



DESIGN 2 FUNCTION, LLC

P. O. Box 93368, Albuquerque, N.M. 87199-3368

Info@design2functionllc.com * (505) 823-6481

DATE: 11/8/23

TO: Routt County Regional Building Department
Routt County Courthouse Annex
136 6th St. Suite 201
Steamboat Springs, CO

RE: SPRNR231281-BD1 – Holiday Inn Express Hotel

Below are the permit review comments and our responses. Please note the Owner has added a toilet/bathing room to the commercial laundry room for employees and converted the previous staff toilet room into a private bathroom.

Building Code Comments:

1. Details of accessible routes to include location of sign with international symbol of accessibility and “van accessible” parking as applicable, curb ramps installed outside level access aisle, and all sidewalks bordering the hotel shall be referenced on Sheet C11. Slopes away from and sidewalks out of the building entrances require slopes not less than one unit vertical in 20 units horizontal (5-percent slope). Other accessible routes with similar slopes less than one unit vertical in 20 units horizontal (5-percent slope) do not require ramps and the slope measured perpendicular to the direction of travel of a route shall not be steeper than one unit vertical in 48 units horizontal (2-percent slope). Please show accessible routes with slopes and elevations on the plans. *(D2F Response): Drawing C11 has been updated as requested.*
2. For those accessible sidewalks and pavement areas that appear heated on Sheet C11, provide location and details of snowmelt boiler with size, efficiency and controls per IECC C403.12.2 as applicable. *(D2F Response): New plumbing drawing P5.2 added to set indicating the requested information.*
3. The Porte Cochere along with all structural steel used in a Type VA building requires intumescent coating. Provide notes on the plans such that this is not missed, provide manufacturer's specifications for application of primer, with tables indicating average applied thickness of coating(s) to be applied in accordance with instructions and coating thickness based on the size of steel structure elements. If secondary casing is applied to the surface of steel elements, it should not prevent the expansion of intumescent coating during fire. Special inspection shall include all three items above and submit final report prior to scheduling final inspection. *(D2F Response): The porte cochere is a canopy per IBC 3105 and as such need not meet the fire rating requirements listed in chapter 6 for Type VA building. I have attached a code opinion from ICC regarding this item. No changes have been made to the drawings.*
4. The mechanical canopies shown with on Sheet S1.1 are required to be designed with timbers of dimensions in accordance with IBC Table 2304.11 (requires C1 columns to be revised to minimum column dimensions utilizing timber, otherwise submit code modification for review under IBC Section 104.10. *(D2F Response): The mechanical canopies are projections per IBC 705.2. Per IBC 705.2.3 “combustible projections,” the combustible projections must be constructed of 1-hour rated construction, heavy timber or FRTW wood. There is no restriction on non-combustible construction. I have attached a code opinion response from ICC regarding the mixing of combustible and non-combustible elements. The use of steel columns with heavy timber roof elements meets the intent of section 705.2.*
5. All rated gypsum assembly details on Sheet A0.2 utilizing proprietary Type(s) of Gypsum Board and may not be modified. For example Wall F, F1 utilizing GA FILE NO. WP 7053 FOR 2 HR RATING utilizes PROPRIETARY GYPSUM BOARD United States Gypsum Company - 3/4" SHEETROCK® Brand ULTRACODE® Core Gypsum Panels - 1" SHEETROCK® Brand Gypsum Liner Panels. A substitution for using generic other gypsum board requires justification as many of the UL listed

assemblies are "Proprietary," meaning that very specific brand name products must be used in the construction of the assemblies. Use of these assemblies with substitute materials raises the question of whether the alternates exhibitor exceed the properties of the listed product. Substitutions shall be submitted the Architect and approved prior to submittal to the Building Official for review and approval. (D2F Response): *Acknowledged.*

