PJ1892-1
Fire Prevention
In: 5/27/2016
Out: 06/01/2016

ROOF KEY:

1	MAIN ROOF: TYPICAL U.N.O.	FIBERGLASS ASPHALT SHINGLES
2	ACCENT ROOF:	STANDING SEAM METAL
3	ROOF DORMERS:	FIBERGLASS ASPHALT SHINGLES
4	BYLIN ROOF PANELS:	COLOR TO MATCH STANDING SEAM METAL
5	CHIMNEY:	THIN VENEER STONE
6	ROOF ACCESS HATCH:	4' X 4' CLEAR ROOF HATCH WITH BUILT-IN LADDER

ROOF LEGEND:

- HEAT TRACE. RE: ELECT
- HEATED GUTTERS & COPPER DOWNSPOUT SYS. (COPPER D.S. FROM GUTTERS TO TERMINATION AT BLDG TO INTERNAL DRAINS).
- SNOW FENCE (RE: STRUCTURAL)
- 24" METAL PANEL @ EDGE (TYP) 8" (EACH SIDE) @ 1/3 OF VALLEYS (BYLIN SYSTEM, RE: SPEC)
- FALL PROTECTION ANCHORS @ 12'-0" O.C. (RE: STRUCT)
- WINDOW WASHING EQUIPMENT ANCHORS/ PLATFORM – TWO NEEDED AT MAIN ROOF (POWER)

GENERAL ROOF NOTES:

1. THE ROOF WILL BE CONSTRUCTED OF NON-COM MATERIALS AND ALL UTILITIES ARE TO BE PROTECTED PER CODE.
2. ALL THROUGH VENTS AND PIPES SHOULD BE LOCATED AS CLOSE TO A RIDGE AS POSSIBLE, NOT TO BE WITHIN 10'-0" OF A VALLEY.
3. DIMENSION OF EAVES ARE FROM FACE OF STUD OR NEAREST GRID TO THE END OF ROOF FRAMING., (RE:A9.5.1 FOR TYPICAL EAVE)
4. ALL ROOF PENETRATIONS ARE TO BE ADEQUATELY FLASHED AND SEALED PER SPECIFICATIONS AND MANUFACTURES RECOMMENDATIONS.
5. ADD LAYER OF ICE AND WATER SHIELD AT ALL SLOPES LESS THAN 4:12 PITCH.
6. ALL DUCT WORK WITHIN THE ROOF MUST MAINTAIN A 2-HOUR FIRE RATING. THIS SHOULD BE ACHIEVED WITH DUCT WRAP OR TWO LAYERS OF GYPBOARD ENCLOSURE.
7. ALL GUTTERS AND DOWNSPOUTS TO BE HEAT TRACED TO PREVENT FREEZING
8. WALLS ADJACENT TO ROOF – WRAP ICE & WATERSHIELD UP WALL 48" MINIMUM OR PER SPECIFICATIONS
9. EACH ROOF VALLEY SHALL HAVE ACCESS TO AN ELECTRICAL RECEPTACLE. INSTALL ACCORDING TO THE ELECTRICAL CODE.
10. FALL PROTECTION ANCHORS TO BE LOCATED AT 12'-0" O.C. DESIGNED FOR 5,000 LB CAPACITY AND SUCH THAT A PERSON CAN NEITHER FREE FALL MORE THAN SIX FEET NOR CONTACT ANY LOWER LEVEL.
11. INSTALL WINDOW WASHING EQUIPMENT ANCHORS AT FIVE LOCATIONS AT MAIN ROOF TO ACCESS ALL WINDOWS. POWER IS NEEDED.

GENERAL NOTES:

1. DIMENSIONS ARE TO FACE OF STUD, FACE OF CONCRETE, FACE OF CMU, OR COLUMN CENTERLINE, U.N.O.
2. DIMENSION FROM INTERIOR DOOR JAMB TO ADJACENT WALL IS 6" UNLESS NOTED OTHERWISE
3. SEE OVERALL FLOOR PLANS AND UNIT PLANS FOR ADDITIONAL DIMENSIONS
4. PROVIDE 5/8"" TYPE 'X' GYP BOARD BEHIND ELECTRICAL PANELS, FEC CABINETS AND TUB/SHOWER ENCLOSURES. ALL TUB/SHOWER ENCLOSURES AT RATED WALLS TO MAINTAIN FIRE RATING.
5. PROVIDE 5/8" NON-COMBUSTIBLE BLOCKING FOR WALL MOUNTED ELECTRICAL FIXTURES, GRAB BARS, BATH ACCESSORIES, MIRRORS, CURTAIN RODS, WALL-HUNG TV'S, HANDRAILS, WOOD CHAIRRAILS & WAINSCOT, ETC.
6. <CJ INDICATES CONTROL JOINTS IN GYP BOARD WALLS, CEILINGS, AND CONC FLOORS. PROVIDE CONTROL JOINTS IN GYP BOARD WALLS WITH LENGTHS GREATER THAN 25'-0" L.F. – TO BE CONCEALED BY WOOD ELEMENTS SPANNING COMMON CORRIDORS WHEN POSSIBLE.
7. ALL PARTITIONS ARE FLOOR TO STRUCTURE, UNLESS NOTED OTHERWISE. CONTINUE GYP BOARD AT RATED WALLS FROM FLOOR TO UNDERSIDE OF RATED STRUCTURE (CONCRETE FLOOR OR RATED CEILING AT ROOFS).
8. ENLARGED UNIT PLAN MAY BE MIRRORED OR FLIPPED TO OVERALL FLOOR PLAN. FOLLOW OVERALL FLOOR PLAN FOR PROPER ORIENTATION
9. GARAGE, ATTIC, AND ALL HABITABLE FLOORS AND MECHANICAL/ELECTRICAL ROOMS TO BE SPRINKLED PER NFPA-13. STANDPIPES TO BE DESIGNED AND INSTALLED PER NFPA-13. FIRE SUPPRESSION SYSTEM TO BE DESIGN/BUILD. GENERAL CONTRACTOR RESPONSIBLE FOR ALL PERMITS AND APPROVALS FOR FIRE SUPPRESION/DETECTION SYSTEM.
10. PROVIDE RECESSED FIRE CABINETS AND FIRE EXTINGUISHERS PER FIRE DEPT. REQUIREMENTS
11. PROVIDE SHAFT WALL AT ROOF DRAINS AND VERTICAL MECHANICAL/PLUMBING RISERS INDEPENDENT OF RATED PARTITIONS
12. CORRIDORS SHALL HAVE MIN. 5'-0" CLEAR DIMENSION U.N.O.
13. PIPE PROTECTION SHALL BE INSTALLED ANYWHERE IN GARAGE WHERE PIPES OR MECHANICAL EQUIPMENT IS LARGER THAN A 4" DIAMETER. GC TO USE BOLLARDS, WHEEL STOPS, OR METAL STRAPPING FOR PROTECTION.PROVIDE PIPE PROTECTION (STEEL CAGE) AT ALL PIPES THAT ARE EXPOSED IN THE GARAGE AT COLUMNS AND WHERE CARS COULD HIT.
14. RE: SHEET A7.0.0 AND 7.0.0a FOR ADA, FHA AND IBCO SIGNAGE AND STRIPING REQUIREMENTS.
15. PENETRATIONS THROUGH RATED CONCRETE FLOOR SHALL NOT EXCEED 6" IN DIAMETER OR A TOTAL OF 144 INCHES IN 100 SQUARE FEET.
16. PENETRATIONS THROUGH ROOF MEMBRANE SHALL BE FIRESTOPPED TO COORDINATE 2-HOUR RATING.
17. GARAGE SLOPED TO DRAIN VARIES. (RE: STRUCT). – SLOPE TO BE ¼" PER FOOT MAXIMUM.
18. PENETRATIONS @ EXPOSED STEEL ANGLES, PLATES & BOLTS TO BE SEALED ALL AROUND FOR WATERPROOFING.

KEY NOTES

DIVISION 3- CONCRETE

3.1 PRECAST CONCRETE CAP
3.2 CONCRETE CRICKET–SLOPE ¼" PER FOOT MINIMUM AND ½" PER FOOT MAX.
3.3 DEPRESSED SLAB FOR ROLL–IN SHOWER
3.4 DEPRESSED SLAB FOR ENTRANCE MAT
3.5 CONCRETE RAMP WITH POWDER COATED STEEL HANDRAIL
3.6 4" HIGH HOUSEKEEPING PAD, CONFIRM PAD SIZE W/ EQUIPMENT – SUBMIT FOR REVIEW
3.7 CONC. STONE LEDGE RE: STRUCT.
3.8 CONC. WHEEL STOP
3.9 CONC. SLAB ON GRADE WITH SNOWMELT
3.10 CONCRETE STAIR WITH POWDER COATED STEEL HANDRAIL / GUARDRAILS – COLOR TO BE SELECTED BY ARCHITECT/LANDSCAPE
3.11 4" HIGH CONCRETE CURB

DIVISION 4- MASONRY

4.1 CONC. PAVERS ON SAND BED W/ SNOWMELT
4.2 STONE VENEER (RE: SPECIFICATIONS)
4.3 PRE–CAST CAP

DIVISION 5- METALS

5.1 NOT USED
5.2 GALVANIZED METAL GRATE (75% FREE AREA)
5.4 METAL GUTTER WITH HEAT TRACE
5.5 METAL DOWNSPOUT WITH HEAT TRACE

DIVISION 5- METALS (CONT.)

5.6 METAL SNOWFENCE (RE: STRUCTURAL)
5.7 NOT USED
5.8 FALL PROTECTION FOR WINDOW WASHING EQUIPMENT AND MAINTENANCE (RE: STRUCT)
5.9 NOT USED.
5.10 ONE–WAY GATE AT STAIR CORES (MUST SWING IN TOWARD THE PATH OF EGRESS)
5.11 STEEL RAILING WITH MESH PANEL
5.12 PIPE BOLLARD
5.13 42" HIGH STEEL GUARDRAIL
5.14 SCUPPER
5.15 METAL LADDER TO ROOF HATCH
5.16 DECORATIVE LOUVER
5.17 RESILENT CHANNELS

DIVISION 6 - WOODS & PLASTICS

6.1 ADD FIRE–TREATED PLYWOOD TO WALLS TO MOUNT EQUIPMENT (4'x8' SHEETS, FULL WALL HEIGHT AND WIDTH U.N.O.).
6.2 BLOCKING FOR OWNER PROVIDED SHELVING UNITS.
6.3 NOT USED

DIVISION 7- THERMAL AND MOISTURE PROTECTION

7.1 CONCRETE SLAB ON GRADE
7.2 SLIP AND WATER RESISTANT PEDESTRIAN DECK COATING: ADD ADDITIONAL LAYER OVER OCCUPIED SPACE.
7.3 SLIP AND WATER RESISTANT PEDESTRIAN DECK COATING (MINIMUM 3 COAT SYSTEM)
7.4 WATERPROOF MEMBRANE WITH PROTECTION / DRAINAGE MAT (RE: SPEC)
7.5 VAPOR BARRIER UNDER SLAB AT ALL LIVABLE AREAS U.N.O.
7.6 DOUBLE SLAB SYSTEM WITH WATERPROOF MEMBRANE AND PROTECTION BOARD BETWEEN SLABS
7.7 MEMBRANE ROOFING ON TAPERED INSULATION– SLOPE TO DRAIN
7.8 BYLIN PANEL
7.9 NOT USED
7.10 SNOW MELT, RE: LANDSCAPE AND MECHANICAL FOR EXTENT

DIVISION 8 - DOORS & WINDOWS

8.1 45 MINUTE – GLAZING
8.2 METAL GARAGE DOOR (RE: SPEC) PAINT – COLOR BY ARCHITECT

DIVISION 10 - SPECIALTY

10.1 WATERHOG WALK–OFF MAT
10.2 PEDIGRID FLOORING SYSTEM, RE: 31/A10.2.4

DIVISION 11 - EQUIPMENT

11.1 TRASH CHUTE (RE: SPEC)
11.2 WINDOW WASHING EQUIPMENT (RE: SPEC)
11.3 NOT USED
11.4 SKI LOCKERS–PROVIDE 2 ACCESSIBLE MIN.
11.5 CARD KEY READER AT GARAGE ENTRY
11.6 HOUSE PHONE – CALL FOR ENTRY SYSTEM

