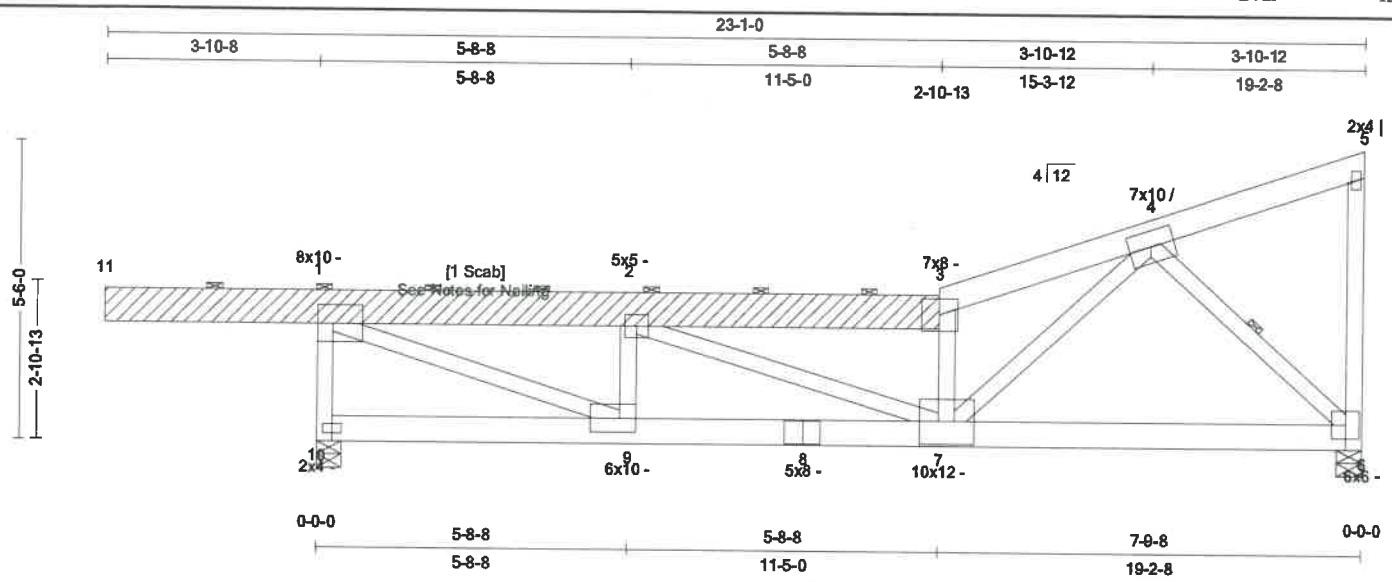
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
29-4-0	4/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	235 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T29
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:26
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	157 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.79 (1-2)	Vert TL:	0.23 in	L/934	8	L/240
TCDL: 10	TPI 1-2014	BC: 0.40 (7-9)	Vert LL:	0.19 in	L/999	8	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.62 (1-10)	Horz TL:	0.03 in		6	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
10	1	5.5 in	2.18 in	4,145 lbs	.	-245 lbs	-578 lbs	-578 lbs	201 lbs
6	1	5.5 in	1.50 in	2,527 lbs	.	-158 lbs	-343 lbs	-343 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 11-3
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-9,4-7
Scabs 11-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 4-3-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 4-6

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads, in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.787	-4,293 lbs		3-4	0.761	-4,716 lbs							
	2-3	0.247	-4,496 lbs											
BC	6-7	0.252	1,991 lbs	(-238 lbs)	7-9	0.404	4,293 lbs	(-684 lbs)						
Web	1-10	0.616	-4,072 lbs		2-9	0.226	-1,646 lbs		3-7	0.368	-2,532 lbs		4-6	0.454	-2,774 lbs
	1-9	0.572	4,628 lbs	(-737 lbs)	2-7	0.387	1,341 lbs	(-72 lbs)	4-7	0.456	3,684 lbs	(-452 lbs)	5-6	0.255	-540 lbs

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

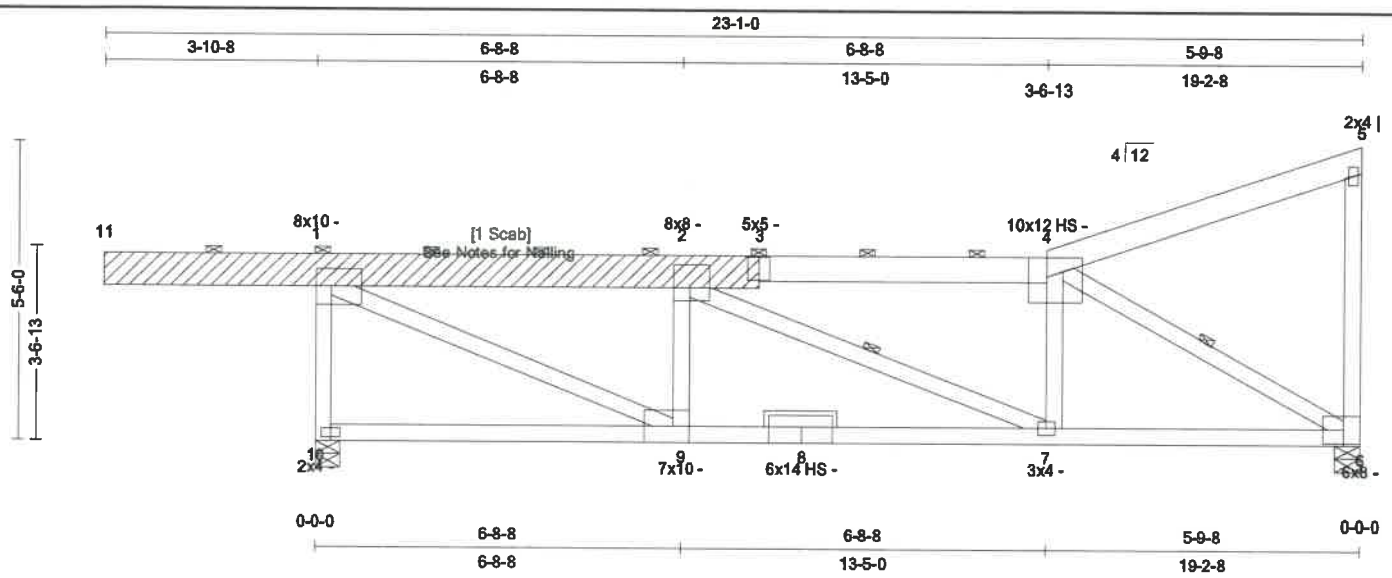
Truss: T29
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:26

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	157 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 3 - 11 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T30 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:00:29 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	143 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.89 (1-2)	Vert TL: 0.29 in	L/761	(7-8)	L/240
TCDL: 10	TPI 1-2014	BC: 0.67 (7-9)	Vert LL: 0.21 in	L/999	8	L/360
BCLL: 0	Rep Mbr: No	Web: 0.82 (4-6)	Horz TL: 0.07 in		6	
BCDL: 10	Lumber D.O.L.: 100 %					

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
10	1	5.5 in	2.18 in	4,130 lbs	-	-248 lbs	-584 lbs	-584 lbs	201 lbs
6	1	5.5 in	1.50 in	2,395 lbs	-	-154 lbs	-351 lbs	-351 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 11-3
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-9
Scabs 11-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 2-7, 4-6