6. All rated gypsum assembly details on Sheet A0.2 utilizing proprietary Type(s) of Gypsum Board and may not be modified. For example Wall F, F1 utilizing GA FILE NO. WP 7053 FOR 2 HR RATING utilizes PROPRIETARY GYPSUM BOARD United States Gypsum Company - 3/4" SHEETROCK® Brand ULTRACODE®Core Gypsum Panels - 1" SHEETROCK® Brand Gypsum Liner Panels. A substitution for using generic other gypsum board requires justification as many of the UL listed assemblies are "Proprietary," meaning that very specific brand name products must be used in the construction of the assemblies. Use of these assemblies with substitute materials raises the question of whether the alternates exhibitor exceed the properties of the listed product. Substitutions shall be submitted the Architect and approved prior to submittal to the Building Official for review and approval. (D2F Response): *Acknowledged.*
7. Mineral fiber or glass fiber shall not be arbitrarily added to floor-ceiling or roof-ceiling systems to increase R-values. This practice has been shown to reduce the fire-resistance rating. The addition of up to 16 3/4 inches of 0.5 pcf glass fiber insulation (R-40), either batt or loose-fill, to any 1- or 2-hour fire resistance rated floor-ceiling or roof-ceiling system having a cavity deep enough to accept the insulation is permitted provided that one additional layer of either 1/2 inch or 5/8 inch type X gypsum board is applied to the ceiling. The additional layer of gypsum board shall be applied as described for the face layer of the tested system except that the fastener length shall be increased by not less than the thickness of the additional layer of gypsum board. (D2F Response): *ANSI/UL 263 section III. Floor-Ceiling and Roof-Ceilings, sub-section 17. Blanket Insulation, allows for the addition of fiberglass insulation either loose-fill, faced or unfaced batts and blankets in 1-hour rated L500 series assemblies when an additional layer of gypsum board is added and does not list a maximum insulation thickness. Also, the UL L546 assembly has no limit to the insulation thickness when the resilient channels are spaced at 12" OC as shown in our detail. The UL P533 roof/ceiling assembly does not have a limit on the thickness of fiberglass batt insulation.*
8. Where resilient channels are included in systems, the resilient channels are shown by a dashed line to distinguish them from rigid furring channels. Modifications are not recommended for sound control may be reduced. Provide copies of fire-resistive assemblies to include testing of the desired STC rating between dwellings and public areas such as 2, 2A/A0.2 2x Joist Floor/Ceiling. (D2F Response): *The 2x joist floor/ceiling assembly is located in the public corridors only and does not separate the dwelling units from the public areas. No STC or IIC rating is required at the corridor floor/ceiling assembly. Sheet A0.2 has been updated to reflect this. STC/IIC information for guest room truss floor assembly has been attached to this response letter.*
9. Detail 12/A0.3 Duct Penetration shall be revised to reflect the General Notes on Sheet M2.0 referencing FD/FSD requirements in both floor/roof ceilings and walls. Fire Extinguisher Cabinets depicted in Section 4/A0.3 requires relocation from 2-HR Rated extensions of Stair Enclosures indicated on Sheet A0.1A as penetrations into enclosures for exit access stairways and ramps, interior exit stairways and ramps, and exit passageways shall be allowed only where permitted by Sections 1023.5 and 1024.6, respectively. (D2F Response): *Detail 12/A0.3 is for duct penetrations without fire dampers that require protection. Detail title updated. General notes on M2.0 have been corrected/modified to clarify requirements. Fire Extinguisher cabinets have been relocated and/or changed to surface mounted cabinets.*
10. While the Architectural and Structural Building Plans include a full structural design of all vertical and lateral loads including a roof structure that meets our local Ground Snow Load values, the Structural

Schedules for Roof Truss Profile 1/S0.4 Load Combinations notes the Live Load incorrectly. *(D2F Response): Truss profile loading corrected on sheet S0.4.*

11. The roof members also appear to have been designed with a duration factor of 1.15. Tabulated design values shall be multiplied by all appropriate adjustment factors to determine allowable design values. The applicability of adjustment factors in accordance with the method prescribed establishes the allowable load for normal duration, as defined by the American Forest & Paper Association (AF&PA) National Design Specification (NDS) for Wood Construction. For our area use a duration factor of 1.0 (not reduced). Please resubmit structural plans displaying the correct Risk Category with duration factor of 1.0. *(D2F Response): The roof members have been designed utilizing NDS Table 2.3.2 Frequently Used Load Duration Factors, "Cd" of 1.15 for snow loading. We can find no documentation on the Routt County Regional Building Department website nor in the (Routt County or Steamboat Springs) 2018 ICC Building Code Adoption & Policies pdf's that modifies the duration factors as requested in the review comment. Therefore, we have left the building design and calculations as submitted as they meet the requirements in the adopted 2018 IBC including published amendments.*
12. Porte Cochere along with all structural construction of buildings and structures shall result in a system that provides a complete load path capable of transferring all loads from their point of origin through the load-resisting elements to the foundation. Plans, calculations and details shall identify a load path distribution of required lateral load resisting components with R-factor matching method used for moment resisting frame requirements on the approved plans as applicable. Submit complete calculations for Porte Cochere and storage building as the roof joists appear overstressed and include details of empirically designed masonry requirements for exception to special inspection. *(D2F Response): Additional information regarding the Porte Cochere load path and seismic calculations have been added to the structural calculations.*
13. Submit geotechnical report referenced in General Notes on Sheet S0.1 to RCRBD for review or submit design of permanent supports of building as reported in NWCC soils report number 22-12552. *Reviewer (D2F Response): Geotechnical report reference corrected to match the NWCC soils report submitted with the permit application.*

This completes our responses to the review comments. Please let us know if you have questions or need any further information.

