

## FAST, EASY INSTALLATION



**1** Enkasonic is laid over the entire concrete or wood subfloor.



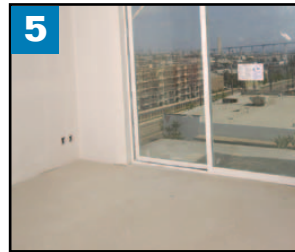
**2** Isolation strips are installed around all walls, columns and floor penetrations to eliminate flanking paths.



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



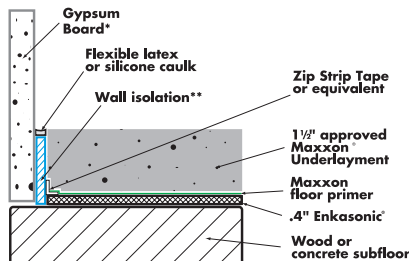
**4** Enkasonic is topped with 1½" (38 mm) of approved Maxxon Underlayment. Installers use a "screed" to finish the underlayment surface. (If mat is installed only in hard surface areas, the underlayment is poured directly over the subfloor in areas to be covered in carpet and pad.)



**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.

## INSTALLATION DETAILS

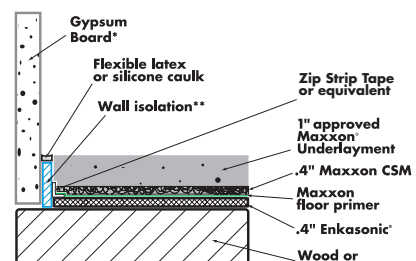
### Typical Enkasonic® Installation



\* 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.

### Enkasonic® with Maxxon® CSM

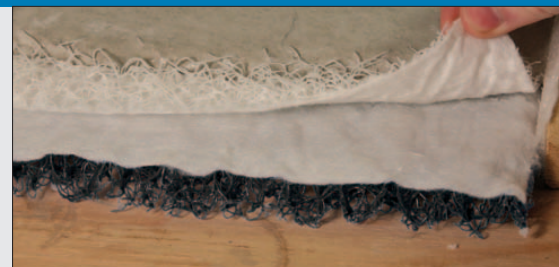


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## Maxxon® CSM (Crack Suppression Mat) or Maxxon Reinforcement

When project conditions require reinforcement of the underlayment, Maxxon CSM and Maxxon Reinforcement provide cost-effective alternatives 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. Although 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.



### Maxxon CSM

- Passes Extra Heavy ratings tests by the TCNA
- Water resistant fabric
- Nylon fibers
- 40% pre-consumer recycled content
- Always a "green" building material
- May help contribute towards LEED project certification



### Maxxon Reinforcement

- Excellent durability
- Light — easy to handle
- No memory (unlike metal lath)
- Dimensionally stable in hot weather; not brittle in cold
- Long rolls reduce installation cost (compared to conventional galvanized metal lath)
- Can be used over wood, concrete and precast plank
- Can be used over Enkasonic to reduce thickness of underlayment

### Maxxon Reinforcement or Maxxon CSM may be used:

- To reduce underlayment thickness to 3/4" (19 mm) over Acousti-Mat II or 1" (25 mm) over Enkasonic systems
- To replace metal lath on Acousti-Mat 3 systems
- In conjunction with any Maxxon underlayment

CSI Specs Online: For customized CSI specs for all Maxxon Products, see [www.MaxxonCorporation.com](http://www.MaxxonCorporation.com)

Item #60068  
12/10



The Maxxon Green Mark  
Maxxon products with this symbol are LEED-compliant and may help contribute toward valuable points for LEED project certification.



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



**Enkasonic®**  
The Original Sound Control Mat

To learn more about Enkasonic: Call 1-800-356-7887  
E-mail: [info@maxxon.com](mailto:info@maxxon.com) • [www.MaxxonCorporation.com](http://www.MaxxonCorporation.com)



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Listed

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# Enkasonic®

The Original Sound Control Mat

Because one room's floor is another room's ceiling.

Renovation | Concrete Construction | Hard Surface Finished Floor Areas





# For Upgraded Sound Control, Choose Enkasonic.

## Impressive Sound Ratings and More

With the Enkasonic system, airborne and impact sound transmission can be reduced by as much as 20 rating points over concrete, and up to 12 rating points over wood frame construction. Together with a Maxxon® underlayment, this system creates a void area that is essential to isolating sound.

