DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT Housing - Federal Housing Commissioner	Series and Series Number: **MATERIALS RELEASE NO:** 1255h (Supersedes issue dated October 26, 2025)
TO: DIRECTORS, SINGLE FAMILY HOCs **DIRECTORS, MULTIFAMILY HUBs**	**ISSUE DATE** 6/22/2026
	REVIEW DATE 6/22/2029

SUBJECT: **1. Product** FIRM-FILL® Gypsum Concrete, FIRM-FILL® 2010+, FIRM-FILL® 3310, and FIRM-FILL® 4010 Underlayment Systems

2. Name and address of Manufacturer

Hacker Industries, Inc.
P. O. Box 5918
Newport Beach, CA 92662

Data on the nonstandard product described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

USE:

Interior floor underlayment for use under a wearing course of carpet, tile or other approved floor covering.

DESCRIPTION:

Hacker Floor Underlayment (FIRM-FILL® Gypsum Concrete, FIRM-FILL® 2010+, FIRM-FILL® 3310, and FIRM-FILL® 4010) are a non-structural gypsum floor fill for use on plywood, oriented strand board (OSB), steel deck, and concrete floors. The underlayment shall be covered with carpet, tile or other approved floor coverings.

MATERIALS:

Hacker Floor Underlayments (HFU) are made of calcined gypsum containing not less than 90% by weight of calcium sulfate hemihydrate, as specified in ASTM C-28, Standard Specification for Gypsum Plasters, and up to 10% by weight of Type 5 Portland Cement as specified in ASTM C-150, Standard Specification for Portland Cement. Sand shall be washed mason, plaster or mortar sand. Sand shall be 1/8" or less sieve size. Water shall be potable and free of impurities.

All materials shall be approved by Hacker Industries, Inc.

REQUIREMENTS:

The floor system shall support the design live load with a deflection limit of L/360. The subfloor may be plywood, oriented strand board (OSB), corrugated metal deck (CMD), concrete or precast concrete. Plywood shall meet the requirements of PS 1-95 Exterior OSB shall meet the requirements of Performance Standard for Wood-Based Structural-Use Panels, PS 2-92 Exposure 1. All panels shall meet the span rating requirements of Table 1 below. Provide tongue and groove joints, blocking or panel clips at joints. The minimum underlayment thickness shall be in accordance with Table 1 below, except that the underlayment placed on concrete or precast concrete may be a minimum of ½".

TABLE 1

Support Spacing (inches)	Span Rating (inches)	Minimum Gypsum Thickness (inches)
16	32/16	¾
19.25	40/20	¾
24	48/24	1

Underlayment shall meet the strength and density requirements of Table 2.

TABLE 2

Underlayment Brand Name	Typical Compressive Strength (PSI)	Bags of Product	Aggregate (cu. ft.)	Water (gal.)	Typical Dry Density (lb./ft^3)
FIRM-FILL Gypsum Concrete	1,200	One (1)	1.9	4.5-5	105
FIRM-FILL 2010+	2,000	One (1)	1.9	4.5-5	110
FIRM-FILL 3310	3,200	One (1)	1.4		120
FIRM-FILL 4010	4,000	One (1)	1.9	4.5-5	125

INSTALLATION:

The Hacker Underlayment System shall be installed in strict compliance with the manufacturer's printed specifications, by a Licensed Applicator authorized by Hacker Industries, Inc., using mixing and pumping equipment with a water meter authorized by Hacker Industries, Inc. Pre-installation, and post- installation methods shall be provided by Hacker Industries, Inc. to its licensed applicators.

1. Subfloor

   The subfloor shall be structurally sound, broom clean, and free of mud, oil, grease, or other contaminants. To prevent leakage, all cracks and voids shall be filled with a quick setting topping or caulking compound approved by Hacker Industries, Inc.

2. Priming

   All wood subfloors shall be primed with Hacker Floor Primer. On new wood, one coat of latex primer shall be sprayed on at the rate of 1 gallon per 500 sq. ft. over the entire surface. On new or old concrete, a sealer is not necessary; however, all concrete subfloors shall be primed with Hacker CMD Primer.

