RAPID FLOOR ULTRA
GIVES YOU THE ULTIMATE EDGE

For new construction or renovation, it’s hard to match Rapid Floor® Ultra’s impressive list of application benefits. For reliably superior results, count on Rapid Floor Ultra, one of the strongest gypsum floor underlayments available.

Floor goods go down fast and easy too, over Rapid Floor Ultra’s smooth, hard surface. With proper ventilation, nearly any type of floor covering can be installed within five to seven days of a Rapid Floor Ultra pour. Carpet, vinyl, wood, tile... they’ll all look better and last longer, thanks to Rapid Floor Ultra’s even, flat surface.

Rapid Floor Ultra is considered a “green” building material and meets the stringent requirements of the new GREENGUARD Gold Certification program.

FEATURES & BENEFITS
• Cap uneven, rough, cracked or spalled concrete
• Level entire floors or transition areas, featheredge to deepfill
• Resurface old or damaged concrete floors
• Perform up to 4,000 PSI (27.6 MPa)
• Resist water absorption
• Fill voids in concrete floors
• Top corrugated steel deck over light gauge steel framing
• Top precast planks
• Install right over old floor coverings, including vinyl asbestos tile
• Provide fire and sound control over wood frame construction
• Requires no troweling
• Provide a temporary wear surface just 2–4 hours after application
• Exceeds standards set by leading floor goods manufacturers
Compressive Strength: 3,000–4,000 psi [20.7–27.6 MPa]  
ASTM C472

Density: 115–120 lbs/ft³ (1,842–1,922 kg/m³)

“K” Factor: 5.2 (BSw/in) (N/mm²) (74 W/in²°C)

Specific Heat: 0.25 Btu/lb•°F at 85 °F (0.94 kJ/kg•°C at 29.4 °C)

Flexural Strength ASTM C348: 1,348 psi

Installed Weight: 3/8” (10 mm) = 3.5 lbs/ft²

(1.59 g/m²) 1” (25 mm) = 9.2 lbs/ft² (42.4 g/m²)

Fire Performance ASTM E-84

Fuel Contribution: 0

Smoke Density: 0

Flame Spread: 0

Point Loading: Typical loading of up to 3,500 lbs (1,590 kg) on a 1” (25 mm) diameter disc

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 Ultra, coat the subfloor with a company approved primer.

INSTALLATION METHODS

The minimum thickness of Rapid Floor Ultra varies with the type of floor system. Rapid Floor Ultra can be featheredged over concrete substrates. Over wood frame construction, the minimum thickness is 3/4” (19 mm). It can be poured before or after drywall.

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

Rapid Floor Ultra requires a floor covering. For detailed instructions on attaching finished floor materials, request the brochure Procedure 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 Ultra is 3” (76 mm). For depths greater than 3” (76 mm), contact an authorized applicator.

2. Rapid Floor Ultra may be scheduled before or after other goods installer to determine the compatibility of their product with a particular floor underlayment.

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

6. Rapid Floor Ultra cannot resist stresses caused by structural movement.

7. 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 Ultra. Some floor coverings may require a stiffer floor system. Rapid Floor Ultra 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.

8. 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 live 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, chair wheels, 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 Systems nor the Rapid Floor applicator.

9. Due to the unique nature of light gauge steel construction, it may be necessary to pour Rapid Floor Ultra before doors are installed. Contact Rapid Floor Systems for installation details.

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

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

12. 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) 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 or Maxxon MVP, before installation of a Rapid Floor Underlayment.

ACOUSTICAL PERFORMANCE

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

CODE LISTINGS

ICC Evaluation Reports ESR-2540 and UL Evaluation Report 8477-01 for fire and sound code. Contact Rapid Floor for major city approvals. GREENGUARD and GREENGUARD Gold Certified.

SUBFLOOR THICKNESS | TRUSS, BEAM OR JOIST SPACING | RAPID FLOOR ULTRA MINIMUM THICKNESS
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19/32” (15 mm) [5/8”] | 16”–19” 2” o.c. [406–487 mm] | 3/4” (19 mm)
19/32” (15 mm) [5/8”] | 19” 2”–24” 2” o.c. [487–610 mm] | 1” (25 mm)
23/32” (18 mm) [3/4”] | 16”–24” 2” o.c. [406–610 mm] | 3/4” (19 mm)

*DRYING CONDITIONS

Rapid Floor Underlayment systems are engineered and provide no source of nutrients to sustain mold growth. Prolonged contact with moisture or other construction materials, however, can result in mold growth. To avoid growth of mold on construction materials such as wallboard, drywall compound and even dirt, it is vital to maintain a low relative humidity level before and after placement of Rapid Floor Underlayment.

The general contractors/project superintendent must provide and maintain correct environmental conditions to keep the building clean and dry, and protect against infection 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 leaks, etc. Often stored in damp conditions, building products may arrive on site laden with moisture that