

# Rapid Floor® Plus

## UNDERLAYMENT



**Commercial**

**NEW**  
**Rapid Floor Plus**  
 NOW ALWAYS WITH  
 RECYCLED CONTENT



**From commercial, multifamily and single family construction to renovation projects, Rapid Floor Plus provides the speed and smooth surface you need for project success.**



**Single Family**

Rapid Floor® Plus is the perfect solution when your project calls for a tougher, more durable floor surface. With compressive strengths from 2000 to 3200 psi (13.8 to 22.1 MPa), Rapid Floor Plus provides the increased surface hardness that's critical in renovation, multifamily, single family, and light commercial projects.

Rapid Floor Plus meets your project challenges with:

- A smooth, tough surface that accepts nearly all floor coverings
- Does not shrink
- Enhanced floor stiffness that reduces floor bounce
- A seal along perimeter walls that keeps out baseboard drafts
- Elimination of squeaks and nail pops common to wood underlayments
- Fire resistance
- Muffled sound transfer

With Rapid Floor Plus on the job, you'll get speedy installation and a new, smooth surface ready for finished floor goods. But the benefits don't stop there — you also get significant sound control and additional fire resistance.



**Renovation**

### SAMPLE USGBC LEED CREDIT AREAS IMPACTED BY RAPID FLOOR PLUS

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 Rapid Floor products used. Contact Maxxon® Corporation for complete information.



**Multifamily**

**Rapid Floor®**  
**Systems**

*A Reputation You Can Stand On®*

**\* 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 nor 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:** Rapid Floor® Plus underlayment is warranted 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 underlayment 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 any underlayment. Because Maxxon® Corporation does not install the underlayment, 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 with the sale and installation of any of its floor underlayments.

### Preparation

Building interior should be enclosed and maintained at a temperature above 50 °F (10 °C) until structure and subfloor temperatures are stabilized. The subfloor must be broom clean and contaminant free. Before pouring Rapid Floor® Plus, coat the subfloor with a company approved primer.

### Methods of Installation

The thickness of Rapid Floor Plus varies with the type of floor system used:

**Minimum wood frame construction** is agency-approved 19/32" (15 mm), 40/20 veneer and nonveneer subfloor panels.

**Preferred wood frame construction** is 3/4" (19 mm) Rapid Floor® Plus over 3/4" (19 mm) tongue-and-groove, agency-approved subfloor with joists, truss or beam spacings of 16" to 24" (406 mm to 609 mm) o.c. In wood renovation Rapid Floor® Plus is installed at a minimum depth of 3/4" (19 mm).

**Precast concrete plank construction** shall be covered by a minimum 1/2" (13 mm) of Rapid Floor Plus (or 3/8" (10 mm) using a 1.4 mix design). Joints between precast units must be grouted by others prior to application.

**Over concrete,** the minimum thickness of Rapid Floor® Plus is usually 1/2" (13 mm). However, the 1.4 mix design can be featheredged.

Consult your authorized Rapid Floor dealer for the appropriate mix design and compressive strength to meet the needs of your project.

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 Rapid Floor Systems. It is the responsibility of the floor goods installer to determine the compatibility of their product with a particular floor underlayment.

### Limitations

- (1) The maximum poured depth of Rapid Floor Plus is 3" (76 mm). For depths greater than 3" contact your RapidFloor Systems applicator.
- (2) Rapid Floor Plus is installed before drywall in wood frame construction, the specifications outlined above are mandatory.
- (3) All materials above crawl spaces must be protected by a vapor barrier.
- (4) During construction, place temporary wood planking over the underlayment wherever it will be subjected to heavy wheeled or concentrated loads.
- (5) Rapid Floor Plus 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 manufactures' maximum span criteria. Typically a deflection limitation of L/360 is adequate for Rapid Floor Plus. Some floor coverings may require a stiffer floor system. Rapid Floor Plus 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) Rapid Floor Plus should not be used for exterior application, or where it will come in prolonged contact with water.
- (8) Rapid Floor Plus 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.

### Sound Control Upgrade

For upgraded sound control, the Acousti-Mat® II Sound Deadening System is recommended for installation with Rapid Floor Plus. Acousti-Mat II is acoustically engineered to isolate sound waves and reduce transmission of impact and airborne sound up to one half — even with hard surface floor goods such as tile and hardwood floors.

For customized CSI specs, contact your Rapid Floor Systems applicator or visit our website: [www.rapidfloor.com](http://www.rapidfloor.com)

### TECHNICAL DATA

**Compressive Strengths:** Up to 3,200 psi (22.1 MPa) when tested in accordance with modified ASTM C 472.

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

**Coefficient of Conductivity (K):** 4.3 Btu-inch/hour-°F-ft² (68 W/m·°C)

**Specific Heat:** .25 Btu/(lb·°F) at 85 °F (94 kJ/kg·°C) at 29.44 °C)

**Acoustical Performance:** The acoustical performance of Rapid Floor® Plus is similar to Rapid Floor® Underlayment. Contact Rapid Floor Systems for reports.

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

**Point Loading:** Typical loading of up to 2500 lbs (1134 kg) on a 1" (25.4 mm) dia. disk

### CODE LISTINGS

ICC-ES Legacy Report No. 93-60  
 ICC-ES Legacy Report No. 2540  
 US Dept. of Housing and Urban Development  
 Materials Release No. 1286c  
 City of New York MEA 49-92-M Vol. III  
 City of Los Angeles RR 25186  
 GREENGUARD Indoor Air Quality Certified®  
 GREENGUARD Children & Schools™ Certified

### UL FIRE RESISTANCE RATINGS

Rapid Floor® Systems products are covered in the following UL Fire Resistive Designs:

G524	L004	L508	L527	L547	L583
G560	L005	L509	L528	L549	L585
G563	L006	L510	L529	L551	L588
G566	L201	L511	L530	L552	L589
G574	L202	L512	L532	L553	L592
G576	L206	L513	L533	L555	L593
J917	L208	L514	L534	L556	L594
J919	L209	L515	L535	L557	L599
J920	L210	L516	L536	L558	M500
J924	L211	L517	L537	L560	M503
J927	L212	L518	L538	L562	M504
J931	L501	L519	L539	L563	M505
J957	L502	L520	L540	L564	M508
J958	L503	L522	L541	L573	
J966	L504	L523	L542	L574	
J991	L505	L524	L543	L575	
J994	L506	L525	L545	L579	
K906	L507	L526	L546	L581	

Warnock-Hersey Design Number WH1 694-029  
 Factory Mutual Design Number FC378 PFS Design Number FC452  
 \*All tests were conducted with ASTM E 119 procedures.

# Rapid Floor® Systems

A Reputation You Can Stand On®

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



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