

Sto Overhead Mortar with CI

80702 Sto Overhead Mortar with CI



Technical Data			
REPORT	TEST METHOD	TEST CRITERIA	TEST RESULTS
Working Time (minutes)			15-30
Compressive Strength (psi)	ASTM C-109	1 day 7 days 28 days	>3,000 >5,000 >6,300
Flexural Strength (psi)	ASTM C-293	7 days 28 days	>1,100 >1,500
Modulus of Elasticity in Compression (psi)	ASTM C-469	28 days	2.26 x 10 ⁶
Splitting Tensile Strength (psi)	ASTM C-496	7 days 28 days	485 565
Shrinkage (%)	ASTM C-157	7 days 28 days	<0.1 <0.1
Direct Tensile Bond (psi)	ASTM D- 4541	28 days	500 *
Length Change	ASTM C-157	28 days	<0.03 **
Typical values for material	cured at 73 °E (23 °	C) and 50 0/ DU	

Typical values for material cured at 73 °F (23 °C) and 50 % RH Note: To convert psi to Mega Pascal (MPa) multiply by 0.0069.

^{**} Wet Cure

Features		Benefits	
1	Polymer-Modified	Increases durability and freeze-thaw resistance; excellent adhesion; improves flexural strength	
2	Non-sag, Low Slump	Hangs 2 inches (50 mm) in one lift vertically and overhead; increases job-site productivity	
3	Low Shrinkage	Stable bond line; resists perimeter cracking	
4	Thermally Compatible with Concrete	Prevents delamination caused by temperature changes	
5	One Component	Factory-controlled polymer-to-cement ratio; ready to use; easily mixed with water on the job-site no chemical jugs to dispose	

Sto Overhead Mortar with integral corrosion inhibitor is a single component, polymer-modified, cement-based mortar for structurally repairing deteriorated concrete. Use on vertical or overhead surfaces for repairs from 1/4 to 2 inches (6 to 50 mm) or apply it in lifts for deeper applications.

Coverage

Approximately 21.5 ft² per 56 lbs bag, applied at 1/4 inch thick (2 m² per 25 kg bag, at 6 mm thick).

Packaging

56 lbs bag (25 kg).

Shelf Life

 12 months in original, unopened, properly stored container.

Storage

Store in a dry area between 50°F (10°C) and 85°F (29°C). Protect from direct sunlight and extreme heat [(90°F (32°C)].

^{* 100%} Failure in Substrate



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Surface Preparation

Remove loose and deteriorated concrete by mechanical chipping or sandblasting to obtain a fractured aggregate surface. Detail the edge of the patch to a 90° angle to eliminate feather edging

Make sure surfaces are sound, clean, and free of all bond-inhibiting materials including oil, dirt, dust, laitance and standing water.

Mixing

Use Sto Overhead Mortar with CI at a preconditioned temperature of 70 ± 5°F (21 ± 3°C). Use 6.0 to 6.5 pints (2.83 to 3.08 L) of water per 56 lbs (25 kg) bag.

Mixing must be achieved mechanically using a slow speed, 3/4 inch (19 mm) drill and mixing paddle. Pour 6.0 pints (2.83 L) of water into a clean 5 gallon (19 L) mixing bucket. Mix while slowly adding the

powder, one-third at a time. If more water is needed, up to one-half pint (0.24 L) may be added. Mix up to 3 minutes, to a uniform, lump-free consistency. Avoid over mixing which could entrap air. Once mixed, the working time is 15-30 minutes, depending upon material, ambient and surface conditions.

Application

Apply only to sound and clean, properly prepared, frost-free surfaces. Dampen the area to be repaired so that the pores of the concrete are filled with water. Remove any ponding or glistening water on the surface (saturated surface dry/SSD).

IMPORTANT: Work a scrub coat of the mixed material into the substrate to ensure intimate contact and establish bond.

Complete the repair while the scrub coat is still wet and trowel to the desired finish. Sto Overhead Mortar with CI can be applied to a thickness of 2 inches (50 mm) in one lift. For application depths greater than 2 inches (50 mm) apply Sto Overhead Mortar with CI in successive lifts.

For additional lifts, scarify the first lift and allow it to set until hardened sufficiently to accept the next lift, about 30 minutes at 75°F (23°C). Trowel the final lift

to the desired finish. Applications made during temperatures below 50°F (10°C) or above 85°F (29°C) should follow appropriate application quidelines.

Curing

Direct sun or wind may cause unwanted rapid surface drying. Curing may be accomplished by continuous water fogging for 48 hours or cover with damp burlap or burlene curing blankets. Do not use solvent-based curing compounds. If a coating or sealer will be applied, use water fogging or blanket curing methods and prep finished surface per manufacturer's recommendations.

Clean Up

Clean tools and equipment with water immediately after use. Cured material can only be remove mechanically.

Limitations

Apply only when the surface and ambient temperature are 45°F (7°C) and rising. See Cold Weather Application guidelines, per ACI for applications in temperatures less than 50°F (10°C). Applications made during temperatures greater than 85°F (29°C) should follow Hot Weather Application guidelines, per

- Application depths greater than 2 inches (50 mm) must be completed in lifts.
- The minimum required thickness is 1/4 inch (6 mm).
- Do not add more water than specified.
- Do not add additional powder from other units.
- Do not overmix.

Health And Safety

WARNING!

Causes serious eye damage, skin irritation, allergic skin reaction, may cause respiratory irritation, damage to organs through prolonged or repeated exposure Harmful if inhaled Health Precautions Avoid breathing dust/fume/gas/ mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Store locked up.

First Aid

Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention. Skin Contact: Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention. Ingestion: If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Spills: Collect in an appropriate container. Uncured material may be removed with water.

Disposal: Dispose of in accordance with local, state or federal

Warning: KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. Consult the Safety Data Sheet (SDS) on www.stocorp.com for further health and safety information

LIMITEDWARRANTY

THIS PRODUCT IS SUBJECT TO AWRITTEN LIMITED WARRANTY WHICH CAN BE OBTAINED FREE OF CHARGE FROM Sto Corp.

Refer to Specifications for more complete information on proper use and handling of this product.

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Attention

Attention

This product is intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. It should be installed in accordance with those specifications and Sto's instructions. Sto Corp, disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product or use as part of an improper application. Stock Description of the Stock Description of t fullest, most current information on proper application, clean-up, mixing and other specific disclaimers, please refer to the Sto Corp. website, www.stocorp.com.