

# SOLHYDCOAT F.S.C.

Solvent free epoxy-based coating with high abrasion resistance and good chemical resistance

**SOLHYDCOAT F.S.C.** is a 100% solids epoxy with excellent all around application properties. It provides high abrasion resistanceand good chemical resistance. With no solvent present in the formula it is V.O.C. compliant with an extremely low odor level during installation

#### USES

Epoxy based resin system which is used as a smooth surface coating, textured coating or self leveling broadcast system.

#### **TYPICAL USES:**

- Institutional buildings
- Pharmaceutical plant floors
- Food warehouse and plant floors
- · Chemical plant floors
- Industrial and commercial floors

#### PRODUCT FEATURES

- · Contains no solvents
- No harmful odors during application
- Will not contaminate foods because of the absence of V.O.C.
- Fast curing
- Excellent wear and abrasion resistance
- Excellent durability, providing up to 3 to 5 times the life expectancy of conventional coatings

#### SURFACE PREPARATION

Concrete surfaces must be clean, sound and free of old existing coatings. New concrete should cure a minimum of 28 days. Dry surfaces allow easier application of this product, however, product will adhere to clean, damp surfaces. Remove all debris from working surface. Remove all oils, greases, dirt and wax solutions from surface. Use suitable means to remove contaminants, heavy laitance, or curing compounds, which will interfere with proper adhesion. Special consideration must be given to oil or other foreign material which may have penetrated into the concrete. Pull Tests are recommended to verify adequacy of preparation. Repair all cracks with appropriate **SOLHYDWELD** resin.

## PRIMING

Prime surface using **SOLHYDCOAT PRIMER 100** or **SOLHYDCOAT PRIMER HS**.

#### PRODUCT MIXING

**SOLHYDCOAT F.S.C.**. is supplied in a 56.7 L (15 gal) unit. Measure out components, respecting the 2:1 ratio. First ensure each component is fully mixed to an even consistency. Mix all contents of components "B" into component "A" until one even color develops. Mixing should be done with low speed mixer (max. 300 rpm).

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

PHYSICAL TESTING			
Tensile Strength ASTM D638	(4300 psi) 30 MPa		
Compressive Strength ASTM C579	(14,500 psi) 100 MPa		
Flexural Strength ASTM D79	(8000 psi) 56.2 MPa		
Hardness Shore D ASTM D2240	82		
Elasticity Module ASTM D790	(5.0 x 10 <sup>5</sup> psi)		
Water Absorption ASTM D570	0.1%		
Thermal Shock Cycling	Passes 30 cycles (Test suspended)		
-5°C to 70°C (23°F to 158°F)			
Abrasion Resistance 1000 revs.	0.070 gm loss		
ASTM D1044	Taber 1 kg/wheels CS17		
Direct Bond Strength	(333 psi) 2.3 MPa		
	100% concrete failure		

CURE TIME				
	10°C (50°F)		25°C (77°F)	
Pot life 200 g		-	18 minutes	
Initial set for light traffic 48 hours 24 hours Through cure for heavy traffic				
Min. overcoating time 16 hours		6 hours		
Max. overcoating	time 96	hours	48 hours	
	COMPONENT A RESIN	COMPONENT B HARDENER	MIXED A+B	
Specific Gravity	1.15	1.05	1.12	
Viscosity	2000 cps	500 cps	550±50 cps	
Color	colored	Clear amber	colored	
% of Solids	-	-	100%	



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# PRODUCT APPLICATION

#### **PRIMER**

Apply the prime coat onto the substrate using a squeegee or brush for the sides and hard to reach places. Once the product is spread in a uniform fashion, backroll the product using a short nap roller.

## **SMOOTH SURFACE COATING**

Once prime coat has become tack free, apply the Top coat using a squeegee or brush for the sides and hard to reach places. Once the product is spread in a uniform fashion, backroll the product using a short nap roller.

#### **TEXTURED COATING**

Once the primer coat is tack free, apply a coat of **SOLHYDCOAT THIXO** using a squeegee or brush for the sides and hard to reach places. Once the product is spread in a uniform fashion, use the special textured finished roller to backroll the product.

#### **SELF LEVELING BROADCAST SYSTEM**

Once primer coat has become tack free, apply a basecoat using a squeegee or brush for the hard to reach places. Once the product is spread in a uniform fashion, backroll the product using a short nap roller. While product is still wet broadcast the selected aggregate to saturation. The broadcasting of the elected aggregate should be done uniformly to avoid bumps and lumps of material.

Once the basecoat has hardened and developed enough resistance to support foot traffic without affecting the surface, apply the final topcoat using a squeegee or brush for hard to reach areas.

Once the product is spread in a uniform fashion, backroll the product using a short nap roller.

#### ESTIMATING/YIELD

**SOLHYDCOAT F.S.C.** is packaged in 56.7 L (15 gal) units, we recommend a coverage rate of:

**Primer** 5 m<sup>2</sup>/L (200 f<sup>2</sup>/gal) (approx. rate)

#### **Smooth Surface Coating**

- Prime Coat: 5 m²/L (200 f²/gal)
- Top Coat: 3.25 m<sup>2</sup>/L (133 f<sup>2</sup>/gal)

#### **Textured Coating**

- Prime Coat: 5 m<sup>2</sup>/L (200 f<sup>2</sup>/gal)
- Top Coat: 3.25 m<sup>2</sup>/L (133 f<sup>2</sup>/gal) of **SOLHYDCOAT THIXO**

#### **Self Leveling Broadcast System**

- Prime Coat: 5 m<sup>2</sup>/L (200 f<sup>2</sup>/gal)
- Base Coat: 1 m<sup>2</sup>/L (40 f<sup>2</sup>/gal)
- Broadcast Silica Sand or selected broadcast material to saturation.
- Top Coat: 4 m<sup>2</sup>/L (160 f<sup>2</sup>/gal)

#### CURING

**SOLHYDCOAT F.S.C.** is a self-curing material.

# PRECAUTIONS/RESTRICTIONS

- SOLHYDCOAT F.S.C. performs best on a clean dry substrate, however it will
  adhere to a clean damp surface (but not on a wet surface).
- SOLHYDCOAT F.S.C. coating will cure down to 0°C, however application properties are significantly better above 10°C (50°F) and are excellent at 20°C (68°F).

# **PACKAGING**

**SOLHYDCOAT F.S.C.** 56.7 L (15 gal) per unit

## RECOMMENDED TOOLS

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

- Squeegee
- Brush
- Short nap roller
- Spiked shoes
- Steel trowel

## CLEANING

Use **ACETONE** to clean all tools and equipment.

#### STORAGE

**SOLHYDCOAT F.S.C.** must be stored in a dry temperate area. Avoid freezing.

#### SAFETY

See Material Safety Data Sheet.

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