

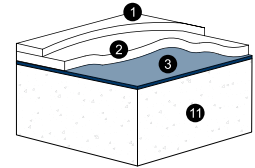
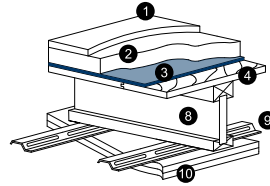
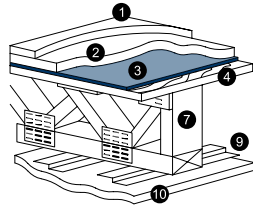
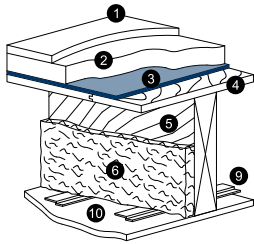


# HACKER SOUND MAT II

**HACKER SOUND MAT II**, to create a quieter living environment while meeting demanding project specifications in multi-family construction.

**HACKER SOUND MAT II**, a recycled rubber sound control mat, installed under a FIRM-FILL<sup>®</sup> Gypsum Concrete Floor Underlayment to produce an exceptional vibration isolation floor system.

- Helps contribute towards LEED points
- Specify with FIRM-FILL<sup>®</sup> Gypsum Concrete Floor Underlayments for additional LEED credits
- Reduces sound transmission between floors; improves STC and IIC ratings
- Over 100 UL Fire Rated Design listings
- System rated for commercial and residential use ASTM C627
- Installed by trained Licensed Applicators



1 - FLOOR COVERING / 2 - FIRM-FILL® BRAND GYPSUM CONCRETE / 3 - HACKER SOUND MAT II / 4 - PLYWOOD OR OSB / 5 - NOMINAL WOOD JOIST / 6 - BATT INSULATION / 7 - PARALLEL CHORD TRUSS / 8 - TJI® JOIST / 9 - RESILIENT CHANNEL / 10 - GYPSUM WALLBOARD / 11 - 6" CONCRETE



Performance in wood-frame and concrete structures



Improves Impact Insulation Class (IIC) ratings



Improves Sound Transmission Class (STC) ratings



Allows vapor to pass through to prevent trapped moisture



Class A Fire-rated Product



Installed by Hacker Industries trained Licensed Applicators



Requires dry-in (building must be fully enclosed before installation)



May not be used as a vapor barrier



Deflection must not exceed L/360 live or dead load



Do not use Mechanical Fasteners



Must be used with FIRM-FILL® Gypsum Concrete



Robinson Wheel tested Light Commercial



Install isolation barrier around perimeter of floor



Install Hacker Sound Mat II with dimples down



Tape all seams with duct tape or 2" wide tape



Install FIRM-FILL® Brand Gypsum Concrete



Apply Hacker TopCoat™ SP when specified



Install finished floor covering only when completely dry

# SUBMITTAL FORM



TECHNICAL DATA	PROPERTIES
Roll Weight	90 lb (40.8 kg)
Thickness	1/4 in (6 mm) nominal
Width	54 in (137.16 cm)
Core Color	Black recycled rubber
Packaging Length	30 ft (9.14 m)
Total Square Feet	135 ft <sup>2</sup> (41.15 m <sup>2</sup> )
Steiner Tunnel Test	Class B
Pill Test DOC-FF 1-70	Passes
Compression Set 601/12131	15%

## Benefits

- A 1/4" sound control mat designed to control noise in multi-family projects
- Integral part of an exceptional vibration isolation floor system
- Composed of recycled tire rubbers
- Specify with a FIRM-FILL<sup>®</sup> Gypsum Concrete Floor Underlayment
- Helps contribute points to LEED project certification
- Installed only by trained Licensed Applicators across North America

## Product Description

A durable, environmentally-friendly sound control mat composed of recycled rubber that helps increase STC and IIC values to create a quieter living environment. Ideal for all types of wood frame construction, Hacker Sound Mat II features a quick and easy dry laid installation. Specify Hacker Sound Mat II with a 1-1/4" FIRM-FILL<sup>®</sup> Gypsum Concrete topping for the ultimate sound performance system.