DIVISION 13 - SPECIAL CONSTRUCTION

13.1 WIRE SHELVING

DIVISION 15 -MECHANICAL

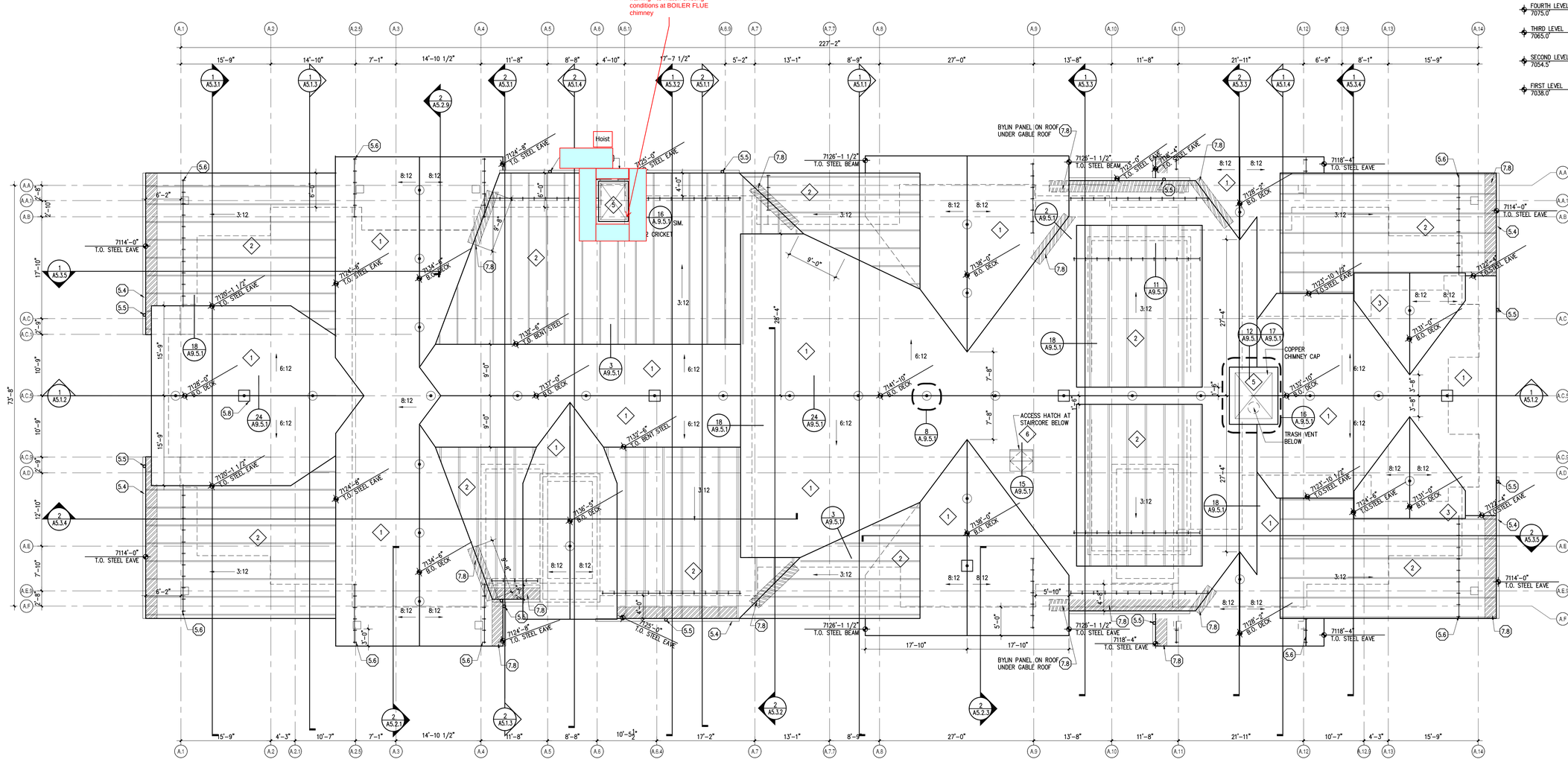
15.1 STANDPIPE (RE: PLUMBING)
15.2 MOP SINK
15.3 STORM GRADE MECHANICAL LOUVER (RE: MECH)
15.4 DECK DRAINS (RE: PLUMBING)
15.5 FLOOR DRAINS (RE: PLUMBING)
15.6 ROOF DRAINS (RE: PLUMBING)
15.7 NOT USED
15.8 TRENCH DRAIN RE: CIVIL

DIVISION 16 -ELECTRICAL

16.1 EXTERIOR LIGHT FIXTURE RE: ELEC.
16.2 HEAT TRACE
16.3 OUTLET FOR WINDOW WASHING EQUIPMENT

RCRBD RECORD SET

Remove and replace exterior stone and drywall framing - to match existing conditions at BOILER FLUE chimney



1 BUILDING 'A' ROOF PLAN
SCALE: 1/8" = 1'-0"

BUILDING A - 7038'

ATTIC LEVEL	7125.0'	10'-6"
EIGHTH LEVEL	7115.0'	10'-0"
SEVENTH LEVEL	7105.0'	10'-0"
SIXTH LEVEL	7095.0'	10'-0"
FIFTH LEVEL	7085.0'	10'-0"
FOURTH LEVEL	7075.0'	10'-0"
THIRD LEVEL	7065.0'	10'-6"
SECOND LEVEL	7054.5'	10'-6"
FIRST LEVEL	7038.0'	16'-6"

OZ ARCHITECTURE
3012 Huron Street
Suite 100
Denver, Colorado 80202
phone 303.861.5704

EDGEMONT - BLDG. A
STEAMBOAT SPRINGS, CO

Atira

PROJ. NO. 56055.00
DRAWN: OZ
CHECKED: OZ
CADD FILE: .dwg
DATE: 07 JULY, 2008
BLDG PERMIT SET
REVISIONS:

SHEET TITLE:
ROOF PLAN

SCALE: As Noted
SHEET NUMBER:
A2.10

SHAFTLINER

AMERICAN GYPSUM Made in the USA

AMERICAN GYPSUM Panel regular para interiores

Submittal 09 29 00

American Gypsum
3811 Turtle Creek Blvd., #1200
Dallas, TX 75219
214-530-5500
www.americangypsum.com

Technical Information
1-800-545-6302 ext. 5607

1” Shaft Liner

RCRBD RECORD SET

GYPSUM WALLBOARD

DESCRIPTION

Shaft Liner panels consist of a fire-resistant type X gypsum core that is encased in a moisture resistant, 100 percent recycled green face and back paper. The face paper is folded around the long edges to reinforce and protect the core. The panels feature a double beveled edge for ease of installation, with the ends being square-cut and finished smooth. Shaft Liner panels are available: 1" thick x 2' wide, and in a variety of lengths.

Products manufactured by American Gypsum contain no asbestos.

GREENGUARD CERTIFIED

Shaft Liner gypsum wallboard has attained the GREENGUARD Indoor Air Quality Certified® and the GREENGUARD Children & Schools Indoor Air Quality Certified℠ status.

The GREENGUARD INDOOR AIR QUALITY CERTIFIED Mark is a registered certification mark used license through the GREEN GUARD Environmental Institute.

BASIC USES

Shaft Liner panels are used in conjunction with other American Gypsum products and metal framing members for Shaftwall and Area Separation Wall systems. Lightweight non-load bearing gypsum Shaftwall systems have replaced traditional masonry for interior vertical enclosures including stairwells, elevator enclosures and mechanical chases.

American Gypsum’s Shaft Liner has been approved for use in the following assemblies:

U 375	2 Hour H-Stud Area Separation Wall System
V 455	1 & 2 Hour Shaftwall Systems using I, C-H and C-T Studs
U 428	2 Hour Shaftwall System using C-H and C-T Studs
U 429	2 Hour Area Separation Wall System using C-H and C-T Studs
V 433	2 Hour Shaftwall System using I-Studs

LIMITATIONS

Exposure to excessive or continuous moisture and extreme temperatures should be avoided during delivery, storage, handling and installation. Eliminate sources of moisture immediately.

Used in non-load bearing systems.

Not to be used in an unlined air supply duct.

Limiting heights and deflection criteria for the system should be based upon the metal stud manufacturer’s recommendations.

Panels should not come in direct contact with concrete, masonry or other surfaces that have high moisture content.

Provide flexible sealant/caulk at partition perimeters and penetrations to avoid air leakage/whistling and dust collection.

Framing must be spaced no more then 24” o/c.

Not to be used in areas with direct exposure to water or continuous high humidity, e.g., saunas, steam rooms, gang showers or indoor swimming pools.

Avoid exposure to temperatures exceeding 125°F (52°C) for extended periods of time, e.g., located adjacent to wood burning stoves and or heating appliances.

STORAGE AND HANDLING

Gypsum board does not generate or support the growth of mold when it is properly transported, stored, handled, installed, and maintained. However, mold spores are present everywhere and when conditions are favorable; mold can grow on practically any surface. GYPSUM BOARD MUST BE KEPT DRY to prevent the growth of mold.

Gypsum board must be stored in an area that protects it from adverse weather conditions, condensation, and other forms of moisture. Job site conditions that can expose gypsum board to water or moisture must be avoided.

Gypsum board must be protected during transit with a weather-tight cover in good condition. Plastic shipping bags are intended to provide protection during transit only and must be promptly removed upon arrival of the load. Failure to remove the shipping bag can increase the likelihood of developing conditions favorable to the growth of mold.

Gypsum board that has visible mold growth must not be used. For additional information, refer to Gypsum Association publication, “Guidelines for the Prevention of Mold Growth on Gypsum Wallboard” (GA-238), which can be found at www.americangypsum.com under “Technical Data” - click on Gypsum Association Literature.

Gypsum board must be stored off the ground and under protective cover. Sufficient risers must be used to assure support for the entire length of the wallboard to prevent sagging.

Gypsum board must be delivered to the job site as near to the time it will be used as possible. Individuals delivering gypsum board to jobsites should ensure that it is carried, not dragged, to place of storage/installation to prevent damage to finished edges.

Gypsum board shall always be stacked flat - NEVER on edge or end. Gypsum board stacked on edge or end is unstable and presents a serious hazard should it accidentally topple. Gypsum board should be placed so weight is evenly distributed and the floor is not overloaded.

SHAFTLINER

Made in the USA

Panel regular para interiores

GOOD BUILDING PRACTICES

Installation – Installation of 1" Shaft Liner panels shall be consistent with specified application details for Shaftwall or Area Separation Wall systems. The assembly must be erected in the proper manner and with all approved components used in a successfully completed fire endurance test. The contractor, design professional and or owner shall ensure that only the components that were a part of the approved test are used; do not substitute components.

Handling and application shall be consistent with methods described in the noted standards and references indicated below.

APPLICABLE STANDARDS

Manufacturing	ASTM C 1396 Federal Specification – SS-L-30D Type IV Grade X
Installation	ASTM C 840 Gypsum Association GA-216 Gypsum Association GA-620
Surface Burning Characteristics	ASTM E 84 Flame Spread 0 Smoke Developed 0

FIRE RESISTANCE RATINGS

Desired fire rated assemblies are specified from tests performed by independent laboratories. These designs are made up of specific materials in a precise configuration. When choosing construction designs to meet certain fire resistance requirements, vigilance must be taken to insure that each component of the selected assembly is the one specified in the test and are assembled in accordance with the requirements of the assembly.

PRODUCT DATA

SIZES				
Thickness	**Widths**	**Lengths**	**Edge Type**	**UL Types**
1" (25.4mm)	2' (610mm)	8' - 12' (2438mm - 3658mm)	Double Beveled	AG-S

Special lengths or edges may be available on special order. Consult your American Gypsum sales representative for details.

