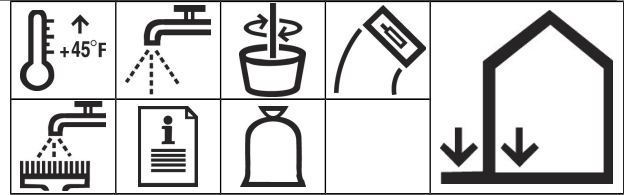


Sto Extended Full-Depth Repair Mortar with CI

80311 Sto Extended Full-Depth Repair Mortar with CI



Technical Data

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULTS
Compressive Strength (psi)	ASTM C-39	1 day	3,000
		7 days	4,800
		28 days	6,000
Flexural Strength (psi)	ASTM C-293	1 day	NT
		7 days	700
		28 days	750
Splitting Tensile Strength (psi)	ASTM C-496	7 days	400
		28 days	600
Modulus of Elasticity (psi)	ASTM C-469	28 days	3.94 x 10 ⁶
Shrinkage	ASTM C-157	28 days	<0.035 %
Direct Tensile Bond (psi)	ASTM D-4541	28 days	210

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.

Sto Extended Full-Depth Repair Mortar with integral corrosion inhibitor is a single-component cement-based mortar for structurally repairing or overlaying deteriorated concrete. Use on horizontal surfaces for repairs deeper than 1.5 inches (38 mm). It has been pre-extended using kiln-dried uniform, pea gravel to allow for deeper applications. Its formula provides increased strength gain and improved performance for repair applications.

Packaging
 80 lbs bag (36 kg)

Shelf Life
 12 months in original, properly stored, unopened container.

Storage
 Store in a dry area, between 50°F (10°C) and 85°F (29°C). Protect from direct sunlight, and extreme heat.

Features Benefits

1 Low Shrinkage	Stable bond line; resists perimeter cracking
2 Thermally Compatible with Concrete	Prevents delamination caused by temperature changes
3 High Abrasion Resistance	Stands up to abusive traffic
4 One Component	Ready to use; pumpable; easily mixed with water on the job-site no chemical jugs to dispose
5 Pre-Extended	Ensures quality aggregate. Pre-measured extension increases job productivity

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Surface Preparation

Patching

Remove loose and deteriorated concrete by mechanical chipping, or sand-blasting 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.

Overlay

Remove loose and deteriorated concrete with a scabber or by shot-blasting to obtain a fractured aggregate surface. Detail the edge of the overlay 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 Full-Depth Repair Mortar with integral Corrosion Inhibitor at a preconditioned temperature of 70 ± 5°F (21 ± 3°C).

Mortar Mixer: Pre dampen thoroughly the inside of a clean mortar mixer, then remove any excess water. Pour 6.5 pints (3.08 L) of water per bag into the mortar mixer and slowly add all of the powder.

If more water is needed, up to one-half pint (0.24 L) per bag may be added. Mix up to 4 minutes, to a uniform, lump-free consistency. Avoid overmixing which could entrap air. Once mixed the working time is 20-40 minutes depending upon material, ambient and surface conditions.

Application

Apply only to sound and clean, dry, properly prepared, frost-free surfaces.

Patching and Overlay

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). Work a scrub coat of the mixed material into the substrate to ensure intimate contact and establish bond. Apply Sto Full-Depth Repair Mortar-CI while the scrub coat is still wet. Consolidate it and trowel to desired finish.

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 or allow water to puddle. 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 materials can only be removed mechanically.

Limitations

- Apply only when the surface and ambient temperatures are 45°F (7°C) and rising. See Cold Weather Application guidelines, as per ACI for applications in temperatures less than 45°F (7°C). Applications made during temperatures greater than 85°F (29°C) should follow Hot Weather Application guidelines, as per ACI.
- Cold or damp conditions retard hydration and require additional time before coating or opening to traffic.
- The minimum required thickness is 1 1/2 inch (38 mm).
- Do not feather edge.
- Do not add more water than specified.
- Do not add additional powder from other units.
- Do not overmix.

Health And Safety

DANGER!

Causes serious eye damage and skin irritation.

Health Precaution

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 regulations.

Warning

KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY.

LIMITED WARRANTY
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

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