



Strongcrete SW-88 Deep Vertical and all Overhead Repairs Product Data Sheet

Strongcrete SW-88 is designed to address deep vertical and overhead concrete repairs. It is a two component polymer modified structural repair mortar that contains migratory corrosion inhibitors. SW-88 has a low modulus of elasticity and a high flexural strength. Use SW-88 for all hand-placed structural overhead and deep vertical repairs. Apply in successive 1½” lifts for overhead repairs and 3” lifts for all vertical repairs every 10-15 minutes to any required depth.

Yield and Packaging:

One 5 gallon pail of SW-88 liquid and ten 27.5 lb. bags of SW-88 powder form one unit.
Unit yield: 2.8 cu. ft. or 34 sq. ft. at 1” in 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 ° or lower than 45 ° F. Pre-condition materials to be applied to ambient temperatures as necessary. Keep the material out of the direct sunlight when possible.

Typical Performance Table

Test Method	Property	SW-88
ASTM G-109	Corrogard MCI reduced rebar corrosion rates 62% vs. control	
ASTM C-109	Compressed Strength	4,000 psi
ASTM C-293	Flexural Strength:	1 Day: 1,000 psi 7 Days: 1,300 psi 28 Days: 1,900 psi
ACI Com. 403	Bonding Strength	470 psi with 100% failure in concrete
Bull # 59-43	Slant Shear-Bond Strength	380 psi
ASTM C882	Shear-Bond Strength	28 Days: 1870
ASTM E-96A	Water Vapor Transmission	38gm/sq. m./ 24 hours or 5.5 perms
ASTM C-1202	Water Permeability	890 colombs
ASTM C-109	Freeze/Thaw Resistance	2% weight gain at 50 cycles
ASTM C-666	Surface Scaling	0.009cm ³ /cm ²
ASTM C-157	Shrinkage	8 Days: 0.20%
ASTM C-501	Abrasion Resitance:	-
	Coefficient of Thermal Expansion	Degree C 9.7 X 10 Centigrade
	Setting Time: hours @ 75°F	5 hours
	Working time @ 75 °F	20 minutes
ASTM 469	Modulus of Elasticity	2.25 x 10 Kg./cm ² Lower than concrete and competitive mortar materials.

Where to use:

Use for all hand placed structural overhead and deep vertical repairs including:

1. Garage decks
2. Columns
3. Beams
4. Balconies
5. Bulkheads

Advantages

Mortar can be applied without cracking and delamination to a feather edge.
Contains migratory corrosion inhibitors
SBR rubber modifier penetrates deeply into the capillaries of the concrete.
Low modulus of Elasticity
High Flexural Strength

Overview of Application Procedures

Refer to the installation procedures. Perform structural repairs to the substrate using the Strongcrete/SWI repair mortars. Crack treatment of the substrate and all surface preparation must be completed, prior to installation of the repair. The surface needs to be profiled and power washed at a minimum of 4000 psi.

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 ¼” clearance behind reinforcing steel. Perform this preparation of the steel according to the ICRI # 03730 of their technical guidelines. This material does not contain added gypsum, lime or high aluminum cements.

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

SW-88 Primer: Mix one part by volume of SW-88 liquid and two parts by volume of SW-88 powder. Apply using a masons brush to the concrete surface to be repaired and all prepared steel surfaces that are to receive the mortar mix. Leave no puddles. Do not allow the primer to cure prior to mortar placement and it will act as a de-bonder.

Mixing Ratio: Mix one gallon of SW-88 liquid and two 27.5 lb. bags of SW-88 powder. Using a margin trowel, place the mortar. Always place while the priming mix is still un cured as this will act as a de-bonder. Start at the edges of the cavity and always work toward the center. Apply mortar in up to 1 1/2” lifts for overhead applications and up to 3” lifts for vertical repairs.

Allow first lift to cure for a minimum of 15-20 minutes at ambient temperatures between placement of successive lifts. Place successive lifts in the same manner until the entire cavity is filled to within 1/8” of the finished surface. No additional

priming is needed if the material is applied with in this time frame.

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 application instructions, 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.