3. Finished Flooring

   Before, during and after installation of HFU, building interior shall be maintained at a temperature above 50°F until structure and subfloor temperatures are stabilized. If condensation occurs after installation, provide adequate ventilation to remove moisture from the area until underlayment is dry. Under the above conditions, 4-6 days is usually an adequate drying time. In accordance with

ASTM F2419, prior to installation of finished floor goods, thick poured gypsum concrete underlayment shall be tested or with an electronic moisture meter with a gypsum scale recommended by the manufacturer of the thick poured gypsum concrete underlayment. Acceptance criteria for the suitability of the substrate for installation of resilient floor covering shall be provided by the manufacturer of the resilient floor covering. To test for dryness, tape 24" x 24" sections of plastic to the surface of the HFU. In accordance with ASTM F2419, prior to installation of finished floor goods, thick poured gypsum concrete underlayment shall be tested in accordance with Test Method D 4263 or with an electronic moisture meter with a gypsum scale recommended by the manufacturer of the thick poured gypsum concrete underlayment. If no condensation occurs after 48-72 hours, the HFU installation is considered dry. The floor finish may then be installed.

LIMITATIONS:

The underlayment is for above grade interior use. The underlayment shall not be used in contact with metal door jambs or metal decks. The underlayment requires a finish floor covering to protect it from abrasion.

STORAGE AND HANDLING:

All materials shall be delivered in their original unopened packages and stored in an enclosed shelter providing protection from damage and exposure to the elements. Damaged or deteriorated materials shall not be used.

QUALITY ASSURANCE:

Test cubes shall be taken by Hacker Industries, Inc. or its designated Licensed Applicator at each installation. Take a minimum of 2 sets per job and 1 set per 10,000 sq. ft. of underlayment. Test for density and compressive strength in accordance with ASTM C-472, Modified Standard Test Methods for Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete. A copy of the test results shall be given to the Licensed Applicator. Test results will be available to the owner upon request.

MANUFACTURING LOCATIONS:

The product covered under this MR will be produced at the following plants:

Gypsum Plant Locations

G-P Gypsum Corporation:

Blue Rapids
2127 Highway 77
Blue Rapids, KS 66411
Order Contact: Deb Gunther
Tel: 785-363-7767 x225
Fax: 785-363-7905

Las Vegas
11401 Highway 91
Las Vegas, NV 89124
Order Contact: Cindy Henry
Tel: 702-643-8100 x357
Fax: 702-643-2049

Camden
1101 South Front Street
Camden, NJ 08103
Order Contact: Deb Gunther
Tel: 856-966-7605
Fax: 856-966-1475

IDENTIFICATION AND LABELING:

Each package certified as conforming to this MR shall bear:

1. The name or Trademark of Hacker Industries, Inc.
2. The product name
3. MR 1255f
4. Manufacturing Plant
5. Date of Manufacture

WARRANTY:

Hacker Industries, Inc. warrants that Hacker Floor Underlayments (HFU) system including installation meets the requirements of this Materials Release (MR). Hacker Industries, Inc. warrants the products against defects in materials for a period of five years from the date of installation. Hacker Industries, Inc. shall repair or replace bags of defective HFU. Hacker Industries, Inc. shall not be responsible for defects or damage resulting from installation, fire or natural catastrophes such as floods or tornados.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this MR commits the manufacturer to fulfill, as a minimum, the following:

1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.

2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.

3. When requested, provide the Office of Manufactured Housing Programs, HUD Headquarters, with a representative list of properties in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.

4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This Materials Release shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this Materials Release shall apply for renewal or revision 90 days prior to the Review Date printed on this Materials Release. Submittals for renewal or revisions must be sent electronically to HSGmps@hud.gov .

Appropriate user fee(s) for the TSP program can be submitted through the Pay.gov website at https://pay.gov/public/form/start/73881741

The holder of this Materials Release may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the Materials Release.
If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate user fee for a revision will need to be submitted in accordance with 24 CFR § 200.934 User fee system for the technical suitability of products program, and the current user fee schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the MR. HUD will notify the manufacturer that the MR may be canceled when:

1. conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted materials, product, or system,

2. the manufacturer has changed its organizational form without notifying HUD, or

3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.

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This Materials Release is issued solely for the captioned firm and is not transferable to any person or successor entity.

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