Design 2 Function, LLC



Nick A. Pirkel
Principal

Attachments: HIESCO-MEP Narrative, HIESCO-projection-ICC-response-10-20-23, HIESCO-Porte-Cochere-ICC-response-10-30-23, TDS_Maxxon_Acousti-Mat+3-8

Date Oct. 19th, 2023

Project: Holiday Inn Express, Steamboat Springs, CO – City comments

Mechanical revised sheet list:

- 1) M1.0 - Mechanical General Specifications And Symbols
- 2) M2.0 - Mechanical First Floor Plan
- 3) M2.1 - Mechanical Second Floor Plan
- 4) M2.2 - Mechanical Third Floor Plan
- 5) M2.3 - Mechanical Fourth Floor Plan
- 6) M4.0 - Mechanical Typical Guestroom Plan
- 7) M4.1 - Mechanical Typical Guestroom Plan

Electrical revised sheet list:

- 1) E2.0 - Lighting First Floor Plan
- 2) E2.1 - Lighting Second Floor Plan
- 3) E2.2 - Lighting Third Floor Plan
- 4) E2.3 - Lighting Fourth Floor Plan
- 5) E3.0 - Power First Floor Plan
- 6) E3.1 - Power Second Floor Plan
- 7) E3.2 - Power Third Floor Plan
- 8) E3.3 - Power Fourth Floor Plan
- 9) E3.4 - Power Roof Plan
- 10) E4.0 - Electrical Typical Guestroom Plan
- 11) E4.1 - Electrical Typical Guestroom Plan

Fire Alarm revised sheet list:

- 1) FA2.0 - Fire Alarm First Floor Plan
- 2) FA2.1 - Fire Alarm Second Floor Plan
- 3) FA2.2 - Fire Alarm Third Floor Plan
- 4) FA2.3 - Fire Alarm Fourth Floor Plan
- 5) FA3.0 - Fire Alarm Typical Guestroom Plan
- 6) FA3.1 - Fire Alarm Typical Guestroom Plan

Plumbing revised sheet list:

- 1) P1.1 - Plumbing Schedule & Diagram
- 2) P2.0 - Sanitary Sewer First Floor Plan
- 3) P2.1 - Sanitary Sewer Second Floor Plan
- 4) P2.2 - Sanitary Sewer Third Floor Plan
- 5) P2.3 - Sanitary Sewer Fourth Floor Plan
- 6) P3.0 - Domestic Water First Floor Plan
- 7) P3.1 - Domestic Water Second Floor Plan
- 8) P3.2 - Domestic Water Third Floor Plan
- 9) P3.3 - Domestic Water Fourth Floor Plan
- 10) P4.1 - Plumbing Risers

- 11) P5.2 - Plumbing Details
- 12) P7.0 - Domestic Water Typical Guestroom Plan
- 13) P7.1 - Domestic Water Typical Guestroom Plan
- 14) P7.2 - Sanitary Sewer Typical Guestroom Plan
- 15) P7.3 - Sanitary Sewer Typical Guestroom Plan
- 16) P7.4 - Enlarged Mechanical/ Fire Room

Mechanical Narrative:

- 1) M1.0 sheet:
 - Update balance air calculation for fan EF-1 on toilet laundry (Updated Arch.)
- 2) M2.0 sheet:
 - Add fan EF-1 on toilet laundry (Updated Arch.)
- 3) M2.0 – M2.3 sheet:
 - Update general notes #3, 4, 13, 14 (City comment)
 - Update the new background (Updated Arch.)
- 4) M4.0 – M4.1 sheet:
 - Update the new background without changing (Updated Arch.)