Thermal Resistance "R" Value 1" = 0.73

SUBMITTAL APPROVALS

Job Name:

Contractor: **Date:**

RCRBD
RECORD
SET

Georgia-Pacific

DensGlass® Sheathing

RCRBD RECORD SET

Technical Service Hotline 1.800.225.6119 or
www.gpgypsum.com

Manufacturer

Georgia-Pacific Gypsum LLC
133 Peachtree Street
Atlanta, GA 30303

Georgia-Pacific Canada LP
6711 Mississauga Road,
Mississauga, ON LSN 2W3

Technical Service Hotline: 1-800-225-6119

Description

DensGlass® Sheathing is a gypsum panel made of a treated, water-resistant core, surfaced with fiberglass mats and a GOLD colored primer coating. Providing superb protection from the elements, DensGlass Sheathing is resistant to decay, delamination and deterioration due to weather exposure—even during construction delays that last as long as twelve months after installation and are backed by a 12-month limited warranty against normal weather exposure.* DensGlass Sheathing panels are also mold-resistant, scoring a 10, the highest score, when tested, as manufactured, per ASTM D 3273.

DensGlass Sheathing exhibits a dimensional stability that assures resistance to warping, rippling, buckling and sagging for a flat and even substrate and is noncombustible as defined and tested in accordance with ASTM E 136. Since DensGlass Sheathing is strong in both directions, it may be installed either parallel or perpendicular to wall framing members (always follow specific assembly installation instructions).

Primary Uses

Because of the superior performance of DensGlass Sheathing, it is specified for exterior walls, ceilings and soffits in a wide variety of applications. These include exterior insulation and finish systems (EIFS); cavity brick or stone veneer applications; cladding such as wood siding, vinyl siding, composition siding, wood shingles, shakes, conventional stucco systems, plywood siding panels; and interior finish systems that require a substrate panel with superior fire and moisture resistance.

For EIFS applications, DensGlass Sheathing is an ideal substrate for adhesive or mechanical application of expanded polystyrene (EPS) or extruded polystyrene insulation, and is recommended in all climate zones.

Consult with the local building code, design professional, owner or cladding manufacturer for weather resistive barrier requirements. Manufacturers of weather resistive barriers, which include flexible membranes, self-adhered membrane and liquid applied, have found DensGlass Sheathing to be a suitable substrate for their systems.

DensGlass Sheathing is an ideal product for exterior ceilings and soffits for both cold and warm climate zones. It resists sagging, even under exceptionally humid conditions. Panels are applied directly to structural framing. Surface and joints may be finished and painted, or surfaced with an exterior finish system.

Limitations

DensGlass Sheathing is resistant to normal weather conditions, but it is not intended for immersion in water. Cascading roof/floor water should be directed away from the sheathing until appropriate drainage is installed.

Avoid any condition that will create moisture in the air and condensation on the exterior walls during periods when the exterior temperature is lower than the interior. The use of forced air heaters creates volumes of water vapor which, when not properly vented, can condense on building materials. The use of these heaters and any resulting damage is not the responsibility of Georgia-Pacific Gypsum. Consult heater manufacturer for proper use and ventilation. Vapor barrier may also restrict ventilation.

When DensGlass Sheathing panels are used in slanted wall applications, that portion of the wall must be temporarily protected from the elements by the use of a water-resistant barrier prior to application of the cladding. Do not allow water to pond or settle on sheathing. Also, exposed wall ends such as those that may be found in parapets must be covered to prevent water from infiltrating the cavity.

Georgia-Pacific Gypsum does not warrant and is not responsible or liable for the performance of the cladding or exterior systems applied over DensGlass Sheathing. The suitability and compatibility of any system is the responsibility of the system manufacturer or design authority.

Do not laminate DensGlass Sheathing to masonry surfaces; use furring strips or framing.

DensGlass Sheathing is not intended for roof applications. For roof applications, consult our DensDeck® Roof Board brochure.

DensGlass Sheathing is not intended for interior or exterior tile applications. For interior tile applications, consult our DensShield® Tile Backer brochure.

DensGlass Sheathing should not be used in lieu of plywood where required.

Do not apply DensGlass Sheathing below grade.

For all installations, design details such as fasteners, sealants and control joints per system specifications must be properly installed. Openings and penetrations must be properly flashed and sealed. Failure to do so will void the warranty.

Do not use DensGlass Sheathing as a base for nailing or mechanical fastening. Fasteners should be flush to the face of the board, not countersunk.

Technical Data

DensGlass Sheathing is noncombustible as described and tested in accordance with ASTM E 136.

DensGlass Sheathing exceeds ASTM C 1396 sheathing standards for humidified deflection by a factor of 10 in tests over the standard for regular gypsum sheathing.

5/8" (15.9 mm) DensGlass® Fireguard® Sheathing is UL classified, Type DGG in the following UL assemblies: Design Nos. G501, G520, G531, L501, L508, L532, L556, L591, N501, N502, N505, N602, P225, P227, P230, P235, P254, P259, P266, P302, P516, P517, P701, P710, P711, P713, P714, P717, P718, P719, P720, P722, P725, P728, P729, P730, P731, P732, P733, P734, P735, P738, P739, P740, P741, P742, P801, P811, P815, P819, P824, P825, P826, P827, P828, S728, S736, U017, U032, U040, U204, U207, U301, U302, U305, U309, U326, U329, U330, U332, U337, U338, U339, U341, U342, U351, U354, U355, U356, U357, U358, U360, U364, U369, U379, U396, U411, U418, U420, U425, U434, U436, U439, U442, U449, U450, U460, U465, U467, U473, U475, U487, U494, U495, U502, U504, U505, U506, U510, U512, U531, U603, U617, U623, U626, U633, U640, U646, U647, U648, U649, U651, U652, U926, V415 , V417, V419, V420, V421, V430, V432, V434, V435, V450, V473, V486, V487, V490, X508, X516, X517, X525, X526, X527, X528, X535, X602, X604 and ULC classified, Type DGG in ULC designs EW10, EW17, U301, U302, W301, W404, W415, W442 and W465.

When tested, as manufactured, DensGlass Sheathing conforms to ASTM C 1177.

* For complete warranty details, visit www.gpgypsum.com.

continued

Submittal Approvals

Job Name _____

Contractor _____

Date _____

Stamps/Signatures

Georgia-Pacific

DensGlass® Sheathing

Technical Service Hotline 1.800.225.6119 or
www.gpgypsum.com

RCRBD
RECORD
SET

Product Data

Thicknesses: 1/2″ (12.7 mm); 5/8″ (15.9 mm) is Type X
Width: 4′ (1220 mm) standard, tolerance up to ± 1/8″ (3.2 mm)
Lengths: 8′ (2438 mm), 9′ (2743 mm) or 10′ (3048 mm) standard, tolerance ± 1/4″ (6 mm) Other lengths available upon request
Edges: Square

Physical Properties

Properties	1/2″ DensGlass® Sheathing	5/8″ DensGlass® Fireguard® Sheathing
Thickness, Nominal	1/2″ (12.7 mm)	5/8″ (15.9 mm)
Width, Nominal	4′ (1219 mm) ± 1/8″ (3 mm)	4′ (1219 mm) ± 1/8″ (3 mm)
Length, Standard	8′ (2440 mm), 9′ (2743 mm), 10′ (3048 mm), ± 1/4″ (6 mm)	8′ (2440 mm), 9′ (2743 mm), 10′ (3048 mm), ± 1/4″ (6 mm)
Weight/lbs./sq. ft. (kg/m^2)	1.9 (9)	2.5 (12)
Surfacing	Fiberglass mat	Fiberglass mat
Racking Strength, lbs./ft. (dry) (N/m) (Ultimate—not design value)	>540 (>7878)	>654 (>9544)
Flexural Strength[3], parallel, lbf. (N) (4′ weak direction)	80 (356)	100 (445)
Humidified Deflection[3]	1/8″ (3 mm)	2/8″ (6 mm)
Permeance (perms)[1] [ng/Pa•s•m^2]	23 (1300)	17 (970)
R value[2] °F•ft^2•hr/BTU (K•m^2/W)	.56 (0.099)	.67 (0.118)
Linear Expansion with Change in Moisture in/in/%RH (mm/mm %RH)	6.25 x 10^{-6}	6.25 x 10^{-6}
Bending Radius[4]	6′ (1829 mm)	8′ (2438 mm)
Compressive Strength	min. 500 psi (3445 kPa)	min. 500 psi (3445 kPa)

Values are based on tests conducted in accordance with ASTM C 473 and ASTM E 72 where applicable.
[1] Tested in accordance with ASTM E 96 (dry cup method).
[2] Tested in accordance with ASTM C 518 (heat flow meter).
[3] Minimum requirements for ASTM C 1177 standard specification.
[4] Double fasteners on ends as needed.

Georgia-Pacific Gypsum

U.S.A.– Georgia-Pacific Gypsum LLC
Canada – Georgia-Pacific Canada LP

SALES INFORMATION AND ORDER PLACEMENT

U.S.A. Midwest: **1-800-876-4746** West: **1-800-824-7503**
South: **1-800-327-2344** Northeast: **1-800-947-4497**

CANADA Canada Toll Free: **1-800-387-6823**
Quebec Toll Free: **1-800-361-0486**

TECHNICAL INFORMATION

U.S.A. and Canada: **1-800-225-6119**
www.gpgypsum.com

TRADEMARKS Unless otherwise noted, all trademarks are owned by or licensed to Georgia-Pacific Gypsum LLC.

WARRANTIES, REMEDIES AND TERMS OF SALE For current warranty information for this product, please go to www.gpgypsum.com and select the product for warranty information. All sales of this product by Georgia-Pacific are subject to our Terms of Sale available at www.gpgypsum.com.

UPDATES AND CURRENT INFORMATION The information in this document may change without notice. Visit our website at www.gpgypsum.com for updates and current information.

CAUTION For product fire, safety and use information, go to www.gp.com/safetyinfo or call 1-800-225-6119.

HANDLING AND USE–CAUTION This product contains fiberglass facings which may cause skin irritation. Dust and fibers produced during the handling and installation of the product may cause skin, eye and respiratory tract irritation. Avoid breathing dust and minimize contact with skin and eyes. Wear long sleeve shirts, long pants and eye protection. Always maintain adequate ventilation. Use a dust mask or NIOSH/MSHA approved respirator as appropriate in dusty or poorly ventilated areas.

FIRE SAFETY CAUTION Passing a fire test in a controlled laboratory setting and/or certifying or labeling a product as having a one-hour, two-hour, or any other fire resistance or protection rating and, therefore, as acceptable for use in certain fire rated assemblies/systems, does not mean that either a particular assembly/system incorporating the product, or any given piece of the product itself, will necessarily provide one-hour fire resistance, two-hour fire resistance, or any other specified fire resistance or protection in an actual fire. In the event of an actual fire, you should immediately take any and all actions necessary for your safety and the safety of others without regard for any fire rating of any product or assembly/system.