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.894	-4,313 lbs		2-4	0.839	-3,562 lbs		4-5	0.851	-334 lbs			
BC	6-7	0.562	3,625 lbs	(-441 lbs)	7-9	0.672	4,313 lbs	(-462 lbs)						
Web	1-10	0.773	-4,072 lbs		2-9	0.309	-1,819 lbs		4-7	0.136	472 lbs	(-198 lbs)	5-6	0.415	-906 lbs
	1-9	0.586	4,740 lbs	(-514 lbs)	2-7	0.232	-834 lbs		4-6	0.820	-4,070 lbs			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

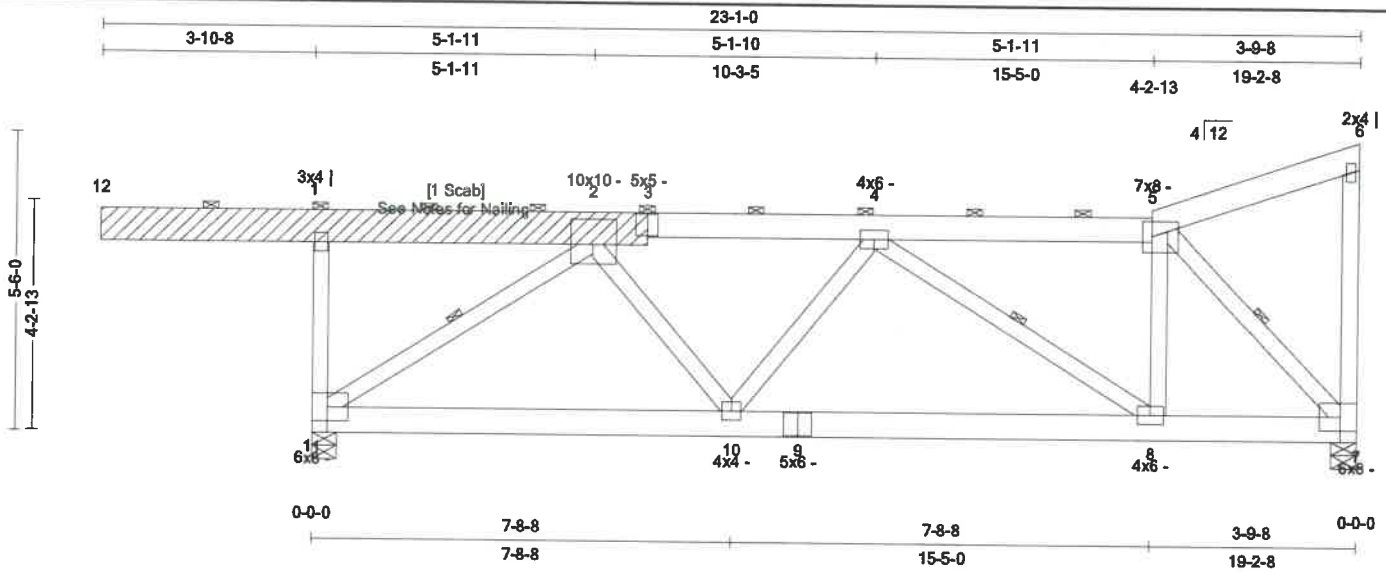
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	143 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 3 - 11 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T31
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:30
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	156 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.91 (2-4)	Vert TL:	0.17 in	L/999	(8-9)	L/240
TCDL: 10	Rep Mbr: No	BC: 0.42 (8-10)	Vert LL:	0.12 in	L/999	(8-9)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.70 (2-11)	Horz TL:	0.06 in		7	
BCDL: 10							

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
11	1	5.5 in	2.15 in	4,083 lbs	.	-253 lbs	-590 lbs	-590 lbs	198 lbs
7	1	5.5 in	1.50 in	2,421 lbs	.	-150 lbs	-359 lbs	-359 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 12-3
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4
Scabs 12-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 4-5-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 2-11, 4-8, 5-7

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	2-4	0.906	-3,535 lbs													
	4-5	0.892	-2,349 lbs													
BC	7-8	0.222	2,515 lbs	(-242 lbs)	8-10	0.416	3,934 lbs	(-417 lbs)	10-11	0.334	2,980 lbs	(-462 lbs)				
Web	1-11	0.664	-2,636 lbs		2-10	0.268	929 lbs	(-29 lbs)	4-8	0.395	-1,927 lbs		5-7	0.540	-3,402 lbs	
	2-11	0.703	-3,664 lbs		4-10	0.233	-715 lbs		5-8	0.351	1,216 lbs	(-46 lbs)	6-7	0.286	-624 lbs	

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T31
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:30
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	156 lbs

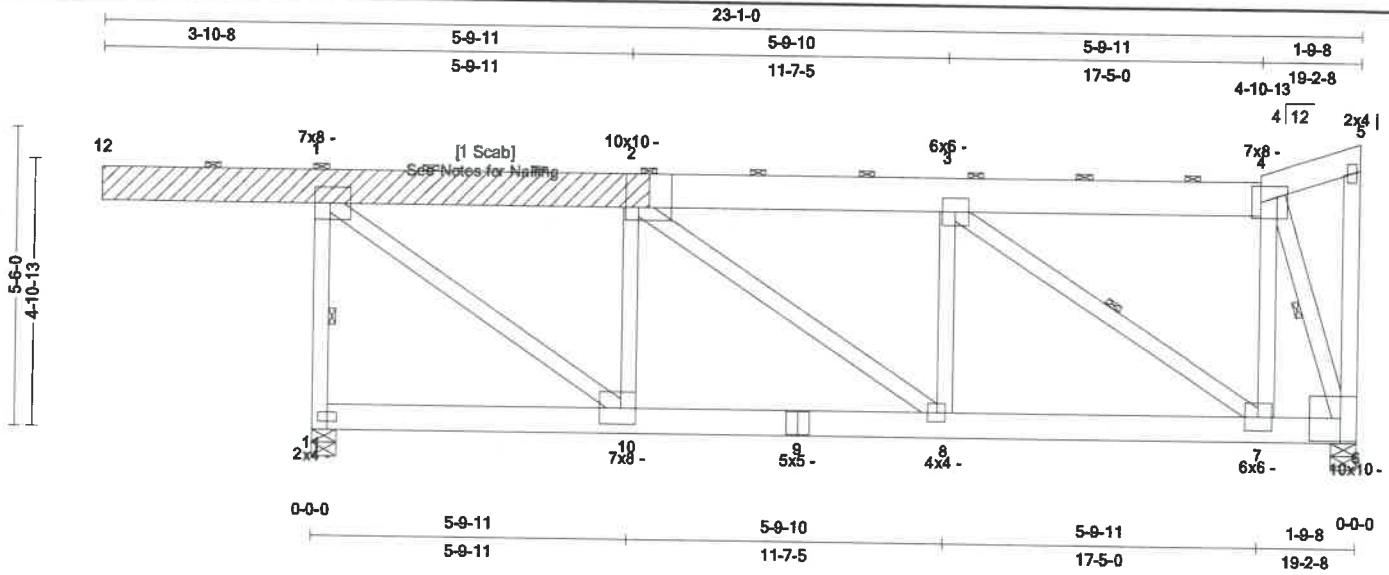
8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 3 - 12 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T32
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:31
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	178 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.89 (1-2)	Vert TL:	0.15 in	L/999	(8-9)	L/240
TCDL: 10	Rep Mbr: No	BC: 0.37 (7-8)	Vert LL:	0.12 in	L/999	(8-9)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.69 (3-7)	Horz TL:	0.04 in		6	
BCDL: 10							

