

**With Sound Control This Superior...  
Every Floor Seems Like the Top Floor.  
Superior Sound Control System**

The apartment project featured on this page was developed by Columbus Realty Trust, a Dallas-based real estate investment trust. Since 1991, the company has developed several thousand-luxury apartments in the Uptown neighborhood of near-downtown Dallas. Columbus first used Acousti-Mat in 1994, in response to noise complaints generated in ceramic tile and hardwood floor areas. Since that first installation, the company has specified Acousti-Mat installation in more than 200,000 square feet of apartment space, and is now specifying New Acousti-Mat II.

**Undeniably Quiet.  
Unmistakably Acousti-Mat II.**

“Top floor usually get leased first, because people want to avoid noise from upstairs neighbors. But with Acousti-Mat, the sound is so muted it’s not even an issue.”

Lori Fall  
Senior Property Manger  
Columbus Realty Trust

Whether choosing an upscale townhome residence or luxury lodging accommodations, today’s consumers are accustomed to the best. Privacy and solitude are especially important factors in their decisions. And the last thing they’re willing to put up with is impact noise from other floors and adjoining units.

**THE SUPERIOR SOUND CONTROL SYSTEM**

When the expectations for solitude are high, the sound control system chosen must be met or exceed those expectations. Unlike some glorified carpet pads sold as “sound mats,” Acousti-Mat II is specifically engineered and tested to inhibit sound transfer. Manufactured for Maxxon Corporation, the floor specialists, NEW Acousti-Mat II represents a breakthrough in sound control technology-one that makes superior sound control more cost-effective than ever.

**PROVEN PERFORMANCE**

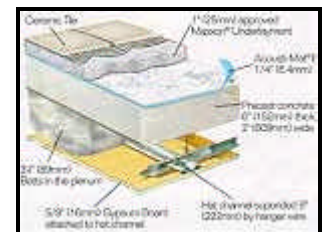
NEW Acousti-Mat II consists of a nylon core of fused entangle filaments, attached to a non-woven fabric. This system reduces transmission of impact and airborne sound by creating a void area in the floor’s construction. The 95% void area serves as an excellent sound isolator. The Acousti-Mat II provides a strong structural element for the Maxxon underlayment. Patterned in a “V” shape, the fine filaments also provide strong deflection and compression resistance.

**FIRE RESISTANCE**

Acousti-Mat II’s benefits aren’t limited to sound control alone. With a high-strength Maxxon Floor Underlayment, it creates a flame barrier between the wood or concrete subfloor and other flammable materials, for a space that’s even more sound and safe.

**IMPROVES HARD SURFACE AREAS, OR THE ENTIRE FLOOR.**

Sound rating of 45 F-IIC and 50 IIC are standard requirements for multi-family housing, limiting interior floor covering choices to basic carpet and pad. But with Acousti-Mat II, elegant hardwoods, marble and ceramic tile can be incorporated without sacrificing sound control-in a few select areas, or though out the entire floorplan.





Acousti-Mat II is laid over the entire concrete or wood subfloor.



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



Seams between sections of Acousti-Mat II are sealed with tape.



Acousti-Mat II is covered with a one-inch (25 mm) minimum tapping of approved Maxxon underlayment. To ensure uniform depth and a smooth finish, installers use a "screed" to finish the underlayment surface.



In as little as two hours after the underlayment has been poured, the floor is had 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.

#### Sound Tests

	¼" (6.4 mm) NEW Acousti-Mat II	Underlayment	Batt Insulation	Ceiling Suspended on Channel	Floor Coverings	Ceiling Drywall	Rating	Test Numbers
<b>Parallel Chord Truss "2 x 4" (50 x 102 mm) OSB Subfloor</b>	Yes	1" (25 mm)	Yes (blown-in)	Yes	Vinyl	5/8" (16 mm)	61 F-STC 55-F-IIC	3018 98 67280.7 &.4
		1" (25 mm)	Yes (blown-in)		Ceramic	5/8" (16 mm)	56-F-IIC	3018 9867280.5
<b>Precast Concrete 6" x 2' (152 mm x 61 cm)</b>	Yes	1" (25 mm)	Yes (batt)	Yes	Ceramic	5/8" (16 mm)	59 STC	RAL-TL98-108
		1" (25 mm)	Yes (batt)		Ceramic	5/8" (16 mm)	57 IIC	RAL-IN 98-12
<b>TJI Joist W/ ¾(19 mm) T&amp;G OSB subfloor</b>	Yes	1" (25 mm)	Yes (batt)	Yes	Vinyl	5/8" (16 mm)	53 F-IIC	1801 991736.3
<b>TJI Joist W/ ¾(19 mm) T&amp;G OSB subfloor</b>	Yes	1" (25 mm)	Yes (batt)	Yes	None	5/8" (16 mm)	56 F-STC	1801 991736.7
<b>TJI Joist W/ ¾(19 mm) T&amp;G OSB subfloor</b>	Yes	1" (25 mm)	Yes (batt)	Yes	Ceramic	5/8" (16 mm)	52 F-IIC	1801 991736.4