NEI CONSTRUCTION
NATIONAL FEDERAL CONTRACTING

PO Box 1238
Clark, Co 80428
Phone (970) 986-2274

ATTACHMENT B

RCRBD
RECORD
SET

Scope in summary:

A. Scaffolding from grade to chimney then around chimney
    a. The Chimney is located in about the most complicated part of the roof to access without significant risk to roofing damage – so our approach is to scaffold to the work accessing from the North side of the building immediately adjacent to the chimney. See figure 1, scaffold would pass by the two roofing outlooks and tie into scaffold surrounding the chimney. Temporary protection will be installed at the current roofing surface prior to the setting of scaffold at the roof level. We intend to use a material lift on the scaffolding to take down demolished materials and take up new materials to do the work. Once the scaffold is erected, and signed off by the scaffolding company – it will be turned over to the trades for their inspection and safety signoff – for their use.
B. Raise and support existing shroud from scaffolding and remove the skins from the shroud frame
    a. Loosen the shroud from its supports, remove the skins from the exterior, and support the remaining frame off the scaffolding with 4x4 lumber, or removed to be secured and stored on the roof below. This will keep the boiler flue and generator exhaust fully functional though out the repair process. (we are still reviewing the opportunity to remove the shroud frame altogether and send to a shop for reskinning – then returned to site for installation)
C. Demolish Stone from chimney
    a. The stone, mortar, lath and tar paper will be removed from the existing framing. The stone will be removed to the ground for removal of mortar and judgment for re-use.
D. Demolish framing and sheetrock from structural steel around chimney
    a. The extent of the damage to the light gauge framing and shaft wall is unknown, complete removal and re-framing is being considered as part of this proposal.
E. Remove and replace upper section of boiler flue
    a. It is anticipated that the boiler flue assembly at the location of the fire has been damaged and would require replacement. This proposal reflects replacing the top 8 feet of flue assembly and flue cap. Further investigation will be made once the flue is accessible.
F. Remove and replace damages sections of fire wrap at generator exhaust.
    a. It is apparent that a portion of the emergency generator exhaust pipe fire insulation has been damaged and is in need of repair – this proposal reflects 4' of repair.
G. Reframe shaft wall, inspections, frame new chimney cap, and install dens-glass
    a. Once work in the shaft is complete, new framing will be installed – inspected as required by Routt County, then closed up with Dens-glass sheathing. It is our recommendation that the top of the shaft be framed closed with light gauge metal framing, cement board and flashing to create a non-combustible cap to the shaft.
H. Install new stone
    a. Where possible, the existing stone that has been cleaned of mortar will be used on the North and East faces of the chimney in order to attempt to re-install the chimney stone to a condition as close as possible to the original installation. All other stone will be installed from material sourced from the original pit in Montana.
I. Re-skin the shroud, apply new horizontal metal at chimney cap and set shroud in place.
    a. The horizontal and vertical metal membranes of the shroud suffered fire damage and as such should be replaced. These membranes will be re-installed on the frame while located at the top of the chimney – avoiding the use of a crane or other hoisting means.
J. Clean stone and punch list
    a. An internal punch list will be done by the trades and NEI Construction – addressed as might be needed then a formal punch list requested of Edgemont prior to turnover.
K. Remove scaffolding and cleanup

PO Box 1238
Clark, Co 80428
Phone (970) 986-2274

ATTACHMENT B

a. The area immediately adjacent to the work and at the base of the scaffolding will be cleaned up and repaired as necessary as a result of the above operations. Having not been able to assess the existing conditions, a $1,000 allowance has been included to repair landscaping as necessary. If no damage is inflicted this amount will be returned. If more landscape is required to be repaired than $1,000 will cover, a change order will be requested.

Minor Logistics –

Elevator – While we have attempted to plan this work at this time to limit the use of the inside elevator for material and equipment, we will need it to move the workforce to the roof and back. We have not included a stair at the exterior scaffolding. Will need to develop an access protocol for workforce while in the building.

Water – Water is anticipated to be needed at the base of the scaffold set and will be taken from exterior hose bibs available

Electricity – Electricity will be needed both at the chimney and at the base of the scaffold. Extension cords will be used from the roof access hatch to the chimney, but will need to route electricity from the main electrical room to the base of the scaffold as we will need 220v power for the lift. (As planning continues, we may find a way to pull this power from a unit closer to the work).

Dumpster – A dumpster will need to be set at the parking area to the south of the building for trash and demolition material disposal. We will make an effort to gain access up the ski edge with a flatbed for this purpose, but am not counting on Steamboat approval at this time.

Storage – a couple of parking spaces will need to be made available for short term storage of material and equipment.

Parking – Presumes we can use the exterior parking lot or the inside parking structure at Edgemont.

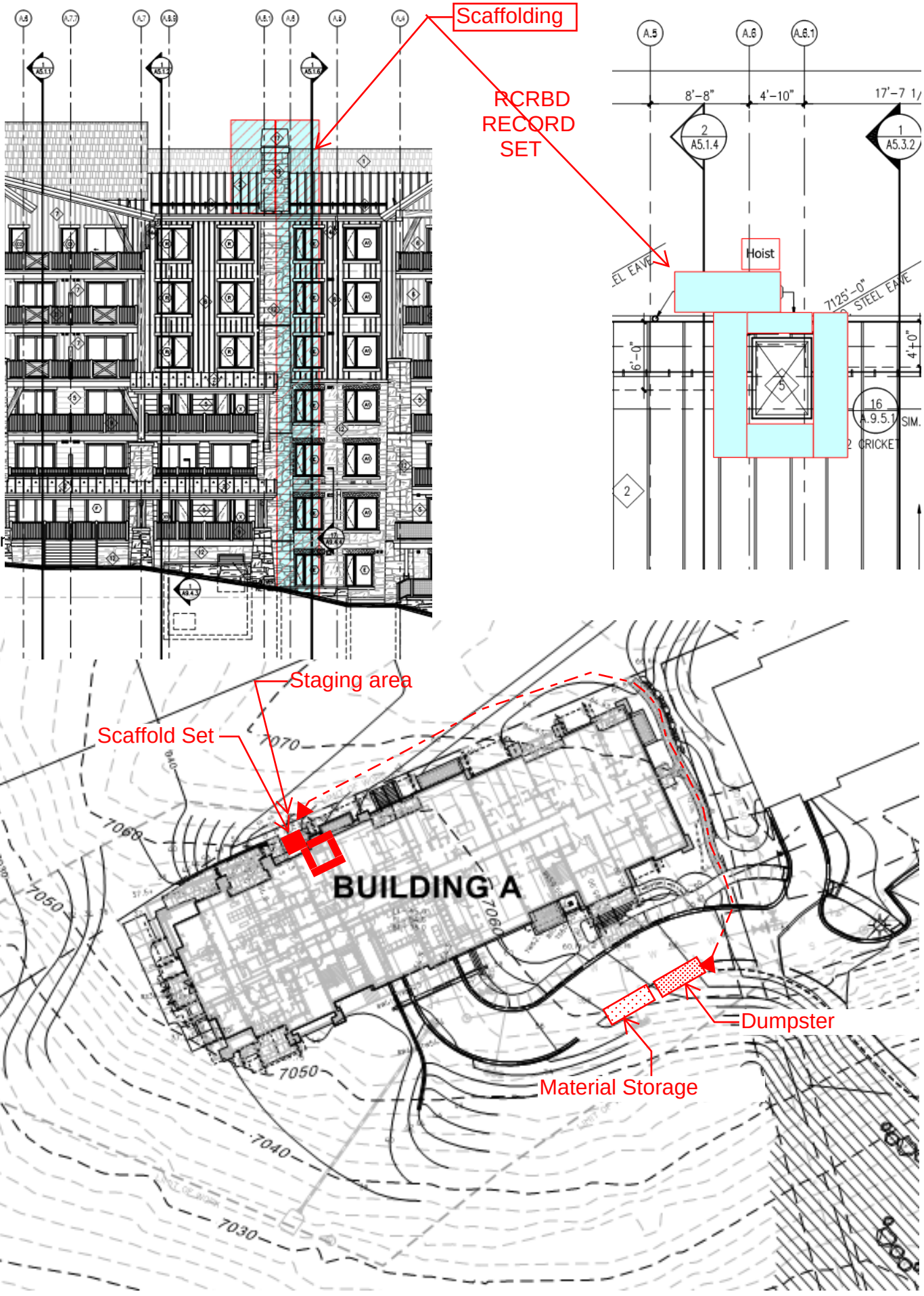
Restrooms – Presumes the use of on-site facilities, no temporary bathroom facilities are included

EXCLUSIONS:

1. Work not specifically outlined above
2. Builders Risk insurance – recommend that Edgemont Condominium Association procure this insurance. Deductible is by Owner.
3. Design work for any of the work or as may be required for permit submission.

ALLOWANCES: Allowances are applied to those scope items that cannot be accurately forecasted based on lack of access or knowledge (costs in excess of the below will be reimbursed by the Owner, remaining amounts in any allowance will be returned to Owner pending final reconciliation)

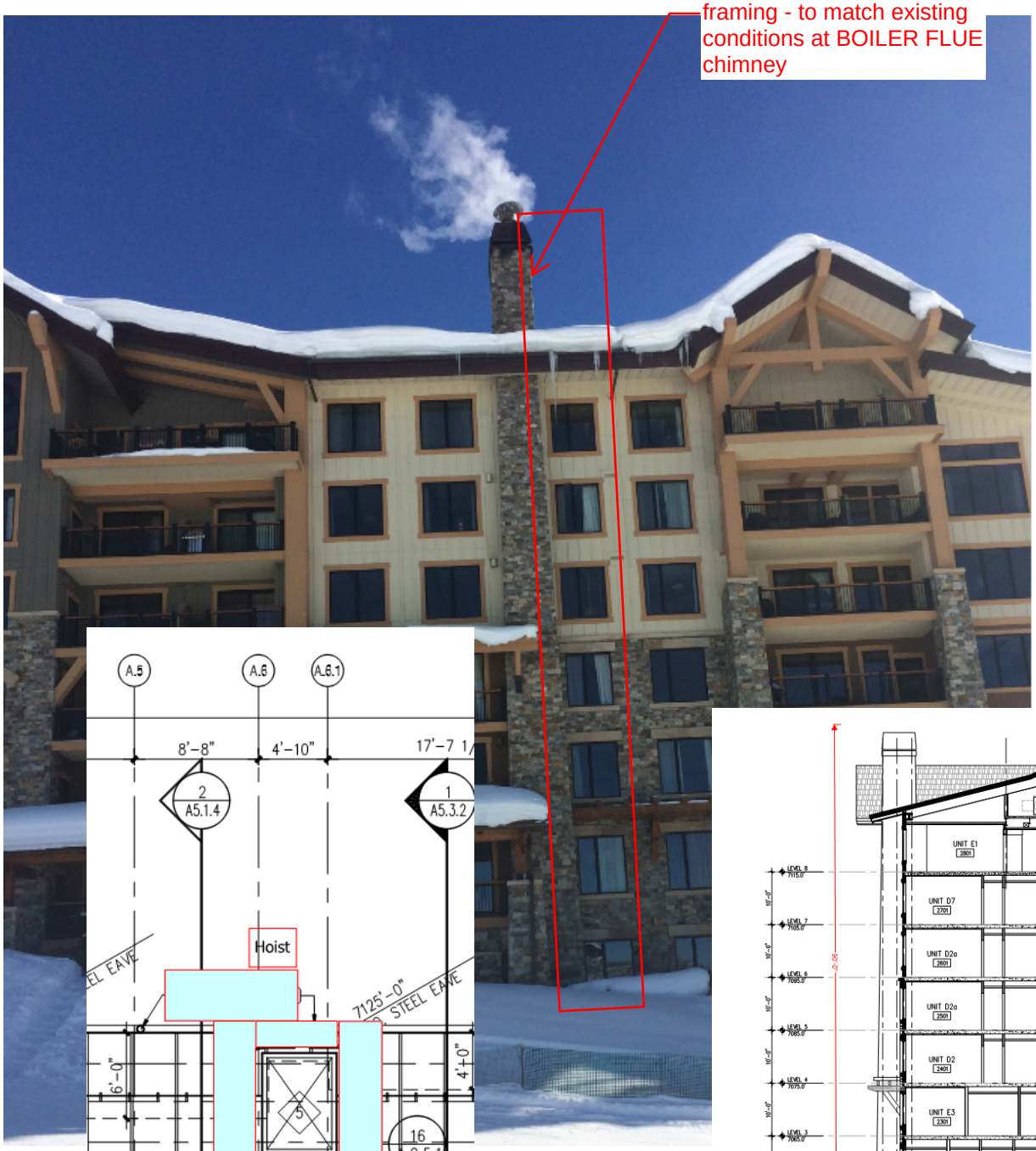
1. Boiler Flue replacement at top of shaft - $19,868.00
2. Fire Wrap at Emergency Generator Exhaust - $1,500.00
3. Additional drywall patching - $1,000.00
4. General Conditions - $9,133.32
5. Contingency - $5,479.99

