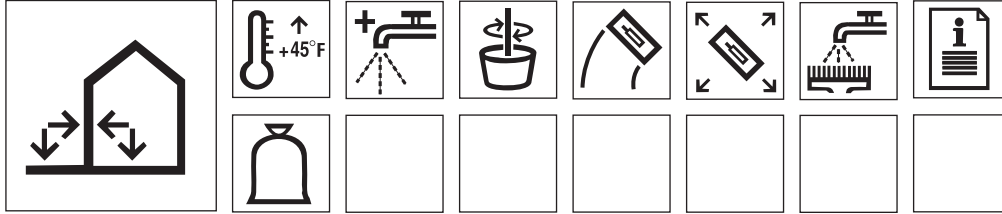


Sto Trowel-Grade Mortar w/ CI

CR701CI

Division 7

1. patching and repair mortar
2. vertical/horizontal
3. polymer-modified



Technical Data

REPORT	TEST METHOD	TEST RESULTS
Working Time (minutes)		25-45
Compressive Strength (psi)	ASTM C-109	7 days 28 days 7,000 8,200
Flexural Strength (psi)	ASTM C-293	7 days 28 days 1,200 1,500
Modulus of Elasticity in Compression (psi)	ASTM C-469	28 days 3.67 x 10 ⁶
Shrinkage (%)	ASTM C-157	7 days 28 days 0.06 0.08
Rapid Chloride Permeability (Coulombs)	ASTM C-1202	28 days 820

*Typical values for material cured at 73°F (23°C) and 50% R.H.
Note: To convert psi to megapascal (Mpa) multiply by 0.0069.

Features	Benefits
1 Polymer-modified	Increases durability and freeze-thaw resistance; excellent adhesion; improves flexural strength
2 Low shrinkage	Stable bond line; resists perimeter cracking
3 Thermally compatible with concrete	Prevents delamination caused by temperature changes
4 Integral Corrosion Inhibitor	Protects embedded steel against corrosion
5 High abrasion resistance	Wears longer; stands up to abusive traffic
6 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 Trowel-Grade Mortar with integral corrosion inhibitor is a polymer-modified, cement-based mortar for structurally repairing or overlaying deteriorated concrete. Use on horizontal or vertical surfaces for repairs from 1/4 to 2 inches (6 mm to 51 mm) or extend it with aggregate for deeper horizontal applications.

Volume Yield

0.50 ft³ per 60-lb bag
(0.014 m³ per 27-kg bag).

Coverage

20-25 ft² per 60-lb bag, applied at 1/4-inch thick (2 m² per 27-kg bag, at 6-mm thick).

Packaging

60-lb bag (27 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)].

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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 scabbler 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, dust, dirt, laitance and standing water.

Mixing

Patching and Overlay

Use Sto Trowel-Grade Mortar with CI at a pre-conditioned temperature of 70 ± 5°F (21 ± 3°C). Use 6.0 - 6.5 pints (2.83 to 3.08 L) of water per 60 pound (27 kg) bag.

Using Drill and Paddle: Mixing must be achieved mechanically using a slow-speed drill and mixing paddle. Pour 6 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 ½ pint (0.24 L) may be added.

Mortar Mixer: Predampen thoroughly the inside of a clean mortar mixer, then remove any excess

water. Pour 6.0 pints (2.83 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 25-45 minutes, depending upon material, ambient and surface conditions.

NOTE: For application depths greater than 2 inches (51 mm), extend Sto Trowel-Grade Mortar by adding 40 pounds (19 kg) of clean, uniformly graded, ¾-inch (9 mm) aggregate dampened to SSD condition.

Application

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 Trowel-Grade Mortar with CI while the scrub coat is still wet. Consolidate it and trowel to the desired finish. Applications made during temperatures below 50°F (10°C) or above 85°F (29°C) should follow the appropriate application guidelines, per ACI.

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 coating manufacturer's recommendations.

Clean Up

Clean tools and equipment with water immediately after use. Cured material can only be removed 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 ACI.

- The minimum required thickness is ¼ inch (6 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

Health Precautions

Contains Portland cement and crystalline-free silica. Avoid breathing dust. As with any chemical construction product, exercise care when handling.

Safety Precautions

Use adequate ventilation. Use of a NIOSH/MSA-approved dust respirator, safety goggles and protective gloves are recommended.

First Aid

SKIN CONTACT: Wash hands thoroughly with soap and water.

EYE CONTACT: Flush immediately with water for 10-15 minutes and contact a physician.

RESPIRATORY PROBLEMS: Remove affected person to fresh air immediately and contact a physician.

HYGIENE: Wash hands immediately after use.

Wash clothing before reuse.

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 A WRITTEN LIMITED WARRANTY WHICH CAN BE OBTAINED FREE OF CHARGE FROM: Sto Corp., 3800 Camp Creek Parkway, Building 1400, Suite 120, Atlanta, GA 30331; Tel: 404-346-3666; Fax: 404-346-3119.

ATTENTION

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Sto Corp.

3800 Camp Creek Parkway
Building 1400, Suite 120
Atlanta, GA 30331
Tel: 404-346-3666
Toll Free: 1-800-221-2397
Fax: 404-346-3119
www.stocorp.com



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