09618/ACO
Buyline 1772

Acousti-Mat® and Enkasonic®

ULTIMATE SOUND CONTROL SYSTEMS

- *Renovation*
- *New Construction*
- *Concrete Construction*
- *Open Beam Construction*
- *Hard Surface Floor Goods Areas*

The sound control system specified for
The Metropolitan Condominiums at the new Omni San Diego Hotel, San Diego, CA — see page 3

Acousti-Mat® and Enkasonic®

For Superior Sound Control, with all the Options.

Proven on over 30 million square feet!

Impressive Sound Ratings and More

With the Acousti-Mat® and Enkasonic® systems, airborne and impact sound transmission can be reduced by as much as 25 rating points over concrete, and up to 17 rating points over wood frame construction. Together with a Maxxon® underlayment, these systems create a void area that is essential to isolating sound.

Acousti-Mat and Enkasonic systems are also:

- Easy to install
- Resilient enough to absorb impact sound
- Ideal for new construction and renovation

Comprehensive Solutions

Acousti-Mat and Enkasonic offer proven components for comprehensive sound control applications, including:

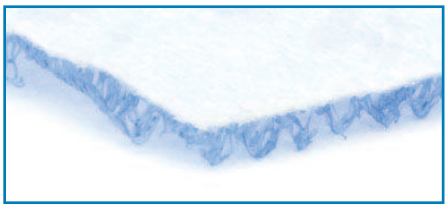
- Enkasonic, Acousti-Mat II and Acousti-Mat 3 sound control mats
- Maxxon underlayments
- Perimeter isolation
- Crack suppression mat

Keep Your Floor Goods Options, Lose the Noise.

Sound ratings of 45 F-IIC and F-STC, and 50 IIC and STC are standard requirements for multi-family housing, limiting interior floor covering choices to basic carpet and pad. But with Acousti-Mat or Enkasonic, design possibilities include the full spectrum of floor goods options such as marble, ceramic tile or hardwoods, without sacrificing sound control. Acousti-Mat and Enkasonic can be installed in hard-surface areas only, or throughout the entire floorplan to ensure peace and quiet from nearly all impact and airborne noises.

Three Levels of Control

Maxxon Underlayment With...



ACOUSTI-MAT® II

The Low-Profile Option

- Low ¼" profile allows a thinner floating floor composite.
- Cost-effective choice for both new floors and retrofit where floor height is a concern.
- Increases IIC and STC levels up to 10 points over wood frame, and IIC up to 20 points over concrete.

Acousti-Mat II Technical Data

Description

Material composition:	nylon
Thickness, nominal:	1/4" (6 mm)
Density:	5.5 pcf (88 kg/m³)
Color:	blue with white fabric

Pressure	Deflection
500 psf (2440 Kg/m²):	0.06" (1.52 mm)
1000 psf (4880 Kg/m²):	0.08" (2.03 mm)
2000 psf (9760 Kg/m²):	0.15" (3.81 mm)
4000 psf (19520 Kg/m²):	0.20" (5.08 mm)

Fire Performance ASTM E-84, Fuel Contribution 0; Smoke Density and Flame Spread NFPA Class A

Code Listings ICC-ES Legacy Reports ER-3433, ER-4950

Enkasonic®

The Original Sound Control Mat

- Creates sound-rated floors with high IIC and STC levels required by ICBO, UBC, and FHA for luxury developments.
- Durable and proven solution – the only mat tested after 10 years of use. (Enkasonic retained 97% of original thickness, was as pliable as a new roll, and performed equally to a newly manufactured roll.)
- Increases IIC and STC levels up to 12 points over wood frame, and IIC up to 20 points over concrete.

