

RAPID FLOOR®



RAPID FLOOR POUR ON THE ADVANTAGES

Rapid-Floor® offers the advantages of a smooth, joint-free surface and is an excellent alternative to double wood floor construction in new, multi-family residential projects. A six-person crew can pour up to 40,000 ft² (3,716 m²) in a single day, and floors can be walked on in as little as 2-4 hours after the pour, making Rapid Floor your tough, fast solution.

With Rapid Floor 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.

RAPID FLOOR MEETS YOUR PROJECT CHALLENGES WITH:

- A smooth, tough surface that accepts nearly all floor coverings
- No shrink cracking
- Enhanced floor stiffness that reduces floor bounce
- A seal along perimeter walls that helps to keep out baseboard drafts
- Elimination of squeaks and nail pops common to wood underlayments
- Fire resistance
- Muffled sound transfer
- Compressive Strengths up to 2,200 (15.2 MPa)

TECHNICAL DATA

Compressive Strength	Up to 2,200 psi (15.2 MPa)
"K" Factor	4.75 (Btu•in)/(h•ft ² •°F) (.6840 W/[m•°C])
Specific Heat	0.223 Btu/(lb•°F) at 85 °F (.9343 kJ/[kg•°C] at 29.44 °C)
Weight	At 3/4", 6.9 lbs (At 19 mm, less than 31.8 kg/m ²)
Dry Density	110 lbs/ft ³ (1,762 kg/m ³)
Point Loading	Up to 2,200 lbs on a 1" (998 kg on a 25 mm) diameter disc
Fire Performance ASTM E-84	
Fuel Contribution.....	0
Smoke Density.....	0
Flame Spread.....	0
VOC Emissions	GREENGUARD and GREENGUARD Gold Certified

INSTALLATION METHODS

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

The minimum thickness of Rapid Floor over wood subfloors 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 over 3/4" (19 mm) tongue-and-groove, agency-approved subfloor with joists, truss or beam spacings of 16" to 24" (406 mm to 610 mm) o.c.

Continuous ventilation and adequate heat should be provided to rapidly remove moisture from the area until underlayment is dry. The general contractor/project superintendent must supply mechanical ventilation and heat if necessary.* Under the above conditions, 3/4" (19 mm) thickness drying time is usually 5 to 7 days. Reference the *Building Conditions Guide* brochure for complete installation guidelines.

Rapid Floor requires a floor covering. Contact your authorized dealer for recommendations for adhering floor goods, or contact Maxxon Corporation for a copy of the brochure *Procedures for Attaching Finished Floor Goods to Maxxon Underlayments*. It is the responsibility of the floor goods installer to determine the compatibility of their product with a particular floor underlayment.

LIMITATIONS

1. The typical maximum depth of Rapid Floor is 3" (76 mm). For depths greater than 3" (76 mm), contact an authorized dealer.
2. All materials above crawl spaces must be protected by a vapor barrier.
3. During construction, place temporary wood planking over underlayment wherever it will be subjected to heavy wheeled or concentrated loads.

*DRYING CONDITIONS

Rapid Floor 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 Rapid Floor Underlayments.

The general contractor/project superintendent 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/project superintendent. The general contractor/project superintendent must supply mechanical ventilation and heat if necessary. These controls fall under the scope of work of the general contractor/project superintendent — not Rapid Floor Systems or the Rapid Floor installer.

See *Maxxon Building Conditions Guide* for additional information.

4. Rapid Floor is not designed to be installed on or below grade, except over well-drained structural substrates.

5. Rapid Floor cannot resist stresses caused by structural movement.

6. The structural floor should be adequate to withstand design loads with deflection limitations of L/360. The structural subfloor and floor joist must both comply with manufacturers' maximum span criteria. Typically a deflection limitation of L/360 is adequate for Rapid Floor Underlayments. Some floor coverings may require a stiffer floor system. Rapid Floor Underlayments are 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. Additional consideration should be taken for concentrated/dynamic loads. U.S. building codes typically specify a uniform live load of 40 pounds per square foot for residential floor designs. This load is intended to account for large loads that can occur in a building. In reality these loads are not uniform, but rather consist of items such as furniture and appliances that actually induce concentrated loads far exceeding 40 lbs per sq ft. Rolling concentrated loads such as office chairs, wheel chairs, and motorized scooters add turning, twisting, repetition, and other dynamics which should also be taken into consideration. Determining the appropriate structural design of the floor is not the responsibility of Rapid Floor nor the Rapid Floor applicator.