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 and available upon request. Maxxon Underlayments and Acousti-Mat II 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.

Limitations:

1. The structural floor should be adequate to withstand design loads with a deflection limitation of L-360
2. Acousti-Mat II should be installed after the drywall.
3. Acousti-Mat II should not be installed over delaminated wood subfloors.

Product Support

Product Support:

Engineered by Enka. Additional product literature, sound test reports and CSI formatted specifications are available upon request. Or visit our web site at <http://www.maxxon.com>

Technical Data:

**Description**

Material Composition: Nylon  
Thickness, nominal: ¼" (6 mm)  
Density: 5.5 pcf (88 kg/m<sup>3</sup>)  
Color: blue with white fabric

**Flammability ASTM E-84**

Fuel contribution: 0  
Smoke density: NFPA Class A  
Flame spread: NFPA Class A

**Code Listings**

ICBO #3488  
ICBO #4950

**Deflection**

Pressure	Deflection
500 psf (244 kg/m <sup>2</sup> ):	0.06 inches (1.52 mm)
1000 psf (4880 kg/m <sup>2</sup> ):	0.08 inches (2.03 mm)
2000 psf (9760 kg/m <sup>2</sup> ):	0.15 inches (3.81 mm)
4000 psf (19520 kg/m <sup>2</sup> ):	0.20 inches (5.08 mm)

FIRE RATINGS/UL DESIGN NUMBERS				
J917	L001	L211	L513	L529
J919	L003	L212	L514	L532
J920	L004	L501	L515	L534
J924	L005	L502	L518	L535
J927	L006	L503	L519	L536
J931	L201	L505	L522	L537
J957	L202	L506	L523	L541
J966	L206	L507	L524	L544
J991	L208	L509	L525	L546
J994	L209	L511	L526	
K906	L210	L512	L528	

*"I've specified Acousti-Mat II for various types of construction – multi-family, open beam, and renovation – with excellent results. Incorporating Acousti-Mat II over a concrete or wood frame subfloor with fiberglass insulation and a resiliently supported ceiling, will provide superior impact noise control."*

*Acoustician with over 30 years of consulting experience*

## SECTION 03540

Gypsum Cementitious Underlayment  
RECOMMENDED  
SPECIFICATIONS FOR MASSON  
FLOOR UNDERLAYMENT OVER  
Acousti-Matt II SOUND DEADENING  
PAD

### PART 1 GENERAL

#### 1.01 SUMMARY

- A. This is the recommended specifications for Maxxon Floor Underlayment over Acousti-Matt II sound deadening pad.

#### 1.02 SECTION INCLUDES

- A. Maxxon Underlayment
- B. Acousti-Matt II
- C. Maxxon Floor Primer
- D. Maxxon Overspray

#### 1.03 QUALITY ASSURANCE

- A. Maxxon Underlayment Installer's Qualifications: Installation of Maxxon Underlayment shall be by and applicator authorized by the Maxxon Corporation using Maxxon approved mixing and pumping equipment.
- B. Acousti-Matt II Installer's Qualifications: Installation of Acousti-Matt II shall be by an applicator authorized by the Maxxon Corporation.

#### 1.04 DELIVERY, STORAGE AND HANDLING

- A. General Requirements: Material shall be delivered in their original, unopened packages, and protected from exposure to the elements. Damaged or deteriorated material shall be removed from the premises.