Electrical Narrative:

- 1) E2.0 sheet:
 - Update lighting plan for the restrooms to match with new architectural plan.
- 2) E2.1~E2.3 sheets:
 - Update the new background without changing on the lighting floor plan.
- 3) E3.0 sheet:
 - Update power plan for the restrooms to match with new architectural plan.
- 4) E3.1~E3.4 sheets:
 - Update the new background without changing on the power floor plan.
- 5) E4.0-E4.1 sheets:
 - Update the new background without changing on the electrical typical guestroom plan.

Fire Alarm Narrative:

- 1) FA2.0 sheet:
 - Update fire alarm plan for the restrooms to match with new architectural plan.
- 2) FA2.1~FA2.3 sheets:
 - Update the new background without changing on the fire alarm floor plan.
- 3) FA3.0-FA3.1 sheets:
 - Update the new background without changing on the fire alarm typical guestroom plan.

Plumbing Narrative:

- 1) P1.1 sheet:
 - Update plumbing calculation to match with new back ground (Updated Arch.)
 - Update plumbing fixture schedule (Updated Arch.)
- 4) P2.0 sheet:
 - Update sanitary sewer plan for the restrooms to match with new back ground. (Updated Arch.)
- 5) P2.1-P2.3 sheet:
 - Update sanitary sewer plan to match with new back ground. (Updated Arch.)
- 6) P3.0 sheet:
 - Update domestic water plan for the restrooms to match with new back ground. (Updated Arch.)
 - Add cloud for the location of snowmelt boilers (City comment)
- 7) P3.1-P3.3 sheet:
 - Update domestic water plan to match with new back ground. (Updated Arch.)
- 8) P4.1 sheet:
 - Update sanitary waste flow schematic diagram #P10, P13 to match with new back ground. (Updated Arch.)
- 9) P5.2 sheet:
 - Add details of snowmelt boilers. (City comment)
- 6) P7.0-P7.3 sheet:
 - Update the new background without changing on the typical guestroom plan.
- 10) P7.4 sheet:
 - Add cloud for the location of snowmelt boilers (City comment)

Nick Pirkl - D2F

From: CHolland <jira@icc-ts.atlassian.net>
Sent: Friday, October 20, 2023 1:21 PM
To: nick@design2functionllc.com
Subject: ICCTO-1673 Projection constructed of non-combustible and combustible elements

Reply above this line.

CHolland has commented on your request:

October 20, 2023

Code Section: Section 705.2 in the 2018 International Building Code

Nicholas Pirkl,

This opinion is in response to your submitted ICC-online staff opinion request of October 13, 2023. You wish to know whether a projection extending up to 40" from the line used to determine the fire separation distance (FSD) can be constructed of both noncombustible steel columns and combustible heavy timber roof construction, including beams, roof joists and wood decking, in accordance with Section 2304.11.

When combustible projections are within 5 feet of the line used to determine the FSD, they must be constructed of 1-hour rated construction, fire-retardant-treated wood or heavy timber construction complying with Section 2304.11. Steel columns are permitted in accordance with Section 705.2.2. Since this projecting element is constructed of steel columns and heavy timber roof construction, including beams, roof joists and wood decking, it is permitted to extend within 40 inches from the line used to determine the FSD. Therefore, it can be constructed of both combustible and noncombustible elements.

Sincerely,

Chris Holland
Senior Technical Staff
Architectural & Engineering Services
International Code Council, Inc.
Central Regional Office
888-ICC-SAFE (422-7233), x4314
cholland@iccsafe.org
www.iccsafe.org

You may reply to this email to add comments to your request.

CHolland resolved this as Answered.

Copyright © 2023 International Code Council, Inc. All rights reserved.

Code opinions issued by ICC staff are based on ICC-published codes and do not include local, state or federal codes, policies or amendments. This opinion is based on the information which you have provided. We have made no independent effort to verify the accuracy of this information nor have we conducted a review beyond the scope of

your question. This opinion does not imply approval of an equivalency, specific product, specific design, or specific installation and cannot be published in any form implying such approval by the International Code Council. As this opinion is only advisory, the final decision is the responsibility of the designated authority charged with the administration and enforcement of this code..

How was our service for this request?


Very poor


Poor


Average


Good


Very good

This is shared with nick@design2functionllc.com.

Nick PirkI - D2F

From: Christopher Reeves <jira@icc-ts.atlassian.net>
Sent: Monday, October 30, 2023 11:00 AM
To: nick@design2functionllc.com
Subject: ICCTO-1662 Hotel structure and adjacent Porte Cochere

Reply above this line.