## Limitations

- Shall not be used in exterior locations, below grade or where continuous exposure to moisture is likely.
- Shall not be used without a FIRM-FILL<sup>®</sup> Gypsum Concrete topping.
- Structure shall be designed so that deflection does not exceed L/360 live or dead load. Certain floor coverings, such as marble, limestone, travertine and wood, may have more restrictive deflection limits. Consult the appropriate floor covering manufacturer for their recommendations.
- Do not use mechanical fasteners to install Hacker Sound Mat II, as mechanical fasteners conduct impact sound, reducing acoustical isolation.
- Hacker Sound Mat II shall be installed with a perimeter isolation strip.
- Hacker Sound Mat II is one component of an effective sound attenuation control system. Care must be taken in the installation of all components to ensure the ultimate design performance. Published acoustical and fire system tests were conducted under controlled laboratory and/or field conditions and reflected results are applicable only to those specific assemblies.

## Installation

Before, during and after installation, the building must be enclosed and the temperature maintained at a minimum of 50°F (10°C). Prior to installation, the subfloor shall be structurally sound (L/360), broom cleaned, dry and free from oil, grease, paraffin, laitance, wax or other contaminants.

# SUBMITTAL FORM

## INSTALLATION(cont.)

Attach perimeter isolation strip or approved alternative to the walls, conduit, flanges, ballasts, etc. in order to isolate or break the vibration transmission path between the floor and wall. Reinforcement is recommended in doorways and other high traffic or transition areas.

Lay Hacker Sound Mat II onto the subfloor with dimples DOWN. The mat shall lay flat, even and uniform. Hacker Sound Mat II shall be pushed up tightly to the isolation barrier previously installed around the perimeter of the floor. Use a high-quality duct tape to tape the seams. Install FIRM-FILL® Gypsum Concrete at a minimum of 1-1/4" (32 mm). Refer to Hacker Industries, Inc. most recent FIRM-FILL® Gypsum Concrete underlayment recommended specifications.

Finished floor coverings can be installed when the FIRM-FILL® Brand Gypsum Concrete is completely dry. Consult flooring contractor for recommended procedures to test for dryness and acceptable levels of moisture. Reference Hacker Industries, Inc.'s Guidelines for Installing Finished Floor Coverings. This guideline is not a warranty and shall be used as a guideline only. See ASTM F2419.

## Product Data

<b>Core Thickness:</b>	1/4 in (6 mm) nominal
<b>Roll Weight:</b>	90 lb (40.8 kg)
<b>Packaging Length:</b>	30 ft (9.14 m)
<b>Core Width:</b>	54 in (137.16 cm)
<b>Total square feet:</b>	135 ft <sup>2</sup> (41.15 m <sup>2</sup> )

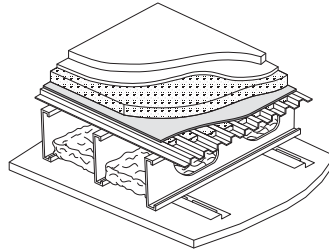
## Sound Test & UL Fire Rated Designs

### PURPOSE STATEMENT/DISCLAIMER

These guidelines are designed to provide the architectural and building communities with detailed performance data on Hacker Industries, Inc.'s comprehensive portfolio of sound attenuation tests and UL Fire Rated Designs. The tests for the assemblies included in these guidelines were conducted in a laboratory setting per ASTM C177, E84, E90, E492 and E2179. These guidelines are not warranties and should be used as guidelines only. The architects' and general contractors' recommendations supersede these guidelines. Field performance may vary. Subject to express Warranty stated on Hacker Industries, Inc.'s website.

Hacker Industries, Inc. regularly performs acoustical testing and fire (UL) testing to ensure performance standards for our products. Firm Fill® SCM (sound control mats), including Hacker Sound Mat II, were tested acoustically with the following floor assemblies and performed as noted.

