



**STRONGWALL INDUSTRIES, INC.**

## Strongcrete SW-82 Shallow Vertical and Form Repairs Product Data Sheet

Strongcrete SW-82 is designed to address shallow vertical and form and pack concrete repairs. It is a two component latex modified structural repair mortar. The unique chemistry of the modifier allows the material to penetrate the capillaries of the substrate. This will allow the repair to form a long lasting bond with the substrate. The modifier provides a low modulus of elasticity and a high flexural strength. As a result, there is no required minimum depth. This polymer serves as an excellent emulsifier and as a result the Strongcrete SW-82 can be applied from a feather edge to ¾".

### Yield and Packaging:

One 5 gallon pail of SW-82 liquid and ten 32.5 lb. bags of SW-82 powder form one unit.

Unit yield: 2.75 cu. ft. or 66 sq. ft. @ ½" depth

### Shelf Life

One year from date of manufacture of all unopened bags and buckets if stored properly.

### Site and Storage Conditions

Indoors, off the ground and in a dry location, at temperatures not exceeding 90°F or lower than 45°F. Pre-condition material to be applied to ambient temperatures as necessary. Keep the materials out of the direct sunlight.

### Typical Physical Properties at 75°F (24°C)

**ASTM C-109 Compressive Strength:** 28 Days- 5,800 psi

**ASTM C-293 Flexural Strength:** 28 Days- 1,900 psi

**ACI Com 403 (Bull # 59-43) Bonding Strength:** 470 psi with 100% failure in concrete

**ASTM C-882 Slant Shear-Bond Strength:** 380 psi

**ASTM C-1042 Shear Bond Strength:** 28 Days- 1870 psi

**ASTM E-96A Water Vapor Transmission:** 38gm/sq.m/ 24 hours or 5.5 perms

**ASTM C-1202 Water Permeability:** 890 coulombs

**ASTM C-109 Freeze/Thaw Resistance:** Passes: 50 cycles

**ASTM C-666 Surface Scaling:** 0.009 cm<sup>3</sup>/cm<sup>2</sup>

**ASTM C-157 Shrinkage:** 28 Days- 0.020%

**ASTM C-501 Abrasion Resistance**

- **Coefficient of Thermal Expansion Degree C:** 9.7 x10<sup>-6</sup> Centigrade
- **Setting Time: hours @ 75 ° F:** 5 hours
- **Working time at 75 ° F:** 20 minutes

**ASTM 469 Modulus of Elasticity:** 2.28 x 10<sup>4</sup>5 kg/ cm<sup>2</sup>

### Where to use

- Eyebrow repairs
- Form and Pack repairs
- All shallow ¾" maximum vertical structural repairs of walls, columns, beams and concrete structures

### Advantages

- Low modulus of elasticity and high flexural strength
- Can be applied to a featheredge without cracking

- Incorporates migratory corrosion inhibitor technology to inhibit corrosion
- SBR rubber modifier penetrates deeply into concrete capillaries to form permanent bond with substrate

### Overview of Installation Procedures

Refer to the detailed installation procedures.

1. Prepare surface by careful and through removal of laitance, grease and foreign matter. Follow all surface-prep procedures.
2. Prime: Use one-half of a 32.5 lb bag of SW-82 powder and ½ gallon of SW-82 liquid. Apply with a mason brush to all concrete and steel surfaces that will receive the mortar mix- leave no puddles. Do not allow primer to cure prior to application of mortar.
3. SW-82: Mixing ten 32.5 lb. bags of SW-82 Powder and one 5 gallon pail of SW-82 liquid form one unit
  - a. Average Yield: 2.75 cubic feet. Apply from featheredge to ¾ "
4. Working Time: 20 minutes at 75 ° F

**Mixing Ratio:** Mix one gallon of SW-82 liquid and two 32.5 lb. bags of SW-82 powder. Using a hand trowel, apply material to a maximum depth of ¾" per lift.

Allow to cure for a minimum of 15-20 minutes at ambient temperatures between placement of successive lifts. No additional priming is needed if the material is applied with in this time frame.