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
11	1	5.5 in	2.11 in	4,003 lbs	.	-259 lbs	-582 lbs	-582 lbs	195 lbs
6	1	5.5 in	1.48 in	2,809 lbs	.	-144 lbs	-362 lbs	-362 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 8 except:
SP-FT/PG 2400/1.8 2 x 6: 4-5
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-10
Scabs 12-2 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 5-3-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 1-11, 3-7, 4-6

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.892	-2,671 lbs		3-4	0.811	-1,085 lbs					
	2-3	0.780	-3,428 lbs									
BC	6-7	0.131	1,126 lbs	(-76 lbs)	7-8	0.370	3,428 lbs	(-312 lbs)	8-10	0.291	2,812 lbs	(-334 lbs)
Web	1-11	0.584	-3,948 lbs		2-8	0.225	778 lbs	(-95 lbs)	4-7	0.495	1,716 lbs	(-121 lbs)
	1-10	0.413	3,337 lbs	(-383 lbs)	3-8	0.097	-353 lbs		4-6	0.474	-3,173 lbs	
	2-10	0.520	-1,884 lbs		3-7	0.694	-2,897 lbs					

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ⊠ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

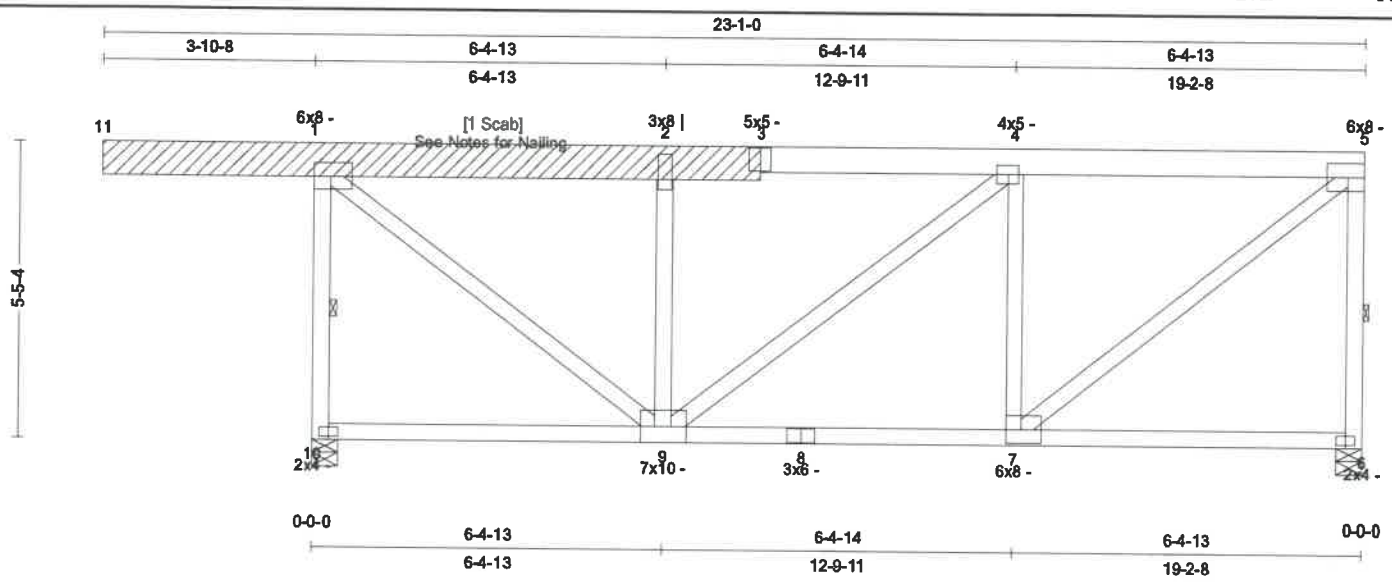
Truss: T32
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:32
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANTL	CANTR	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	178 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permited.
13) Scab 2 - 12 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T33 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:00:32 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	148 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.94 (4-5)	Vert TL:	0.13 in	L/999	(7-8)	L/240
TCDL: 10	TPI 1-2014	BC: 0.39 (7-9)	Vert LL:	0.1 in	L/999	(7-8)	L/360
BCLL: 0	Rep Mbr: No	Web: 0.78 (5-7)	Horz TL:	0.02 in		6	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
10	1	5.5 in	1.86 in	3,530 lbs	-	-266 lbs	-578 lbs	-578 lbs	188 lbs
6	1	5.5 in	1.50 in	2,395 lbs	-	-137 lbs	-362 lbs	-362 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 11-3
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4
Scabs 11-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 5-3-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 1-10, 5-6

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed to account for the effects of ice dams forming at the eaves.
4) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
5) This truss has been designed for the effects of TCLL = 20 psf.
6) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.890	-1,951 lbs		2-4	0.846	-1,959 lbs		4-5	0.938	-2,109 lbs			
BC	7-9	0.394	2,109 lbs	(-215 lbs)										
Web	1-10	0.566	-3,476 lbs		2-9	0.503	-1,292 lbs		4-7	0.646	-1,567 lbs		5-6	0.391	-2,342 lbs
	1-9	0.720	2,495 lbs	(-337 lbs)	4-9	0.484	-460 lbs		5-7	0.783	2,713 lbs	(-398 lbs)			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

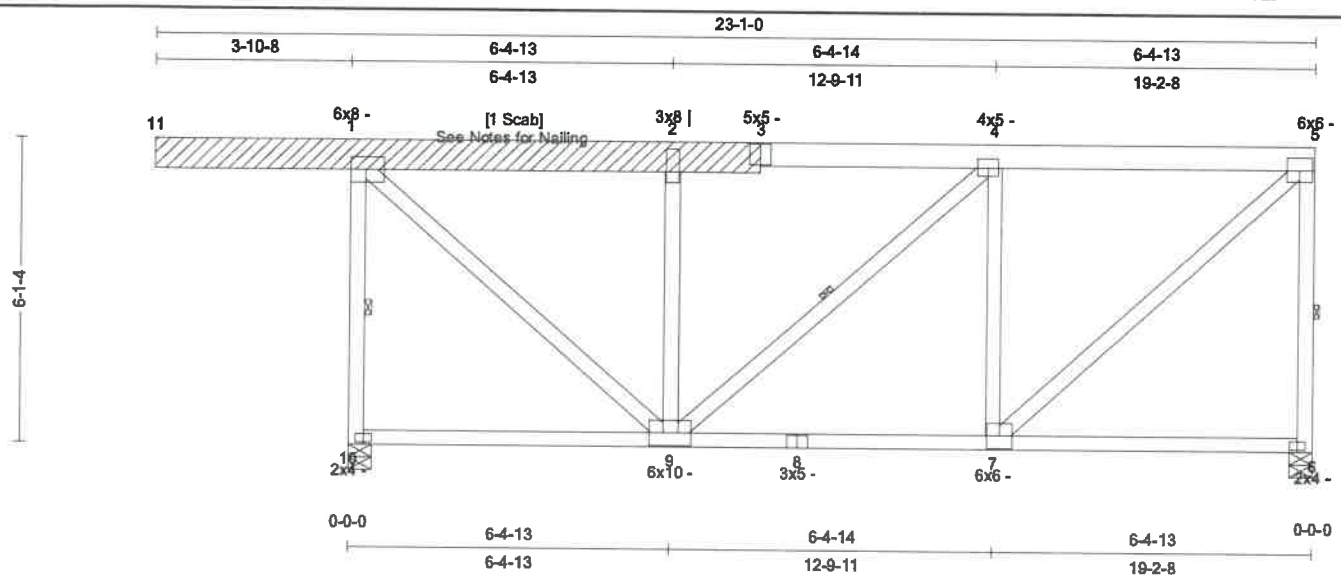
Truss: T33
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:33

