

# SOLHYDFLOW INDUSTRIAL

Heavy Duty Self-leveling Wear Resistant Topping

SOLHYDFLOW INDUSTRIAL is a heavy duty self-leveling wear resistant topping that provides a flat, smooth and very durable surface with minimum effort, installation time and cost. It is a single component, high strength, non-shrink, regulated setting wear surface using a polymer modified binder system to level and smooth floors. SOLHYDFLOW INDUSTRIAL can be poured or pumped (no trowel required) in one single step to thicknesses from 10 mm (3/8") to 25 mm (1").

SOLHYDFLOW INDUSTRIAL will accept foot traffic within 4 hours and heavy industrial traffic 24 hours after application.

# USES

Specially designed fast setting, self-leveling wear surface for the repair and levelling of concrete plant floors that are uneven, rough, damaged, unfinished, frozen or rained on concrete slabs. Specially formulated for heavy duty industrial equipment traffic on concrete floors.

### **TYPICAL USES:**

- Plant floors
- Warehouse and distribution floors
- Rain damaged floors
- · Floors damaged by wear
- Parking garage floors (interior)
- Correctional institutions
- Showrooms (Heavy equipment vehicle dealers)

# PRODUCT FEATURES

- · Very durable and resistant
- Superior bond
- Installable from 10 mm (3/8") to a 25 mm (1") thickness
- Non-shrink and non-dusting
- Self-leveling wear surface ideal for pouring and pumping
- Maintains workability for 25 to 35 minutes at 21°C (70°F)
- No sanding or grinding required
- Not a gypsum based product
- Rapid early strength gain
- Minimize shut down time and accelerates the return to service floors
- Yield can be increase with addition of 1/8-3/8" granite stone

# PRODUCT MIXING

- Mix a minimum of 2 bags at a time.
- For each 22.7 kg bag add 4.5- 4.7 L of clean potable water into the mixing drum.
- Then add the SOLHYDFLOW INDUSTRIAL 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.
- 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 INDUSTRIAL can also be pumped affording high productivity and continuous smooth placement.
- Contact your local BMQ SOLUTIONS representative for the recommendations concerning specific equipment to be used.

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

COMPRESSIVE STRENGTH ASTM 109-93, 50MM (2") CUBES				
4 hours	17.0 MPa	2,500 psi		
1 day	22.0 MPa	3,200 psi		
7 days	27.0 MPa	3,900 psi		
28 days	45.0 MPa	5,800 psi		
FLEXURAL STRENGTH ASTM C348				
28 days	6.2 Mpa	900 psi		
TENSILE STRENGTH ASTM C190				
28 days	3.6 Mpa	522 psi		

HARDENING				
Working time	25 to 35 minutes			
Initial set time ASTM C191	60 minutes			
Final set time ASTM C191	70 minutes			
Curing	self-curing			
Foot traffic	4 hours			
Floor covering	24 hours			

ADHESIVE STRENGTH ASTM D4541			
28 days	1.4 MPa	200 psi	



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# 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.

### NON POROUS SUBSTRATES

Ceramic tile, terrazzo, quarry tile and stone must be solid, well bonded, clean and free of any bond breaking contaminates 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 INDUSTRIAL. Vacuum the floor surface, removing all debris, dust and loose material prior to installing the primer.

# PRODUCT APPLICATION

SOLHYDFLOW INDUSTRIAL will level itself for 25 to 35 minutes at 21°C (70°F). Pour and apply mixed product as soon as possible to floor surface and spread using the SOLHYDFLOW Depth Gage Spreader, followed by the SOLHYDFLOW Spiked Roller and finish with the SOLHYDFLOW Surface Smoother. Cleated shoes must be worn to avoid leaving marks.

SOLHYDFLOW INDUSTRIAL can be applied from 10 mm (3/8") up to a 25 mm (1") thickness in one step. For applications greater than 25 mm (1") thickness, add up to 6.8 kg (15 lbs) of clean dry 1/8-3/8" granite stone per 22.7 kg (50 lbs) bag of SOLHYDFLOW INDUSTRIAL.

