

FloroCrete PT Urethane Primer & Topcoat System

Product Description:

FloroCrete PT is a solvent free, three-component, pre-pigmented Primer and/or Topcoat for use with the FloroCrete Mortar Systems. FloroCrete PT may also be used as a stand-alone, two-coat, slip-resistant system.

Typical Uses:

Use FloroCrete PT as a primer under FloroCrete RT without a broadcast. If broadcasting aggregate or flake, it is not necessary to prime the floor.

Use FloroCrete PT as a topcoat over FloroCrete SLX or RT. FloroCrete PT may be applied at 125 microns dft over smooth surfaces and may be applied at 250 microns dft over a broadcasted FloroCrete SLX or RT.

Use FloroCrete PT as a “stand-alone,” two-coat, 380-500 micron dft system where the first coat is the primer and the second coat is the topcoat. Aluminium oxide aggregate must be broadcasted into the primer coat.

Product Advantages:

- Thermal Shock Resistant
- High Chemical & Solvent Resistance
- High Acid & Alkali Resistance
- Solvent-Free Installation
- Quick-Curing Formula
- Slip Resistant

Packaging: FloroCrete PT is packaged and sold by the component. Each kit consists of:

- Part A – Polyol Component
- Part B – Isocyanate Component
- Part C – FloroCrete PT Filler

(Aluminium Oxide Broadcast Aggregates are sold separately)

Colours: FloroCrete PT is available in pre-pigmented Silver Grey and Tile Red.

Coverage:

As a primer or topcoat with the FloroCrete RT System, apply FloroCrete PT at 125 to 250 microns dft. Each kit will cover 6m²/ltr @ 250 microns or 15m²/ltr @ 100 microns.

Physical Properties		
Property	Test Method	Results
Compressive Strength	ASTM C579	50 N/mm ²
Tensile Strength	ASTM D638	5.1 N/mm ²
Flexural	ASTM D790	30 N/mm ²
Hardness, Shore D	ASTM D2240	85
Bond Strength (concrete failure)	ASTM D4541	>3 N/mm ²
Impact Resistance (125 mils)	ASTM-D-1709	>1800 mm kg
Water Absorption	ASTM C413	<0.1%
Resistance to Fungi Growth	ASTM G21	Passes
Abrasion Resistance	ASTM C-501	90 mg loss
VOC	EPA Method 24	0
Service Temperature		-45°C to 113°C
*Workable Life, 1 Mixed kit		10 – 12 min.
**Cure time at 21° C @ 50% RH		
Set to Touch		4 hours
Foot Traffic		12 hours
Vehicle Traffic – Full Service		24 hours
Clean-up Solvent		MEK

Limitations:

FloroCrete PT is not to be applied in temperatures below 7° C or above 30° C, or when relative humidity is >85%. Apply only to dry, properly prepared, uncoated, reinforced concrete floor slabs that have a moisture content of <10%. Do not apply if air temperature is within 3° C of dew point. During application, protect substrate from exposure to water leakage or condensation from pipes. Do not hand-mix material and do not apply to cracked or unsound substrates. Product is for horizontal use on dry concrete surfaces only.

Substrate Preparation:

Mechanically prepare concrete surface using abrasive blast cleaning, diamond grinding or other approved method. Ensure that all surface contaminants are removed. Determine that concrete is sound, with appropriate compressive strength; a Schmidt hammer can be used for this purpose. If concrete has strength of less than 20 N/mm², do not install FloroCrete PT as Primer until concrete has been replaced.

Expansion Joints:

In addition to standard slab expansion joint construction, place joints wherever FloroCrete PT is adjacent to dissimilar materials. Isolate areas subject to movement, vibration, thermal stress, load-bearing columns, and vessel sealing rings. Rout-out cracks and fill with FloroCrete RT prior to floor system installation. Treat very large cracks as expansion joints and fill with FloroFlex System 6500 JS elastomeric sealant (see tech data sheet).

FloroCrete PT Mixing & Application:**Mixing Instructions:**

Premix FloroCrete PT Component A (pigmented) and add Component C (dry material). Blend together with a jiffy mixer for 30 seconds making sure powder is thoroughly wetted out. Scrape down sides and bottom of container with a flat or straight edge trowel to assure complete mixing. Add Part B to A & C and mix again. Be sure to MIX FULL KITS.

Primer Application Method:

Pour FloroCrete PT onto floor. Using a short or medium nap roller, push primer well into substrate, being sure to wet out entire surface. Pull back lightly with roller, spreading to the desired thickness (typically 125-250 microns). Roll newly mixed batch across the transition of the previously applied materials before it begins to set, keeping a "wet edge."

