

FOR SUPERIOR HEATING PERFORMANCE AND COMFORT

Therma-Floor®

*Like a Quiet,
Even-Heating
Radiator, Under
Every Floor in
Your Home*

NEW
THERMA-FLOOR
NOW ALWAYS A "GREEN"
BUILDING MATERIAL 



Therma-Floor is a gypsum underlayment designed by Maxxon® Corporation specifically for radiant floor heating systems. Poured over hot water tubes or electric heating cables, it's the ideal thermal mass for any radiant floor system.

Therma-Floor encases the tubes or cables in noncombustible gypsum specially formulated to resist breakdown to 150 °F (66 °C). Poured only 1¼" (32 mm) thick, Therma-Floor also makes your heating system more responsive — and your home more comfortable.

Some radiant systems install under plywood subfloors, resulting in lost heat as plywood is nearly 4 times more insulative than Therma-Floor. Therma-Floor works above the subfloor, for greater efficiency and consistent comfort.

Therma-Floor is now always a "green" building material, manufactured with recycled content. It is GREENGUARD Indoor Air Quality and Children & Schools Certified.

Why a radiant floor heating system isn't complete without Therma-Floor:

- Resists heat deterioration — it's formulated specifically for radiant floor heating
- Enhances heating system responsiveness due to its thin thermal mass
- Provides a smooth, tough surface
- Stiffens the floor
- Seals perimeter walls, keeping out baseboard drafts
- Eliminates squeaks and nail pops common to wood underlayments
- Muffles sound transfer
- Backed by a nationwide applicator network with over 3.5 billion square feet of experience
- Accepts virtually all floor coverings
- Contains no urea formaldehyde.

THERMA-FLOOR®
The Ideal Underlayment for Radiant Floor Heat

The Ideal Underlayment for Electric or Hot Water Radiant Floor Heating Systems

from Maxxon®, the “Green” Floor Specialists.

Product Support:

Additional product literature and information are available upon request. CSI formatted specifications are available at www.maxxon.com

*** Drying Conditions:** Maxxon gypsum underlayments are inorganic and provide no source of nutrients to sustain mold growth. Prolonged contact of moisture with other construction materials, however, can result in mold growth. To avoid growth of mold on construction materials such as wallboard, drywall compound and even dust, it is vital to maintain a low relative humidity both before and after placement of Maxxon gypsum underlayments.

The general contractor must provide and maintain correct environmental conditions to keep the building clean and dry, and protect against infestation of moisture from a variety of potential sources. Moisture can be introduced by other trades through spillage, tracked in mud and rain, plumbing leaks, etc. Often stored in damp conditions, building products may arrive on site laden with moisture that releases after installation. Outside sources such as rain, snow, wind, etc. can also increase moisture levels.

Controlling moisture levels in the building, through appropriate trade sequencing and prevention of potential damage by other trades, is the responsibility of the general contractor. The general contractor must supply mechanical ventilation and heat if necessary. These controls fall under the scope of work of the general contractor — not Maxxon Corporation or the Maxxon gypsum underlayment installer.

Testing: Compressive strength testing must be performed in accordance with modified ASTM C 472. Before independent sampling, contact the Maxxon Corporation quality control department to ensure that proper procedures are followed.

Warranty: Maxxon Corporation warrants Thermo-Floor Underlayment to be free from manufacturing defects as defined in this warranty. Manufacturing defects are considered to be those defects that occur due to the quality of the Thermo-Floor ingredients or from the manufacturing process itself. This warranty does not include labor costs and other costs or expenses associated with the removal or installation of Thermo-Floor.

Because the Maxxon Corporation does not perform the actual Thermo-Floor installation, it cannot be held responsible for the results of the application. Maxxon Corporation specifically disclaims problems that occur due to weather conditions, structural movement, structural design flaws and application techniques.

This warranty is in lieu of all other warranties expressed or implied including the warranty of merchantability and fitness of purpose and of all other obligations or liabilities on Maxxon Corporation's part. Maxxon Corporation neither assumes nor authorizes any person to assume for Maxxon Corporation any liability in connection with the sale and installation of Thermo-Floor.

THERMA-FLOOR®

The Ideal Underlayment for Radiant Floor Heat

For more information:

1-800-356-7887

E-mail: info@maxxon.com

www.maxxon.com

Maxxon® Corporation

920 Hamel Road, P.O. Box 253
Hamel, Minnesota 55340 USA
763-478-9600 • FAX: 763-478-2431



The GREENGUARD INDOOR AIR QUALITY CERTIFIED® Mark is a registered certification mark used under license through the GREENGUARD Environmental Institute.



The Maxxon Green Mark
Maxxon products with this symbol are LEED-compliant and may help contribute toward valuable points for LEED project certification.

Preparation:

Building interior should be enclosed and maintained at a temperature above 50 °F (10 °C) until structure and subfloor temperatures are stabilized. Preferred wood-frame construction is tongue-and-groove veneer or nonveneer subfloors. The subfloor must be broom clean and contaminant free. Before pouring Thermo-Floor, the subfloor is coated with a company approved primer.

