

## SOLHYDFLOW SUPREME

Premium smooth and durable self-leveling

**SOLHYDFLOW SUPREME** is a self-leveling fluid underlayment that provides a flat, smooth, durable surface with minimum effort, installation time and cost. It is a single component, high strength, non-shrink, regulated setting underlayment using a polymer modified binder system to level and smooth floors. **SOLHYDFLOW SUPREME** can be poured or pumped (no trowel required) in one single step to thicknesses from 3 mm to 18mm (1/8" to 3/4") and up to 37 mm (3") by adding aggregate\* (Refer to "Product Application" section to reach higher thicknesses by adding aggregate). **SOLHYDFLOW SUPREME** will accept foot traffic in 3 hours and floor coverings in 12 hours after application.

### USES

Specially designed for interior use in leveling uneven rough damaged, unfinished, frozen or rained on concrete slabs. Provides a smooth and even finish to existing wooden, vinyl tiles, ceramic or terrazzo floors.

### TYPICAL USES

- Floors covered by carpeting, hardwood, tiles, VFT or polymer coatings
- Showroom floors
- Office and condo building floors
- Shopping center floors
- School and gymnasium floors
- Hospitals and correctional institutions
- Heated flooring

### PRODUCT FEATURES

- Economical and easy to use
- Superior bond
- Self-leveling, no trowel work required
- Installable from featheredge to a 37 mm (3") thickness by adding aggregate.
- Non-shrink and non-dusting
- Fluid, ideal for pouring and pumping
- Maintains workability for 30 minutes at 21°C (70°F)
- No sanding or grinding required
- Adhesive compatible
- Not a gypsum based product
- Rapid early strength gain

### SURFACE PREPARATION

#### CONCRETE FLOORS

Surface must be solid, completely clean, free of oil, wax, grease, sealers, curing compounds, asphalt, paint, dirt, loose surface material and any contaminant that will act as a bondbreaker. Weak concrete surfaces must be cleaned down to sound concrete by mechanical means like Blastrac® or light grinding. Acid etching or chemical cleaning is not acceptable. Joints in the substrate must be reflected through the applied underlayment.

#### WOOD SURFACES

Wooden sub floors must be clean, free of varnish, shellac or any contaminant that hinders bond. If needed, sand down to bare clean wood. Do not use chemical cleaners. Substrate must be solid and secure to provide a rigid base. Any moving boards should be renailed and open joints filled with **SOLHYDPATCH**.

The wooden substrate must be solid hardwood flooring or 20 mm (3/4") tongue and groove, APA rated Type 1, Exterior Exposure plywood. Prime the substrate as outlined in "Substrate Priming". Then anchor a thin galvanized expanded diamond 20 mm (3/4") metal lath mesh (plaster lath) to the subfloor, securing every 150 mm (6") to prevent movement, overlapping adjacent pieces by 25 mm (1").

### MATERIAL PHYSICAL PROPERTIES @ 21°C (70°F)

#### COMPRESSIVE STRENGTH ASTM C-109-93 2" (50 MM) CUBES

8 hours	21.0 MPa	(3045 psi)
24 hours	24.0 MPa	(3450 psi)
3 days	27.5 MPa	(4000 psi)
7 days	31.0 MPa	(4500 psi)
28 days	36.6 MPa	(5300 psi)

#### FLEXURAL STRENGTH ASTM C-348

7 days	3.5 MPa	(510 psi)
28 days	7.6 MPa	(1100 psi)

#### TENSILE STRENGTH ACNOR A23.2-6B

1 day	2.4 MPa	(350 psi)
7 days	2.8 MPa	(400 psi)
28 days	3.1 MPa	(450 psi)

#### HARDENING

Working time	more than 25 minutes
Initial set time ASTM C191	60-75 minutes
Final set time ASTM C191	90-110 minutes
Curing	self-curing
Foot traffic	3 hours
Floor covering	12 hours

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### ■ SURFACE PREPARATION (CONTINUED)

When placing **SOLHYDFLOW SUPREME** over wood, cutback and nonporous floors the addition of **SOLHYDFLOW EMULSION** is required to increase the performance of **SOLHYDFLOW SUPREME** (see "Mixing").