Contact your local BMQ SOLUTIONS representative to determine recommended type, size and dosage per bag of aggregate extension.

### PRIMING

#### **ALL SURFACES**

All substrates must be clean, dry and primed before SOLHYDFLOW INDUSTRIAL 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 m² to 40 m² (350 ft² to 400 ft²) 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 INDUSTRIAL.

### **VERY POROUS CONCRETE**

A 100% solids epoxy primer (SOLHYDPRIME 100 and broadcast clean No.24 round silica sand to saturation) is recommended on a very porous concrete surface. For more information concerning the method, contact your local BMQ SOLUTIONS representative.

### NON-POROUS SUBSTRATES, WOOD AND CUTBACK

Prime the above subfloors using SOLHYDFLOW PRIMER PLUS. Apply a thin layer using a pushbroom, covering all areas, leaving no excess primer puddles.

Allow to completely dry then apply SOLHYDFLOW INDUSTRIAL.

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

### ESTIMATING / YIELD

SOLHYDFLOW INDUSTRIAL: 22.7 kg bags reinforced with a polyethylene liner (moisture protection). A 22.7 kg SOLHYDFLOW INDUSTRIAL bag mixed with 4.5-4.7 L of clean potable water will cover approximately 2.0 m2. When applied on concrete at a 6 mm thickness. For applications greater than 25 mm thickness, add up to 6.8 kg of clean dry 1/8-3/8" granite stone per 22.7 kg bag of SOLHYDFLOW INDUSTRIAL.

### COVERAGE PER 22.7KG (50LB) BAG:

Nominal Thickness	Approximate Coverage
6 mm (1/4")	2.0 m <sup>2</sup> (22 pi <sup>2</sup> )
12 mm (1/2")	1.0m² (11 pi²)

### CURING

SOLHYDFLOW INDUSTRIAL is self curing. The application of concrete cures is not required. SOLHYDFLOW INDUSTRIAL is walkable in 4 hours and will accept floor coverings 18 hours following the installation. All floor adhesives compatible with concrete may be used on SOLHYDFLOW INDUSTRIAL.



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### PRECAUTIONS / RESTRICTIONS

- For interior use only
- Do not use this product if packaging is damaged
- Do not add admixtures (accelerators, etc.) or antifreeze to this product
- Do not use for repairs exceeding 37 mm (1.45") in thickness
- 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 install over gypsum based surfaces
- Do not apply on light weight based concrete

# PACKAGING

### **SOLHYDFLOW INDUSTRIAL:**

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

# **SOLHYDFLOW PRIMER PLUS:**

18.9 L pail (5 US gal) 3.8 L (1 US gal) unit Qty: 4 units per case

# **SOLHYDFLOW EMULSION:**

18.9 L pail (5 US gal) 3.8 L (1 US gal) unit Qty: 4 units per case

### STORAGE

### SOLHYDFLOW INDUSTRIAL:

Store in a dry and temperate area. Shelf life: 1 year (unopened bag).

# **SOLHYDFLOW PRIMER PLUS:**

Avoid freezing.

### **SOLHYDFLOW EMULSION:**

Avoid freezing.

### RECOMMENDED TOOLS

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

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

### CLEANING

Use water to clean all tools immediately after use.

#### NOTE

SOLHYDFLOW INDUSTRIAL is cement based and all ACI (American Concrete Institute) recommendations for concrete apply. Follow proper procedures for hot and/or cold weather placements.

### SAFETY

See Material Safety Data Sheet.

This product contains Portland cement and silica sand. It may cause eye and skin irritation. Avoid contact with eyes and prolonged contact with skin. Do not breathe powder. If contact occurs, rinse thoroughly with water.

### PRODUCT NOTE

All applications require the use of SOLHYDFLOW PRIMER PLUS before proceeding with the installation of SOLHYDFLOW INDUSTRIAL. 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 INDUSTRIAL.