Protect materials at all times from excessive temperatures and pre-condition to ambient temperatures prior to application. Keep out of direct sun whenever possible.

### Exposed Aluminum, Steel and Rebar.

As with all cementitious products, avoid all contact with exposed aluminum. Completely expose and clean all reinforcing steel. It is practice to have a ¾" clearance behind reinforcing steel. Perform this preparation of the steel according to the ICRI #03730 technical guidelines. This material does not contain added gypsum, lime or high aluminum cements.

The proper application of this product is the sole responsibility of the end user. Job site visits by Strongwall representatives are only for the purpose of making recommendations and do not assume any liability for inspection, supervision or quality control.

### Cleaning Tools

Clean all tools with water immediately after use. If cured, mechanical means will be necessary.

### First Aid

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at

least 15 minutes. For respiratory problems, remove person to fresh air. Contact a physician. Keep container tightly closed. Keep out of reach of children, Not for internal consumption. For industrial use only.

#### **Specification Assistance**

Consult Strongwall Industries Incorporated for specification assistance and details. This consultation is highly recommended prior to specification.

#### **Testing**

The technical data contained herein is the result of tests made in manufacturer laboratories or in independent laboratories using small scale equipment, following generally accepted trade practices. Although this information is believed to be true and accurate, the use of different equipment for testing under dissimilar conditions or the testing of samples produced under dissimilar conditions may develop substantially different results.

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Natural gray and pigmented cementitious coatings may exhibit color variegation due to fluctuating evaporation rates during cure. Measure surface and ambient temperatures to ensure the material is only applied when temperatures are 45°F and rising during placement and cure time.

All information provided by Strongwall Industries concerning Strongwall products, including but not limited to, any recommendations and advice relating to the application and use of Strongwall products, is given in good faith based upon Strongwall's current experience and knowledge of its product when properly stored, handled, and applied under normal conditions in accordance with Strongwall's instructions.

In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Strongwall's control as such that Strongwall assumes no liability for the provision of such information, advice, recommendations, or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations, or instructions related to its products. The user of the Strongwall product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Strongwall reserves the right to change the properties of its products without notice. All sales of Strongwall product(s) are

subject to its current terms and conditions of sale which are available by calling 201-445-4633.

Prior to each use of any Strongwall product, the user must always read and follow the instructions on the products most current product data sheet, product label, and Safety Data Sheet which are available by calling at 201-445-4633. Nothing contained in Strongwall materials relieves the user of the obligation to read and follow the instructions for each Strongwall product as set forth in the current product data sheet installation procedures product label, and safety data sheet prior to product use.

#### **Material Guarantee**

Strongwall Industries, Inc. (hereafter referred to as Strongwall) guarantees materials only for a period of 1 year from the date of installation, when applied to an approved substrate by an approved applicator in accordance with Strongwall's written specifications, application instructions, and Product Data Sheet. Strongwall disclaims any other guarantee or warranty express or implied of the materials and this guarantee shall be the sole remedy of any person who purchases or uses the materials.

This guarantee applies only to material defects and will not apply in instances where failure has been caused by substrate defects including improper preparation, structural movement or settlement. In addition, it will not cover vandalism, accidents, acts of God, ordinary wear or any other damage not associated with normal usage. Where the materials have been applied over a previous coated surface, guarantee is limited to adhesion of the materials to previous coating and does not guarantee adhesion of previous coating to substrate.

This guarantee is valid only upon completion of the job, proper maintenance of all systems, payment in full to Strongwall and after the applicator and owner have affixed their signatures to the fully executed document to signify their acceptance of its terms and conditions and to release Strongwall of all claims and obligations other than those set forth in the above paragraph. A fully executed copy must be returned to Strongwall.

In the event of any kind of failure, the owner will advise the approved applicator in writing. The applicator will make an inspection to determine the cause of such failure. Should materials failure occur, Strongwall will provide replacement of materials that may be required to correct deficiencies. There are no express agreements other than those set forth in the above paragraphs.

Buyer understands and agrees that any and all warranties implied by the provisions of the Uniform Commercial Code are executed from this sale.