#### OVER CUTBACK AND ADHESIVE RESIDUE

Do not use **SOLHYDFLOW SUPREME** over coal tar and asphalt waterproofing systems. Cutback and adhesives may contain asbestos fibers whose inhalation is harmful, resulting from the sanding/grinding of adhesive residue. Consult government agencies for rules concerning the removal of asbestos containing flooring and adhesives. The Resilient Floor Covering Institute's booklet "Recommended Work Practices for the Removal of Resilient Floor Coverings" is recommended. Thick accumulations, brittle or powdery residue of weak and unbonded adhesive must be removed using the wet-scrape and wet-sweep method as outlined by the Resilient Floor Covering Institute booklet. What remains should be a translucent clean well bonded film suitable for primer application. Installation of **SOLHYDFLOW SUPREME** over non-asbestos adhesives is possible if the residue is solid, well bonded to the substrate and not affected by water. Avoid applications where heat may soften the adhesive causing delamination.

#### NON POROUS SUBSTRATES

Ceramic tile, terrazzo, quarry tile and stone must be solid, well bonded, clean and free of any bond breaking contaminants such as glazes, wax, oil, sealers etc... Surfaces must be mechanically sanded or Blastracked® until a "profile" is obtained for the maximum bonding of **SOLHYDFLOW SUPREME**. Vacuum the floor surface, removing all debris, dust and loose material prior to installing the primer.

### ■ PRIMING

#### ALL SURFACES

All substrates must be clean, dry and primed before **SOLHYDFLOW SUPREME** is applied. Subfloor temperature must be at least 10°C (50°F). Mix 3.8 L (1 US gal) of a **SOLHYDFLOW PRIMER** with 3.8 L (1 US gal) of clean potable water. That volume will cover approximately 35 m<sup>2</sup> to 40 m<sup>2</sup> (350 ft<sup>2</sup> to 400 ft<sup>2</sup>) of floor area. **SOLHYDFLOW PRIMER** must be applied evenly with a nylon pushbroom with exploded tips. Do not use paint rollers, mops, or spray equipment. Apply a thin layer leaving no bare spots, puddles or excess primer. Allow to dry to a clear, thin film (usually 2 hours, but less than 24 hours before applying **SOLHYDFLOW SUPREME**).

#### VERY POROUS CONCRETE

Precaution: To avoid the development of bubbles and pinholes in the **SOLHYDFLOW SUPREME**, very absorbent concrete may require two applications of **SOLHYDFLOW PRIMER**. Apply the first coat of **SOLHYDFLOW PRIMER** diluted (1 part of **SOLHYDFLOW PRIMER** with 3 parts of clean potable water). Let this coat completely dry and install a second application of primer (one part of **SOLHYDFLOW PRIMER** mixed with one part of clean potable water). Let dry, then apply **SOLHYDFLOW SUPREME**.

#### NON-POROUS SUBSTRATES, WOOD AND CUTBACK

Prime the above subfloors using **SOLHYDFLOW PRIMER PLUS**. Apply a thin layer using a pushbroom, covering all areas, and not leaving any excess primer puddles. Allow to completely dry then apply **SOLHYDFLOW SUPREME**.

Note: Low subfloor temperatures, or high humidity will slow primer drying. Never place **SOLHYDFLOW SUPREME** until the primer is completely dry.

### ■ PRODUCT MIXING

Mix a minimum of 2 bags at a time. For each 22.7 kg (50 lbs) bag add 5.75 L (1.5 US gal) of clean potable water into the mixing drum. Then add the **SOLHYDFLOW SUPREME** bags, while mixing at full speed with a paddle mixer attached to a heavy duty 1/2" drill (min. 650 rpm). **Always add the product to the mixing water.** Mix completely for a minimum of 2 to 3 minutes until mixture is homogeneous and lump free. Do not add any additional water once the homogeneous mix has been obtained.

Over wood, cutback and non-porous subfloors the addition of **SOLHYDFLOW EMULSION** is required to increase the resiliency of **SOLHYDFLOW SUPREME**. Mix 1.9 L (0.42 US gal) of **SOLHYDFLOW EMULSION** with 3.85 L (1.2 US gal) of clean potable water for each bag of **SOLHYDFLOW SUPREME**. Add this mixture into the mixing drum followed by the addition of **SOLHYDFLOW SUPREME** bags and mix as outlined above.