Topcoat Application Method: Pour FloroCrete PT onto the Urethane Mortar System. Use a flat squeegee to spread the material and then a

Chemical Resistance of Mortar	
Reagents	Results
Hydrochloric Acid 37%	R
Hydrofluoric Acid 4%	R
Hydrofluoric Acid 6%	R
Nitric Acid 30%	R
Phosphoric Acid 85%	R
Sulfuric Acid 39%	R
Sulfuric Acid 45%	R
Acetic Acid 10%	R
Acetic Acid 60%	L
Acetic Acid, Glacial 100%	L
Acetic Anhydride 98%	L
Citric Acid 40%	R
Formic Acid 10%	R
Lactic Acid 85%	R
Dibutylamine 100%	R
Ammonium Hydroxide 30%	R
Potassium Hydroxide 50%	R
Sodium Hydroxide 50%	R
Ammonium Chloride (sat'd)	R
Ammonium Sulphate (sat'd)	R
Ammonium Nitrate 50%	R
Ammonium Aqueous 30%	R
Zinc Chloride 50%	R
Ferric Chloride 50%	R
Hydrogen Peroxide 3%	R
Potassium Carbonate (sat'd)	R
Potassium Chloride (sat'd)	R
Sodium Carbonate (sat')	R
Sodium Chloride (sat'd)	R
Sodium Nitrate (sat'd)	R
Sodium Sulphate (sat'd)	R
Sodium Hydro chlorite 10%	R
Diacetone Alcohol 100%	R
Acetone 100%	L
Benzyl Alcohol 100%	R
n-Butyl Alcohol	R
Ethyl Alcohol 100%	R
Glycol Ether Acetone 100%	R
Hexane 100%	R
Is-o-Octane 100%	R
2-Propanol	R
Methyl Alcohol 100%	R
Methylene Chloride 100%	L

(Continued on page 3)

FloroCrete PT Urethane Primer & Topcoat System

short or medium nap roller to roll out. A smooth surface will typically take 125 microns. A broadcasted surface will typically take 250 microns. Keeping a “wet edge” is important so plan the work flow before beginning.

Note: When doing a two-coat, stand-alone system, aluminium oxide aggregate must be broadcasted into the first coat.

Cure Time:

The chemical curing of FloroCrete PT is affected by temperature, but unaffected by relative humidity. At 18° C curing temperature, expect to walk on the floor in 12 hours, with full traffic after 24 hours. At 7° C curing temperature, allowing foot traffic may take 48 hours or longer; therefore, it is imperative that air and substrate temperatures be kept above 18° C for best cure.

Maintenance:

FloroCrete System floors can be maintained by using a stiff mechanical brush and/or hot pressure washer or steam cleaner. Surfactant-type detergents or degreasers may be used. However, avoid products containing Phenol, as this may damage colour. Though FloroCrete is highly chemical resistant, a test patch is recommended prior to using any harsh cleaners.

Storage: All containers should be stored at 7° C to 30° C and be kept tightly sealed and out of direct sunlight.

Please read Material Safety Data before using product.

Disclaimer:

All statements and recommendations are based on experience we believe to be reliable. The use or the application of these products being beyond the control of the Seller or Manufacturer, neither Seller nor Manufacturer make any Warranty, expressed or implied, as to results or hazard from its use. The suitability, risk and liability of a product for an intended use shall be solely up to the User.

Chemical Resistance of Mortar	
(Continued from page 2)	
Reagents	Results
Mineral Spirits 100%	R
Pentane 100%	R
Petroleum Ether 100%	R
Boric Acid 100%	R
Muriatic Acid 80%	R
Ethylene Glycol 100%	R
Copper Sulfate (in solution)	R
Benzoic Acid 100%	R
Diesel Fuel 100%	R
Stearic Acid	R
Amyl Acetone	R
Fatty Acid 100%	R
Toluene 100%	R
Xylene 100%	R
Antifreeze 100%	R
Glycol Ether PM 100%	R
Transmission Fluid 100%	R
Freon 100%	R
Glycerin 96%	R
Oleic Acid	R
100 Solvent 100%	R
Kerosene 100%	R
Mineral Oil 100%	R
Brake Fluid 100%	R
Sugar Solution (sat'd)	R
Motor Oil 100%	R
Water	R
MEK & MIBK	L

Key:

R - Resistance. Appropriate for long term spills and secondary containment.

L - Limited Resistance. Appropriate for splashes and spills that are not promptly cleaned up.

F - Not Recommended.