Enkasonic Technical Data

Description

Material composition:	nylon
Thickness, nominal:	.4" (10.2. mm)
Density:	4.65 pcf (74.4 kg/m³)
Color:	black with white fabric

Pressure	Deflection
500 psf (2440 Kg/m²):	0.087" (2.21 mm)
1000 psf (4880 Kg/m²):	0.131" (3.327 mm)
2000 psf (9760 Kg/m²):	0.189" (4.801 mm)
4000 psf (19520 Kg/m²):	0.256" (6.502 mm)

Fire Performance ASTM E-84, Fuel Contribution 0; Smoke Density and Flame Spread NFPA Class A

Code Listings
ICC-ES Legacy Report ER-4778

ACOUSTI-MAT® 3

For Super Sound Control

- Provides maximum sound isolation for open beam, concrete slab, and conventional wood frame construction.
- Puts a stop to noise that has been impossible to control.
- Increases IIC and STC levels up to 17 points over wood frame, and IIC up to 25 rating points (or more) over concrete.

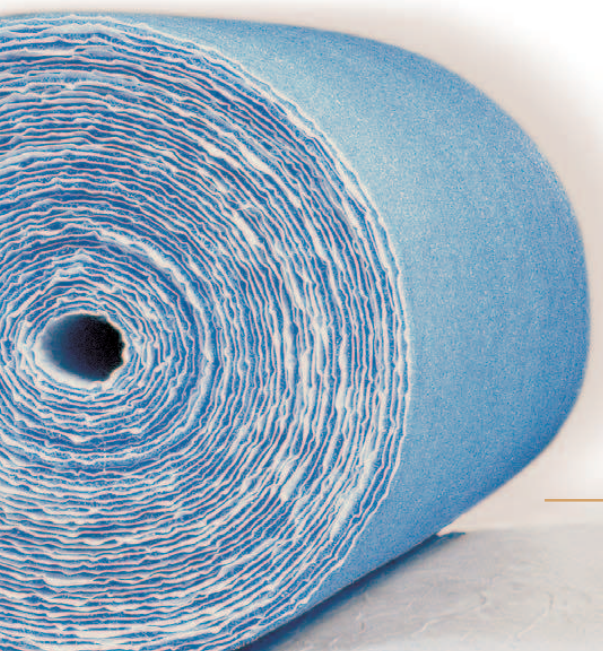
Acousti-Mat 3 Technical Data

Description

Material composition:	nylon
Thickness, nominal:	.8" (20.3mm)
Density:	2.66 pcf (42.6 Kg/m³)
Color:	blue with white fabric

Pressure	Deflection
50 psf (244 Kg/m²):	0.05" (1.27 mm)
100 psf (488 Kg/m²):	0.08" (2.03 mm)
200 psf (976 Kg/m²):	0.15" (3.81 mm)
300 psf (1464 Kg/m²):	0.21" (5.33 mm)

Fire Performance ASTM E-84, Fuel Contribution 0; Smoke Density and Flame Spread NFPA Class A



Proven Performance

- Documented Sound Tests
- More than 80 UL Fire Rated Designs
- Lightweight and easy to install
- Low deflection rate with high load levels
- Durable — chemical and moisture insensitive

Sound Control Case Study:

The Metropolitan Condominiums
at the Omni San Diego Hotel

Our Featured Cover Project

Location: San Diego, CA

Contractor: JMI Realty

Architect: Hornberger & Worstell, Inc.

Scope: 80,000 sq. ft. of Enkasonic and Maxxon Underlayment installed in 36 luxury condominiums on floors 22 through 32. Overlooking San Diego harbor and the new San Diego Petco Ballpark.

Sound Control Case Study:

Wireworks Lofts

Acousti-Mat 3 made it possible to keep this open beam ceiling.

Trades continue working the day after pouring.

Location: St. Louis, MO

Contractor: E.M. Harris Construction Co.

Architect: Johannes/Cohen Collaborative

Scope: 16,000 sq. ft. of Acousti-Mat 3 covered with 1½" approved Maxxon Underlayment; 24,000 sq. ft. of Acousti-Mat II covered with 1½" approved Maxxon Underlayment.

