

# **RECOMMENDED SPECIFICATIONS**



#### **PART I. GENERAL**

### 1.1 Scope

The work of this section includes Hacker Sound Mat II to be placed under FIRM-FILL® Gypsum Concretes.

#### 1.2 Qualifications

- **A.** Hacker Sound Mat II 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

A durable, environmentally-friendly sound control mat composed of recycled rubber that helps increase STC and IIC values, creating a quieter living environment. Ideal for all types of woodframe 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® Gypsum Concrete topping for the ultimate sound performance system.

#### 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 recommendations.
- **D.** Do not use mechanical fasteners to install Hacker Sound Mat II, as mechanical fasteners conduct impact sound, reducing acoustical isolation.
- **E.** Hacker Sound Mat II shall be installed with a perimeter isolation strip.
- Hacker Sound Mat II is one component of an effective sound and fire control system. Care must be taken in the installation of all components to assure 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.

# RECOMMENDED SPECIFICATIONS (CONT.)



#### **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 and meet ASTM F710.
- **B.** Before installation, the GC shall inspect and approve the elevations and subfloor and test the existing subfloor for moisture.
- **C.** When required, the GC shall install bulkheads in areas where the Hacker Sound Mat II stops and meets the carpet and pad areas.
- **D.** All cracks and voids should be filled with a quick-setting patching or taping compound or equal where leakage may occur.

#### 3.2 Application

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

#### B. Installation

- 1. Attach Perimeter Isolation Strip or approved alternative to the wall around areas where Hacker Sound Mat II will be installed, including any openings in the subfloor installation, in order to isolate or break the vibration transmission path between the floor and the wall. Reinforcement is recommended in doorways and other high traffic areas.
- 2. Lay Hacker Sound Mat II onto the subfloor with dimples DOWN. The mat shall lie flat, even and uniform. Hacker Sound Mat II shal be pushed up tightly to the isolation barrier previously installed around the perimeter. Use a high-quality tape (duct tape or 2" (51mm) -wide tape) to tape the seams.

### 3.3 Application of FIRM-FILL® Brand Gypsum Concretes

- **A.** Taping and seams of Hacker Sound Mat II 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 1-1/4" (32 mm). Refer to Hacker Industries, Inc.'s most recent FIRM-FILL® Floor Underlayments recommended specifications.
- **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 specifications and requirements supersede 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.