Christopher Reeves has commented on your request:

Nicholas PirkI,

This email is in response to your email correspondence regarding the construction of a porte cochere for a hotel. All comments are based on the 2018 International Building Code (IBC) unless noted otherwise.

As indicated in your correspondence, a 4-story hotel is constructed of Type VA construction. A detached noncombustible porte cochere of Type IIB construction is built adjacent to the hotel. Your question is whether the noncombustible porte cochere is permitted even though it does not have the additional fire-resistance ratings for certain building elements as required for buildings of Type VA construction in accordance with Table 601.

In general, these types of structures are regulated by Section 3105 or similar provisions. In our opinion, such structures, due to their location, should be of materials "consistent" with the type of construction of the main building. As such, the porte cochere could, in our opinion, be of combustible or noncombustible construction, and would not need to be further fire-resistance rated in accordance with Table 601 for Type VA construction.

With that being said, detached porte cocheres are typically not considered additional building area and are, therefore, not required to comply with Section 503.1.2 for two or more buildings on the same lot.

If you would like to discuss this further, I can be reached directly at (888) 422-7233, X4309.

Sincerely,

Chris Reeves

Christopher R. Reeves, P.E.
Director, Architectural & Engineering Services
International Code Council, Inc.
Central Regional Office
888-ICC-SAFE (422-7233), x4309
creeves@iccsafe.org

You may reply to this email to add comments to your request.

Christopher Reeves resolved this as Answered.

Copyright © 2023 International Code Council, Inc. All rights reserved.

Code opinions issued by ICC staff are based on ICC-published codes and do not include local, state or federal codes, policies or amendments. This opinion is based on the information which you have provided. We have made no independent effort to verify the accuracy of this information nor have we conducted a review beyond the scope of your question. This opinion does not imply approval of an equivalency, specific product, specific design, or specific installation and cannot be published in any form implying such approval by the International Code Council. As this opinion is only advisory, the final decision is the responsibility of the designated authority charged with the administration and enforcement of this code..

How was our service for this request?



Very poor



Poor



Average



Good



Very good

This is shared with nick@design2functionllc.com.

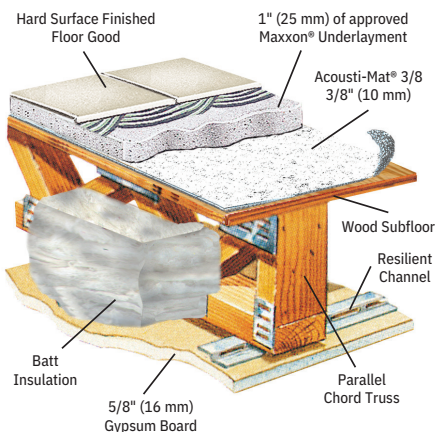
MAXXON®

Acousti-Mat®

3/8



Products for
approved Maxxon
applicators



TECHNICAL DATA SHEET

MAY 2023

PRODUCT DESCRIPTION

Ideal for luxury developments, Maxxon® Acousti-Mat® 3/8 creates sound-rated floors that achieve the higher IIC and STC levels established by the International Code Council for 'recommended' or 'preferred' noise reduction. Acousti-Mat 3/8 increases IIC ratings up to 13 points in wood frame and 20 points in concrete construction

WHERE TO USE

Application

Multifamily, light commercial, low-rise hotels/motels.

Subfloor

Interior wood, concrete, steel deck.

FEATURES & BENEFITS

- Elevates sound control to IBC's "recommended" or "preferred" levels
- 3/8" (10 mm) profile, minimum 1" (25 mm) topping for total system height of 1 3/8" (35 mm)
- More than 140 UL & ULC Fire Resistance-Rated Designs
- Up to 13 points increased IIC ratings in wood frame construction; up to 20 points increased in concrete construction
- One system warranty on sound mat and underlayment
- GREENGUARD® Gold Certified

PRODUCT INFORMATION

Thickness	3/8" (10 mm)
Color	Clear with water-resistant white fabric
Underlayment Depth	Minimum 1" (25 mm)
Underlayment Depth with Maxxon® Reinforcement or Maxxon® Fibers	Minimum 3/4" (19 mm)
Roll Width	60" (152.4 cm)
Roll Length	72' (21.9 m)
Coverage per Roll	360 ft² (33.4 m²)
Weight per Roll	55 lbs (24.9 kg)

MAXXON®

Acousti-Mat®

3/8



Products for
approved Maxxon
applicators

TECHNICAL DATA SHEET

MAY 2023

ENVIRONMENTAL IMPACT

Sample USGBC LEED® Credit Areas*		
Project	Credit	Category
Environmental Quality	EQ 2	Low Emitting Materials
	EQ 4	Indoor Air Quality Assessment
	EQ 9	Acoustic Performance

* Credits may vary depending on project type and Maxxon products used.

