

SOLHYDFLOW DECO

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

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

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.

MATERIAL PHYSICAL PROPERTIES @ 25°C (77°F)

| COMPRESSIVE STRENGTH (ASTM 109*, 50MM (2") CUBES] @ 22.2°C (72°F) | | |
|--|------|------|
| Time | MPa | psi |
| 1 hours | 13.8 | 2000 |
| 3 hours | 27.6 | 4000 |
| 1 days | 41.4 | 6000 |
| 3 days | 51.7 | 7500 |
| 7 days | 55.2 | 8000 |
| 28 days | 66.6 | 9600 |

| FLEXURAL STRENGTH ASTM C78 | | |
|----------------------------|------------|----------|
| 28 days | 8.8 MPa | 1280 psi |
| SET TIME ASTM C191* @ 21°C | | |
| Initial | 45 minutes | |
| Final | 60 minutes | |
| TENSILE STRENGTH ASTM C190 | | |
| 28 days | 4.0 MPa | 570 psi |

SOLHYDFLOW DECO

■ SURFACE PREPARATION (SUITE)

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 m²-37 m² (350-400 ft²) 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 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.

■ PRODUCT APPLICATION

PLACING:

All applications require the use of **SOLHYDFLOW PRIMER** or **SOLHYDFLOW PRIMER PLUS** prior to the placement of **SOLHYDFLOW DECO**. Floor preparation is crucial in obtaining a successful underlayment installation. The contractor is responsible for ensuring the substrate is properly prepared prior to application of **SOLHYDFLOW DECO**. Do not apply over lightweight or gypsum base concrete. A test application is recommended.

THICKNESS:

SOLHYDFLOW DECO can be applied from a 10 mm (3/8") to 50 mm (2") without extension with aggregate, and up to 125 mm (5") extended. Blend the **SOLHYDFLOW DECO** with washed, dried, clean 1/4" pea gravel or other decorative stone. Mix **SOLHYDFLOW DECO** first with water, then add 15 lbs of the aggregate, mixing until the added stone is coated, then place on substrate. Be aware that wet aggregate may cause overwatering and the addition of aggregate will reduce the workability and may necessitate a finish coat. Allow the extended layer to dry, normally 16-18 hours. Prime the surface with **SOLHYDFLOW PRIMER PLUS** as per the priming instructions outlined. When this primer is completely dry, install the smooth unextended finish layer.

CURING:

SOLHYDFLOW DECO is self curing. The application of concrete cures is not required. **SOLHYDFLOW DECO** is walkable in 3 hours and will accept floor coverings in 18 hours. All floor adhesives compatible with concrete may be used on **SOLHYDFLOW DECO**.

Note: **SOLHYDFLOW DECO** is cement based, therefore follow ACI rules of concrete work. Follow good warm and cold weather placement procedures. Hot temperatures will reduce working time, therefore use cold water. Do Not place below 5°C (40°F), do not allow to freeze, protect from wind, direct sunlight and do not mix with admixtures. Any questions call your Solhydroc Inc. representative. Clean-up: use water to clean all tools immediately after use.

SOLHYDFLOW DECO

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 m² (16 ft²) when installed over concrete at a thickness of 10 mm (3/8").

Coverage: per 22.7 kg (50 lbs) bag over concrete

| <i>Nominal Thicknes</i> | <i>Approximate Coverage</i> |
|-------------------------|--|
| 10.0 mm (3/8") | 1.5 m ² (16 ft ²) |
| 12.0 mm (1/2") | 1 m ² (11 ft ²) |
| 2.5 cm (1") | 0.5 m ² (5 ft ²) |

PRECAUTIONS/RESTRICTIONS

- For interior use only
- Do not install below 5°C (40°F)
- Do not install over gypsum based surfaces
- Do not overwater
- Always install a test area, ensuring suitability of **SOLHYDFLOW DECO** for intended use
- Rely upon floor covering manufacturer for directions concerning maximum moisture content of subfloor, adhesive selection etc...
- Contains Portland cement and silica sand. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Do not take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- Keep out of reach of children.

STORAGE

Store in cool dry area.

SECURITY

See Material Safety Data Sheet.

WARRANTY

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.

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

www.solhydroc.com