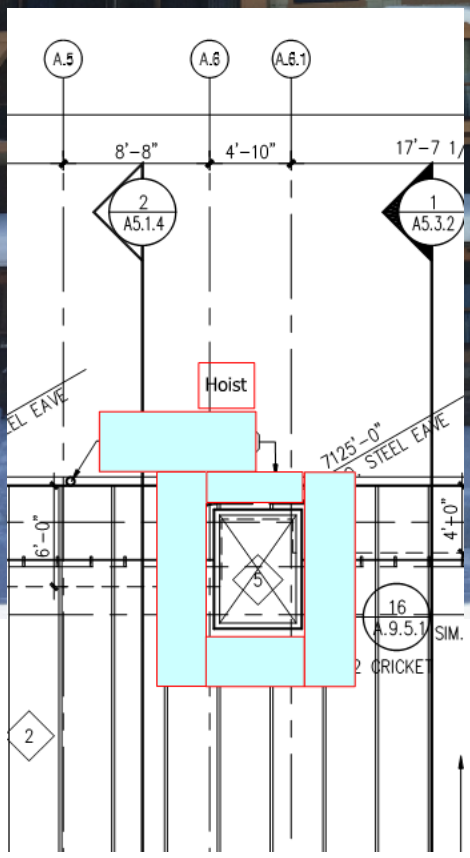

Scaffolding
RCRBD
RECORD
SET
Hoist
Staging area
Scaffold Set
BUILDING A
Dumpster
Material Storage

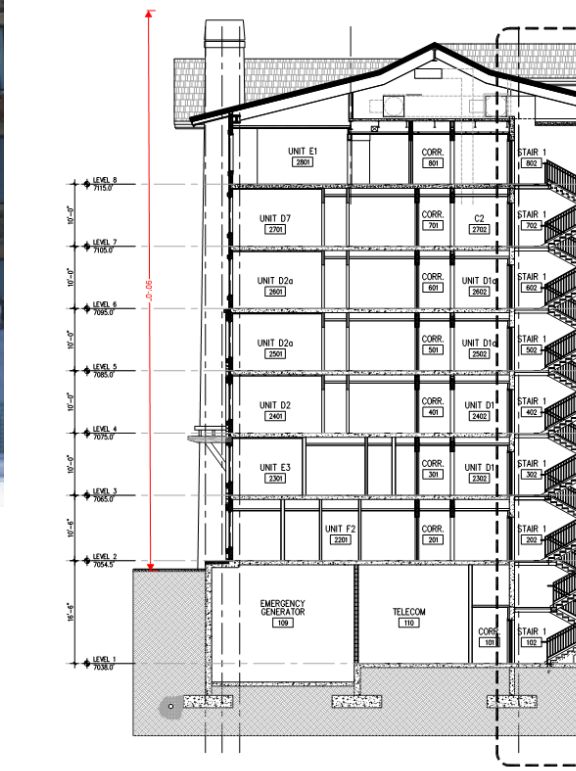
Figur

RCRBD
RECORD
SET

Remove and replace exterior stone and drywall framing - to match existing conditions at BOILER FLUE chimney







PJ1892-1
Fire Prevention
In: 5/27/2016
Out: 06/01/2016

ROOF KEY:

1	MAIN ROOF: TYPICAL U.N.O.	FIBERGLASS ASPHALT SHINGLES
2	ACCENT ROOF:	STANDING SEAM METAL
3	ROOF DORMERS:	FIBERGLASS ASPHALT SHINGLES
4	BYLIN ROOF PANELS:	COLOR TO MATCH STANDING SEAM METAL
5	CHIMNEY:	THIN VENEER STONE
6	ROOF ACCESS HATCH:	4' X 4' CLEAR ROOF HATCH WITH BUILT-IN LADDER

ROOF LEGEND:

- HEAT TRACE. RE: ELECT
- HEATED GUTTERS & COPPER DOWNSPOUT SYS. (COPPER D.S. FROM GUTTERS TO TERMINATION AT BLDG TO INTERNAL DRAINS).
- SNOW FENCE (RE: STRUCTURAL)
- 24" METAL PANEL @ EDGE (TYP) 8" (EACH SIDE) @ 1/3 OF VALLEYS (BYLIN SYSTEM, RE: SPEC)
- FALL PROTECTION ANCHORS @ 12'-0" O.C. (RE: STRUCT)
- WINDOW WASHING EQUIPMENT ANCHORS/ PLATFORM – TWO NEEDED AT MAIN ROOF (POWER)

GENERAL ROOF NOTES:

1. THE ROOF WILL BE CONSTRUCTED OF NON-COM MATERIALS AND ALL UTILITIES ARE TO BE PROTECTED PER CODE.
2. ALL THROUGH VENTS AND PIPES SHOULD BE LOCATED AS CLOSE TO A RIDGE AS POSSIBLE, NOT TO BE WITHIN 10'-0" OF A VALLEY.
3. DIMENSION OF EAVES ARE FROM FACE OF STUD OR NEAREST GRID TO THE END OF ROOF FRAMING., (RE:A9.5.1 FOR TYPICAL EAVE)
4. ALL ROOF PENETRATIONS ARE TO BE ADEQUATELY FLASHED AND SEALED PER SPECIFICATIONS AND MANUFACTURES RECOMMENDATIONS.
5. ADD LAYER OF ICE AND WATER SHIELD AT ALL SLOPES LESS THAN 4:12 PITCH.
6. ALL DUCT WORK WITHIN THE ROOF MUST MAINTAIN A 2-HOUR FIRE RATING. THIS SHOULD BE ACHIEVED WITH DUCT WRAP OR TWO LAYERS OF GYPBOARD ENCLOSURE.
7. ALL GUTTERS AND DOWNSPOUTS TO BE HEAT TRACED TO PREVENT FREEZING
8. WALLS ADJACENT TO ROOF – WRAP ICE & WATERSHIELD UP WALL 48" MINIMUM OR PER SPECIFICATIONS
9. EACH ROOF VALLEY SHALL HAVE ACCESS TO AN ELECTRICAL RECEPTACLE. INSTALL ACCORDING TO THE ELECTRICAL CODE.
10. FALL PROTECTION ANCHORS TO BE LOCATED AT 12'-0" O.C. DESIGNED FOR 5,000 LB CAPACITY AND SUCH THAT A PERSON CAN NEITHER FREE FALL MORE THAN SIX FEET NOR CONTACT ANY LOWER LEVEL.
11. INSTALL WINDOW WASHING EQUIPMENT ANCHORS AT FIVE LOCATIONS AT MAIN ROOF TO ACCESS ALL WINDOWS. POWER IS NEEDED.

GENERAL NOTES:

1. DIMENSIONS ARE TO FACE OF STUD, FACE OF CONCRETE, FACE OF CMU, OR COLUMN CENTERLINE, U.N.O.
2. DIMENSION FROM INTERIOR DOOR JAMB TO ADJACENT WALL IS 6" UNLESS NOTED OTHERWISE
3. SEE OVERALL FLOOR PLANS AND UNIT PLANS FOR ADDITIONAL DIMENSIONS
4. PROVIDE 5/8"" TYPE 'X' GYP BOARD BEHIND ELECTRICAL PANELS, FEC CABINETS AND TUB/SHOWER ENCLOSURES. ALL TUB/SHOWER ENCLOSURES AT RATED WALLS TO MAINTAIN FIRE RATING.
5. PROVIDE 5/8" NON-COMBUSTIBLE BLOCKING FOR WALL MOUNTED ELECTRICAL FIXTURES, GRAB BARS, BATH ACCESSORIES, MIRRORS, CURTAIN RODS, WALL-HUNG TV'S, HANDRAILS, WOOD CHAIRRAILS & WAINSCOT, ETC.
6. <CJ INDICATES CONTROL JOINTS IN GYP BOARD WALLS, CEILINGS, AND CONC FLOORS. PROVIDE CONTROL JOINTS IN GYP BOARD WALLS WITH LENGTHS GREATER THAN 25'-0" L.F. – TO BE CONCEALED BY WOOD ELEMENTS SPANNING COMMON CORRIDORS WHEN POSSIBLE.
7. ALL PARTITIONS ARE FLOOR TO STRUCTURE, UNLESS NOTED OTHERWISE. CONTINUE GYP BOARD AT RATED WALLS FROM FLOOR TO UNDERSIDE OF RATED STRUCTURE (CONCRETE FLOOR OR RATED CEILING AT ROOFS).
8. ENLARGED UNIT PLAN MAY BE MIRRORED OR FLIPPED TO OVERALL FLOOR PLAN. FOLLOW OVERALL FLOOR PLAN FOR PROPER ORIENTATION
9. GARAGE, ATTIC, AND ALL HABITABLE FLOORS AND MECHANICAL/ELECTRICAL ROOMS TO BE SPRINKLED PER NFPA-13. STANDPIPES TO BE DESIGNED AND INSTALLED PER NFPA-13. FIRE SUPPRESSION SYSTEM TO BE DESIGN/BUILD. GENERAL CONTRACTOR RESPONSIBLE FOR ALL PERMITS AND APPROVALS FOR FIRE SUPPRESION/DETECTION SYSTEM.
10. PROVIDE RECESSED FIRE CABINETS AND FIRE EXTINGUISHERS PER FIRE DEPT. REQUIREMENTS
11. PROVIDE SHAFT WALL AT ROOF DRAINS AND VERTICAL MECHANICAL/PLUMBING RISERS INDEPENDENT OF RATED PARTITIONS
12. CORRIDORS SHALL HAVE MIN. 5'-0" CLEAR DIMENSION U.N.O.
13. PIPE PROTECTION SHALL BE INSTALLED ANYWHERE IN GARAGE WHERE PIPES OR MECHANICAL EQUIPMENT IS LARGER THAN A 4" DIAMETER. GC TO USE BOLLARDS, WHEEL STOPS, OR METAL STRAPPING FOR PROTECTION.PROVIDE PIPE PROTECTION (STEEL CAGE) AT ALL PIPES THAT ARE EXPOSED IN THE GARAGE AT COLUMNS AND WHERE CARS COULD HIT.
14. RE: SHEET A7.0.0 AND 7.0.0a FOR ADA, FHA AND IBCO SIGNAGE AND STRIPING REQUIREMENTS.
15. PENETRATIONS THROUGH RATED CONCRETE FLOOR SHALL NOT EXCEED 6" IN DIAMETER OR A TOTAL OF 144 INCHES IN 100 SQUARE FEET.
16. PENETRATIONS THROUGH ROOF MEMBRANE SHALL BE FIRESTOPPED TO COORDINATE 2-HOUR RATING.
17. GARAGE SLOPED TO DRAIN VARIES. (RE: STRUCT). – SLOPE TO BE ¼" PER FOOT MAXIMUM.
18. PENETRATIONS @ EXPOSED STEEL ANGLES, PLATES & BOLTS TO BE SEALED ALL AROUND FOR WATERPROOFING.

KEY NOTES

DIVISION 3- CONCRETE

3.1 PRECAST CONCRETE CAP
3.2 CONCRETE CRICKET–SLOPE ¼" PER FOOT MINIMUM AND ½" PER FOOT MAX.
3.3 DEPRESSED SLAB FOR ROLL–IN SHOWER
3.4 DEPRESSED SLAB FOR ENTRANCE MAT
3.5 CONCRETE RAMP WITH POWDER COATED STEEL HANDRAIL
3.6 4" HIGH HOUSEKEEPING PAD, CONFIRM PAD SIZE W/ EQUIPMENT – SUBMIT FOR REVIEW
3.7 CONC. STONE LEDGE RE: STRUCT.
3.8 CONC. WHEEL STOP
3.9 CONC. SLAB ON GRADE WITH SNOWMELT
3.10 CONCRETE STAIR WITH POWDER COATED STEEL HANDRAIL / GUARDRAILS – COLOR TO BE SELECTED BY ARCHITECT/LANDSCAPE
3.11 4" HIGH CONCRETE CURB

DIVISION 4- MASONRY

4.1 CONC. PAVERS ON SAND BED W/ SNOWMELT
4.2 STONE VENEER (RE: SPECIFICATIONS)
4.3 PRE–CAST CAP

DIVISION 5- METALS

5.1 NOT USED
5.2 GALVANIZED METAL GRATE (75% FREE AREA)
5.4 METAL GUTTER WITH HEAT TRACE
5.5 METAL DOWNSPOUT WITH HEAT TRACE

DIVISION 5- METALS (CONT.)

