Sure-FloTM FT 100 Industrial and commercial floor topping

MANUFACTURER

Gemite[®] Products Inc.

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|------------|-----------------------------|
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FEATURES

- Savings in labor and indirect costs
- No trowelling required = *Sure-Flo FT 100* self levels
- Crack-resistant, Fire-resistant & Sound insulating
- Hard, smooth and resilient finished floor
- No sanding or grinding required when properly applied
- Pumpable
- No curing needed
- Not a gypsum product
- Walkable overnight or earlier depending on RH, temperature and thickness
- Nonflammable & Nontoxic

PRODUCT DESCRIPTION

Basic Use

Sure-Flo FT 100 is pumpable, self-leveling, floor topping with a high compressive strength and very good resilience. It is designed for indoor use only as a leveling floor topping It is suitable for:

- Frozen & Rained on concrete
- Rough concrete
- Replaces concrete finishing
- Elimination of camber problems
- Uneven floor surfaces
- Quarry tile & Terrazzo
- Warehouse floors and utility areas

Composition and Materials

A specially formulated, cement based, shrinkage compensated self-leveling floor topping material supplied as a premix and mixed with water only.

Limitations

Do not apply when the temperature is expected to be below 4 $^{\circ}$ C (40 $^{\circ}$ F) within 24 hours. Not for exterior use, or where exposed to prolonged contact with water. Under rapid drying conditions, prevent from drying out too quickly. The maximum applied thickness should not exceed 19 mm (3/4 in) in one layer. The floor must be designed with maximum L/360 deflection. If a vapor barrier is applied as a finish, in slab on grade applications, it is important to make sure that there is no water vapor transfer



from below. This could cause debonding of the floor finishing material, or *Sure-Flo FT 100* topping. Please contact Gemite Technical Service for further instructions. *Sure-Flo FT 100* is not recommended for high impact and/or high abrasion industrial application or where there the topping is continuously exposed to water. *Sure-Flo FT 100* is not an exterior use product. For exterior use consider either *Gem-Crete HF ST* or *Gem-Crete TO ST*. Always carry out test installation for approval by the client and to establish placement procedure.

Health and Safety

Sure-Flo FT 100 is nontoxic and nonflammable. Your skin might be sensitive to cement. We recommend use of rubber gloves. Avoid contact with eyes and prolonged contact with skin. If contact occurs, flush immediately with water. Seek medical advice if irritation occurs. Harmful if digested. Keep product out of reach of children. FOR INDUSTRIAL USE ONLY. Consult MSDS for additional information.

Color

Cement Grey. The colour of the surface may not be uniform due to Portland cement based formulation. Where the uniformity is of a consideration it is recommended to use either chemical concrete stains or water borne color stains to provide a suitable colored surface. In all cases it is recommended to seal the floor with two coat application of *Gem-Cote WA Plus*.

Packaging

Sure-Flo FT 100 is pumpable, self-leveling, floor topping with Sure-Flo FT 100 Premix is packaged in 22.7 kg (50 lb) bags.

Yield

Sure-Flo FT 100 Premix yields 12.8 L (0.45 ft³), and covers approx. 4.3 m² @ 3 mm (43.5 ft² @ 1/8") thickness per bag.

Primer # 410 covers approximately 6 - 8 m² per L (247 - 376 ft² per USG). It is used as supplied. Do not mix with additional water.

Storage and Transportation

Sure-Flo FT 100 when stored on pallets in a dry, cool area, free from moisture has a shelf-life of 12 months.

TECHNICAL DATA - Premix

| Compressive Strength, 28 days (ASTM C109 Modified) | 27.6 - 34.5 MPa (4,000- 5,000 psi) |
|---|--|
| Flexural Strength , 28 days (ASTM C348) | 6.1-6.5 MPa (880 - 940 psi) |
| Bond Strength | 1.0 MPa (145 psi) |
| Dry Density | 1.77 g/cm ³ (110 lbs/ft ³) |
| Fire Hazard Classification (ASTM E 286) | 0 - flame spread, 0 - smoke, 0 - fuel contributed |
| Setting Time (6 mm (1/4 in) layer) | Walkable overnight |

Acoustical Performance: Care must be taken in the installation of all components of structure to assure the designed acoustical result, as

INSTALLATION

Current Product Data Sheet & Guide Specification must be followed. Consult Gemite Technical Service before starting a project, to ensure that the correct surface preparation and application procedures are followed, especially when applied to previously treated substrates.