#### 1.05 SITE CONDITIONS

- A. Environmental Requirements: Before, during and after installation of Maxxon Underlayment and Acousti-Matt II, building interior shall be enclosed and maintained at a temperature above 50

- D. Mix water: Potable, free from impurities
- E. Subfloor Primer: Maxxon Floor Primer
- F. Sealer: Maxxon Overspray

#### 2.02 MIX DESIGNS

- A. General Requirements: Mix proportions and methods shall be in strict accordance with product manufacturer recommendations.

### PART 3 EXECUTION

#### 3.01 PREPERATION

- A. Condition and Cleaning of Subfloor: Subfloor shall be structurally sound. General Contractor shall clean subfloor to remove mud, oil, grease, and other contamination factors before the arrival of the Maxxon Underlayment crew.
- B. Leak Prevention: Fill cracks and voids with a quick setting patching or caulking material where leakage of Maxxon Underlayment could occur.
- C. Expansion Joints: Allow joints to continue through the Maxxon Underlayment at the same width.

#### 3.02 APPLICATION OF CEMENTITIOUS FLOORING

- A. Acousti-Mat II Installations: Install Acousti-Mat II following manufactures' recommended mendations and specifications.

#### 3.03 APPLICATION OF CEMENTITIOUS FLOORING

- A. Scheduling: Application of Maxxon Underlayment shall not begin until the building is enclosed, including roof, windows, doors and other fenestration. Install after drywall insulation unless tenant finish requirements identify partitioning after the pour. Schedule the Acousti-Mat II sound control system as late as possible in the construction cycle.
- B. Priming Acousti-Mat II: Prime

#### 3.04 PREPERATION FOR INSTALLATION OF GLUE-DOWN FLOOR GOODS

- A. Sealing: Seal all areas that receive glue down floor goods with Maxxon Overspray according to the Maxxon Corporation's specifications. Any floor areas where the surface has been damaged shall be cleaned and sealed regardless of floor covering to be used. Where floor goods manufactures require special adhesive or installation systems, their requirements supersede these recommendations.
- B. Floor Goods Procedures: See the Maxxon Corporation's "Procedures for Attaching Finished Floor Goods to Maxxon Underlayments" brochure for guidelines for installing finished floor goods. This procedure is not a warranty and is to be used as a guideline only.

#### 3.05 FIELD QUALITY CONTROL

- A. Slump Test: Maxxon Underlayment mix shall be tested for slump as it's being pumped using a 2-inch by 4 inch (50 mm by 101 mm) cylinder resulting in a patty size of 8 inches (203 mm) plus or minus 1 inch (25 mm) diameter.
- B. Field Samples: At least one set of 3 molded cube samples shall be taken from each day's pour during the Rapid Floor Ultra application. Cubes shall be tested as recommended by Rapid Floor Systems in accordance with ASTM C 472. Test results shall be available to architect and/or contractor upon request from applicator.

#### 3.06 PROTECTION

- A. Protection From Heavy Loads: During construction, place temporary wood planking over Rapid Floor Ultra wherever it will be

degrees F (10 degrees C).

## **PART 2 PRODUCTS**

### **2.01 MATERIALS**

- A. Floor Underlayment: Floor underlayment as manufactured by the Maxxon Corporation, Hamel, MN. All others must receive prior approval.
- B. Sound Deadening Pad: Acousti-Matt II as manufactured by the Maxxon Corporation, Hamel MN.
- C. Sand Aggregate: Sand shall be 1/8 inch (3 mm) or less, washed masonry or plaster sand, meeting requirements of Maxxon Corporation Sand Specifications 101.

Acousti-Mat II using the Maxxon Floor Primer to bond the Maxxon Underlayment to the pad.

- C. Application: Place Maxxon Underlayment a nominal 1 inch (25 mm) thick, over loosely laid Acousti-Mat II. Spread and screed Maxxon Underlayment to a smooth the surface.
- D. Drying: General Contractor shall provide continuous ventilation and adequate heat to rapidly remove moisture from the area until the Maxxon Underlayment is dry. General Contractor shall provide mechanical ventilation if necessary. Under the above conditions, for 1 inch thick Maxxon Underlayment, 7-10 days is usually adequate drying time. To test for dryness tape a 24 inch by 24 inch (609 mm by 609 mm) section of plastic or a high density rubber mat to the surface of the underlayment. After 48-72 hours, if not condensation occurs, the underlayment shall be considered dry. Perform dynes test 5-7 days after pour.

subject to heavy wheeled or concentrated loads.

**END OF SECTION**