Sound Tests

	Floor System	Topping	Insulation	Ceiling Suspended on Channel	Ceiling Drywall	Floor Coverings	Rating	Test Numbers
Acousti-Mat® II 1/4" (6.4 mm)	**Parallel Chord Truss** 2" x 4" (51 x 102 mm) w/3/4" (19 mm) OSB subfloor							
		1" (25 mm) Maxxon*	Yes	Yes	5/8" (16 mm)	Vinyl	61 F-STC, 55 F-IIC	98 67280.7 & .4
		1" (25 mm) Maxxon*	Yes	Yes	5/8" (16 mm)	Ceramic	56 F-IIC	98 67280.5
	Precast Concrete 6" x 2' (152 mm x 61 cm)							
		1" (25 mm) Maxxon*	Yes	Yes	5/8" (16 mm)	Ceramic	59 STC	98-108
		1" (25 mm) Maxxon*	Yes	Yes	5/8" (16 mm)	Ceramic	57 IIC	98-12
	TJI® Joist w/3/4" (19 mm) T&G OSB subfloor							
		1" (25 mm) Maxxon*	Yes	Yes	5/8" (16 mm)	Vinyl	53 F-IIC	99 1736.3
		1" (25 mm) Maxxon*	Yes	Yes	5/8" (16 mm)	None	56 F-STC	99 1736.7
		1" (25 mm) Maxxon*	Yes	Yes	5/8" (16 mm)	Ceramic	52 F-IIC	99 1736.4
	8" Cast-in-Place Concrete (203 mm)							
		1" (25 mm) Maxxon*	No	No	No	Armstrong Vinyl	62 F-STC	18-0-607.2
		1" (25 mm) Maxxon*	No	No	No	Armstrong Vinyl	64 F-IIC	18-0-607.5
		1" (25 mm) Maxxon*	No	No	No	Ceramic Tile	61 F-IIC	18-0-607.6
		1" (25 mm) Maxxon*	No	No	No	Bruce Hardwood	60 F-IIC	18-0-607.7
		2 ½" (64 mm) Maxxon*	No	No	No	Maxxon ColorKote	56 F-IIC	03-56381.3
		2 ½" (64 mm) Concrete	No	No	No	None	55 F-IIC	03-56381.4
	Bare Floor, no Acousti-Mat (control)							
		None	No	No	No	None	39 F-IIC	18-0-607.3
Enkasonic® 4" (10.2 mm)	**Wood Joist** w/5/8" (16 mm) plywood subfloor, 2" x 10" (51 mm - 254 mm) joists							
		1½" (38 mm) Maxxon*	Yes	Yes	5/8" (16 mm)	Ceramic Tile	57-IIC	IN88-2
	Parallel Chord Truss 2" x 4" (51 x 102 mm) 12" Deep w/3/4" (19 mm) T&G OSB subfloor							
		1½" (38 mm) Maxxon*	Yes	Yes	5/8" (16 mm)	None	59-FSTC	87-729-13
		1½" (38 mm) Maxxon*	Yes	Yes	5/8" (16 mm)	Carpet & Pad	83-F-IIC	87-729-7
	4" Precast Concrete (102 mm) 4" x 2' (102 mm x 61 cm)							
		7/16" Wonder-Board	No	No	None	Tile	55-FSTC, 52 F-IIC	90-155, 90-8
	8" Precast Concrete (203 mm) 8" x 2' (203 mm x 61 cm)							
		7/16" Wonder-Board	No	No	None	Tile	59-FSTC, 52 F-IIC	83-17, 83-1
		1¼" (19 mm) mortar bed	Yes	Yes	5/8" (16 mm)	Tile	61-FSTC, 62 F-IIC	82-165, 82-11
		1¼" (19 mm) mortar bed	No	No	None	Tile	60-FSTC, 54 F-IIC	82-166, 82-12
