



# SOLHYDFLOW DECO

## Decorative Self-leveling Finish

SOLHYDFLOW DECO is a single component, high strength, non-shrink, polishable, self leveling mortar that provides a flat, smooth, durable wear surface. It can be used for decorative and industrial indoor flooring applications and can be incorporated with integral color, colored aggregates and unique surface treatments. SOLHYDFLOW DECO uses a polymer modified binder system that when mixed only with water, poured or pumped onto the floor, will level and smooth concrete and other subfloors.

SOLHYDFLOW DECO provides a superior bond to the substrate when used in conjunction with SOLHYDFLOW PRIMER PLUS, and can be applied from 10 mm (3/8") up to 50 mm (2") in a single operation and up to 125 mm (5") in depth, with proper aggregate extension and accepts foot traffic in 3 hours and floor treatments in 18 hours.

### ■ USES

Specially designed for leveling uneven, damaged, poorly finished or frozen interior concrete floor surfaces during curing. Leveling of existing plywood, vinyl tile, ceramic or terrazzo floors.

#### TYPICAL USES:

- Leveling rough uneven concrete floor surfaces
- Leveling hardwood or plywood floors
- Leveling existing ceramic tile, terrazzo and wood floors to provide a smooth even finish
- Showroom floors, commercial shopping centre
- Decorative store floors

### ■ PRODUCT FEATURES

- Low in place cost, easy to use
- No troweling required, self leveling
- Rapid early strength gain
- Can be polished within 24 hours after placement
- Polished DECO maximizes brilliance of surface
- Mixes with water only
- Very fluid, ideal for pouring and pumping
- Installable from 10 mm (3/8") to 125 mm (5") thick
- Non-shrink and non dusting
- Superior bond
- Maintains workability for 25 minutes at 21°C (70°F)
- Not a gypsum based product
- Available in Grey or White
- Floor Covering Adhesive compatible
- Can be coated with Polyurethane or Epoxy within 18 hours

### ■ PRODUCT MIXING

- Mix 4.7 L clean water per 22.7 kg (50 lbs) bag of SOLHYDFLOW DECO.
- Mix 2 bags of SOLHYDFLOW DECO at a time.
- For each bag add 4.7 L clean potable water into a mixing drum.
- Then add the SOLHYDFLOW DECO bags, while mixing at full speed with a paddle mixer attached to a heavy duty 1/2" drill (min. 650 rpm).
- Mix completely for a minimum of 2-3 minutes until lump free, adding no additional water.
- Over wood subfloors the addition of SOLHYDFLOW EMULSION is recommended to increase the resiliency of SOLHYDFLOW DECO.
- Mix 1.9 L (2 qts) of SOLHYDFLOW EMULSION with 3.3 L (3.5 qts) of water for each bag of SOLHYDFLOW DECO used and combine as outlined above.
- SOLHYDFLOW DECO will level itself for 20 minutes at 21°C (70°F) no troweling needed.
- Pour the blended SOLHYDFLOW DECO on the floor and disperse with a spreader, followed by smoothing the material with a smoother or flat trowel.
- Cleated shoes must be worn to avoid leaving marks.
- It is recommended that two (2) SOLHYDFLOW DECO mixing drums be used simultaneously.
- Mixing in one while pouring the other. This way there is no job slow down and still allows mixing for the required 2-3 minutes.
- SOLHYDFLOW DECO can also be pumped affording high productivity and continuous smooth placement. Consult your SOLHYDROC INC. representative for pump information.

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

COMPRESSIVE STRENGTH ASTM 109-93, 50MM (2") CUBES			HARDENING	
1 day	24.1 MPa	(3,500 psi)	Working time	25 minutes
3 days	30.0 MPa	(4,350 psi)	Initial setting ASTM C-403	45 minutes
7 days	34.5 MPa	(5,000 psi)	Final setting ASTM C-403	60 minutes
28 days	42.0 MPa	(6,100 psi)	Curing	self-curing
FLEXURAL STRENGTH ASTM C348			Pedestrian traffic	3 hours
28 days	8.8 MPa	(1,280 psi)	Polishing / grinding	24 hours
TENSILE STRENGTH ASTM C190				
28 days	3.9 MPa	(570 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 solid sound concrete by mechanical means. Acid etching or chemical cleaning is not acceptable. Joints in the substrate must be reflected through the applied underlayment.