It is also recommended to use two (2) mixing drums simultaneously, mixing one (1) drum while the other is being poured. In this manner, we avoid slowing down the pours while respecting the 2 to 3 minutes mixing time. **SOLHYDFLOW SUPREME** can also be pumped affording high productivity and continuous smooth placement. Contact your local **SOLHYDROC** representative for the recommendations concerning specific equipment to be used.

### ■ PRODUCT APPLICATION

**SOLHYDFLOW SUPREME** will level itself for 25 minutes at 21°C (70°F) with no trowel work required. Pour the blended **SOLHYDFLOW SUPREME** on the floor and disperse with the spreader, followed by smoothing the material with the smoother or similar floating tool. Cleated shoes must be worn to avoid leaving marks.

**SOLHYDFLOW SUPREME** can be applied from featheredge up to a 18 mm (3/4") thickness in one step.

\* Note: For all placements of product exceeding 18mm (3/4"), the addition of aggregate is required.

Contact your local SOLHYDROC representative to get recommendation.

### ■ CURING

**SOLHYDFLOW SUPREME** is self curing. The application of concrete cures is not required. All floor adhesives compatible with concrete may be used on **SOLHYDFLOW SUPREME**.

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### ESTIMATING / YIELD

**SOLHYDFLOW SUPREME:** 22.7 kg (50 lbs) bags reinforced with a polyethylene liner (moisture protection). A bag of **SOLHYDFLOW SUPREME** bag mixed with 5.75 L (1.5 US gal) of clean potable water will cover approximately 4.64 m<sup>2</sup> (50 ft<sup>2</sup>). When applied on concrete at a 3 mm (1/8") thickness.

#### Coverage: per 22.7kg (50 lb) bag:

Nominal Thickness	Approximate Coverage
3 mm (1/8")	4.64 m <sup>2</sup> (50 pi <sup>2</sup> )
6 mm (1/4")	2.32 m <sup>2</sup> (25 pi <sup>2</sup> )
12 mm (1/2")	1.16 m <sup>2</sup> (12.5 pi <sup>2</sup> )

### PRECAUTIONS / RESTRICTIONS

- For interior use only
- Not a wearing surface. It must be covered. For wearing surfaces use **SOLHYDFLOW INDUSTRIAL<sup>MC</sup>** or **SOLHYDFLOW DECO**
- Do not use this product if packaging is damaged
- Do not add admixtures (accelerators, etc. . . ) or antifreeze to this product
- Do not install over gypsum based surfaces
- Do not place on surfaces where the temperature is above 32°C (90°F) or below 7°C (44°F)
- Provide protection from wind and direct sunlight during application
- High temperature reduces working time. The use of cold water is recommended
- Do not apply over light weight concrete

### PACKAGING

**SOLHYDFLOW SUPREME** 22.7 kg (50 lbs) bag  
Qty: 56 bags per pallet

**SOLHYDFLOW PRIMER PLUS** 18.9 L pail (5 US gal)  
1 L bottle  
3.8 L (1 US gal) unit  
Qty: 4 units per case

**SOLHYDFLOW EMUSION** 3.8 L (1 US gal) unit  
Qty: 4 units per case

### RECOMMENDED TOOLS

The following tools will assure a cost effective, satisfactory installation:

- Mixing Drum
- Heavy Duty 1/2" Drill with Mixing Paddle
- Depth Gage Spreader
- Surface Smoother

### CLEANING

Use water to clean all tools immediately after use.

### PRODUCT NOTE

All applications require the use of **SOLHYDFLOW PRIMER PLUS** before proceeding with the installation of **SOLHYDFLOW SUPREME**. Floor preparation is crucial in obtaining a successful underlayment installation. The contractor is responsible of ensuring that all surfaces are well prepared before proceeding with application of **SOLHYDFLOW SUPREME**.

#### ELIGIBLE LEED<sup>®</sup> CREDITS: 3

Regional Materials (MR 5.1 & 5.2)  
2 Points

Low Emitting Materials (EQ 4.1)  
1 Point

SOLHYDROC WARRANTS that the product conforms to its chemical description and is reasonably fit for the purpose stated on its Technical Bulletin when used in accordance with its directions. SOLHYDROC makes NO OTHER WARRANTY either expressed or implied. Buyer assumes all risk in handling.

*For Professional Use Only*

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