Maxxon Acousti-Mat 3/8 is GREENGUARD Gold Certified. For additional information on Maxxon Acousti-Mat 3/8 environmental credits and certifications visit Maxxon.com/go_green.

CODE LISTINGS

- ICC ESR 2540
- UL ER 8477-01
- HUD1286e

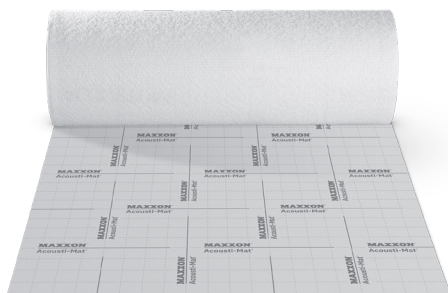
UL FIRE RESISTANCE-RATED DESIGNS

UL Design

D938	J919	L212	L517	L536	L562	L589	M517
G230	J920	L501	L518	L537	L563	L590	M518
G516	J924	L502	L519	L538	L564	L592	M519
G524	J927	L503	L520	L539	L565	L593	M530
G551	J931	L504	L522	L540	L567	L901	M531
G553	J957	L505	L523	L541	L569	M500	M533
G560	J958	L506	L524	L542	L570	M502	M534
G561	J991	L507	L525	L543	L573	M503	M535
G563	J994	L508	L526	L545	L574	M504	M536
G566	L006	L509	L527	L546	L576	M505	M538
G574	L201	L510	L528	L547	L577	M506	M544
G587	L202	L511	L529	L549	L579	M508	M545
G592	L206	L512	L530	L551	L581	M510	M546
G597	L208	L513	L532	L556	L583	M511	M550
H502	L209	L514	L533	L557	L585	M513	M553
H511	L210	L515	L534	L558	L587	M514	
J917	L211	L516	L535	L560	L588	M515	

ULC Design

I530	L003	L511	M500	M503	M520
I533	L201	L512	M501	M514	M521



For more information on current UL and ULC Designs, contact Maxxon Corporation.

MAXXON®

Acousti-Mat®

3/8



Products for
approved Maxxon
applicators

TECHNICAL DATA SHEET

MAY 2023

SOUND TESTS

For more detailed information, please refer to Maxxon® Fire & Sound Manual at Maxxon.com.

Floor System	Min. Topping [†]	Insulation	Resilient Channel	Ceiling Drywall	Floor Covering	Rating	Test Numbers
PARALLEL CHORD TRUSS 18" (457 mm) w/ 3/4" (19 mm) OSB or Plywood T&G subfloor	1" (25 mm) Maxxon*	Yes	Yes	5/8" (16 mm)	Sheet Vinyl	STC 59	I0106.28
						IIC 56	
					LVT	IIC 55	I0106.26
					Ceramic Tile	IIC 57	I0106.32
					Engineered Wood	IIC 56	I0107.05
TJI® JOIST 12" (300 mm) w/ 3/4" (19 mm) OSB or Plywood T&G subfloor	1" (25 mm) Maxxon*	Yes	Yes	2 layers 5/8" (2x16 mm)	Carpet and Pad	IIC 75	I0106.30
					Sheet Vinyl	STC 58	I0110.12
						IIC 56	
					LVT	IIC 55	I0110.10
					Ceramic Tile	IIC 59	I0110.16
CAST-IN-PLACE CONCRETE 8" (203 mm)	1" (25 mm) Maxxon*	No	No	None	Ceramic Tile	AIIC 65	30160 05 72550-7
				5/8" (16 mm)		AIIC 66	30160 05 67282-1
HOLLOWCORE PRECAST CONCRETE 8" (203 mm)	1" (25 mm) Maxxon*	No	No	None	Vinyl Plank	AIIC 57	B2863.08
					Ceramic Tile	IIC 61	B2863.07
					Wood	AIIC 61	B2863.09

* Approved Maxxon Underlayment [†]Where weight and/or floor height is a concern, a 3/4" Maxxon approved underlayment with Maxxon Reinforcement can be used.



