



SPI Performance Coatings
Mopes Ln, Purton, Wiltshire
SN5 4HG

Raven® 755

High Early Strength Repair Mortar
Technical Data Sheet

Selection and Specification Data

Description

Raven® 755 is designed as a reinforced, trowel or spray applied high early strength underlayment / repair material. Raven 755 can be a stand-alone product or may be top coated with Raven products after 24 hours. Raven 755 is a proprietary Portland cement formulation.

Application Thickness

Raven 755 is designed for minimum application of at least 12.7mm thick and up to 5cm per lift. additional thickness may be applied in successive lifts.

Coverage

Theoretical coverage 4.1m² per 27.2kg bag at 12.7mm thickness (yielding 0.17 cubic meters per bag). Actual surface coverage will depend upon substrate roughness and irregularities.

Physical Properties

Test	Method	Result
Compressive strength	ASTM C109, 28 days	>9,000 psi
Flexural strength	ASTM C293	>1,500 psi
Tensile strength	ASTM C496	>800 psi
Shrinkage @ 90% R.H.	ASTM C596	0%
Freeze thaw	ASTM C666, 100 cycles	No visible damage
Bond strength	ASTM C882	>2,000 psi
Applied density	2162.49kg ± 80.09kg/m ³	

The value ranges stated in this Technical Data Sheet are based on system processing under controlled laboratory conditions. Equipment configuration and/or field application conditions may produce variances in the final system values.

Surface Preparation

Before application surfaces shall be damp but free of flowing or excess water, a Saturated, Surface Dry (SSD) condition is recommended. Follow standard practices: the substrate must be prepared in a manner that provides a uniform, clean, sound, and neutralized surface with all active leaks stopped. The substrate must be free of all contaminants, such as oil, grease, rust, scale, or deposits. Loose and protruding brick, mortar, and concrete shall be removed using a mason's hammer, chisel, or scraper.

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Concrete and Masonry

Surfaces must be sound and contaminant-free with a surface profile equivalent to a minimum of CSP 5 in accordance with ICRI Technical Guideline No. 310.2R- 2013. This can generally be achieved by abrasive blasting, shot blasting, high pressure water cleaning, water jetting, or a combination of methods.

Components and Mixing

Dry cement powder, 27.2kg per bag, is to be mixed with 1.5 to 6.8 liters of clean, potable water (or as recommended by Raven based upon application conditions). Follow mixing procedures noted on product bag.

Application

Apply with a cementitious spray system, steel/wood trowel or other suitable method. Optimal mixing and application is achieved with the use of a Raven approved low velocity cementitious spray system (such as the Graco M680 Mortar Pump).

Application Temperatures

No application shall be made when ambient temperature is 4.4°C or less or when substrate temperatures are (or may become within 24 hours of application) less than 1.7° C. Precautions shall be taken to keep the ambient, substrate, and mix temperature below 32°C at time of application. Water temperature shall not exceed 26.7°C. Chill with ice if necessary.



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Cure Time

Caution should be taken to minimize exposure of applied product to sunlight and air movement. If time between applications of additional product is to be longer than 15 minutes, place cover over structure to restrict air movement. At no time should the finished product be exposed to sunlight or air movement for longer than 15 minutes. In extremely hot and arid climates, surfaces shall be shaded while application is in process.

In environments where the humidity level is below 70% the applied product shall be kept damp or coated with Raven 155, Raven 171FS, or Raven 175 primers to prevent moisture loss.

At 22°C, working time is 30 minutes, initial set time is 8 hours and cure 24 hours before surface preparation for polymer topcoat.

Cleanup & Safety

Cleanup

Cured product may be disposed of without restriction.

Safety

SDS's are available on the website, (www.spiperformancecoatings.com) or upon request. Consult the Safety Data Sheet for this product concerning health and safety information before using.

Strictly follow all notices on the Safety Data Sheet and container label. If you do not fully understand the notices and procedures provided on the SDS or if you cannot strictly comply with them, do not use this product. Actual safety measures are dependent on application methods and work environment. Keep uncured product away from children at all times.

Packaging, Shelf Life & Storage

Packaging

Available in 27.2 kilo bags. Raven 755 is available through SPI Performance Coatings.

Shelf Life

Product shelf life is 1 year from purchase date in sealed bags, stored in a sheltered area between 4.4°C and 43°C. Materials are to be kept dry and protected from weather.

Packaging, Shelf Life & Storage

Limited Warranty: Company warrants its goods to be free of manufacturing defects. Goods manufactured by Company will comply with all applicable federal, state and local laws and regulations. Company makes no warranty as to any parts or equipment manufactured by others. Customer shall look solely and only to the manufacturer of such parts or equipment with respect to any warranty claims. Company hereby assigns to Customer the original manufacturer's warranties to all such equipment and parts, to the full extent permitted. THE AFORESAID IS THE EXCLUSIVE WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. SPECIFICALLY, THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

Limitation of Liability: COMPANY'S LIABILITY FOR DEFECTIVE OR NON-CONFORMING GOODS SHALL BE LIMITED TO, AND SHALL IN NO EVENT EXCEED, THE AMOUNT PAID BY CUSTOMER FOR SUCH DEFECTIVE OR NON-CONFORMING GOODS. UNDER NO CIRCUMSTANCES SHALL COMPANY BE LIABLE FOR ANY SPECIAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR LOST PROFITS. In no event may any claim by Customer arising from or relating to any sale of any goods or services referenced herein be brought more than one year after the date of delivery of such Goods.