5.6 METAL SNOWFENCE (RE: STRUCTURAL)
5.7 NOT USED
5.8 FALL PROTECTION FOR WINDOW WASHING EQUIPMENT AND MAINTENANCE (RE: STRUCT)
5.9 NOT USED.
5.10 ONE–WAY GATE AT STAIR CORES (MUST SWING IN TOWARD THE PATH OF EGRESS)
5.11 STEEL RAILING WITH MESH PANEL
5.12 PIPE BOLLARD
5.13 42" HIGH STEEL GUARDRAIL
5.14 SCUPPER
5.15 METAL LADDER TO ROOF HATCH
5.16 DECORATIVE LOUVER
5.17 RESILENT CHANNELS

DIVISION 6 - WOODS & PLASTICS

6.1 ADD FIRE–TREATED PLYWOOD TO WALLS TO MOUNT EQUIPMENT (4'x8' SHEETS, FULL WALL HEIGHT AND WIDTH U.N.O.).
6.2 BLOCKING FOR OWNER PROVIDED SHELVING UNITS.
6.3 NOT USED

DIVISION 7- THERMAL AND MOISTURE PROTECTION

7.1 CONCRETE SLAB ON GRADE
7.2 SLIP AND WATER RESISTANT PEDESTRIAN DECK COATING: ADD ADDITIONAL LAYER OVER OCCUPIED SPACE.
7.3 SLIP AND WATER RESISTANT PEDESTRIAN DECK COATING (MINIMUM 3 COAT SYSTEM)
7.4 WATERPROOF MEMBRANE WITH PROTECTION / DRAINAGE MAT (RE: SPEC)
7.5 VAPOR BARRIER UNDER SLAB AT ALL LIVABLE AREAS U.N.O.
7.6 DOUBLE SLAB SYSTEM WITH WATERPROOF MEMBRANE AND PROTECTION BOARD BETWEEN SLABS
7.7 MEMBRANE ROOFING ON TAPERED INSULATION– SLOPE TO DRAIN
7.8 BYLIN PANEL
7.9 NOT USED
7.10 SNOW MELT, RE: LANDSCAPE AND MECHANICAL FOR EXTENT

DIVISION 8 - DOORS & WINDOWS

8.1 45 MINUTE – GLAZING
8.2 METAL GARAGE DOOR (RE: SPEC) PAINT – COLOR BY ARCHITECT

DIVISION 10 - SPECIALTY

10.1 WATERHOG WALK–OFF MAT
10.2 PEDIGRID FLOORING SYSTEM, RE: 31/A10.2.4

DIVISION 11 - EQUIPMENT

11.1 TRASH CHUTE (RE: SPEC)
11.2 WINDOW WASHING EQUIPMENT (RE: SPEC)
11.3 NOT USED
11.4 SKI LOCKERS–PROVIDE 2 ACCESSIBLE MIN.
11.5 CARD KEY READER AT GARAGE ENTRY
11.6 HOUSE PHONE – CALL FOR ENTRY SYSTEM

DIVISION 13 - SPECIAL CONSTRUCTION

13.1 WIRE SHELVING

DIVISION 15 -MECHANICAL

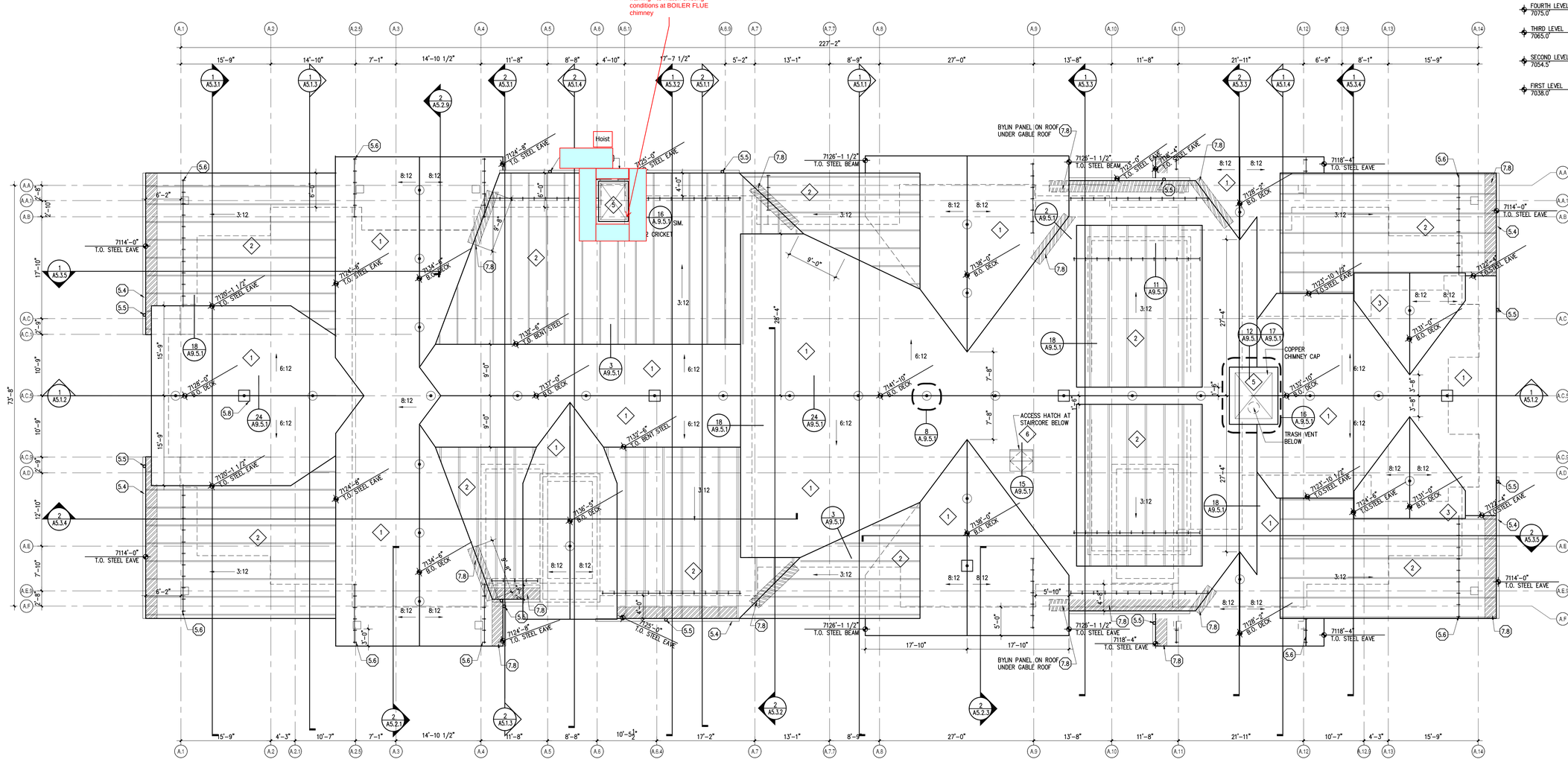
15.1 STANDPIPE (RE: PLUMBING)
15.2 MOP SINK
15.3 STORM GRADE MECHANICAL LOUVER (RE: MECH)
15.4 DECK DRAINS (RE: PLUMBING)
15.5 FLOOR DRAINS (RE: PLUMBING)
15.6 ROOF DRAINS (RE: PLUMBING)
15.7 NOT USED
15.8 TRENCH DRAIN RE: CIVIL

DIVISION 16 -ELECTRICAL

16.1 EXTERIOR LIGHT FIXTURE RE: ELEC.
16.2 HEAT TRACE
16.3 OUTLET FOR WINDOW WASHING EQUIPMENT

RCRBD RECORD SET

Remove and replace exterior stone and drywall framing - to match existing conditions at BOILER FLUE chimney



1 BUILDING 'A' ROOF PLAN
SCALE: 1/8" = 1'-0"

BUILDING A - 7038'

ATTIC LEVEL	7125.0'	10'-6"
EIGHTH LEVEL	7115.0'	10'-0"
SEVENTH LEVEL	7105.0'	10'-0"
SIXTH LEVEL	7095.0'	10'-0"
FIFTH LEVEL	7085.0'	10'-0"
FOURTH LEVEL	7075.0'	10'-0"
THIRD LEVEL	7065.0'	10'-6"
SECOND LEVEL	7054.5'	10'-6"
FIRST LEVEL	7038.0'	16'-6"

OZ ARCHITECTURE
3012 Huron Street
Suite 100
Denver, Colorado 80202
phone 303.861.5704

EDGEMONT - BLDG. A
STEAMBOAT SPRINGS, CO

Atira

PROJ. NO. 56055.00
DRAWN: OZ
CHECKED: OZ
CADD FILE: .dwg
DATE: 07 JULY, 2008
BLDG PERMIT SET
REVISIONS:

SHEET TITLE:
ROOF PLAN

SCALE: As Noted
SHEET NUMBER:
A2.10

SHAFTLINER

AMERICAN GYPSUM Made in the USA

AMERICAN GYPSUM Panel regular para interiores

Submittal 09 29 00

American Gypsum
3811 Turtle Creek Blvd., #1200
Dallas, TX 75219
214-530-5500
www.americangypsum.com

Technical Information
1-800-545-6302 ext. 5607

1” Shaft Liner

RCRBD RECORD SET

GYPSUM WALLBOARD

DESCRIPTION

Shaft Liner panels consist of a fire-resistant type X gypsum core that is encased in a moisture resistant, 100 percent recycled green face and back paper. The face paper is folded around the long edges to reinforce and protect the core. The panels feature a double beveled edge for ease of installation, with the ends being square-cut and finished smooth. Shaft Liner panels are available: 1" thick x 2' wide, and in a variety of lengths.

Products manufactured by American Gypsum contain no asbestos.

GREENGUARD CERTIFIED

Shaft Liner gypsum wallboard has attained the GREENGUARD Indoor Air Quality Certified® and the GREENGUARD Children & Schools Indoor Air Quality Certified℠ status.

The GREENGUARD INDOOR AIR QUALITY CERTIFIED Mark is a registered certification mark used license through the GREEN GUARD Environmental Institute.

BASIC USES

Shaft Liner panels are used in conjunction with other American Gypsum products and metal framing members for Shaftwall and Area Separation Wall systems. Lightweight non-load bearing gypsum Shaftwall systems have replaced traditional masonry for interior vertical enclosures including stairwells, elevator enclosures and mechanical chases.

American Gypsum’s Shaft Liner has been approved for use in the following assemblies:

U 375	2 Hour H-Stud Area Separation Wall System
V 455	1 & 2 Hour Shaftwall Systems using I, C-H and C-T Studs
U 428	2 Hour Shaftwall System using C-H and C-T Studs
U 429	2 Hour Area Separation Wall System using C-H and C-T Studs
V 433	2 Hour Shaftwall System using I-Studs

LIMITATIONS

Exposure to excessive or continuous moisture and extreme temperatures should be avoided during delivery, storage, handling and installation. Eliminate sources of moisture immediately.

Used in non-load bearing systems.

Not to be used in an unlined air supply duct.

Limiting heights and deflection criteria for the system should be based upon the metal stud manufacturer’s recommendations.

Panels should not come in direct contact with concrete, masonry or other surfaces that have high moisture content.

