

Floropoxy System 4700 Epoxy Primer

Product Description:

Floropoxy System 4700 epoxy is a 100% solids, 2 component fast curing and self-levelling primer. This coating is designed to penetrate and seal concrete floors. It cures to form a glossy, tough, smooth surface.

Typical Uses, Applications:

Ideally suited for priming or midcoat use in commercial, industrial and institutional applications, such as:

- Manufacturing plants & warehouses
- Pharmaceutical installations
- Aviation facilities
- Hotels, restaurants & public areas
- Education establishments

Product Advantages:

- Excellent durability and resilience
- Self Levelling epoxy system restores worn, pitted or deteriorated concrete to a smooth, highly dense and lustrous surface
- A variety of colours can be achieved with the addition of Florock 100% solids colourants

Packaging:

Standard kit size

Each unit of Floropoxy 4700 consists of:
1 x 11.35 ltr Part A Binder in black bucket
1 x 3.79 ltr Part B Activator in white bucket

Mini kit size

Each unit of Floropoxy 4700 consists of:
1 x 2.85 ltr Part A Binder in white bucket
1 x 0.95 ltr Part B Activator in white bucket

Storage:

All containers should be stored between 16° C to 30° C in a dry area and be kept tightly sealed and out of direct sunlight.

Coverage:

When used as the priming system under FloroBuild mortar, properly prepared floors will typically consume 125 microns of primer depending on the porosity of the surface. The spread ratio will be 8m²/ltr.

When used as the primer within non-mortar systems, properly prepared floors will typically consume 250-400 microns of primer depending on the porosity of the surface. The spread ratios will be 2.5m²/ltr @ 400µ dft and 4.0m²/ltr @ 250µ dft

Cured Physical Properties

Property	Test Method	Results
Compressive Strength	ASTM D695	93 N/mm ²
Tensile Strength	ASTM D2370	55 N/mm ²
Hardness, Shore D	ASTM D2240	85 @ 0 sec.
		80 @ 15 sec.
Flexural Strength	ASTM D790	83 N/mm ²
Tensile Elongation	ASTM 2370	5%
Abrasion Resistance, Taber Abrader CS 17 Wheel, 1000 gm load, 1000 cycles	ASTM D4060	88 mg loss
Water Absorption	ASTM C413	0.2%
Bond Strength	ASTM D454	>3 N/mm ²
Impact Resistance	ASTM D2794	73 kg

Mix ratio 3:1 by volume

Surface Preparation:

New concrete must have a 28 day cure, and preferably a broom swept finish, prior to coating. In the case of older concrete flooring, remove all surface oils, paint, dust and debris. Prior to coating, make sure the surface is clean, passes the Moisture Vapour Transmission (MVT) test and the water drop test and that all surface defects have been repaired. Refer to the Florock "Preparation of Concrete" datasheet for more information on preparation and MVT before proceeding.

Note: Floropoxy should not be applied when the floor temperature is above 32° C or below 13° C, or when within 3° C of the dew point.

Primer Application:

In a clean, dry container, blend 3 parts by volume of Resin Part A with 1 part by volume of Activator Part B. Mix thoroughly for 3-5 minutes, using a low speed mechanical mixer. Transfer the mixture from the batch container to a transport container. Remix and pour entire mix from the transport container onto floor immediately. Retaining mixture in the bucket will shorten the pot life. Using a flat or 3mm notched squeegee, apply at desired thickness. Backroll with a 10mm nap roller.

Note: The cure time will vary with conditions. Allow a minimum of 4 hours and a maximum of 24 hours before next step.

Self Levelling Application:

When the surface is not as smooth as desired after priming and a high performance topcoat will be the final step, a second application of Floropoxy as a self-leveller shall be applied at a sufficient thickness to restore the profile. Mix the same as with primer step. For 450µ dft apply at 2.4m²/ltr

Instructions for use over Existing Coatings:

Examine the existing coating to ensure that it is well bonded to the concrete. Any loose coating must be completely removed.

Chemical Resistance	
Reagent	Spot Test Results
Water	1
Isopropyl Alcohol	4
Acetone	4
Sulfuric Acid 10%	1
Nitric Acid	1
Hydrochloric Acid 10%	2
Phosphoric Acid 50%	1
Citric Acid 10%	1
Brake Fluid	1
Salt 20%	1
Acetic Acid 10%	4
Sugar Solution 10%	1
MEK	4
JP 4 Jet Chloride	1
Methylene Chloride	D
Xylene	4
Toluene	4
Mineral Spirits	1
Skydrol	1
Tincture of Iodine	4,S
Lactic Acid 10%	4
Sulfuric Acid 25%	3

Rating Scale: Spot Test, ASTM D1308

Pencil Hardness Test, ASTM D3363

1 – No change in pencil hardness

2 – 1 Unit change in pencil hardness

3 – 2 Units change in pencil hardness

4 – 3 Units change in pencil hardness

D – Destroyed

S – Stains

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Edges should be sanded to a feathered edge. Clean the entire floor thoroughly with detergent cleaner. The surface must be free of all dirt, oils, or other contaminants.

After the floor has completely dried, sand the existing coating until a powdery residue is evident and all gloss is removed. Sweep or vacuum clean, finishing with solvent free wipes to ensure good adhesion of the new system.

Note: When installing over existing coatings, a test patch is recommended to evaluate compatibility.

Please read material safety data before using product.

DISCLAIMER:

All statements and recommendations above are based on experience we believe to be reliable. The use or 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.

Liquid Physical Properties			
Property	Test Method	M0-076 Component A	U0-144 Component B
Viscosity	ASTM D2196	1000 cps	75 cps
Flash Point	ASTM D3278	>93° C	>93° C
Weight Per Litre	ASTM D1475	1.1 kg	0.98 kg
N.V.W.	ASTM D2369	100%	100%
N.V.V.	ASTM D1259	100%	100%
VOC	ASTM D3960	0	0
Blended Components			
Blended Ratio		3:1 by volume	
Curing Time, 21° C @ 50% RH			
Set to Touch		4 hours	
Minimum Recoat (Foot Traffic)		6 hours	
Maximum Recoat		24 hours	
Pot Life 15 ltr Volume)*		18 minutes @21° C	
Minimum Recommended Spread Rate		4.0 sq.m/ltr	
Weight Per Litre, ASTM D1475		1.04 kg	
N.V.W., ASTM D2369		100%	
N.V.V., ASTM D1259		100%	
Blended Viscosity, ASTM D2196		500 – 800 cps	
Recommended Clean Up Solution		S-41 Florobase solvent	
VOC, ASTM D3960		0	

*Pot Life will be less with warmer slab and material temperatures.