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	148 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 3 - 11 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T34 Job: CBS0306SA-7-HIESCO COMPLETE Designer: Shane Allen Date: 09/12/24 08:00:34 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	152 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC 2018/	TC: 0.94 (4-5)	Vert TL:	0.13 in	L/999	(7-8)	L/240
TCDL: 10	TPI 1-2014	BC: 0.38 (7-9)	Vert LL:	0.09 in	L/999	(7-8)	L/360
BCLL: 0	Rep Mbr: No	Web: 0.82 (4-7)	Horz TL:	0.02 in		6	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
10	1	5.5 in	1.86 in	3,530 lbs	-	-265 lbs	-578 lbs	-578 lbs	210 lbs
6	1	5.5 in	1.50 in	2,395 lbs	-	-137 lbs	-362 lbs	-362 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 11-3
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4
Scabs 11-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 5-7-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 1-10, 4-9, 5-6

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed to account for the effects of ice dams forming at the eaves.
4) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
5) This truss has been designed for the effects of TCLL = 20 psf.
6) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.890	-1,722 lbs		2-4	0.846	-1,730 lbs		4-5	0.939	-1,865 lbs			
BC	7-9	0.380	1,865 lbs	(-167 lbs)										
Web	1-10	0.638	-3,476 lbs		2-9	0.644	-1,290 lbs		4-7	0.825	-1,568 lbs		5-6	0.443	-2,342 lbs
	1-9	0.670	2,321 lbs	(-313 lbs)	4-9	0.137	-428 lbs		5-7	0.730	2,529 lbs	(-372 lbs)			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ⊠ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T34
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:34

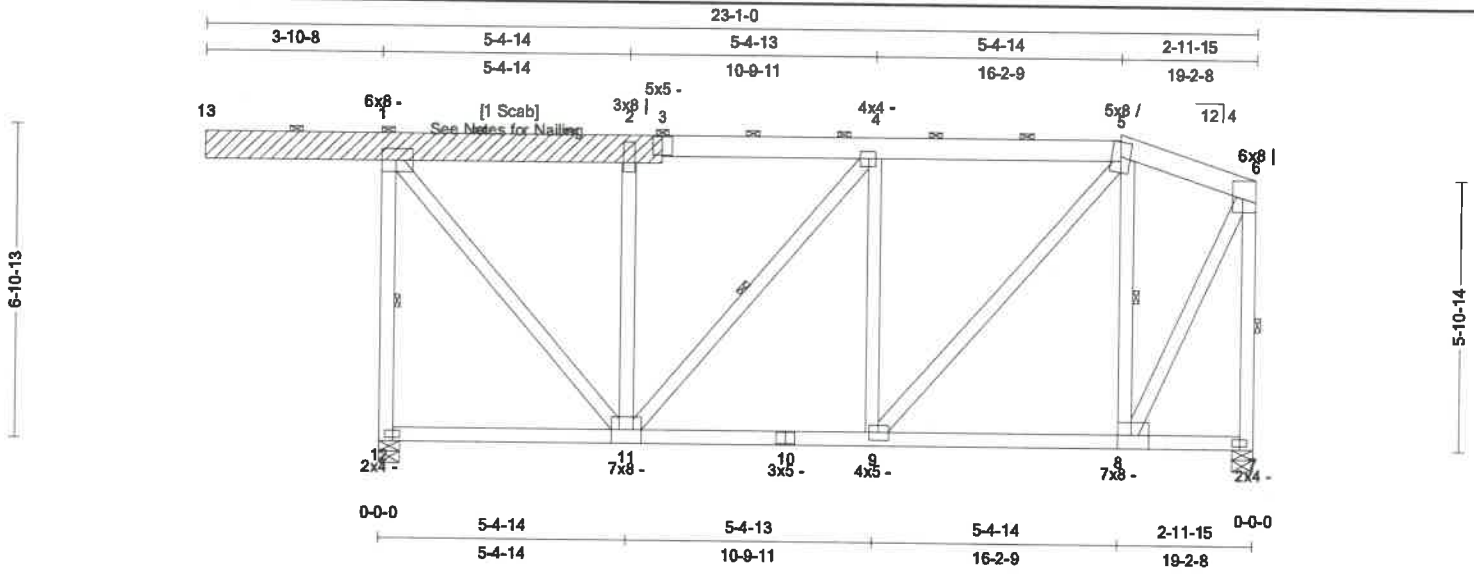
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	152 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 3 - 11 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T35
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:35
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	172 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.89 (1-2)	Vert TL:	0.12 in	L/999	(10-11)	L/240
TCDL: 10	Rep Mbr: No	BC: 0.30 (9-11)	Vert LL:	0.08 in	L/999	10	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.73 (1-12)	Horz TL:	0.02 in		7	
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
12	1	5.5 in	1.86 in	3,530 lbs	.	-276 lbs	-598 lbs	-598 lbs	-234 lbs
7	1	5.5 in	1.50 in	2,395 lbs	.	-127 lbs	-349 lbs	-349 lbs	

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 13-3
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4
Scabs 13-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 1-12, 4-11, 5-8, 6-7

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed to account for the effects of ice dams forming at the eaves.
4) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
5) This truss has been designed for the effects of TCLL = 20 psf.
6) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.890	-1,329 lbs		4-5	0.761	-1,769 lbs						
	2-4	0.723	-1,337 lbs		5-6	0.466	-1,017 lbs						
BC	8-9	0.231	867 lbs	(-93 lbs)	9-11	0.305	1,769 lbs	(-147 lbs)					
Web	1-12	0.733	-3,484 lbs		4-11	0.209	-682 lbs		5-8	0.375	-1,817 lbs		
	1-11	0.600	2,078 lbs	(-359 lbs)	4-9	0.582	-888 lbs		6-8	0.612	2,122 lbs	(-277 lbs)	
	2-11	0.601	-961 lbs		5-9	0.389	1,348 lbs	(-201 lbs)	6-7	0.434	-2,378 lbs		