		1¼" (19 mm) mortar bed	Yes	Yes	5/8" (16 mm)	Vinyl	61-FSTC, 67 F-IIC	82-141, 82-9
		2 layers – 3/8" plywood	Yes	Yes	5/8" (16 mm)	T&G Oak	60-FSTC, 61 F-IIC	82-98, 82-7
	Wood Joist w/5/8" (16 mm) plywood subfloor, 2" x 10" (51 mm - 254 mm) joists							
		7/16" Wonder-Board	Yes	Yes	5/8" (16 mm)	Tile	62-FSTC, 58 F-IIC	JN 8010
		1¼" (19 mm) mortar bed	Yes	Yes	5/8" (16 mm)	Tile	60-FSTC, 55 F-IIC	80-74, 80-1
	Parallel Chord Truss 18" deep, 24" oc plywood subfloor							
		1½" (38 mm) Maxxon*	batt	Yes	5/8" (16 mm)	Quarry Tile	59-IIC	7004073
		1½" (38 mm) Maxxon*	batt	Yes	5/8" (16 mm)	Quarry Tile	58-STC	5004024
		1½" (38 mm) Maxxon*	batt	Yes	5/8" (16 mm)	Vinyl	55-IIC	7004081
		1½" (38 mm) Maxxon*	batt	Yes	5/8" (16 mm)	Floating Wood	57-IIC	7004082
		1½" (38 mm) Maxxon*	batt	Yes	5/8" (16 mm)	Glue down Wood	57-IIC	7004083
	Hambro D-500 Composite Floor System							
		1½" (38 mm) Maxxon*	No	Yes	1/2" (12 mm)	Vinyl	53-IIC	7004079
		1½" (38 mm) Maxxon*	No	Yes	1/2" (12 mm)	Quarry Tile	54-IIC	7004078
		1½" (38 mm) Maxxon*	No	Yes	1/2" (12 mm)	Floating Laminate	55-IIC	7004080
		1½" (38 mm) Maxxon*	No	Yes	1/2" (12 mm)	Quarry Tile	54-STC	5004027
		1½" (38 mm) Maxxon*	No	Yes	1/2" (12 mm)	Glue down Wood	51-IIC	7004084
Acousti-Mat® 3 .8" (20.3 mm)							The Uniform Building Code and the I.C.B.O. require a minimum of 45 for Field STC and Field IIC.	
	Open Beam							
		1½" (38 mm) Maxxon*	None	No	None	Vinyl	46 F-IIC	02 31573.3
		1½" (38 mm) Maxxon*	None	No	None	Wood Floating Floor	52 F-IIC	02 31573.4
		1½" (38 mm) Maxxon*	None	No	None	None	47 F-STC	02 31573.6
	Bare Floor over Open Beam (control)	None	None	No	None	None	33 F-IIC	02 31573.5
		None	None	No	None	None	30 F-STC	02 31573.7
	8" Cast-in-Place Concrete (203 mm)							
		2" (51 mm) Maxxon*	None	No	None	None	65 F-IIC	03 56381.6
		2" (51 mm) Concrete	None	No	None	None	61 F-IIC	03 56381.5
	Bare Floor, no Acousti-Mat (control)	None	None	No	None	None	36 F-IIC	03 56381.1
	Steel Joist 12" Deep (305 mm) w 3/4" (19 mm) T&G plywood subfloor							
		1½" (38 mm) Maxxon*	Batt	Yes	5/8" (16 mm)	Ceramic	57 F-IIC	04-22-1
		1½" (38 mm) Maxxon*	Batt	Yes	5/8" (16 mm)	Vinyl	57 F-IIC	04-22-2
		1½" (38 mm) Maxxon*	Batt	Yes	5/8" (16 mm)	Wood	58 F-IIC	04-22-3