Methods of Installation:

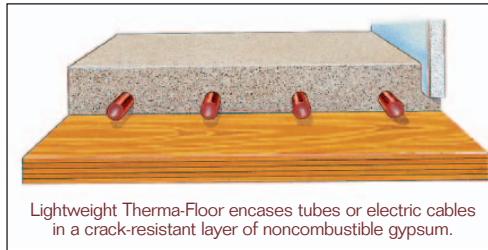
The thickness of Thermo-Floor varies with the type of radiant floor heating system. Thermo-Floor is poured to a depth that is 3/4" (19 mm) above the tops of the tubes or cables, in one or two lifts at the discretion of the installer.

Continuous ventilation and adequate heat should be provided to rapidly remove moisture from the area until the underlayment is dry. The general contractor must supply mechanical ventilation and heat, if necessary.* Under the above conditions, drying time of 5 to 7 days is usually adequate.

For a complimentary copy of the brochure, Procedures for Attaching Finished Floor Goods, contact Maxxon Corporation. It is the responsibility of the floor goods installer to determine the compatibility of their product with a particular floor underlayment.

Limitations:

- (1) Thermo-Floor is to be poured to a depth that is 3/4" (19 mm) above the tops of the tubes or cables.
- (2) Thermo-Floor can be poured before or after drywall is installed.
- (3) All materials above crawl spaces must be protected by a vapor barrier.



Lightweight Thermo-Floor encases tubes or electric cables in a crack-resistant layer of noncombustible gypsum.

(4) During construction, place temporary wood planking over the underlayment wherever it will be subjected to heavy wheeled or concentrated loads.

(5) Thermo-Floor is not designed to be installed on or below grade, except over well-drained structural substrates.

(6) The structural subfloor and floor joist must both comply with manufacturers' maximum span criteria. Typically a deflection limitation of L/360 is adequate for Thermo-Floor. Some floor coverings may require a stiffer floor system. Thermo-Floor is non-structural and therefore cannot be expected to reinforce structurally deficient subfloors. Necessary allowances should be made for expected live,

concentrated, impact, and/or dead loads including the weight of finished floor goods and setting beds.

(7) Thermo-Floor should not be used for exterior application, or where it will come in prolonged contact with water.

(8) Thermo-Floor should not be applied directly to a plastic vapor barrier.

(9) Maxxon underlayments are “breathable” and not a vapor barrier. The general contractor, architect, specifier, or building owner shall test slabs-on-ground or elevated slabs for MVER (ASTM F1869-09) or RH (ASTM F2170). If the MVER or RH of the concrete substrate exceeds the floor covering manufacturer's respective requirements for the finished flooring system, the concrete must be treated with a damp proof membrane, such as Maxxon DPM, before installation of a Maxxon underlayment.

Code Listings:

ICC-ES Legacy Report ESR-2540

ICC-ES Legacy Report #90-31

Contact Maxxon Corporation for major city approvals.

GREENGUARD Indoor Air Quality Certified®

GREENGUARD Children & Schools™ Certified

SAMPLE USGBC LEED CREDIT AREAS*			
Project	Credit	Category	How Requirement is Fulfilled
Indoor Environmental Quality	IEQ 3.2	Air Quality Before Occupancy	GREENGUARD Certified (Testing MUST be performed before claiming credit)
	IEQ 4.3	Low Emitting Materials: Floor System	GREENGUARD Children & Schools™ Certified
Materials & Resources	MR 2	Construction Waste Management	Recyclable packaging and shipping materials
	MR 4	Recycled Content	Fly Ash
	MR 5	Local/Regional Materials	Manufactured in Blue Rapids, KS 66411; Las Vegas, NV 89036; Camden, NJ 08103; Job Site Manufactured with Local Sand & Water
Innovation & Design	ID 1	Sound Control	Enhanced living environment

*Credits may vary depending on project type and Maxxon products used. Contact Maxxon Corporation for complete information

Technical Data

Compressive Strengths: Up to 3,000 psi (20.7 MPa) when tested in accordance with modified ASTM C 472.

Weight: At 1 1/4", less than 12 lbs./sq. ft. (at 32 mm, less than 58.7 kg/m²).

Point Loading: Typical loading of up to 2,500 pounds (1134 kg) on a 1" (25 mm) diameter disc.

Density: Typical density of 115 pounds per cubic foot (1,840 kg/m³).

Thermal Resistance at 1-inch Thickness: R-0.208

Coefficient of Conductivity (K): 4.96 Btu/(h•ft²• °F) (.7142 W/(m• °C))

Specific Heat: .224 Btu/(lb• °F) at 85 °F (.9385 kJ/(kg• °C) at 29.44 °C)

Acoustical Performance: The acoustical performance of Thermo-Floor is similar to Gyp-Crete® Floor Underlayment. Contact Maxxon Corporation for reports.

Fire Ratings: Contact Maxxon Corporation for Underwriters Laboratories fire ratings or see www.maxxon.com/fd

Surface Burning Characteristics: Flame spread index - 0, fuel contributed - 0, smoke development - 0. (ASTM E 84)

VOC Emissions: GREENGUARD Indoor Air Quality and Children & Schools Certified.