RECOMMENDED SPECIFICATIONS

Firm-Fill® SCM-125 SOUND CONTROL MAT

PART I. GENERAL

1.1 Scope

The work of this section includes FIRM-FILL® SCM-125 to be placed under FIRM-FILL® Gypsum Concretes.

1.2 Qualifications

A. FIRM-FILL® SCM-125 shall be installed by trained Licensed Applicators of Hacker Industries, Inc.

B. All materials specified herein shall be approved by Hacker Industries, Inc., Newport Beach, CA. All others must receive prior approval.

C. Materials shall be delivered in their original, unopened containers with identification labels intact. Protect materials from exposure to harmful weather conditions and maintain at a minimum temperature of 50˚F (10˚C).

D. Before, during and after installation the building interior shall be ventilated and heated to a minimum of 50°F (10°C) to assure completion of the drying process for the Hacker Floor Underlayment.

PART II. PRODUCTS

2.1 Product Description

FIRM-FILL® SCM-125 is a nominal 1/8" (3 mm), random filament, corrugated "U"- groove core sound control mat designed to limit impact noise between floors. Designed for critical applications in which FIRM-FILL® Gypsum Concrete will be utilized. FIRM-FILL® SCM-125 prevents liquid moisture from passing through to the substrate, an essential quality for wood frame construction. FIRM-FILL® SCM-125 is a Class A fire-rated product. Use with a minimum 3/4" FIRM-FILL® Gypsum Concrete topping.

2.2 Product Limitations

A. Shall not be used in exterior locations, below grade or where continuous exposure to moisture is likely.

B. Shall not be used without a FIRM-FILL® Gypsum Concrete topping.

C. 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.

D. Do not use mechanical fasteners to install FIRM-FILL® SCM-125, as mechanical fasteners conduct impact sound, reducing acoustical isolation.

E. FIRM-FILL® SCM-125 shall be installed with a perimeter isolation strip.

F. FIRM-FILL® SCM-125 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 or field conditions and reflect results applicable only to those specific assemblies.

PART III. PREPARATION

3.1 Condition of Subfloor

A. Subfloor shall be structurally sound (L/360), broom clean, dry and free from oil, grease, paraffin, laitance, wax or other contaminants. Concrete substrate shall be 28 days or older.

B. **Leak prevention:** All cracks and voids should be filled with a quick-setting patching or taping compound or equal where leakage may occur.

C. Before installation, the GC shall inspect and approve the condition of the subfloor and test the existing subfloor for moisture.

3.2 Application

A. **Scheduling:** Installation of FIRM-FILL® SCM-125 shall not begin until other trades are finished in the area. Protect FIRM-FILL® SCM-125 from trade traffic prior to application of FIRM-FILL® Gypsum Concretes.

B. **Installation**

1. Perimeter Isolation Strip shall be properly installed in an "L" formation around areas where FIRM-FILL® SCM-125 will be installed, including any openings in the subfloor installation.

2. FIRM-FILL® SCM-125 is laid directly over the concrete, plywood or OSB subfloor, with the blue mesh down and white/blue fabric side up. It should be pushed up tightly to the isolation barrier that was previously installed around the perimeter of the floor; the gap between the floor and wall should not exceed 0.25" (6 mm). Alternately, the FIRM-FILL® SCM-125 may be pushed up tightly to the gypsum wall board when the isolation barrier installed is FIRM-FILL® Perimeter Isolation. The gap between the floor and wall should not exceed 0.25" (6 mm).

3. FIRM-FILL® SCM-125 edge must be placed adjacent to other pieces without any gap. Rolls are manufactured with the self-adhesive selvage edge folded over on the fabric top. If necessary, tape (duct tape or 2" [51 mm]-wide tape) the 3" (76 mm) fabric overlaps snug to the fabric on the adjoining FIRM-FILL® SCM-125 strip. Tape all seams to prevent penetration into the core material during pour. Double tape seams if necessary. When unrolled, the selvage edge remains in that position. Starting at the base of the roll, smooth the selvage edge to the adjacent piece.

3.3 Application of FIRM-FILL® Brand Gypsum Concretes

A. Taping and seams of FIRM-FILL® SCM-125 shall be checked and approved by the GC prior to the installation of FIRM-FILL® Gypsum Concretes.

B. Install FIRM-FILL® Gypsum Concretes at a minimum thickness of 3/4" (19 mm).

C. **Protection:** After installation, temporary wooden planking shall be placed by GC wherever the underlayment is subject to wheeled loads.

D. **Drying:** The GC shall provide continuous ventilation and adequate heat to rapidly remove moisture from the area until the underlayment is dry. If necessary, the GC shall provide mechanical ventilation and heat. Do not install finished floor coverings until the FIRM-FILL® Gypsum Concrete has been tested for dryness. Consult flooring contractor for recommended procedures to test for acceptable moisture levels. To avoid potential problems during the drying process, the GC shall consult Hacker Industries, Inc.'s Drying Conditions Flyer and Hacker Industries, Inc.'s website for additional information.

3.4 Preparation for Installation of Floor Coverings

A. **Sealing:** Any areas where the underlayment surface has been damaged shall be cleaned and sealed. The floor covering manufacturer's specificatiions and requirements suspersede these recommendations.

B. **Floor Covering Procedures:** See Hacker Industries, Inc.'s Guidelines for Installing Finished Floor Coverings. The guideline is not a warranty and shall be used as a guideline only. See ASTM F2419.

C. After finished floor covering is installed, trim the perimeter isolation strip below the finished flooring. Fill the groove with a bead of acoustical sealant or elastomeric sealant. Do not allow ceramic tile, grout or FIRM-FILL® Gypsum Concrete to come in contact with the wall. Shim the molding above the finished floor covering and caulk with an acoustical sealant.

3.5 Field Quality Control

Sound tests on underlayment systems have been conducted under laboratory and field conditions. Contact Hacker Industries, Inc. at (800) 642-3455 for information. Note: 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.

Warranty: *Hacker Industries, Inc. warrants Hacker Floor Underlayments (HFU) to be free from manufacturing defects, and when properly prepared and installed according to approved specified methods, HFU will attain minimum physical specifications as stated by Hacker Industries, Inc.'s most recent literature. Hacker Industries, Inc.'s obligation shall be limited to the replacement of the bagged product only and is subject to notice and inspection requirements. This warranty is in lieu of all other warranties, express or implied, including the warranties of merchantability and fitness for a particular purpose and all other obligations or liabilities.*