VF-146

Low density, void filling, cementitious grout

Product Description

VF-146 is a low density cementitious grout suitable for many applications. VF-146 is a Portland cement-based, factory-mixed material requiring only the addition of water on the job site for application. It is suitable for use whenever controlled, low strength, lightweight materials are required.

Features & Benefits

- **Non-toxic—**The factory-mixed blend of common Portland cement and other inert materials requires only the addition of water for mixing and application.
- **Equipment Versatility—**VF-146 can be mixed in standard plaster mixer.
- **Factory Pre-mixed—**Ready to use. No job site proportioning required. Simply add water in a standard paddle-type plaster mixer and apply with conventional plastering equipment.

Delivery & Storage

The material should be kept dry until ready for use. Keep packages of material off of the ground, under cover and away from sweating walls and other damp surfaces. All bags that have been exposed to water before use should be discarded.

Stock of material is to be rotated and used before its expiration date.

Mixing

a. VF-146 should be mixed by machine in a conventional, plaster-type mixer or a continuous mixer specifically modified for cementitious material. The mixer should be kept clean and free of all previously mixed material. Adjust the mixer speed in a conventional mixer to the lowest speed which gives adequate blending of the material and a mixer density of 50 to 60 pcf (800 to 961 kg/m³) of material.

b. Using a suitable metering device and a conventional mixer, add all water to the mixer as the blades turn. Mixing should continue until the mix is lump-free, with a creamy texture. All material is to be thoroughly wet. Overmixing VF-146 will reduce pumping rate and will negatively affect in-place density and mechanical properties.

c. Pre-wet mixer and empty excess water. Place cool, clean potable water in mixer, then add dry material. Mix on low RPM for a total of 1 to 2 minutes to achieve desired consistency. Mix only enough grout that can be placed within working time. For plastic consistency, use 3.5 gallons of water. For flowable consistency, use 4 gallons of water. For fluid consistency, use 4.5 gallons of water.

Performance Characteristics

Physical Properties	Recommended* Specifications	Test Method/Notes**
Dry density	Min. 40 pcf (640 kg/m^3)	ASTM E605
Bond strength	Min. 10,000 psf (478 kN/m^2)	ASTM E736 modified++
Compressive strength @ 10% deformation	500 psi (3.45 MPa)	ASTM E761
Hardness	40	ASTM D2240
Yield	1.4 cubic feet per bag (49 lb bag)	Theoretical maximum
Color	—	Natural concrete gray
Volatile Organic Content (off gassing) at 122 °F (50 °C) organic compounds C6-C28	Less than 1 PPMW (part per million by weight)	Dynamic headspace (Thermal desorbtion gas chromatography —mass spectrometry)
Leachable ammonia	Less than 50 PPB, 50 nanograms/mg	Leachable ion by ion chromatography

* Independent test values exceed recommended specification limits. Report available upon request

** ASTM International test methods modified for Bond Strength and Compressive Strength, where required, for high density, high performance products.

++Modified per AWCI 12A

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