SOUND TESTS *Continued*

SOUND TEST INFORMATION

International Building Code (IBC) requires a minimum 50 STC/IIC (45 ASTC/AIIC) in multifamily construction. Maxxon underlayments and Acousti-Mat products are single components of a sound control system. Care must be taken in the selection and installation of all components of construction to ensure the designed acoustical performance.

All acoustical testing was done by Architectural Testing; Riverbank Testing Laboratories; Intest, Inc.; Intertek; Twin City Testing Corporation; Maxxon R & D Test Center; D.L. Adams Associates, L.T.D.; Veneklasen Associates; NGC Testing Services; AV Group or JGL Acoustics. For specific sound test information, contact Maxxon for test reports.

INSTALLATION

Building interior and floor should be maintained above 50° F (10° C) for at least 24 hours prior to sound mat installation and until underlayment topping has set. Plumbing or electrical penetrations should be packed with insulation and sealed.

Wood Subfloor Preparation

Wood subfloors must be structurally sound and clean and free of dust and contaminants. Back-blocking is required for all non-tongue-and-groove OSB and plywood subfloors.

Concrete Subfloor Preparation

Concrete subfloors must be structurally sound, fully cured, moisture free and have no efflorescence. All concrete subfloors should be tested for moisture prior to installing Maxxon Acousti-Mat 3/8 sound mat (see Limitation 5).

The substrate surface must be clean and free of dust and contaminants. If cracks are present prior to installing Maxxon Acousti-Mat 3/8 sound mat, contact a structural engineer to determine the appropriate remediation. Follow Radiant Panel Association (RPA) recommendations at radiantprofessionalsalliance.org and turn off radiant heating systems 24 hours prior to and after topping with a Maxxon underlayment.

Steel Deck Preparation

Steel deck must be structurally sound, clean and free of dust and contaminants. Steel decks must conform to the Steel Deck Institute requirements meeting an L/360 design deflection limitation with a minimum 22-gauge steel requirement.

MAXXON®

Acousti-Mat®

3/8



Products for
approved Maxxon
applicators

TECHNICAL DATA SHEET

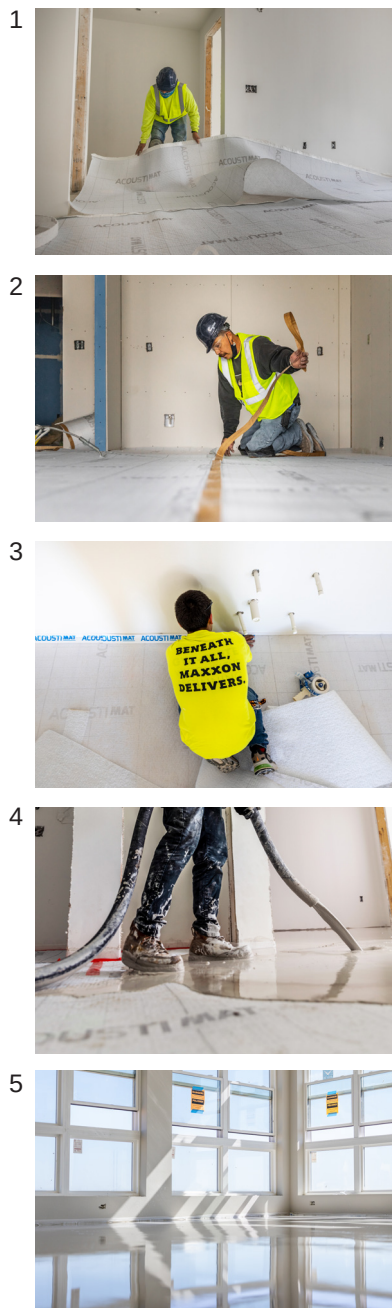
MAY 2023

INSTALLATION *Continued*

Tools Needed

- Scissors or box knife
- Maxxon® Acousti-Mat® Logo or Perm Tape
- Maxxon® Acousti-Mat® Perimeter Isolation Strip
- Maxxon® Primer

