

# PRODUCT DATA

## STONFLOW INDUSTRIAL

### SELF LEVELING PUMPED SCREED FOR HEAVY DUTY INDUSTRIAL ENVIRONMENTS

#### PRODUCT DESCRIPTION

StonFlow Industrial is a single component highly engineered self leveling pumped screed for fast turnaround substrate leveling and repair. Designed to be applied either by pump or hand from 1/8" to 1 1/4" (3mm to 30mm) and cures to receive foot traffic after only 2 hours. StonFlow Industrial has been specifically formulated to quickly receive resinous finishes (such as Epoxy flooring systems) and for heavy duty industrial environments.

#### ADVANTAGES

- Flowing formulation for ease of installation
- Walk on time in just 2 hours
- Pumpable through standard equipment
- Exceptional shrinkage control for outstanding crack resistance
- Protein free for use in sensitive environments
- Extended self healing time for ease of placement
- Fast curing formulation – finishes can be installed after only 24 hour cure period

#### USES & APPLICATIONS

- Fast track leveling of floors to receive resin finishes
- Rapid installation up to 20,000ft<sup>2</sup> per day
- Tough heavy duty industrial finish
- Precision refurbishment in high bay warehousing

#### SUBSTRATE

StonFlow Industrial is suitable for application over many differing substrates including concrete, engineered timber and steel when used with the correct primer. For substrates other than concrete please consult with your local StonCor design team for the correct procedures.

#### PACKAGING

StonFlow Industrial is provided in 50 lb. (22.7 kg) moisture resistant paper bags.

#### COVERAGE

Each bag of StonFlow Industrial yields approximately 0.46 ft<sup>3</sup> (13 liters) of material. Approximate coverage per thickness:

1/8" (3mm)	46.48ft <sup>2</sup> (4.33m <sup>2</sup> )
1/4" (6mm)	23.24ft <sup>2</sup> (2.16m <sup>2</sup> )
1/2" (12mm)	11.62ft <sup>2</sup> (1.08m <sup>2</sup> )
1" (25mm)	5.59ft <sup>2</sup> (0.52m <sup>2</sup> )
1 1/4" (30mm)	4.66ft <sup>2</sup> (0.43m <sup>2</sup> )

#### POT LIFE

After mixing, StonFlow Industrial will continue to self heal for approximately 25 minutes at 70°F / 21°C. This working time will vary depending upon ambient and surface conditions.

#### COMPRESSIVE STRENGTH (ASTM C-109 2" Cubes)

2 Hours	1000 psi (7.0 MPa)
4 Hours	2600 psi (18.0 MPa)
24 Hours	4500 psi (31.0 MPa)
7 Days	5100 psi (35.0 MPa)
28 Days	5400 psi (37.5 MPa)
56 Days	7600 psi (48.5 MPa)

#### BOND STRENGTH (ASTM C-1042)

7 Days	580 psi (4.0 MPa)
28 Days	600 psi (4.1 MPa)

#### SET TIME ASTM C266 @ 70°F (21°C)

Initial Set	48 minutes
Final Set	60 minutes

#### STORAGE CONDITIONS

Store StonFlow Industrial between 60 to 85°F / (16 to 30°C) in a dry area above the ground. Avoid excessive heat and do not freeze. The shelf life is 6 months in the original, unopened packaging.

#### SUBSTRATE PREPARATION

Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e., abrasive blasting or scarifying. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent (StonKleen DG9) and rinsing with clean water. The surface must show open pores throughout and have a surface profile of CSP- 3-5 in accordance with ICRI Guideline 310.2. Fill in deep holes or areas of cracking with appropriate concrete repair materials (such as Five Star Structural Concrete) prior to application. For recommendations or additional information regarding substrate preparation, contact StonCor's Technical Service Department.

#### PRIMING

The use of a primer is required for all applications. For use on concrete apply one coat of Stonhard Epoxy Primer and broadcast to refusal with aggregates. Allow the primer to cure and sweep off any excess aggregates before applying StonFlow Industrial. For very porous substrates an additional coat of primer may be required.

For recommendations or additional information regarding substrate preparation and priming particularly for surfaces other than concrete, contact StonCor's Technical Service Department.