Enkasonic systems are also:

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

## Comprehensive Solutions

The Enkasonic system offers proven components for comprehensive sound control applications, including:

- Enkasonic sound control mat
- Maxxon underlayments
- Perimeter isolation
- Crack Suppression Mat or Maxxon Reinforcement

## Keep Your Finished Floor 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. With Enkasonic, design possibilities include the full spectrum of floor goods options such as marble, ceramic tile or hardwoods, without sacrificing sound control. 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.

## Maxxon® Underlayment with Enkasonic

- Creates sound-rated floors with high IIC and STC levels required by IBC, 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 up to 12 points over wood frame, and IIC up to 20 points over concrete.
- Increases STC rating 6-15 points over bare wood floor system.

### TECHNICAL DATA

**Description**  
 Material composition: nylon  
 40% pre-consumer recycled content  
 Thickness, nominal: .4" (10.2 mm)  
 Density: 4.65 pcf (74.4 kg/m³)  
 Color: black with white fabric  
 • optional water-resistant 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

**Thermal Resistance**  
*Mat Only*                      R-Value\*: 0.78

*1½" Maxxon Underlayment*  
 R-Value\*: 0.288

*Mat/Underlayment System*  
 R-Value\*: 1.068  
 \*ft²•F•h/BTU

### ULC DESIGN NUMBERS

L003	L511	M500	M503	M514
L201	L512	M501	M513	M517

### UL DESIGN NUMBERS

G524	J957	L209	L510	L524	L538	L556	L583
G560	J958	L210	L511	L525	L539	L557	L585
G561	J966	L211	L512	L526	L540	L558	L588
G563	J991	L212	L513	L527	L541	L559	L589
G566	J994	L501	L514	L528	L542	L560	L592
G574	K906	L502	L515	L529	L543	L562	L593
G576	L004	L503	L516	L530	L545	L563	L594
J917	L005	L504	L517	L532	L546	L564	L599
J919	L006	L505	L518	L533	L547	L573	M500
J920	L201	L506	L519	L534	L549	L574	M503
J924	L202	L507	L520	L535	L551	L575	M504
J927	L206	L508	L522	L536	L552	L579	M505
J931	L208	L509	L523	L537	L555	L581	M508

## Proven Performance

- Documented Sound Tests
- More than 100 UL Fire Rated Designs
- Lightweight and easy to install
- Low deflection rate with high load levels
- Durable — chemical and moisture insensitive



## The Metropolitan Condominiums at the Omni San Diego Hotel

### Sound Control Case Study

**Location:** San Diego, CA

**Contractor:** JMI Realty

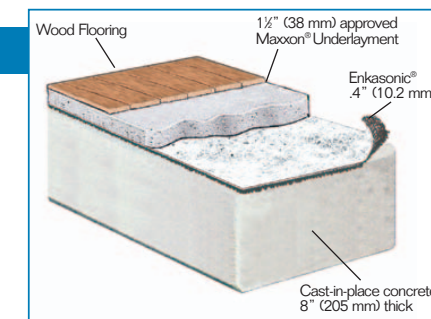
**Architect:** Hornberger & Worstell, Inc.

**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 San Diego PETCO Ballpark.

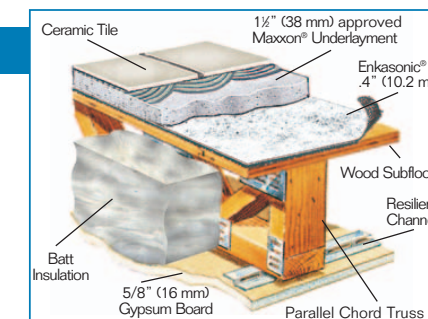


### DETAIL DRAWINGS

With a nylon core of fused, entangled filaments attached to a nonwoven fabric, Enkasonic creates a void area between the subfloor and the high-strength underlayment. This system isolates sound waves, reducing airborne and impact noise.