* Approved Maxxon Underlayment

F-IIC (Field Impact Insulation Class) sound tests were performed in accordance with ASTM E 1007 and E 989. F-STC (Field Sound Transmission Class) sound tests were performed in accordance with ASTM E 336 and E 413. Actual tests above, plus additional tests, are available upon request. Maxxon Underlayments and Acousti-Mat/Enkasonic are but two components of an effective sound control system. No sound control system is better than its weakest component. Care must be taken in the installation of components of construction to assure the ultimate designed acoustical performance.

Sound Control Case Study:

The Village Apartments at St. Anthony Falls

Acousti-Mat II and Maxxon Underlayment installed in hard surface floor goods area.

Maxxon Underlayment is poured directly over subfloor in carpet and pad areas.

Location: Minneapolis, MN

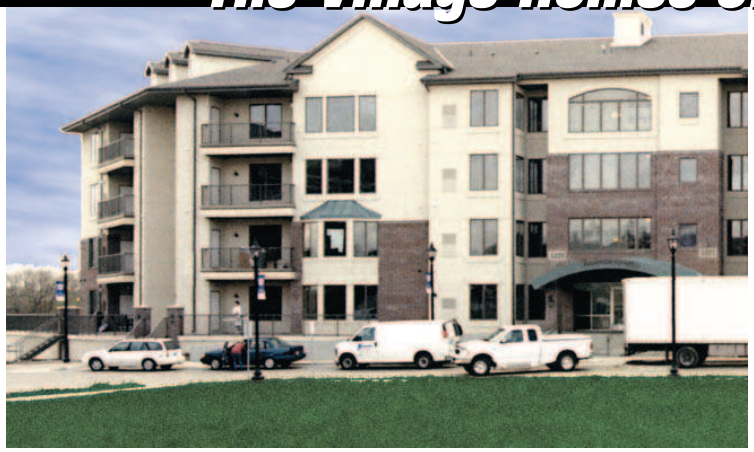
Contractor: Stahl Construction Company

Architect: J. Buxell Architecture, Ltd.

Scope: 5,500 sq. ft. of Acousti-Mat® II in hard surface floor goods areas.
35,000 sq. ft. of approved Maxxon Underlayment throughout.

Sound Control Case Study:

The Village Homes of Grandview Square



Location: Edina, MN

Contractor: Ron Clark Construction

Scope: 95,126 sq. ft. of Acousti-Mat II in carpeted areas.
10,954 sq. ft. of Acousti-Mat 3 in hard surface areas.
141,964 sq. ft. of approved Maxxon Underlayment.

Fast, Easy Installation

1 Sound mat is laid over the entire concrete or wood subfloor.

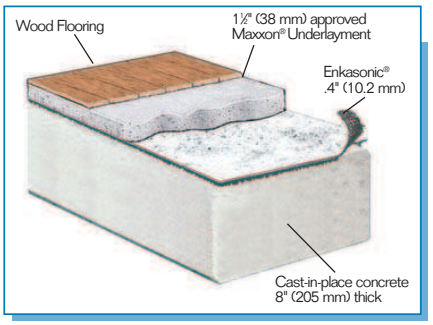
2 Isolation strips are installed, then taped, around the perimeter of the entire room, to eliminate flanking paths.

3 Seams between sections of sound mat are adhered with zip-strip or taped.

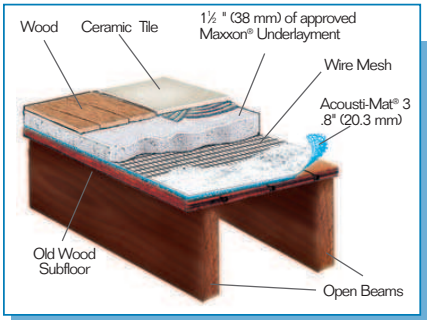
4 Sound mat is topped with approved Maxxon Underlayment, at a depth specific to the mat chosen for the application.* Installers use a "screed" to finish the underlayment surface. (If mat is installed only in hard surface areas, the underlayment is poured directly over the subfloor in areas to be covered in carpet and pad.)

5 In as little as two hours after the underlayment has been poured, the floor is hard enough to accommodate foot traffic, so light subtrades may continue working. Total drying time varies depending on the type of finished floor goods to be installed, but is generally completed within 10 to 14 days.