Surface Preparation

The surface must be clean, firm, free of dust & dirt. All contaminants such as paint, wax, polish, grease, oil, curing compounds, asphalt, etc. must be thoroughly removed. Any degreasers or acids used in cleaning the floor must be flushed away. All openings must be sealed.

Primer

All surfaces must be primed, using *Primer* # 410 applied in a thin layer with a broom or sprayer. Let the primer dry until the milky color turns clear. Avoid puddles (white spots). Apply *Sure-Flo FT 100* within 24 hours after priming.

Test Installation

Due to the variety of surfaces and different site conditions it is recommended that a test installation using one bag of *Sure-Flo FT 100* be done first, allowing for an overnight cure. Is advisable to identify and correct any potential problems prior to a full scale installation.

Mix Design

| Sure-Flo FT 100 Premix | 22.7 kg (50 lb) |
|------------------------|---------------------------|
| Water | 4.2-4.4 L (1.10-1.16 USG) |

Mixing

Use a heavy duty drill (min. 400-600 RPM) and mixing paddle, or paddle mortar mixer with rubber sweep. Place most of the specified water into mixer and add *Sure-Flo FT 100* Premix slowly while continuously mixing. Mix for a minimum of 5 minutes. Initially the mix may appear quite thick, but after a vigorous mixing it will become a thick, paint-like, viscous liquid.

The exact amount of water for the best result depends on the porosity of the substrate, relative humidity and temperature. At high humidity and low temperatures, the amount of mixing water may have to be decreased. The reverse conditions may result crease. Withhold part of the water, while mixing the first batch and adjust the water as required in the particular situation. DO NOT OVER WATER - "white bleed" water or sedimentation is an indication of high water content.

Application

Sure-Flo FT 100 can be feather-edged on concrete substrates, but it will not self-level (flow) unless at least a 3 mm (1/8") thick layer is applied.Pour the Sure-Flo FT 100 where needed. Use a squeegee with adjustable height pins to spread the material followed by a "smoother" squeegee. When joining the batches, use "smoother" squeegee to blend the batches. It may be necessary to use a trowel on the joint between the already setting material (if more than 15 - 20 minutes expired) and the new batch. Wear baseball, or soccer shoes, with non-metallic cleats to avoid leaving marks in the liquid Sure-Flo FT 100. The best result is achieved with a continuous application using pump. Any positive displacement pump is suitable for pumping Sure-Flo FT 100. Sure-Flo FT 100 has a "flow time" approximately 15 minutes at 21°C (70°F). The recommended thickness is 6-12 mm (1/4 in to $\frac{1}{2}$ in).

Curing

Make sure that the area is well ventilated and heated, if necessary, to remove the excess water during curing. Avoid relative humidity over 70% if possible. Avoid fast surface drying. *Sure-Flo FT 100* can be walked on overnight or earlier depending on tempearture, relative humidity and thickness.

MAINTENANCE

None required.

WARRANTY

A limited twelve (12) month Material Replacement Warranty is available. For complete details contact Gemite's Head Office.

TECHNICAL SERVICE

For advice on suitability of *Sure-Flo FT 100* for a specific application, specification assistance and application instructions, contact Technical Service: USA at 888-443-6483 in Canada at 905-672-2020.

Short Specification

The self-levelling floor topping will be *Sure-Flo FT 100*, manufactured by Gemite Products Inc., [USA 888-443-6483] [Canada 905-672-2020]. It will meet all the Technical Data specified in the current *Sure-Flo FT 100* Product Data Sheet.