ITOS™ SH 500

High Performance, Polymer-Modified Water Resistant Mortar Standard Specification

CHARACTERISTIC RATINGS



- 1 = Minimum 2 = Low3 = Moderate
- 4 = High5 = Extreme

WATER RESISTANT

DESCRIPTION

SH 500 is a high-performance, polymer modified, cement coating. Durable in multiple environments, SH 500 is a blend of Rapid Set hydraulic cement, high performance additives and quality aggregates. SH 500 has a working time of 30 minutes, can be exposed to hydrostatic pressure in 3-5 days, and cures to a concrete gray color.

UESE INCLUDE

Use SH 500 on interior or exterior concrete and masonry surfaces, both above and below grade. Use SH 500 can be used to waterproof basements, foundations, retaining walls, tilt-up concrete, cast-in-place concrete, and precast concrete.

PREPARATION

Application surface must be clean, sound and free from any materials that may inhibit bond, such as oil, asphalt, curing compound, acid, dirt and loose debris. Mechanically abrade smooth surfaces such as precast and cast-in-place concrete. Surface must be dampened, but not saturated with water before applying SH 500.

MIXING

The use of a power-driven mechanical mixer, such as a mortar mixer or a drill mounted mixer, is recommended. Organize work so that all personnel and equipment are in place before mixing. Use clean potable water. SH 500 may be mixed using 5.0 to 7.0 quarts (4.7 to 6.6 L) of water per 55lb (25kg) bag. Vary water content to achieve desired consistency. Do not exceed 7.0 quarts (6.6 L) of water per bag. Do not add any chemicals or admixtures. Place the desired quantity of mix water into the mixing container. While the mixer is running, add SH 500. Mix thoroughly to achieve a homogeneous, lump-free consistency (usually 1 to 3 minutes). Let SH 500 rest undisturbed for 2 to 3 minutes, then remix and

APPLICATION

Apply SH 500 in thicknesses from 1/16" to 1/8" (0.16 cm to 0.32 cm).

PLACEMENT

SH 500 may be applied using a trowel, Tampico masonry brush, 3/8" nap roller or similar. It is essential to thoroughly work the first coat into substrate to fill all voids and cracks, then apply with a horizontal stroke to ensure even application.

Allow first coat to cure for a minimum of 3 hours, then apply second coat using a vertical stroke to finish the application. To eliminate joint telegraphing and shadowing on block and masonry walls, allow SH 500 to cure for 2 days before applying second coat. SH 500 may be applied in temperatures ranging from 45°F to 90°F (7°C to 32°C).

CURING

Water cure all SH 500 installations after 4 hours of placement at normal temperatures at 70°F (21°C) with a light water mist for 1 hour. A curing compound may be used as a substitute for water curing after the final coat. For warm and cold weather conditions, refer to instructions.

TOOL CLEANING

Clean all equipment and tools with water immediately after use. The hardened material can only be removed by physical scraping.









ITOS[™] SH 500

High Performance, Polymer-Modified Water Resistant Mortar Standard Specification



COVERAGE

(Base weight: 55lb / 25kg)

	Coverage		Thicknesses	
	(m²)	(ft²)	(mm)	(in)
Minimum total consumption	11.2	121.2	1.6	0.062

One 55lb (25kg) bag of MORTAR MIX will yield approximately 0.5 ft3

PACKAGING

25 kg Kraft Paper bag (Pallet 64 bags, 1600 kg, protected by plastic bag wrapping) 25.6MT/20'container, 1024 bags/container

SHELF LIFE

The shelf life is 6(min) ~ 12(max) months when stored unopened in dry, normal conditions. Excessive temperature differential and/or high humidity can shorten the shelf life expectancy. Store in a cool, dry area away from direct sunlight.

PRODUCT DATA

Appearance	Powder type	
Color type	Grey type	
Dry bulk density	~ 1400 kg/m³	
Maximum aggregate size	< 2mm	

TECHNICAL DATA

Hydrostatic Pressure Resistance	Positive pressure	21.7 psi (0.15 MPa)
	Negative pressure	7.3 psi (0.05 MPa)
Set Time	Initial set	2 hours
	Final set	3 hours
Compressive Strength	4 hours	1500 psi (10.3 MPa)
	1 day	2500 psi (17.2 MPa)
	3 days	3000 psi (20.7 MPa)
	7 days	3500 psi (24.1 MPa)
	28 days	3800 psi (26.2 MPa)
Tensile Bond Strength	3 days	100 psi (0.69 MPa)
	28 days	200 psi (1.38 MPa)









ITOS[™] SH 500

High Performance, Polymer-Modified Water Resistant Mortar Standard Specification



LIMITED WARRANTY

ITOS Co., Ltd. warrants its materials to be of good quality and, at its option, will replace or refund the purchase price of any material proven to be defective within one (1) year from date of purchase. The above remedies shall be the limit of ITOS's responsibility. Except for the foregoing, all warranties expressed or implied, including merchantability and fitness for a particular purpose, are excluded. ITOS shall not be liable for any consequential, incidental, or special damages arising directly or indirectly from the use of the materials.

SPECIAL OFFER

!!! We can provide it by changing it to the specifications you want.

End of page..