Provide flexible sealant/caulk at partition perimeters and penetrations to avoid air leakage/whistling and dust collection.

Framing must be spaced no more then 24” o/c.

Not to be used in areas with direct exposure to water or continuous high humidity, e.g., saunas, steam rooms, gang showers or indoor swimming pools.

Avoid exposure to temperatures exceeding 125°F (52°C) for extended periods of time, e.g., located adjacent to wood burning stoves and or heating appliances.

STORAGE AND HANDLING

Gypsum board does not generate or support the growth of mold when it is properly transported, stored, handled, installed, and maintained. However, mold spores are present everywhere and when conditions are favorable; mold can grow on practically any surface. GYPSUM BOARD MUST BE KEPT DRY to prevent the growth of mold.

Gypsum board must be stored in an area that protects it from adverse weather conditions, condensation, and other forms of moisture. Job site conditions that can expose gypsum board to water or moisture must be avoided.

Gypsum board must be protected during transit with a weather-tight cover in good condition. Plastic shipping bags are intended to provide protection during transit only and must be promptly removed upon arrival of the load. Failure to remove the shipping bag can increase the likelihood of developing conditions favorable to the growth of mold.

Gypsum board that has visible mold growth must not be used. For additional information, refer to Gypsum Association publication, “Guidelines for the Prevention of Mold Growth on Gypsum Wallboard” (GA-238), which can be found at www.americangypsum.com under “Technical Data” - click on Gypsum Association Literature.

Gypsum board must be stored off the ground and under protective cover. Sufficient risers must be used to assure support for the entire length of the wallboard to prevent sagging.

Gypsum board must be delivered to the job site as near to the time it will be used as possible. Individuals delivering gypsum board to jobsites should ensure that it is carried, not dragged, to place of storage/installation to prevent damage to finished edges.

Gypsum board shall always be stacked flat - NEVER on edge or end. Gypsum board stacked on edge or end is unstable and presents a serious hazard should it accidentally topple. Gypsum board should be placed so weight is evenly distributed and the floor is not overloaded.

SHAFTLINER

Made in the USA

Panel regular para interiores

GOOD BUILDING PRACTICES

Installation – Installation of 1" Shaft Liner panels shall be consistent with specified application details for Shaftwall or Area Separation Wall systems. The assembly must be erected in the proper manner and with all approved components used in a successfully completed fire endurance test. The contractor, design professional and or owner shall ensure that only the components that were a part of the approved test are used; do not substitute components.

Handling and application shall be consistent with methods described in the noted standards and references indicated below.

APPLICABLE STANDARDS

Manufacturing	ASTM C 1396 Federal Specification – SS-L-30D Type IV Grade X
Installation	ASTM C 840 Gypsum Association GA-216 Gypsum Association GA-620
Surface Burning Characteristics	ASTM E 84 Flame Spread 0 Smoke Developed 0

FIRE RESISTANCE RATINGS

Desired fire rated assemblies are specified from tests performed by independent laboratories. These designs are made up of specific materials in a precise configuration. When choosing construction designs to meet certain fire resistance requirements, vigilance must be taken to insure that each component of the selected assembly is the one specified in the test and are assembled in accordance with the requirements of the assembly.

PRODUCT DATA

SIZES				
Thickness	**Widths**	**Lengths**	**Edge Type**	**UL Types**
1" (25.4mm)	2' (610mm)	8' - 12' (2438mm - 3658mm)	Double Beveled	AG-S

Special lengths or edges may be available on special order. Consult your American Gypsum sales representative for details.

Thermal Resistance "R" Value 1" = 0.73

SUBMITTAL APPROVALS

Job Name:

Contractor: **Date:**

RCRBD
RECORD
SET

Georgia-Pacific

DensGlass® Sheathing

RCRBD RECORD SET

Technical Service Hotline 1.800.225.6119 or
www.gpgypsum.com

Manufacturer

Georgia-Pacific Gypsum LLC
133 Peachtree Street
Atlanta, GA 30303

Georgia-Pacific Canada LP
6711 Mississauga Road,
Mississauga, ON LSN 2W3

Technical Service Hotline: 1-800-225-6119

Description

DensGlass® Sheathing is a gypsum panel made of a treated, water-resistant core, surfaced with fiberglass mats and a GOLD colored primer coating. Providing superb protection from the elements, DensGlass Sheathing is resistant to decay, delamination and deterioration due to weather exposure—even during construction delays that last as long as twelve months after installation and are backed by a 12-month limited warranty against normal weather exposure.* DensGlass Sheathing panels are also mold-resistant, scoring a 10, the highest score, when tested, as manufactured, per ASTM D 3273.

DensGlass Sheathing exhibits a dimensional stability that assures resistance to warping, rippling, buckling and sagging for a flat and even substrate and is noncombustible as defined and tested in accordance with ASTM E 136. Since DensGlass Sheathing is strong in both directions, it may be installed either parallel or perpendicular to wall framing members (always follow specific assembly installation instructions).

Primary Uses

Because of the superior performance of DensGlass Sheathing, it is specified for exterior walls, ceilings and soffits in a wide variety of applications. These include exterior insulation and finish systems (EIFS); cavity brick or stone veneer applications; cladding such as wood siding, vinyl siding, composition siding, wood shingles, shakes, conventional stucco systems, plywood siding panels; and interior finish systems that require a substrate panel with superior fire and moisture resistance.

For EIFS applications, DensGlass Sheathing is an ideal substrate for adhesive or mechanical application of expanded polystyrene (EPS) or extruded polystyrene insulation, and is recommended in all climate zones.

Consult with the local building code, design professional, owner or cladding manufacturer for weather resistive barrier requirements. Manufacturers of weather resistive barriers, which include flexible membranes, self-adhered membrane and liquid applied, have found DensGlass Sheathing to be a suitable substrate for their systems.

DensGlass Sheathing is an ideal product for exterior ceilings and soffits for both cold and warm climate zones. It resists sagging, even under exceptionally humid conditions. Panels are applied directly to structural framing. Surface and joints may be finished and painted, or surfaced with an exterior finish system.

Limitations

DensGlass Sheathing is resistant to normal weather conditions, but it is not intended for immersion in water. Cascading roof/floor water should be directed away from the sheathing until appropriate drainage is installed.

Avoid any condition that will create moisture in the air and condensation on the exterior walls during periods when the exterior temperature is lower than the interior. The use of forced air heaters creates volumes of water vapor which, when not properly vented, can condense on building materials. The use of these heaters and any resulting damage is not the responsibility of Georgia-Pacific Gypsum. Consult heater manufacturer for proper use and ventilation. Vapor barrier may also restrict ventilation.

When DensGlass Sheathing panels are used in slanted wall applications, that portion of the wall must be temporarily protected from the elements by the use of a water-resistant barrier prior to application of the cladding. Do not allow water to pond or settle on sheathing. Also, exposed wall ends such as those that may be found in parapets must be covered to prevent water from infiltrating the cavity.

Georgia-Pacific Gypsum does not warrant and is not responsible or liable for the performance of the cladding or exterior systems applied over DensGlass Sheathing. The suitability and compatibility of any system is the responsibility of the system manufacturer or design authority.

Do not laminate DensGlass Sheathing to masonry surfaces; use furring strips or framing.

DensGlass Sheathing is not intended for roof applications. For roof applications, consult our DensDeck® Roof Board brochure.

DensGlass Sheathing is not intended for interior or exterior tile applications. For interior tile applications, consult our DensShield® Tile Backer brochure.

DensGlass Sheathing should not be used in lieu of plywood where required.

Do not apply DensGlass Sheathing below grade.

For all installations, design details such as fasteners, sealants and control joints per system specifications must be properly installed. Openings and penetrations must be properly flashed and sealed. Failure to do so will void the warranty.

Do not use DensGlass Sheathing as a base for nailing or mechanical fastening. Fasteners should be flush to the face of the board, not countersunk.

Technical Data

DensGlass Sheathing is noncombustible as described and tested in accordance with ASTM E 136.

DensGlass Sheathing exceeds ASTM C 1396 sheathing standards for humidified deflection by a factor of 10 in tests over the standard for regular gypsum sheathing.

5/8" (15.9 mm) DensGlass® Fireguard® Sheathing is UL classified, Type DGG in the following UL assemblies: Design Nos. G501, G520, G531, L501, L508, L532, L556, L591, N501, N502, N505, N602, P225, P227, P230, P235, P254, P259, P266, P302, P516, P517, P701, P710, P711, P713, P714, P717, P718, P719, P720, P722, P725, P728, P729, P730, P731, P732, P733, P734, P735, P738, P739, P740, P741, P742, P801, P811, P815, P819, P824, P825, P826, P827, P828, S728, S736, U017, U032, U040, U204, U207, U301, U302, U305, U309, U326, U329, U330, U332, U337, U338, U339, U341, U342, U351, U354, U355, U356, U357, U358, U360, U364, U369, U379, U396, U411, U418, U420, U425, U434, U436, U439, U442, U449, U450, U460, U465, U467, U473, U475, U487, U494, U495, U502, U504, U505, U506, U510, U512, U531, U603, U617, U623, U626, U633, U640, U646, U647, U648, U649, U651, U652, U926, V415 , V417, V419, V420, V421, V430, V432, V434, V435, V450, V473, V486, V487, V490, X508, X516, X517, X525, X526, X527, X528, X535, X602, X604 and ULC classified, Type DGG in ULC designs EW10, EW17, U301, U302, W301, W404, W415, W442 and W465.

When tested, as manufactured, DensGlass Sheathing conforms to ASTM C 1177.

* For complete warranty details, visit www.gpgypsum.com.

continued

Submittal Approvals

Job Name _____

Contractor _____

Date _____

Stamps/Signatures

Georgia-Pacific

DensGlass® Sheathing

Technical Service Hotline 1.800.225.6119 or
www.gpgypsum.com

RCRBD
RECORD
SET

Product Data

Thicknesses: 1/2″ (12.7 mm); 5/8″ (15.9 mm) is Type X
Width: 4′ (1220 mm) standard, tolerance up to ± 1/8″ (3.2 mm)
Lengths: 8′ (2438 mm), 9′ (2743 mm) or 10′ (3048 mm) standard, tolerance ± 1/4″ (6 mm) Other lengths available upon request
Edges: Square

Physical Properties

Properties	1/2″ DensGlass® Sheathing	5/8″ DensGlass® Fireguard® Sheathing
Thickness, Nominal	1/2″ (12.7 mm)	5/8″ (15.9 mm)
Width, Nominal	4′ (1219 mm) ± 1/8″ (3 mm)	4′ (1219 mm) ± 1/8″ (3 mm)
Length, Standard	8′ (2440 mm), 9′ (2743 mm), 10′ (3048 mm), ± 1/4″ (6 mm)	8′ (2440 mm), 9′ (2743 mm), 10′ (3048 mm), ± 1/4″ (6 mm)
Weight/lbs./sq. ft. (kg/m^2)	1.9 (9)	2.5 (12)
Surfacing	Fiberglass mat	Fiberglass mat
Racking Strength, lbs./ft. (dry) (N/m) (Ultimate—not design value)	>540 (>7878)	>654 (>9544)
Flexural Strength[3], parallel, lbf. (N) (4′ weak direction)	80 (356)	100 (445)
Humidified Deflection[3]	1/8″ (3 mm)	2/8″ (6 mm)
Permeance (perms)[1] [ng/Pa•s•m^2]	23 (1300)	17 (970)
R value[2] °F•ft^2•hr/BTU (K•m^2/W)	.56 (0.099)	.67 (0.118)
Linear Expansion with Change in Moisture in/in/%RH (mm/mm %RH)	6.25 x 10^{-6}	6.25 x 10^{-6}
Bending Radius[4]	6′ (1829 mm)	8′ (2438 mm)
Compressive Strength	min. 500 psi (3445 kPa)	min. 500 psi (3445 kPa)

Values are based on tests conducted in accordance with ASTM C 473 and ASTM E 72 where applicable.
[1] Tested in accordance with ASTM E 96 (dry cup method).
[2] Tested in accordance with ASTM C 518 (heat flow meter).
[3] Minimum requirements for ASTM C 1177 standard specification.
[4] Double fasteners on ends as needed.