8. Rapid Floor should not be used for exterior application, or where it will come in prolonged contact with water.

9. Rapid Floor should not be directly applied to a plastic vapor barrier.

10. Rapid Floor Underlayments are "breathable" and not a vapor barrier. The general contractor/project superintendent, architect, specifier, or building owner shall test slabs-on-ground or elevated slabs for MVER (ASTM F1869-16) 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 moisture vapor barrier, such as Maxxon DPM or Maxxon MVP, before installation of a Rapid Floor Underlayment.

ACOUSTICAL PERFORMANCE

The acoustical performance of all Rapid Floor Underlayments is similar. Visit www.RapidFloor.com or contact Rapid Floor Systems for reports.

CODE LISTINGS

ICC-ES Evaluation Report ESR-2540 and UL ER 8477-01 for fire and sound codes. Contact Rapid Floor Systems for major city approvals. GREENGUARD Certified and GREENGUARD Gold Certified.

TESTING

Compressive strength testing must be performed in accordance with modified ASTM C472. Before independent sampling, contact the Maxxon Quality Assurance Department to ensure that proper procedures are followed.

WARRANTY

See our website for complete warranty information.

FIRE/SOUND RATINGS

Accepted by local building officials for fire and sound code compliance, Evaluation Reports are technical reports which verify that specific products meet the following code requirements and warrant regulatory approval. Minimum code requirements: Sound - 50 STC/ILC, Fire - 1 Hour

International Code Council

ICC ESR #2540 For the following assembly types:
 • Parallel Chord Truss • I-Joist • Precast
 • 2x10 Wood Truss • Steel Joist • Concrete
Additional ICC ES Reports: ESR #1141, ESR #1153, ESR #1774

Underwriters Laboratory International

UL ER #8477-01 For the following assembly types:
 • Parallel Chord Truss • I-Joist • Steel Joist
 • 2x10 Wood Truss • Hambro • Precast Concrete

FIRE RATINGS

UL Design

G230	L501	L526	L558	M503
G516	L502	L527	L560	M504
G524	L503	L528	L562	M505
G561	L504	L529	L563	M506
G587	L505	L530	L564	M508
J917	L506	L533	L565	M510
J919	L507	L534	L567	M511
J920	L508	L535	L569	M513
J924	L509	L536	L570	M514
J927	L510	L537	L573	M515
J931	L511	L538	L574	M517
J957	L512	L539	L576	M518
J958	L513	L540	L577	M519
J991	L514	L541	L579	M530
J994	L515	L542	L581	M531
L006	L516	L543	L583	M533
L201	L517	L545	L585	M534
L202	L518	L546	L588	
L206	L519	L547	L589	
L208	L520	L549	L590	
L209	L522	L551	L592	
L210	L523	L552	L593	
L211	L524	L556	M500	
L212	L525	L557	M502	

ULC Design

L003	L512	M503	M521
L201	M500	M514	
L511	M501	M520	

LEED® INFORMATION

For information regarding how Rapid Floor may help contribute toward points for LEED project contribution, contact your Regional Representative at (800) 356-7887 or visit www.rapidfloor.com/go_green.



Rapid Floor®

UNDERLAYMENT

For more info: 800-FLOOR-20 • Email: info@rapidfloor.com
 (800-356-6720) www.RapidFloor.com



THE MAXXON GREEN MARK
 Maxxon products with this symbol may help contribute toward points for LEED project certification.

Another superior product from:
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