

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Housing - Federal Housing Commissioner

Series and Series Number:
MATERIALS RELEASE NO: 951h
(Supersedes issue dated
April 5, 2002)

TO: DIRECTORS, SINGLE FAMILY HOCs
DIRECTORS, MULTIFAMILY HUBs

ISSUE DATE

May 9, 2005

REVIEW DATE

May 9, 2008

SUBJECT: 1. Product "Maxxon" Underlayment System

**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 (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

DESCRIPTION:

"Maxxon" Underlayment System is a nonstructural material for use on wood, plywood, and concrete subfloors covered with carpet, tile or other floor coverings. The "Maxxon" Underlayment System is a mixture of gypsum, Portland cement, sand, and water.

There are 2 systems: **SYSTEM 1** (Gyp-Crete) and **SYSTEM 2** (Gyp-Crete 2000). System 2 is denser and has a higher compressive strength than System 1.

PHYSICAL PROPERTIES:

	Minimum Density (pcf)	Minimum Compressive Strength (psi)
SYSTEM 1	100	1000
SYSTEM 2 Type A	110	1250
SYSTEM 2 Type B	110	1500
SYSTEM 2 Type C	110	2000

Test cubes shall be formed for each installation, and tested in accordance with ASTM C 472, Standard Test Method for Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete.

INSTALLATION:

The "Maxxon" Underlayment Systems shall be installed in strict compliance with the manufacturer's printed specifications, by a contractor authorized by Maxxon Corporation, using mixing and pumping equipment authorized by Maxxon Corporation.

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 Maxxon Corporation.

2. **Finish Flooring**

The finish flooring shall not be installed until the specified mix has cured as prescribed in the installation specification. During this period, the dwelling should maintain a minimum temperature of 55°F with adequate ventilation.

3. **Priming**

All wood subfloors shall be primed with Maxxon Floor Primer. On new wood, one coat of latex primer shall be sprayed on at a rate of 1 gallon per 300 sq. ft. over the entire surface. On new or old concrete, a sealer is not necessary; however, all concrete subfloors shall be primed with Maxxon Floor Primer.

4. **Patching**

Holes or minor surface irregularities shall be patched using a latex patching material which has been approved by Maxxon Corporation.

MATERIALS:

All materials shall be approved by Maxxon Corporation.

"Gyp-Crete"

"Gyp-Crete" shall consist of calcinated gypsum containing not less than 90% by weight of calcium sulfate hemihydrate, as specified in ASTM C 28/C 28M (Standard Specification for Gypsum Plasters), and up to 10% Portland Cement Type 5 as specified in ASTM C 150 (Standard Specification for Portland Cement). Minute amounts of retarder can be added to ensure adequate workability.

2. Sand

Washed mason, mortar or plaster sand (1/8" sieve size or less) shall be used in accordance with Maxxon Sand Specifications 101.

3. Water

The water shall be clean, free from oil, acid, alkali, vegetable matter, or impurities that affect the setting of gypsum.

MIXING INSTRUCTIONS:

System 1 (Gyp-Crete):

The mixture proportions are: 80 pounds of Gyp-Crete (one bag), 2.1 cubic feet of sand and 5 to 6 gallons of water. The finished Gyp-Crete weighs approximately 8.5 to 9 pounds per square foot per inch of thickness.

System 2 (Gyp-Crete 2000):

Gyp-Crete 2000 weighs approximately 9.5 to 9.75 pounds per square foot per inch of thickness. Gyp-Crete 2000 is available in three different mixture proportions:

The mixture proportions are:

Type A: 2.1 Mix Design Gyp-Crete 2000 - for multi-family housing (not for pours of 1/2" or less in depth):
 80 pounds of Gyp-Crete 2000 (one bag)
 2.1 cubic feet of sand
 4 to 5 gallons of water

Type B: 1.8 Mix Design Gyp-Crete 2000 - for single-family housing (not for use on pours of 1/2" or less in depth):
80 pounds of Gyp-Crete 2000 (one bag)
1.8 cubic feet of sand
4 to 5 gallons of water

Type C: 1.4 Mix Design Gyp-Crete 2000 - for renovation and commercial (must be used on all pours 1/2" or less):
80 pounds Gyp-Crete 2000 (one bag)
1.4 cubic feet of sand
4 to 5 gallons of water

LIMITATIONS:

- 1 Underlayment is for interior use only.
2. Subflooring shall be structurally adequate to withstand the design live loads with a deflection limitation of L/360.
3. Underlayment requires a finish floor covering to prevent abrasion and to protect it from moisture.
4. Underlayment thickness shall not be less than the following:

Minimum Subfloor Thickness (in.)	Truss, Beam or Joist Spacing (in.)	Minimum Gyp-Crete Thickness (in.)
19/32	16" to 19" o.c	3/4"
19/32	over 19" to 24" o.c.	1"

5. Underlayment shall not be used directly over metal door jams or metal decks.

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.

CERTIFICATION AND IDENTIFICATION:

Maxxon Corporation shall certify that each bag of the Underlayment System conforms to the requirements of this MR. The Quality Inspection Agency shall validate the manufacturer's certification that the Underlayment System meet the requirements of this MR. Each certified bag of Maxxon Underlayment System shall be marked with the following information:

Manufacturer's name and / or trademark
Plant number
Product designation
Evaluation report number (HUD MR 951)
Quality control agency name and / or trademark

MANUFACTURING LOCATIONS:

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

GP Gypsum
11401 US Hwy 91
North Las Vegas NV 89124
800-896-5406

GP Gypsum
2127 Highway 77
Blue Rapids KS 66411
785-363-7767

GP Gypsum
End of Union Street
Brunswick GA 31521
912-265-1700

GP Gypsum
1101 S Front Street
Camden NJ 08103
856-966-7605

WARRANTY:

Maxxon products are warranted for five (5) years to be of high quality workmanship and materials, and to be free from defects, which might render the windows unserviceable. If a defect occurs, Maxxon Corporation, at it's option (1) repair the defective product, (2) replace the defective materials or (3) refund your purchase price. The warranty also applies to flooring system. Installation and finishing are not included in the warranty. See the warranty included with the product for more specific information.

The manufacturer's warranty does not relieve the builder, in any way, of responsibility under the terms of the Builder's Warranty required by the National Housing Act, or under any provisions applicable to any other housing program.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

- 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 FHA Standards, 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 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 renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to:

U. S. Department of Housing and Urban Development
FHA Standards, Office of Manufactured Housing Programs
451 7th Street, SW, Room 9152-6198
Washington, DC 20410-8000

Appropriate User Fee shall be sent to:

U. S. Department of Housing and Urban Development
Miscellaneous Income – Technical Suitability of Products Fees
Bank of America
P. O. Box 198762
Atlanta, GA 30384-8762

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 the MR. HUD will notify the manufacturer that the MR may be canceled when:

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 cancelled. No refund of fees will be made on a cancelled document.

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