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

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Eagle Metal Products

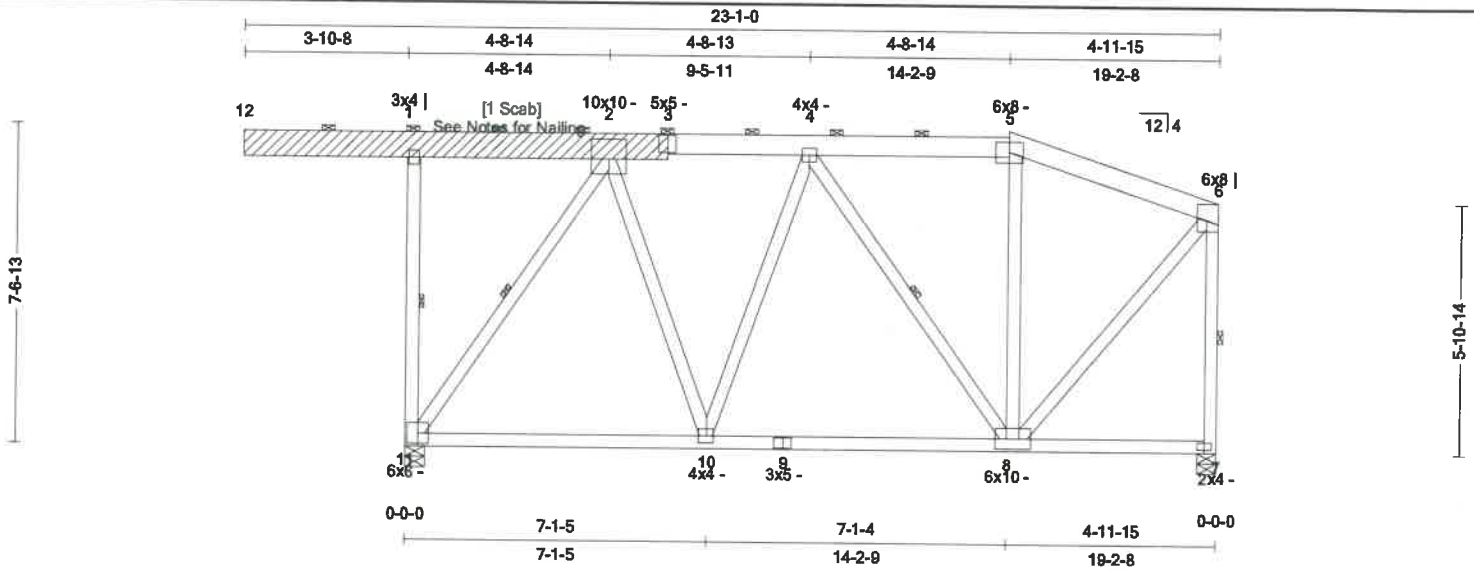
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	172 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 3 - 13 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T36
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:36
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	169 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/	TC: 0.93 (4-5)	Vert TL:	0.13 in	L/999	(10-11)	L/240
TCDL: 10	TPI 1-2014	BC: 0.54 (8-10)	Vert LL:	0.07 in	L/999	(8-9)	L/360
BCLL: 0	Rep Mbr: No	Web: 0.79 (2-11)	Horz TL:	0.03 in		7	
BCDL: 10	Lumber D.O.L.: 100 %						

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
11	1	5.5 in	2.17 in	4,115 lbs	-	-286 lbs	-606 lbs	-606 lbs	-259 lbs
7	1	5.5 in	1.50 in	2,395 lbs	-	-117 lbs	-335 lbs	-335 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 12-3
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4
Scabs 12-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 1-11, 2-11, 4-8, 6-7

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL=157 psf), Terrain C, Exposure (Ce=1.0), Thermal (Ct=1.00), DOL=1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL=1.60
4) This truss has been designed for the effects of TCLL=20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	2-4	0.853	-1,737 lbs		5-6	0.646	-1,462 lbs								
	4-5	0.930	-1,342 lbs												
BC	8-10	0.544	1,982 lbs	(-152 lbs)	10-11	0.532	1,411 lbs	(-255 lbs)							
Web	1-11	0.656	-2,697 lbs		2-10	0.283	979 lbs	(-76 lbs)	4-8	0.366	-1,124 lbs		6-8	0.608	2,105 lbs	(-225 lbs)
	2-11	0.788	-2,570 lbs		4-10	0.723	-805 lbs		5-8	0.763	-936 lbs		6-7	0.431	-2,359 lbs	

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq=0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

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Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

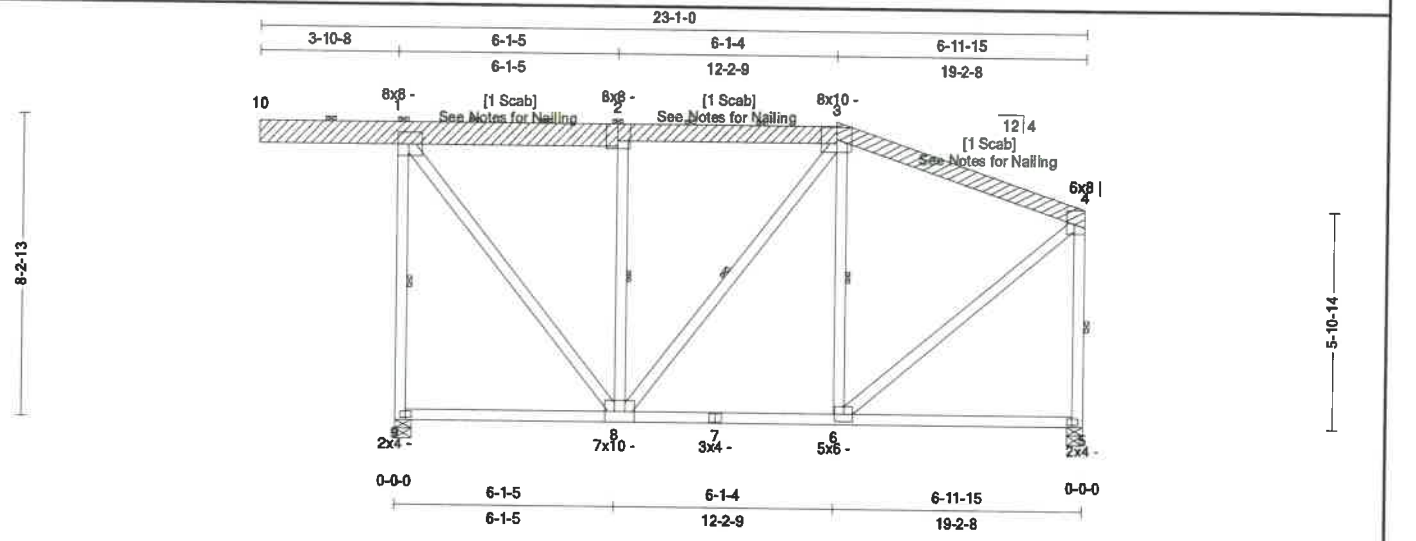
Truss: T36
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:37

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	169 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 3 - 12 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

	Valley Truss 133 Range View Loop Westcliffe, CO 81252 Phone (719) 371-8508	Truss: T37 Job: CBS0306SA-8-HIESCO COMPLETE Designer: Shane Allen Date: 09/16/24 08:09:04 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	167 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code:	IBC 2018/ TPI 1-2014	TC: 0.89 (1-2)	Vert TL:	0.12 in	L/999	(5-6)	L/240
TCDL: 10			BC: 0.35 (6-8)	Vert LL:	0.08 in	L/999	(7-8)	L/360
BCLL: 0	Rep Mbr:	No	Web: 0.78 (1-9)	Horz TL:	0.01 in		5	
BCDL: 10	Lumber D.O.L.:	100 %						

09/16/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
9	1	5.5 in	1.89 in	4,143 lbs	-	-296 lbs	-607 lbs	-607 lbs	-283 lbs
5	1	5.5 in	1.50 in	2,405 lbs	-	-107 lbs	-319 lbs	-319 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 10-2
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-9
Scabs 10-2 [Qty: 1] SP-FT/PG 2400/1.8 2x2-8 [Qty: 1] SP-FT/PG 2400/1.8 2x3-6 [Qty: 1] SP-FT/PG 2400/1.8 2x4-6

