U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
*ASSISTANT SECRETARY FOR HOUSING-FEDERAL HOUSING COMMISSIONER*

Series and Series Number:

TO: DIRECTORS, HOUSING DIVISION
DIRECTORS, MULTIFAMILY DIVISION
DIRECTORS, SINGLE FAMILY DIVISION

MATERIALS RELEASE NO. 1286

ISSUE DATE: May 27, 1997

REVIEW DATE: May 27, 2000

SUBJECT: 1. Product

Rapid Floor® Systems

2. Name and Address of Manufacturer

Maxxon™ Corporation
920 Hamel Road
Hamel, MN 55340

Data on the nonstandard product described herein have been reviewed by the Department of Housing and Urban Development 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, presentation, however made, indicating such approval, endorsement or acceptance 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 coverings.

DESCRIPTION:

The Rapid Floor® Systems underlayment system is a nonstructural gypsum/concrete floor fill used on plywood, oriented strand board (OSB), precast concrete planks, and concrete floors and covered with carpet, tile or other approved finish floor coverings.

MATERIALS:

Rapid Floor® Systems underlayment is made of a minimum of 80% calcined gypsum as specified in ASTM C 28, and a maximum of 20% by weight of Type 5 portland cement as specified in ASTM C 150. Sand shall be washed mason, plaster or mortar sand. Sand shall be 1/16" or less in sieve size. The water shall be potable and free of impurities.

All materials shall be provided by the Maxxon Corporation and the authorized contractor.

REQUIREMENTS:

The structural floor system shall support a design live load with a deflection limit of L/360. The subfloor may be plywood, oriented strand board (OSB), concrete or precast concrete planks. Plywood and OSB shall meet the requirements of Product Standard PS 1-95 "Construction and Industrial Plywood". All panels shall meet the span rating requirements of Table 1 shown on this page. The minimum underlayment floor thickness shall be in accordance with Table 1 (below), except that the underlayment placed on concrete or precast concrete may be a minimum of 1/2".

TABLE 1

| Support Spacing (in.) | Span Rating (in.) | Minimum Underlayment Floor Thickness (in.) |
|---|---|---|
| 16 | 32/16 | 3/4 |
| 19.25 | 40/20 | 3/4 |
| 24 | 48/24 | 1 |

Rapid Floor® Systems shall meet the strength and density requirements of Table 2 (below).

TABLE 2

| | Rapid Floor | Rapid Floor Plus |
|---|---|---|
| Density (Min) | 100 pcf | 100 pcf |
| Compressive Strength (Min) | 1200 psi | 1650 psi* |
| | | 1850 psi* |
| | | 2100 psi* |

*Minimum specified strength

INSTALLATION:

The Rapid Floor® Systems shall be installed by contractors authorized by the Maxxon Corporation and be in strict compliance with the manufacturer's printed specifications. The mixing and pumping equipment shall be approved by the Maxxon Corporation. The underlayment materials, shall be provided by the Maxxon Corporation.

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.

2. Priming

The Maxxon Floor sealer shall be applied to porous wood or concrete floors. The sealer shall be allowed to film over before applying the Maxxon Floor primer. The primer shall be applied at the rate specified. A second coat of primer shall be applied if the primer has been allowed to dry for more than 24 hours before the application of the Rapid Floor underlayment. Nonporous wood or concrete floors do not require a sealer.

3. Gypsum Underlayment

Before, during and after installation of Rapid Floor gypsum underlayment, the building interior shall be maintained at a temperature above 50° until the structural floor and the subfloor temperatures are stabilized. After installation, adequate ventilation shall be provided to rapidly remove the moisture from the area until underlayment is dry. Under the above conditions, 4-6 days is usually an adequate drying time. To test for dryness, tape a 24" x 24" section of plastic film to the surface of the Rapid Floor® underlayment system on a daily basis. After 48 to 72 hours no condensation occurs on the plastic film, the Rapid Floor underlayment system is considered to be 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 to provide protection from damage and exposure to the elements. Damaged or deteriorated materials shall not be used.

QUALITY ASSURANCE:

Test cubes shall be taken, by the approved applicator, at each installation. A minimum of 2 sets of cubes per job and 1 set per 3,000 sq. ft. of underlayment shall be taken. Density and compressive strength shall be tested in accordance with ASTM C 472, as modified by Maxxon Corporation. A copy of the test results shall be given to the owner.

LABELING:

Each bag of Rapid Floor materials shall be labeled with the following information:

a. Maxxon Corporation
920 Hamel Road
Hamel, MN 55340-9610
MR No. 1286

WARRANTY:

The Maxxon Corporation warrants this product against defects due to materials or workmanship for a period of five (5) years. Maxxon Corporation shall make allowance toward the restoration, repair or replacement of the defective material. The "Maxxon Rapid Floor Underlayment System" covered by this Materials Release (MR) shall be installed by the Maxxon Corporation, or an agent of Maxxon Corporation whose personnel have been trained by Maxxon Corporation.

Maxxon Corporation shall not be responsible for any defects or damage due to misuse, or damage resulting from fire or natural catastrophes such as floods or tornados.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (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 Consumer and Regulatory Affairs, Manufactured Housing and Standards Division, 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 MR 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 MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate User Fee shall be sent to:

U.S. Department of Housing and Urban Development
Technical Suitability of Products Fees
P.O. Box 954199
St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the MR.

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 Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of this 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 material, 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 cancelled 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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