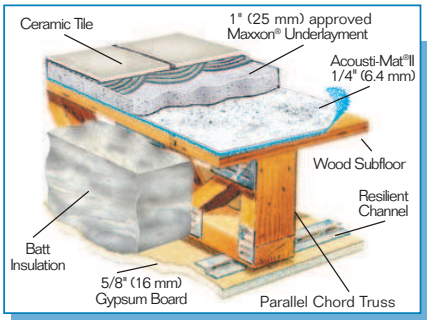
Enkasonic® Over Cast-In-Place Concrete



Acousti-Mat® 3 over Open Beam



Acousti-Mat® II over Parallel Chord Truss



With a nylon core of fused entangled filaments attached to a nonwoven fabric, Acousti-Mat and Enkasonic create a void area between the subfloor and the high-strength underlayment. These systems isolate sound waves, reducing airborne and impact noise.

UL Design Numbers

J917	J991	L201	L501	L509	L517	L526	L534	L542	L550	L559
J919	J994	L202	L502	L510	L518	L527	L535	L543	L551	L560
J920	K906	L206	L503	L511	L519	L528	L536	L544	L552	L562
J924	L001	L208	L504	L512	L520	L529	L537	L545	L553	L563
J927	L003	L209	L505	L513	L522	L530	L538	L546	L555	
J931	L004	L210	L506	L514	L523	L531	L539	L547	L556	
J957	L005	L211	L507	L515	L524	L532	L540	L548	L557	
J966	L006	L212	L508	L516	L525	L533	L541	L549	L558	

ULC Design Numbers

L003	L201	L511	L512	M500	M501	M503	M508

*Underlayment Depth

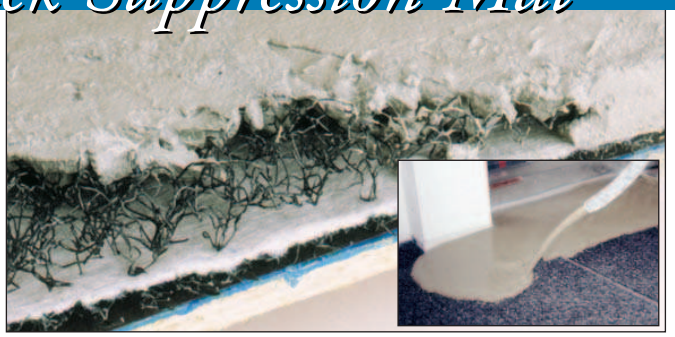
Sound Mat	Underlayment Depth
Acousti-Mat II	1" (25mm)
Enkasonic	1½" (38mm)
Acousti-Mat 3	1½" (38mm) plus wire mesh

New Maxxon® CSM – *Crack Suppression Mat*

When project conditions require reinforcement of the underlayment, New Maxxon CSM provides a cost-effective alternative to metal lath.

Conditions such as potential movement of the subfloor — which could cause ceramic tile or other hard surface floor goods to crack — have typically been handled by installing metal lath prior to the underlayment pour. Though metal lath is difficult to install, and its cost has been rapidly increasing, there haven't been any reliable, more cost-effective options until now.

Quickly and easily installed, Maxxon CSM saves time and money. Its strong nylon fibers provide an excellent reinforcement for a variety of floor systems.



CSM with Maxxon Underlayment:

- Requires no crack isolation with ceramic tile
- Provides a better surface for ceramic tile
- Passes residential ratings tests by the Tile Council
- Is Certified by the Ceramic Tile Institute of America
- Maxxon CSM may be used:

  To reduce underlayment thickness to 3/4" (19 mm) over Acousti-Mat II or Enkasonic systems

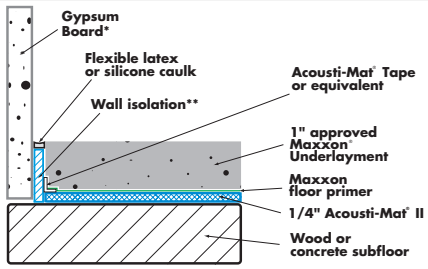
  To replace metal lath on Acousti-Mat 3 systems

  In conjunction with any Maxxon underlayment.