Bracing

TC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 1-9, 2-8, 3-8, 3-6, 4-5

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL= 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL= 1.60
4) This truss has been designed for the effects of TC LL= 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.888	-1,529 lbs		2-3	0.455	-1,492 lbs		3-4	0.501	-1,725 lbs			
BC	6-8	0.346	1,424 lbs	(-119 lbs)										
Web	1-9	0.781	-4,089 lbs		2-8	0.517	-1,899 lbs		3-6	0.292	-1,061 lbs		4-5	0.429	-2,349 lbs
	1-8	0.703	2,437 lbs	(-302 lbs)	3-8	0.286	-695 lbs		4-6	0.545	1,888 lbs	(-198 lbs)			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

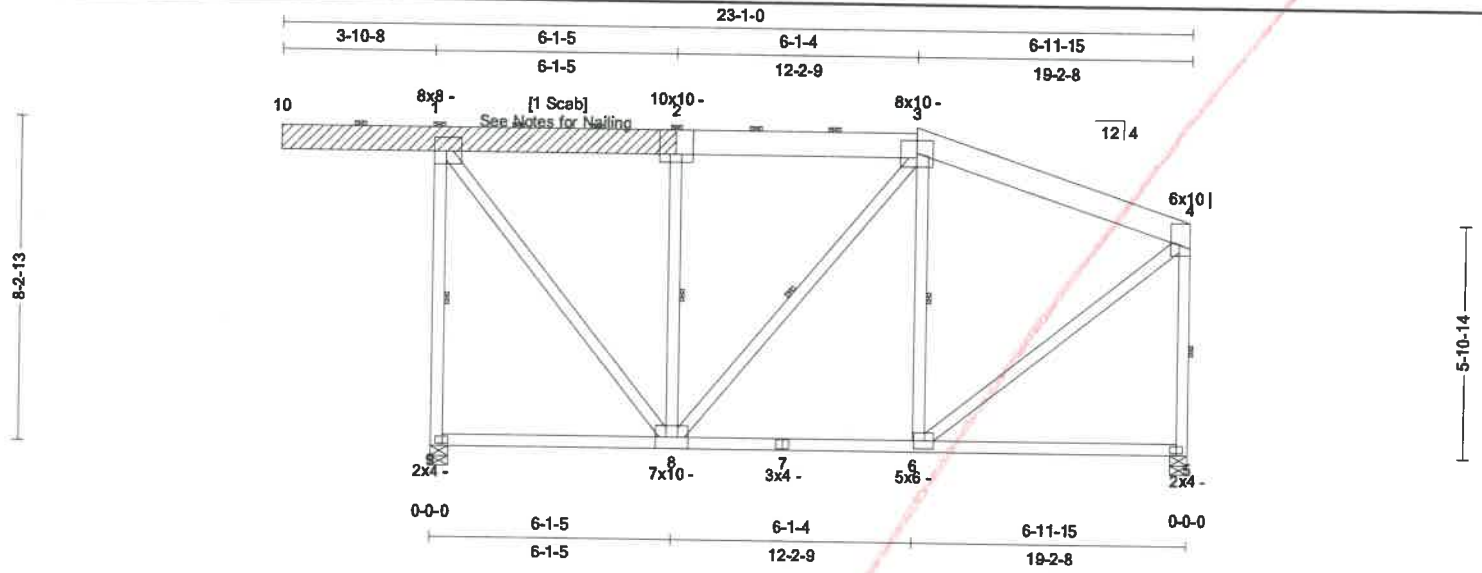
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	167 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 2 - 10 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Scab 2 - 3 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
15) Scab 3 - 4 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T37
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:38
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	177 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC 2018/ TPI 1-2014	TC: 0.89 (1-2)	Vert TL:	0.12 in	L/999	(5-6)	L/240
TCDL: 10	Rep Mbr: No	BC: 0.35 (6-8)	Vert LL:	0.08 in	L/999	(7-8)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.78 (1-9)	Horz TL:	0.01 in		5	
BCDL: 10							

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
9	1	5.5 in	1.89 in	4,143 lbs	.	-297 lbs	-608 lbs	-608 lbs	-285 lbs
5	1	5.5 in	1.50 in	2,405 lbs	.	-106 lbs	-318 lbs	-318 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-9
Scabs 10-2 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 1-9, 2-8, 3-8, 3-6, 4-5

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.888	-1,484 lbs		2-3	0.690	-1,489 lbs		3-4	0.706	-1,738 lbs			
BC	6-8	0.352	1,436 lbs	(-118 lbs)										
Web	1-9	0.782	-4,091 lbs		2-8	0.497	-1,884 lbs		3-6	0.280	-1,051 lbs		4-5	0.416	-2,349 lbs
	1-8	0.697	2,416 lbs	(-301 lbs)	3-8	0.289	-705 lbs		4-6	0.546	1,892 lbs	(-196 lbs)			

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T37
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:38
Page: 2 of 2

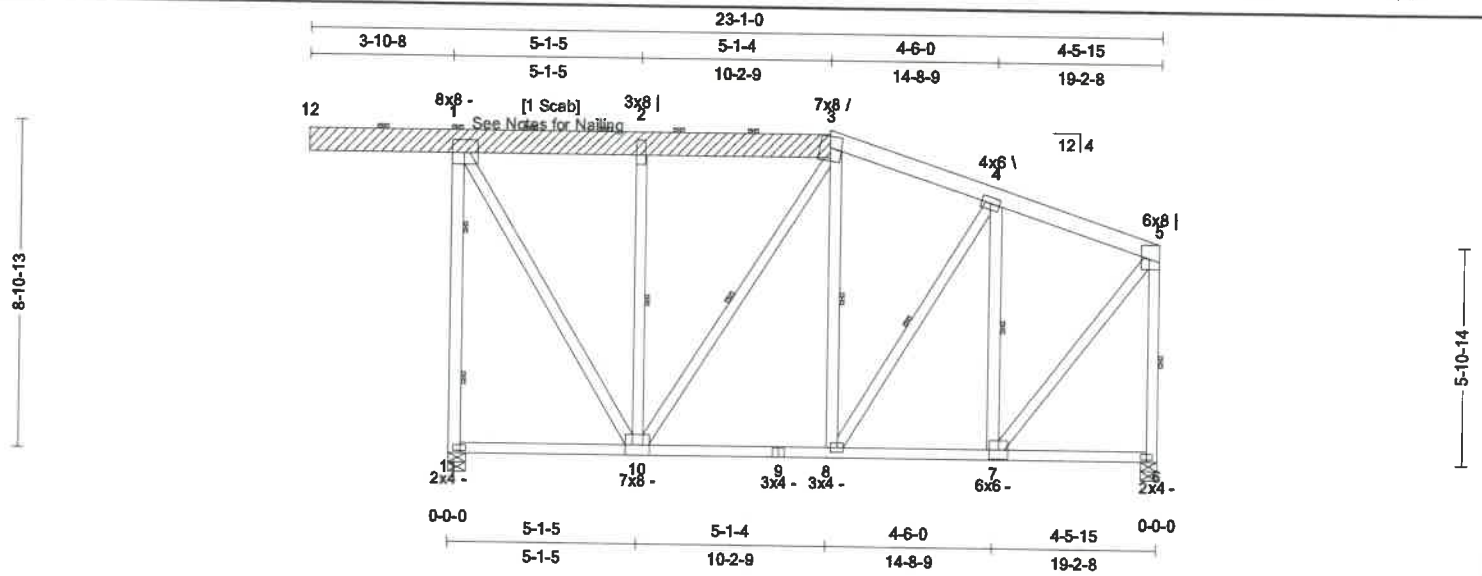
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	177 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 2 - 10 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T38
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:39
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	189 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC 2018/ TPI 1-2014	TC: 0.89 (1-2)	Vert TL:	0.1 in	L/999	(9-10)	L/240
TCDL: 10	Rep Mbr: No	BC: 0.25 (8-10)	Vert LL:	0.07 in	L/999	(9-10)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.71 (1-11)	Horz TL:	0.02 in		6	
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
11	1	5.5 in	1.89 in	4,138 lbs	.	-307 lbs	-607 lbs	-607 lbs	-308 lbs
6	1	5.5 in	1.50 in	2,695 lbs	.	-96 lbs	-305 lbs	-305 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 6 except:
SP-FT/PG 2400/1.8 2 x 8: 12-3
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4 except:
SP-FT/PG 2400/1.8 2 x 4: 1-11
Scabs 12-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.

BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 2-10, 3-10, 3-8, 4-8, 4-7, 5-6
Two Third Point Rows: 1-11

Loads

1) This truss has been designed for the effects of balanced (110 psf) and unbalanced roof snow loads. in accordance with ASCE7 - 16 with the following user defined input: 110 psf Roof (GSL = 157 psf), Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.00. Ventilated.
2) This truss has been designed to account for the effects of ice dams forming at the eaves.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
4) This truss has been designed for the effects of TCLL = 20 psf.
5) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.890	-993 lbs		3-4	0.780	-1,543 lbs						
	2-3	0.176	-1,009 lbs		4-5	0.855	-1,508 lbs						
BC	7-8	0.210	1,255 lbs	(-94 lbs)	8-10	0.252	1,323 lbs	(-116 lbs)					
Web	1-11	0.712	-4,094 lbs		3-10	0.398	-977 lbs		4-7	0.351	-1,510 lbs		
	1-10	0.631	1,939 lbs	(427 lbs)	3-8	0.137	-430 lbs		5-7	0.588	2,038 lbs	(192 lbs)	
	2-10	0.382	-1,256 lbs		4-8	0.179	621 lbs	(-113 lbs)	5-6	0.485	-2,657 lbs		

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
6) A creep factor of 1.50 has been applied for this truss analysis.
7) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T38
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:39

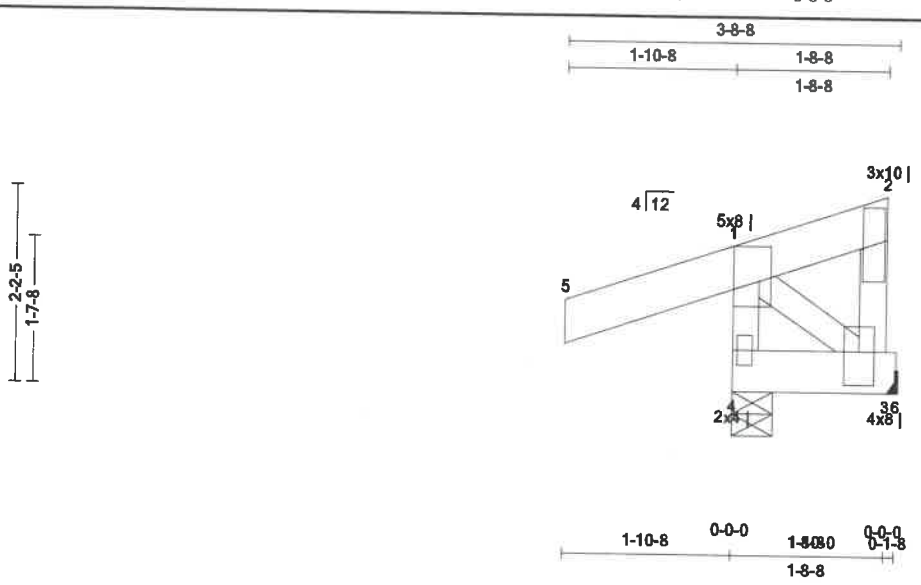
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
19-2-8	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	189 lbs

8) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
9) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
10) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
11) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
12) Incising is not permitted.
13) Scab 3 - 12 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
14) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T39
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:40
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
1-8-8	4/12	2	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	20 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI
TCLL: 110	Bldg Code: IBC 2018/ TPI 1-2014	TC: 0.85 (5-1)
TCDL: 10	Rep Mbr: No	BC: 0.55 (6-3)
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.19 (1-4)
BCDL: 10		

Deflection		L/	(loc)	Allowed
Vert TL:	0 in UP	L/999	(3-4)	L/240
Vert LL:	0 in UP	L/999	(3-4)	L/360
Cant/OH TL:	0 in	2L/999	4	2L/120
Cant/OH LL:	0 in	2L/999	4	2L/120
Horz TL:	0 in		6	

09/12/2024

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
4	1	5.5 in	1.50 in	1,456 lbs	.	-97 lbs	-361 lbs	-361 lbs	108 lbs
6	1	1.5 in	—	39 lbs	-523 lbs	-35 lbs	.	-523 lbs	.

Material

TC: SP-FT/PG 2400/1.8 2 x 6
BC: SP-FT/PG 2400/1.8 2 x 6
Web: SP-FT/PG #2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed to account for the effects of ice dams forming at the eaves.
4) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
5) This truss has been designed for the effects of TCLL = 20 psf.
6) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC							
BC							
Web	1-4	0.192	-1,539 lbs	2-3	0.185	642 lbs	(-117 lbs)

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
5) A creep factor of 1.50 has been applied for this truss analysis.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T39
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:41

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
1-8-8	4/12	2	1-10-8	0-0-0	0-0-0	0-0-0	1	24 in	20 lbs

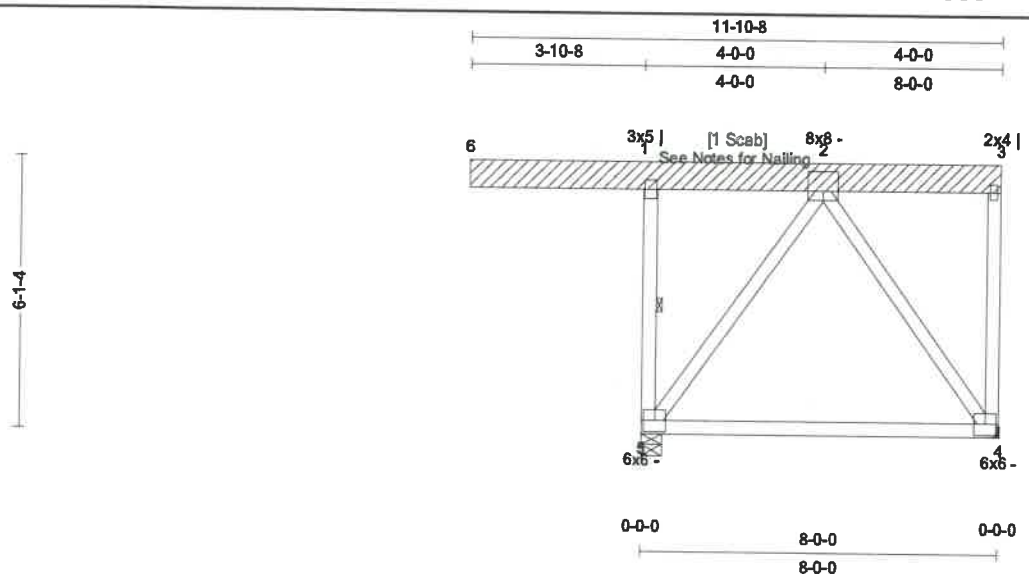
6) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 6 may need to be considered.
7) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
8) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
9) All connectors, i.e. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
10) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
11) Incising is not permitted.
12) Listed wind uplift reactions based on MWFRS & C&C loading.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T40
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:43
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
8-0-0	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	80 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.88 (1-2)	Vert TL:	0.32 in	L/274	(4-5)	L/240
TCDL: 10	Rep Mbr: No	BC: 0.58 (4-5)	Vert LL:	0.15 in	L/605	(4-5)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.50 (1-5)	Horz TL:	0 in		4	
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
5	1	5.5 in	2.11 in	2,424 lbs	-	-255 lbs	-567 lbs	-567 lbs	-209 lbs
4	1	1.5 in	—	789 lbs	-322 lbs	-126 lbs	-160 lbs	-322 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4
Scabs 6-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 1-5