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### MIXING

NOTE: Do not start mixing until the surface is properly prepared and dry, ideally with the temperatures of both the StonFlow Industrial and the surface at least 60°F / 16°C or higher (maximum 90°F / 32°C).

StonFlow Industrial only requires the addition of clean potable water. Mixing must be achieved by mechanical means. For small quantities StonFlow Industrial can be mixed with a heavy-duty, slow-speed (400 to 600 rpm) drill and a Jiffler Mixer. Add the appropriate amount of water ( 5qts (4.7L)) and then slowly add one bag of StonFlow Industrial. Do not add water at a rate that will cause segregation or bleeding of the product.

For larger areas use conventional mixing and placing equipment. The mixer and pump must be in good condition and may require periodic cleaning as recommended by the manufacturer, during the application. A mesh "sock" can be used at the end of the hose to catch any unmixed lumps.

In each instance the material should be delivered to the repair area as quickly as possible and placed immediately. A staff of technical service engineers is available to assist with application or to answer questions related to StonCor's products. Requests for technical service or literature can be made through local sales representative and offices, or corporate offices located worldwide.

### APPLYING

The product must be continuously placed to achieve a smooth and uniform surface. Set the width of the pour such that the wet edge is maintained throughout placement. Pump or pour the StonFlow Industrial onto the prepared and primed surface in a continuous stream along one edge of the area then work back again as soon as possible to achieve the desired thickness. Additional tools such as spike rollers, notched squeegee's and trowels may be used during application to assist placement.

During pumping, regularly check the consistency of the material with a StonCor Flow Ring (40mm diameter 40mm high): Range 125-140mm diameter.

StonFlow Industrial can be extended with clean ¼"-3/8" aggregates for applications over 1 1/4" thick by adding 20 to 25lbs per bag to extend the initial layer. Aggregates may also be pre placed and flooded with StonFlow Industrial if preferred. For best results the extended layer should then be re-primed and topped off with a further application of StonFlow Industrial.

### JOINTS

StonFlow Industrial is a rigid system and any joints subject to movement in the substrate should therefore be honored. Ensure that any such joints are bought fully through the system. Joints should be at least ¼" wide and cut as soon as practical. Consider expansion control joints at the perimeter of the area, around plinths, columns and equipment pedestals. For fast joint installation use Reactamine Joint sealant or Stonflex standard sealants.

### CURING

StonFlow Industrial is self curing providing the site recommendations are followed. Avoid exposure to direct sunlight and avoid drafts during the curing period.

### RECOMMENDATIONS

Do not use StonFlow Industrial as a wearing surface. Ensure any openings through the slab are sealed prior to application particularly when working on suspended floors. StonFlow Industrial is very fluid. Do not use in areas subjected to continuous exposure to moisture as this could jeopardize product performance. StonFlow Industrial is not a vapour barrier, and will allow the free passage of water vapour. If a vapour barrier is required prime with Stonhard Green Concrete Primer prior to application (see separate data sheet). Do not use if the ambient temperature on the job site cannot be maintained at a minimum of 40°F / 4°C for a period of 72 hours. Do not allow to freeze. Turn off HVAC and tape up openings to prevent drafts during curing. If heat is required use indirect heating to maintain the desired temperatures. Do not expose to direct sunlight during curing. Check the moisture content prior to application of moisture sensitive finishes particularly when used in thick sections. Clean up tools and uncured material with water. Cured material can only be removed mechanically. Dispose of waste material in accordance with federal, state and local regulations. In case of contact, flush the area for 15 minutes with copious amounts of water and seek medical attention. Wash skin with soap and water.

### NOTES

Material Safety Data Sheets for StonFlow Industrial are available upon request and should be consulted prior to commencing any project.

#### Important:

Stonhard Construction Solutions believes the information contained here to be true and accurate as of the date of publication. Stonhard Construction Solutions makes no warranty, expressed or implied, based on this literature and assumes no responsibility for consequential or incidental damages in the use of the systems described, including any warranty of merchantability or fitness. Information contained here is for evaluation only. We further reserve the right to modify and change products or literature at any time and without prior notice.  
Rev. 03/11