Application



1. Maxxon Acousti-Mat 3/8 is loose laid over the entire concrete or wood subfloor. Take care to avoid wrinkles. Do not use adhesives of any kind to apply Maxxon Acousti-Mat 3/8 to the subfloor. Fasteners such as, but not limited to, screws, nails or staples used to attach Maxxon Acousti-Mat 3/8 to wood subfloors can negatively affect sound performance. Provide adequate openings in sound mat for all protrusions.
2. Sound mat sections are attached to each other using the built-in zip-strips or may be taped with Maxxon Acousti-Mat Logo or Perm Tape.
3. To eliminate flanking paths, Maxxon Acousti-Mat Perimeter Isolation Strips are installed and taped around the perimeter of the entire room and around any penetrations through the sound mat. Maxxon Acousti-Mat Perimeter Isolation Strips can be installed before or after Acousti-Mat 3/8 as long as a seal is created using tape between the sound mat and perimeter strip. See Maxxon® Acousti-Mat® Perimeter Isolation Strip TDS at Maxxon.com for further instructions. At transitions between areas with sound mat and without sound mat, a pour stop and isolation strip are recommended. At doorways less than 3' wide, a smooth transition can also be created by continuing the sound mat 12" into the area not intended to receive sound mat. For large transition areas, only the method using a pour stop and isolation strip will provide adequate protection against flanking. For relevant detail drawings, contact Maxxon Corporation. Spray Maxxon primer onto the surface of the mat.
4. Maxxon Acousti-Mat is covered with a Maxxon underlayment at 1" (25 mm) minimum (or 3/4" (19 mm) if using Maxxon Reinforcement or Maxxon Fibers). See the specific TDS at Maxxon.com for more information. Spread the underlayment with a gauge rake to assist in achieving the desired depth.
5. Refer to the specific Maxxon underlayment TDS at Maxxon.com for dry time information and floor covering considerations.

MAXXON®

Acousti-Mat®

3/8



Products for
approved Maxxon
applicators

TECHNICAL DATA SHEET

MAY 2023

LIMITATIONS

For questions regarding these limitations or for applications other than those described herein, contact Maxxon Corporation at (800) 356-7887.

1. Fasteners such as, but not limited to screws, nails or staples used to attach Maxxon Acousti-Mat 3/8" to wood subfloors can negatively affect sound performance.
2. Do not use adhesives of any kind.
3. Do not use where Maxxon Acousti-Mat 3/8 will come in prolonged contact with water or water vapor unless special ordered for exterior applications. Contact Maxxon for more information.
4. It is the responsibility of the general contractor to complete moisture testing before sound mat and underlayment is installed. If testing is necessary, use the methods specified by the flooring manufacturer, typically ASTM F710. If the MVER exceeds 5 lbs. (2.3 kg)/1,000 sq ft (92.9 m²)/24 hours or an RH greater than 80%, treat the concrete subfloor with Maxxon® Commercial MVP One Primer, or Maxxon® Commercial MVP Two-Part Epoxy. If the flooring manufacturer specifies more stringent moisture limitations or practices, they must be followed. Contact Maxxon Corporation for further information.
5. Maxxon sound mats and underlayments are non-structural and therefore cannot be expected to reinforce structurally deficient subfloors. The structural floor should be adequate to withstand design loads with deflection limitations of L/360. Some floor coverings may require more restrictive deflection limits. Determining the appropriate structural design of the floor is not the responsibility of Maxxon nor the Maxxon applicator.

STORAGE AND DISPOSAL

Keep in a dry, cool place. Maxxon Acousti-Mat 3/8 is not considered hazardous per US-GHS requirements and may be disposed of with day-to-day construction materials.

SAFETY

Follow local and state regulations and use appropriate safety precautions and measures when installing Maxxon products. See related product literature at Maxxon.com or contact Maxxon Corporation for more information prior to installation.

MAXXON®

Acousti-Mat®

3/8



Products for
approved Maxxon
applicators

TECHNICAL DATA SHEET

MAY 2023

WARRANTY AND TECH SERVICES

See Maxxon.com for complete warranty information. Technical performance verification and service is available through Maxxon Corporation or Maxxon Regional Representatives throughout North America.



Maxxon Corporation
920 Hamel Road PO Box 253
Hamel, Minnesota 55340
800-356-7887
maxxon.com
info@maxxon.com

@Maxxon.Corporation
 maxxon-corporation

JOB NAME: _____

DATE: _____

APPLICATOR: _____

Maxxon Corporation assumes no responsibility or liability for any errors or omissions in the content of this document. The information contained is subject to change without notice. Follow local and state regulations and use appropriate safety precautions and measures when installing Maxxon products. See related product literature at Maxxon.com or contact Maxxon Corporation for more information prior to installation.

©2021 Maxxon Corporation. All Rights Reserved. Gyp-Crete, Acousti-Mat and associated logos are registered trademarks of Maxxon Corporation, Hamel, MN, USA.