Georgia-Pacific Gypsum

U.S.A.– Georgia-Pacific Gypsum LLC
Canada – Georgia-Pacific Canada LP

SALES INFORMATION AND ORDER PLACEMENT

U.S.A. Midwest: **1-800-876-4746** West: **1-800-824-7503**
South: **1-800-327-2344** Northeast: **1-800-947-4497**

CANADA Canada Toll Free: **1-800-387-6823**
Quebec Toll Free: **1-800-361-0486**

TECHNICAL INFORMATION

U.S.A. and Canada: **1-800-225-6119**
www.gpgypsum.com

TRADEMARKS Unless otherwise noted, all trademarks are owned by or licensed to Georgia-Pacific Gypsum LLC.

WARRANTIES, REMEDIES AND TERMS OF SALE For current warranty information for this product, please go to www.gpgypsum.com and select the product for warranty information. All sales of this product by Georgia-Pacific are subject to our Terms of Sale available at www.gpgypsum.com.

UPDATES AND CURRENT INFORMATION The information in this document may change without notice. Visit our website at www.gpgypsum.com for updates and current information.

CAUTION For product fire, safety and use information, go to www.gp.com/safetyinfo or call 1-800-225-6119.

HANDLING AND USE–CAUTION This product contains fiberglass facings which may cause skin irritation. Dust and fibers produced during the handling and installation of the product may cause skin, eye and respiratory tract irritation. Avoid breathing dust and minimize contact with skin and eyes. Wear long sleeve shirts, long pants and eye protection. Always maintain adequate ventilation. Use a dust mask or NIOSH/MSHA approved respirator as appropriate in dusty or poorly ventilated areas.

FIRE SAFETY CAUTION Passing a fire test in a controlled laboratory setting and/or certifying or labeling a product as having a one-hour, two-hour, or any other fire resistance or protection rating and, therefore, as acceptable for use in certain fire rated assemblies/systems, does not mean that either a particular assembly/system incorporating the product, or any given piece of the product itself, will necessarily provide one-hour fire resistance, two-hour fire resistance, or any other specified fire resistance or protection in an actual fire. In the event of an actual fire, you should immediately take any and all actions necessary for your safety and the safety of others without regard for any fire rating of any product or assembly/system.

NEI CONSTRUCTION
NATIONAL FEDERAL CONTRACTING

PO Box 1238
Clark, Co 80428
Phone (970) 986-2274

ATTACHMENT B

RCRBD
RECORD
SET

Scope in summary:

A. Scaffolding from grade to chimney then around chimney
    a. The Chimney is located in about the most complicated part of the roof to access without significant risk to roofing damage – so our approach is to scaffold to the work accessing from the North side of the building immediately adjacent to the chimney. See figure 1, scaffold would pass by the two roofing outlooks and tie into scaffold surrounding the chimney. Temporary protection will be installed at the current roofing surface prior to the setting of scaffold at the roof level. We intend to use a material lift on the scaffolding to take down demolished materials and take up new materials to do the work. Once the scaffold is erected, and signed off by the scaffolding company – it will be turned over to the trades for their inspection and safety signoff – for their use.
B. Raise and support existing shroud from scaffolding and remove the skins from the shroud frame
    a. Loosen the shroud from its supports, remove the skins from the exterior, and support the remaining frame off the scaffolding with 4x4 lumber, or removed to be secured and stored on the roof below. This will keep the boiler flue and generator exhaust fully functional though out the repair process. (we are still reviewing the opportunity to remove the shroud frame altogether and send to a shop for reskinning – then returned to site for installation)
C. Demolish Stone from chimney
    a. The stone, mortar, lath and tar paper will be removed from the existing framing. The stone will be removed to the ground for removal of mortar and judgment for re-use.
D. Demolish framing and sheetrock from structural steel around chimney
    a. The extent of the damage to the light gauge framing and shaft wall is unknown, complete removal and re-framing is being considered as part of this proposal.
E. Remove and replace upper section of boiler flue
    a. It is anticipated that the boiler flue assembly at the location of the fire has been damaged and would require replacement. This proposal reflects replacing the top 8 feet of flue assembly and flue cap. Further investigation will be made once the flue is accessible.
F. Remove and replace damages sections of fire wrap at generator exhaust.
    a. It is apparent that a portion of the emergency generator exhaust pipe fire insulation has been damaged and is in need of repair – this proposal reflects 4' of repair.
G. Reframe shaft wall, inspections, frame new chimney cap, and install dens-glass
    a. Once work in the shaft is complete, new framing will be installed – inspected as required by Routt County, then closed up with Dens-glass sheathing. It is our recommendation that the top of the shaft be framed closed with light gauge metal framing, cement board and flashing to create a non-combustible cap to the shaft.
H. Install new stone
    a. Where possible, the existing stone that has been cleaned of mortar will be used on the North and East faces of the chimney in order to attempt to re-install the chimney stone to a condition as close as possible to the original installation. All other stone will be installed from material sourced from the original pit in Montana.
I. Re-skin the shroud, apply new horizontal metal at chimney cap and set shroud in place.
    a. The horizontal and vertical metal membranes of the shroud suffered fire damage and as such should be replaced. These membranes will be re-installed on the frame while located at the top of the chimney – avoiding the use of a crane or other hoisting means.
J. Clean stone and punch list
    a. An internal punch list will be done by the trades and NEI Construction – addressed as might be needed then a formal punch list requested of Edgemont prior to turnover.
K. Remove scaffolding and cleanup

PO Box 1238
Clark, Co 80428
Phone (970) 986-2274

ATTACHMENT B

a. The area immediately adjacent to the work and at the base of the scaffolding will be cleaned up and repaired as necessary as a result of the above operations. Having not been able to assess the existing conditions, a $1,000 allowance has been included to repair landscaping as necessary. If no damage is inflicted this amount will be returned. If more landscape is required to be repaired than $1,000 will cover, a change order will be requested.

Minor Logistics –

Elevator – While we have attempted to plan this work at this time to limit the use of the inside elevator for material and equipment, we will need it to move the workforce to the roof and back. We have not included a stair at the exterior scaffolding. Will need to develop an access protocol for workforce while in the building.

Water – Water is anticipated to be needed at the base of the scaffold set and will be taken from exterior hose bibs available

Electricity – Electricity will be needed both at the chimney and at the base of the scaffold. Extension cords will be used from the roof access hatch to the chimney, but will need to route electricity from the main electrical room to the base of the scaffold as we will need 220v power for the lift. (As planning continues, we may find a way to pull this power from a unit closer to the work).

Dumpster – A dumpster will need to be set at the parking area to the south of the building for trash and demolition material disposal. We will make an effort to gain access up the ski edge with a flatbed for this purpose, but am not counting on Steamboat approval at this time.

Storage – a couple of parking spaces will need to be made available for short term storage of material and equipment.

Parking – Presumes we can use the exterior parking lot or the inside parking structure at Edgemont.

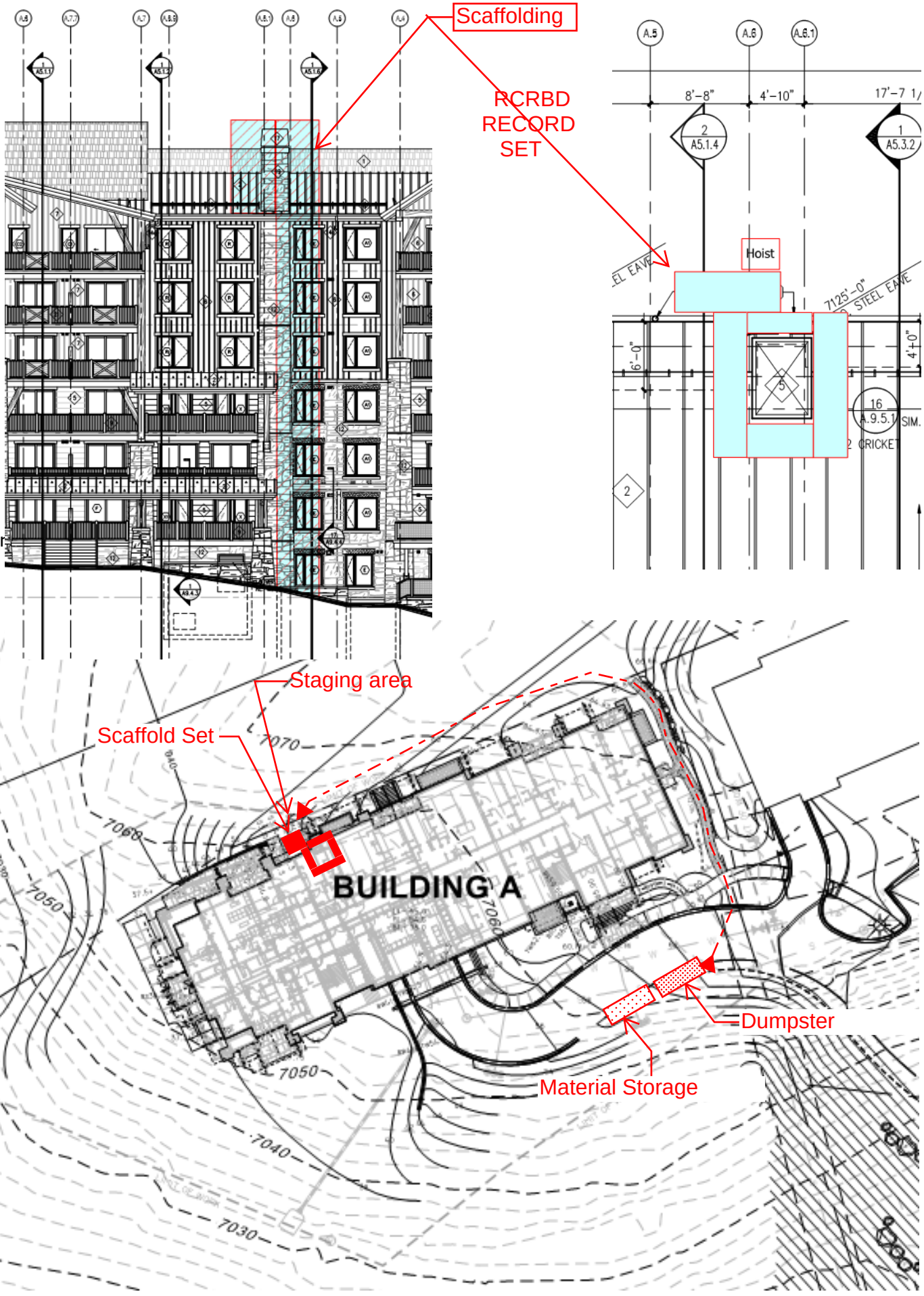
Restrooms – Presumes the use of on-site facilities, no temporary bathroom facilities are included

EXCLUSIONS:

1. Work not specifically outlined above
2. Builders Risk insurance – recommend that Edgemont Condominium Association procure this insurance. Deductible is by Owner.
3. Design work for any of the work or as may be required for permit submission.

ALLOWANCES: Allowances are applied to those scope items that cannot be accurately forecasted based on lack of access or knowledge (costs in excess of the below will be reimbursed by the Owner, remaining amounts in any allowance will be returned to Owner pending final reconciliation)

1. Boiler Flue replacement at top of shaft - $19,868.00
2. Fire Wrap at Emergency Generator Exhaust - $1,500.00
3. Additional drywall patching - $1,000.00
4. General Conditions - $9,133.32
5. Contingency - $5,479.99


Scaffolding
RCRBD
RECORD
SET
Hoist
Staging area
Scaffold Set
BUILDING A
Dumpster
Material Storage

Figur

RCRBD
RECORD
SET

Remove and replace exterior stone and drywall framing - to match existing conditions at BOILER FLUE chimney