Enkasonic® Over Cast-In-Place Concrete



Enkasonic® Over Parallel Chord Truss

### SOUND TEST RESULTS

Floor System	Topping	Insulation	Resilient Channel	Ceiling Drywall	Floor Coverings	Rating	Test Numbers	
<b>Wood Joist</b> w/ 5/8" (16 mm) plywood subfloor, 2" x 10" (51 x 254 mm) joist	1½" (38 mm) Maxxon <sup>†</sup>	Yes	Yes	¾" (16 mm)	Ceramic Tile	57 IIC	IN88-2	
<b>Parallel Chord Truss</b> 2" x 4" (51 x 102 mm) 12" deep w/ 3/4" (19 mm) T&G OSB Subfloor	1½" (38 mm) Maxxon <sup>†</sup>	Yes	Yes	¾" (16 mm)	None	59 F-STC	87-729-13	
	1½" (38 mm) Maxxon <sup>†</sup>	Yes	Yes	¾" (16 mm)	Carpet & Pad	83 F-IIC	87-729-7	
<b>Parallel Chord Truss</b> 18" deep, 24" oc plywood subfloor	1½" (38 mm) Maxxon <sup>†</sup>	Yes	Yes	¾" (16 mm)	Quarry Tile	59 IIC	7004073	
	1½" (38 mm) Maxxon <sup>†</sup>	Yes	Yes	¾" (16 mm)	Quarry Tile	58 STC	5004024	
	1½" (38 mm) Maxxon <sup>†</sup>	Yes	Yes	¾" (16 mm)	Vinyl	55 IIC	7004081	
	1½" (38 mm) Maxxon <sup>†</sup>	Yes	Yes	¾" (16 mm)	Floating Wood	57 IIC	7004082	
	1½" (38 mm) Maxxon <sup>†</sup>	Yes	Yes	¾" (16 mm)	Glue down Wood	57 IIC	7004083	
<b>4" Precast Concrete</b> (102 mm) 4" x 2' (102 mm x 61 cm)	¾" (11.1 mm) Wonder-Board	No	No	None	Tile	55 F-STC, 52 F-IIC	90-155, 90-8	
	1¼" (31.75 mm) mortar bed	¾" (11.1 mm) Wonder-Board	No	No	None	Tile	59 F-STC, 52 F-IIC	83-17, 83-1
		Yes	Yes	¾" (16 mm)	Tile	61 F-STC, 62 F-IIC	82-165, 82-11	
		No	No	None	Tile	60 F-STC, 54 F-IIC	82-166, 82-12	
		Yes	Yes	¾" (16 mm)	Vinyl	61 F-STC, 67 F-IIC	82-141, 82-9	
2 layers - ¾" plywood	Yes	Yes	¾" (16 mm)	T&G Oak	60 F-STC, 61 F-IIC	82-98, 82-7		
<b>Hambro D-500 Composite Floor System</b>	1½" (38 mm) Maxxon <sup>†</sup>	No	Hat	½" (12.7 mm)	Vinyl	53 IIC	7004079	
	1½" (38 mm) Maxxon <sup>†</sup>	No	Hat	½" (12.7 mm)	Quarry Tile	54 IIC	7004078	
	1½" (38 mm) Maxxon <sup>†</sup>	No	Hat	½" (12.7 mm)	Floating Laminate	55 IIC	7004080	
	1½" (38 mm) Maxxon <sup>†</sup>	No	Hat	½" (12.7 mm)	Quarry Tile	54 STC	5004027	
	1½" (38 mm) Maxxon <sup>†</sup>	No	Hat	½" (12.7 mm)	Glue down Wood	51 IIC	7004084	
<b>TJ® Joist</b> w/ 3/4" (19 mm) T&G plywood subfloor	1½" (38 mm) Maxxon <sup>†</sup>	Yes	Yes	2 layers of ¾"	Ceramic	56 F-IIC	48-06-01	
	1½" (38 mm) Maxxon <sup>†</sup>	Yes	Yes	2 layers of ¾"	Ceramic	57 F-STC	48-06-02	

<sup>†</sup> Approved Maxxon Underlayment. The International Building Code requires a minimum of 45 for Field STC and Field IIC. For more sound test information see back cover.  
**SOUND TEST INFORMATION** — All acoustical testing was done by Riverbank Testing Laboratories; Intest, Inc.; Twin City Testing Corporation, D.L. Adams Associates, L.T.D.; Veneklassen Associates or NGC Laboratories. For type of floor covering used, channel spacing and other information, contact Maxxon for test reports by number. For good acoustical performance, the selection of a floor/ceiling system attaining a minimum 60 STC and IIC is recommended. Systems attaining ratings less than 55 STC and IIC provide only marginal acoustical performance. The Maxxon floor underlayments and Acousti-Mat® are but single 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 all components of construction to ensure the ultimate designed acoustical performance.

\*Credits may vary depending on project type and Maxxon® products used. Contact Maxxon Corporation for complete information.

SAMPLE USGBC LEED CREDIT AREAS IMPACTED BY ENKASONIC FLOOR UNDERLAYMENT*			
CREDIT AREA	CREDIT	CATEGORY	HOW REQUIREMENT IS FULFILLED
Innovation & Design Process	ID 1	Exemplary Performance	Enhanced Acoustical Living Environment
Materials & Resources	MR 4	Recycled Content	Nylon 40% Pre-Consumer
	MR 5	Local/Regional Materials	Enka, NC 28728