Installation Details

Typical Installation

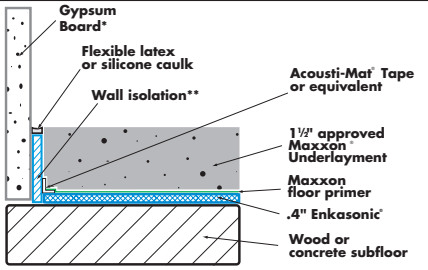
Acousti-Mat® II



* Gypsum Wall Board must be installed to floor no more than 1/2" off floor

** Wall Isolation is installed around the perimeter of the entire room to receive Acousti-Mat II, and around any floor penetrations such as toilet collars, electrical, plumbing, etc.

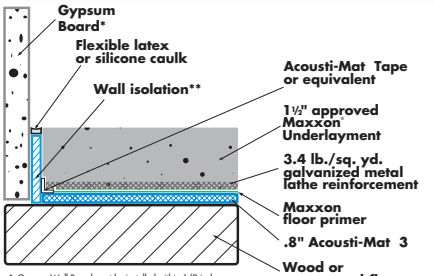
Enkasonic®



* Gypsum Wall Board must be installed to floor no more than 1/2" off floor

** Wall Isolation is installed around the perimeter of the entire room to receive Enkasonic, and around any floor penetrations such as toilet collars, electrical, plumbing, etc.

Acousti-Mat® 3

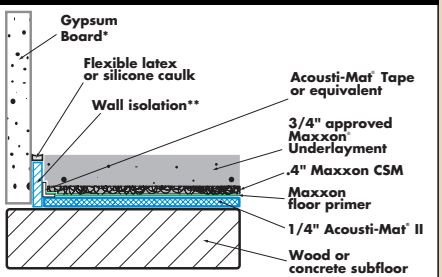


* Gypsum Wall Board must be installed within 1/2 inch of subfloor.

** Wall Isolation is installed around the perimeter of the entire room to receive Acousti-Mat 3, and around any floor penetrations such as toilet collars, electrical, plumbing, etc.

With Maxxon CSM

Acousti-Mat® II with Maxxon® CSM



* Gypsum Wall Board must be installed to floor no more than 1/2" off floor

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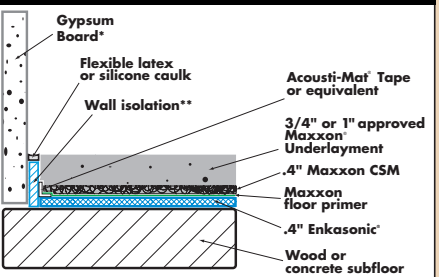
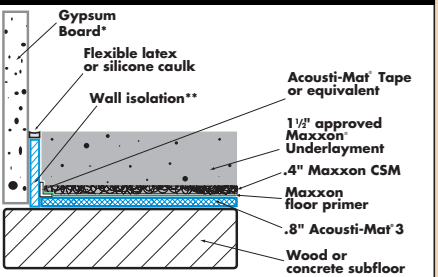
Enkasonic® with Maxxon® CSM



* Gypsum Wall Board must be installed to floor no more than 1/2" off floor

** Wall Isolation is installed around the perimeter of the entire room to receive Enkasonic, and around any floor penetrations such as toilet collars, electrical, plumbing, etc.

Acousti-Mat® 3 with Maxxon® CSM



* Gypsum Wall Board must be installed to floor no more than 1/2" off floor

** Wall Isolation is installed around the perimeter of the entire room to receive Acousti-Mat 3, and around any floor penetrations such as toilet collars, electrical, plumbing, etc.

CSI Specs On-line: *For customized CSI specs for all Maxxon Products, see* **www.MaxxonCorporation.com**

Item #60064
1/05

SEE US IN DIRECTORY CATALOG FILES CD SWEETS.COM

ACOUSTI-MAT®
Superior Sound Control Systems

To learn more about Acousti-Mat and Enkasonic: Call 1-800-356-7887
E-mail: info@maxxon.com • www.MaxxonCorporation.com

Underwriters Laboratories Inc.® Listed

Maxxon® Corporation • 920 Hamel Road • P.O. Box 253 • Hamel, MN • 55340 USA • 1-763-478-9600 • Fax: 1-763-478-2431