# SUBMITTAL FORM



Hacker Sound Mat II – Corrugated Metal Deck										
Subfloor Topping	Sound Mat	Subfloor	Insulation	Truss	Ceiling Isolation	Ceiling	Finish	Sound Rating		Report #
								STC	IIC	
1" (25 mm) FIRM-FILL® CMD Gypsum Concrete	1/4" (6 mm) Hacker Sound Mat II	14 mm deep 22 msg galvanized corrugated fluting steel decking	3-1/2" (89 mm) unfaced fiberglass batt insulation	Dietrich	Clark Dietrich RCSD Resilient Channel	1 layer 5/8" (16 mm) type C gypsum board	13 mm Quarry Tile Flooring Over 10 mm HSM I**	61	--	5008041
							13 mm Quarry Tile Flooring Over 10 mm HSM I**	--	58	7008100

Contributes points to LEED® certification.

UL Fire Rated Designs	
<b>Steel Deck</b>	G230, G516, G524, G553, G561, G565, G566, G568, G587, G594, G595
<b>Steel Joist</b>	L524, L527, L539, L543, L549, L551, L552, L564, M505, M511, M513, M515, M534

\*Tested in accordance with ASTM E2179 - Standard Test Method for Laboratory Measurement of Effectiveness of Floor Coverings in Reducing Impact Sound Transmission Through Concrete Floors.

# SUBMITTAL FORM

## Warranty

*Subject to express warranty stated on Hacker Industries, Inc.'s website.*

## Submittal Approvals

\_\_\_\_\_  
Project Name

\_\_\_\_\_  
Contractor/Architect

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

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*The sound test acoustical guidelines shall only be a resource and are not a guarantee of performance. FIRM-FILL® SCM Underlayments are only one component in an overall floor/ceiling assembly. Their acoustical performance is affected by every other component. The likelihood of achieving code compliance is contingent upon many other trades including (but not limited to) framers, plumbers and drywall contractors. Developers and general contractors are responsible for building properly and testing field performance as soon as possible in order to ensure the reliability of the project. Laboratory tests are not a guarantee of field performance because of the issues noted above and many other design and/or construction errors that may occur. Please consult a professional acoustical consultant to assure specifications are written correctly and that the floor/ceiling assembly can perform to expectations. Field performance testing shall be done to ensure reliability of design prior to occupancy.*

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### PRODUCT INFORMATION

See [www.HackerIndustries.com](http://www.HackerIndustries.com) for current recommended product specifications and literature.

Hacker Sound Mat II, for use with Hacker Floor Underlayments, is a component in an overall floor/ceiling assembly. Its performance is affected by every other component and the likelihood of achieving code compliance is contingent upon many other trades, including framers, plumbers and drywall contractors. Developers and general contractors are responsible for building properly and testing field performance as soon as possible in order to ensure the reliability of the project.

### WARNING

Laboratory tests are not a guarantee of field performance because of the issues noted above and many other design and/or construction errors that may occur. Please consult a professional acoustical consultant to ensure plans are proper and that the floor/ceiling assembly can perform to expectations.

### TRADEMARKS

FIRM-FILL®, GYP-SPAN®, Let Our Products Floor You™ and the associated logos are trademarks of Hacker Industries, Inc. LEED® is a registered trademark of the U.S. Green Building Council.

### WARRANTY

**HACKER INDUSTRIES, INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, DIRECTLY OR INDIRECTLY SUSTAINED, NOR FOR ANY LOSS CAUSED BY APPLICATION OF THESE GOODS NOT IN ACCORDANCE WITH CURRENT PRINTED INSTRUCTION OR FOR OTHER THAN THE INTENDED USE. HACKER'S LIABILITY IS EXPRESSLY LIMITED TO REPLACEMENT OF DEFECTIVE GOODS. ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO HACKER INDUSTRIES, INC. WITHIN 30 DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

### SAFETY FIRST

Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read specs, MSDS and literature prior to specification and installation.

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