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed to account for the effects of ice dams forming at the eaves.
4) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
5) This truss has been designed for the effects of TCLL = 20 psf.
6) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC													
BC	4-5	0.585	-353 lbs										
Web	1-5	0.498	-2,863 lbs	2-5	0.220	628 lbs	(-299 lbs)	2-4	0.220	628 lbs	(-299 lbs)	3-4	0.405	-462 lbs

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
4) Provide adequate drainage to prevent ponding.
5) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
6) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
7) A creep factor of 1.50 has been applied for this truss analysis.
8) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T40
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:43

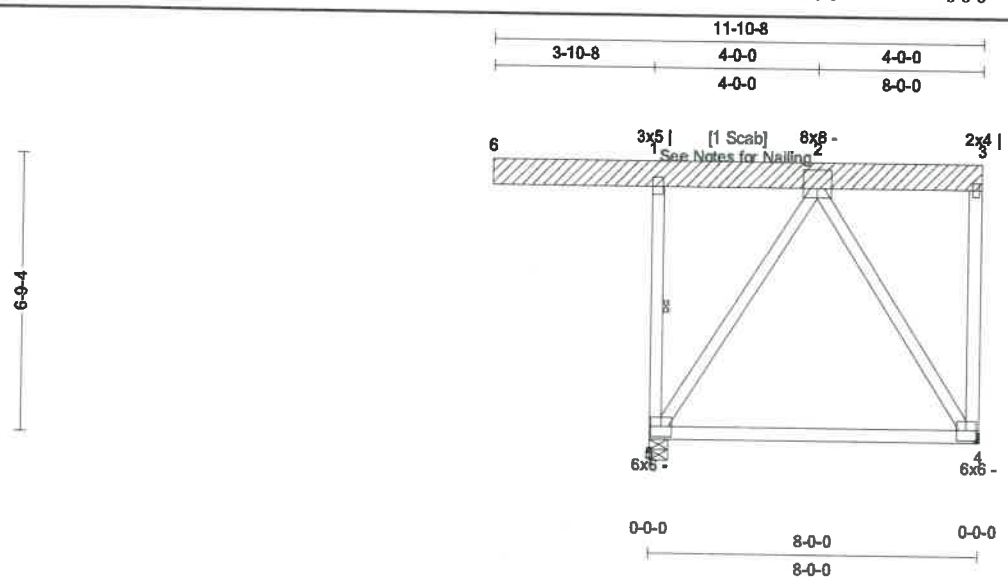
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
8-0-0	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	80 lbs

9) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 4 may need to be considered.
10) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
11) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
12) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
13) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
14) Incising is not permitted.
15) Scab 3 - 6 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
16) Listed wind uplift reactions based on MWFRS & C&C loading.

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T41
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:44
Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
8-0-0	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	83 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection		L/	(loc)	Allowed
TCLL: 110	Bldg Code: IBC2018/ TPI 1-2014	TC: 0.88 (1-2)	Vert TL:	0.36 in	L/246	(4-5)	L/240
TCDL: 10	Rep Mbr: No	BC: 0.65 (4-5)	Vert LL:	0.18 in	L/482	(4-5)	L/360
BCLL: 0	Lumber D.O.L.: 100 %	Web: 0.57 (1-5)	Horz TL:	0 in		4	
BCDL: 10							

09/12/2024

COLORADO REGISTERED ARTURO A. HERNANDEZ 39632 PROFESSIONAL ENGINEER

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
5	1	5.5 in	2.11 in	2,424 lbs	-	-273 lbs	-567 lbs	-567 lbs	231 lbs
4	1	1.5 in	—	789 lbs	-322 lbs	-144 lbs	-160 lbs	-322 lbs	-

Material

TC: SP-FT/PG 2400/1.8 2 x 8
BC: SP-FT/PG 2400/1.8 2 x 4
Web: SP-FT/PG #2 2 x 4
Scabs 6-3 [Qty: 1] SP-FT/PG 2400/1.8 2 x 8

Bracing

TC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 1-5

Loads

1) This truss has been designed for the effects of balanced (110 psf) roof snow loads. in accordance with ASCE7 - 16 except as noted, with the following user defined input: 157 psf ground snow load. NOTE: Conservatively, all flat/sloped roof factors have been ignored and the ground snow load has been used for the roof snow load, DOL = 1.00.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed to account for the effects of ice dams forming at the eaves.
4) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable, Risk Category II, h=B=L=15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
5) This truss has been designed for the effects of TCLL = 20 psf.
6) Non-concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC													
BC	4-5	0.648	-313 lbs										
Web	1-5	0.569	-2,858 lbs	2-5	0.255	601 lbs	(-295 lbs)	2-4	0.255	601 lbs	(-295 lbs)	3-4	0.496	-457 lbs

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
4) Provide adequate drainage to prevent ponding.
5) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
6) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
7) A creep factor of 1.50 has been applied for this truss analysis.
8) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.

TrueBuild® Truss Software v5.7.12
Eagle Metal Products

Valley Truss
133 Range View Loop
Westcliffe, CO 81252
Phone (719) 371-8508

Truss: T41
Job: CBS0306SA-7-HIESCO COMPLETE
Designer: Shane Allen
Date: 09/12/24 08:00:45

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
8-0-0	0/12	1	3-10-8	0-0-0	0-0-0	0-0-0	1	24 in	83 lbs

9) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 4 may need to be considered.
10) Due to the inherent corrosion of treated lumber and steel connectors and the number of variables that affect the rate of corrosion, the G60 coating provided on metal plates shall be reviewed and approved by the Building Designer considering service expectancy life of the structure. If further protection is required beyond G60, the use of G185 can be investigated.
11) Field cuts of treated lumber shall be treated with approved end coating. See supplier for details.
12) All connectors, ie. nails, screws, bolts, truss plates, etc, to treated wood shall have a minimum of G60 galvanization including but not limited to repairs and add framing.
13) Wood and plating reductions for treated lumber are unique to the supplier. Only supplier shown shall be used for this design.
14) Incising is not permitted.
15) Scab 3 - 6 to match size and grade of member to which it is attached. Attach with 2 staggered rows of TrussLoc - Z(TSLZ278, 2 - ply) Screws @ 6 oc.
16) Listed wind uplift reactions based on MWFRS & C&C loading.