

# **PRODUCT BULLETIN**

# **Sto Wall Leveler & Patch**

Product Number: 81622

## PRODUCT DESCRIPTION

Sto Wall Leveler & Patch is a single component, polymer-modified, cement-based mortar for leveling and patching concrete and CMU. Use on vertical walls for repairs from 1/8 to 2 inches (3 to 50 mm) or apply it in lifts to maximum 3 inch (76.2 mm) thickness.

FEATURES	BENEFITS		
Polymer-Modified	Increases durability; excellent adhesion		
Non-sag, Low Slump	Apply up to 2 inches (50 mm) in one lift on vertical surfaces; increases job-site productivity		
Low Shrinkage	Stable bond line; resists perimeter cracking		
Thermally	Prevents delamination caused by		
Compatible with	temperature changes		
Concrete			
One Component	Factory-controlled polymer-to-cement ratio;		
	ready to use; easily mixed with water on the job-site no chemical jugs to dispose		

Packaging: 56 lbs. bag (25kg)

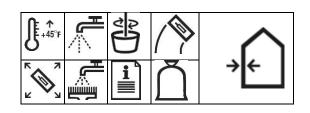
Yield: 0.45 ft<sup>3</sup> per 56 lbs bag (25kg)

**Coverage:** Approximately 21.5  $ft^2$  per 56 lbs bag, applied at 1/4 inch thick (2 m<sup>2</sup> per 25 kg bag, at 6 mm thick).

Coverage will vary depending on substrate condition and texture, application technique, waste factor, final film thickness, and other variables that may exist.

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

Storage: Store in a dry area, between 50°F (10°C) and 85°F (29°C).



### SURFACE PREPARATION

1. Saw cut the perimeter of the repair area to a minimum depth of 1/8" (3mm) at a 90° angle.

2. Remove loose, deteriorated concrete and all other bond-inhibiting materials from the area to be repaired.

3. Prepare concrete surface using proper equipment to achieve a Concrete Surface Profile (CSP) of 5 or greater according to ICRI Guideline No. 310.2R-2013. Verify bond to properly prepared concrete or concrete masonry as specified by design professional at a minimum of 28 days old.

4. Concrete substrate must be clean and saturated surface dry (SSD) with no visible standing water. Exposed reinforcing steel shall be clean and free of oxidation (rust).

5. Work a scrub coat of the mixed material into the substrate to ensure intimate contact and establish bond. Complete repair while scrub coat is still wet.

**Priming:** Alternatively, prepared concrete and reinforcing steel may be primed using Sto Bonding and Anti-Corrosion Agent.

## MIXING

**Recommended Mixing Paddle:** Type P2, P5, or P6 according to ICRI Guideline No. 320.5R-2014

**Recommended Mixing Drill:** Type D5 or D6 according to ICRI Guideline No. 320.5R-2014

Use Sto Wall Leveler & Patch at a preconditioned temperature of 70  $\pm$  5°F (21  $\pm$  3°C). Use 7.0 to 7.5 pints (3.3 to 3.5 L) of water per 56 lbs (25 kg) bag.

Mixing must be achieved mechanically using a slow speed drill and mixing paddle. Pour 7.0 pints (3.3L) of water into a clean mixing container. Mix while slowly adding the product to the water. 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. Do not re-temper.



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## **APPLICATION**

Apply only to sound, clean, properly prepared, and 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 material (mixed as described above) into the substrate to ensure intimate contact and establish bond. Do not add additional water to the scrub coat.

Complete the repair while the scrub coat is wet and trowel to the desired finish. Sto Wall Leveler & Patch can be applied to a thickness of 2 inches (50 mm) in one lift. For application thickness greater than 2 inches (50 mm) apply Sto Wall Leveler & Patch in lifts to maximum thickness of 3 inches (76.2 mm).

For additional lifts, score the first lift to achieve the proper concrete surface profile (CSP) 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 cold or hot weather application guidelines, respectively.

#### Curing/Drying

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 solventbased curing compounds. If a coating or sealer will be applied, use water fogging or blanket curing methods and prepare the finished surface per manufacturer's recommendations.

#### Clean Up

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

# **HEALTH & SAFETY**

WARNING: Causes eye and skin irritation.

Precautionary Statement: Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection. **FIRST AID MEASURES**: 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. Store locked up.

Spills: Collect with suitable absorbent material such as cotton rags.

**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. Consult the Safety Data Sheet (SDS) on www.stocorp.com for further health and safety information.

### LIMITATIONS

- Apply only when the surface and ambient temperatures are 45°F (7°C) and expected to remain above 45°F (7°C) for 24 hours. 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.
- Field testing is recommended to verify surface preparation and adhesion. For application areas larger than 100 ft<sup>2</sup> (9.29 m<sup>2</sup>) consult a qualified design professional to establish appropriate intervals for field testing.
- Application depths greater than 2 inches (50 mm) must be completed in lifts.
- Do not feather-edge. The minimum required thickness is 1/8 inch (3 mm).
- Do not add more water than specified.
- Do not add additional powder from other units.
- Do not overmix.

### LIMITED WARRANTY

This product is subject to a written limited warranty which can be obtained free of charge from Sto Corp.



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#### **TECHNICAL DATA**

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULT*	
Application Thickness		Minimum Maximum	1/8" or 3mm 2" or 50mm	
Working Time (minutes)			15 - 30	
Compressive Strength (psi)	ASTM C109	1 day 7 days 28 days	>3,500 >7,000 >8,000	
Shrinkage (%)	ASTM C157	28 days	<0.18	
Direct Tensile Bond (psi)	ASTM C1583	28 days	>400 (substrate failure)	
Slant Shear Bond (psi)	ASTM C882 modified	7 days 28 days	>1,200 >1,400	
Freeze/Thaw Resistance (%)	ASTM C666	300 cycles	>98	
Salt Scaling Resistance	ASTM C672	50 cycles	Rating = 0 Scaled Material = 0.0 lbs/ft <sup>2</sup>	
Note: To convert psi to Mega Pascal (MPa) multiply by 0.0069.				

Sto Corp.

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#### 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, and to the structure of the building or its components. <u>STO CORP. DISCLAIMS ALL</u> WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Corp. website, <u>www.stocorp.com</u>