#### PREPARATION OF 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 until a "profile" is obtained for the maximum bonding of SOLHYDFLOW DECO. Wet mop the floor removing all debris, dust and loose material prior to installing the primer.

#### SUBSTRATE PRIMING:

All substrates must be clean, dry and primed before SOLHYDFLOW DECO is applied. Subfloor temperature must be at least 10°C (50°F). 3.8 L (1 gal) of SOLHYDFLOW PRIMER or SOLHYDFLOW PRIMER PLUS mixed with 3.8 L (1 gal) of clean potable water will cover approximately 32 m<sup>2</sup>-37 m<sup>2</sup> (350-400 ft<sup>2</sup>) of floor area. Primer must be applied evenly with a nylon pushbroom with exploded tips. Do not use paint rollers, mops, or spray equipment. Apply a thin primer layer leaving no bare spots, puddles or excess primer. Allow to dry to a clear, thin film (usually 2-3 hours, but less than 24 hours).

#### SUBSTRATE PRIMING PRECAUTIONS VERY ABSORBENT CONCRETE:

To avoid the development of bubbles and pin holes in the SOLHYDFLOW DECO, very absorbent concrete may require two applications of SOLHYDFLOW PRIMER PLUS. Apply the first coat of SOLHYDFLOW PRIMER PLUS diluted with 2 parts water, let completely dry and install a second application of Primer mixed 1:1 with water. Let dry, then apply SOLHYDFLOW DECO.

#### NON-POROUS SUBFLOORS, WOOD AND CUTBACK:

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

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

### ■ PRODUCT APPLICATION

SOLHYDFLOW DECO will level itself for 25 minutes at 21°C (70°F) with no trowel work required. Pour the blended SOLHYDFLOW DECO 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.

### ■ PRIMING

#### ALL SURFACES

All substrates must be clean, dry and primed before SOLHYDFLOW DECO 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 DECO).

#### VERY POROUS CONCRETE

Precaution: To avoid the development of bubbles and pinholes in the SOLHYDFLOW DECO, 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 DECO.

#### 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 or puddles. Allow to completely dry then apply SOLHYDFLOW DECO.

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

### ■ PARTICULARITY

With the addition of 3-10mm (1/8-3/8") granite stone or decorative gravel, it is possible to increase this thickness up to 125 mm (5"). The quantity of 6.8 kg (15 lbs) of aggregate or decorative gravel is recommended for each 22.7 kg bag of SOLHYDFLOW DECO. Once well mixed, pour the mixture onto the substrate. Adding wet aggregate can cause bleeding. Simply adding aggregate can reduce workability. If the surface requires a finishing coat, let dry completely (16 to 18 hours) and prime the surface with SOLHYDFLOW PRIMER PLUS (see "Primer Coat" section) and finally finish with a thin coat of SOLHYDFLOW DECO (without any aggregate). Once the surface is flat and smooth and has dried completely (24 hours), the grinding, aggregate exposure, sanding and finishing steps can begin. For details on these methods and equipment, contact your BMQ SOLUTIONS representative.

### ■ CURING

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



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## ■ ESTIMATING / YIELD

SOLHYDFLOW DECO is shipped in 22.7 kg (50 lbs) bags, reinforced with a 1 mil polyethylene film to protect from humidity. One bag of SOLHYDFLOW DECO mixed with 4.7 L of clean potable water will cover an area of 1.5 m<sup>2</sup> (16 ft<sup>2</sup>) when installed over concrete at a thickness of 10 mm (3/8").

### 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")	1.0m <sup>2</sup> (11 pi <sup>2</sup> )
25 mm (1")	0.5 m <sup>2</sup> (5 pi <sup>2</sup> )

## ■ 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 place on surfaces where the temperature is above 32°C (90°F) or below 5°C (40°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 over light weight concrete

## ■ PACKAGING

### SOLHYDFLOW DECO :

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 :

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 DECO. 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 DECO.

## ■ STORAGE

### SOLHYDFLOW DECO:

Store in a dry and temperate place for 9 months (unopened bag).

### SOLHYDFLOW PRIMER PLUS:

Avoid freezing.

### SOLHYDFLOW EMULSION:

Avoid freezing.

## ■ NOTE

SOLHYDFLOW DECO is Portland 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.

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

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