

## Florothane CR Clear CRU 250 Chemical Resistant Urethane

**Product Description:** Florothane CR provides a textured, glossy, clear or field tinted surface which is approved for use in military hangars. Florothane CR protects concrete floors from the harmful effects of maintenance fluids. Florothane CR is used as a chemical resistant coating over Floropoxy Primer and other systems. Florothane CR 250 clear may be used as clear, or field tinted with Florock 100% colorants.

**Typical Uses, Applications:** Ideally suited for facilities that regularly encounter strong chemicals, such as:

- Aircraft hangars
- Maintenance facility floors
- Fire stations
- Auto & motorcycle dealerships

### Product Advantages:

- Superior resistance to many harmful chemicals, including Skydrol and JP Jet Fuels.
- Resistant to UV and oxidation. It maintains original color over time and is non-chalking
- Prevents penetration of contaminants that can break down concrete.

### Packaging:

- Florothane CRU Clear -
- 10 Gal Pail Set
  - 2 Gal Kit

**Storage:** All containers should be stored at 40° F to 95° F and be kept tightly sealed and out of direct sunlight.

### Coverage:

- Clear CRU –
- 310 SF/gallon (2 coats required)

Cured Physical Properties		
Property	Test Method	Results
Gloss, 60 Degree	ASTM E97	90+
Sward	ASTM C2134	68
Elongation	ASTM D2370	7%
Abrasion Resistance	ASTM D4060	56.9 mg loss
Tensile Strength	ASTM C2370	5,500 PSI
Adhesion (5=perfect)	ASTM D3359	5
Accelerated Weathering	ASTM D623	Gloss Loss 12%
Impact Resistance Forward	ASTM G14	200 inch lbs
Fungus and Algae Resistance	TTP 19 4.3.7	No Effect
Flame Spread	ASTM E84	7.1 Fire Class A
Appearance		Textured

**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 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.

**Florothane CR Clear Application –**  
Applied on smooth bare concrete.

*Note: Floropoxy should not be applied when floor temperature is above 90°F or below 55°F, or when within 5°F of the dew point.*

*Note: In the basic system, 2 coats of CRU are applied over primer. In the event the primer is not sufficient to cover substrate profile an application of Floropoxy SL shall be applied in sufficient thickness to restore the profile.*

**1. Primer Application:** Once surface preparation is complete, apply Floropoxy 4700 primer to the concrete floor. In a clean, dry container, blend 3 parts by volume of Resin Part A with 1 part 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 squeegee, apply at desired thickness. Backroll with a 3/8" nap roller.

*Note: Primer should be the same color as the topcoat. For pigmented topcoat, use either prepigmented primers or clear primer with 100% Florock Colorants. (Blend 1 or 2 quarts of colorant into each 4 gallon batch of clear primer. It is important to develop good hiding with the basecoat because only 1 quart of colorant shall be used in each batch Florothane CR topcoat)*

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

**2. 1<sup>st</sup> CRU Coat:** In a clean, dry container, blend equal volumes of CRU parts A and B. Mix well for 3-5 minutes using a low speed mechanical mixer. Do not mix more product than can be applied in 1 hour. (For field tinting blend 1 qt 100% colorant into a 4 gal. batch. Apply first coat of CRU at the rate of approximately 310 SF/gallon with a solvent resistant, medium nap roller. Allow a minimum of 10 hours and a maximum of 24 hours between coats. If more than 24 hours elapses between coats, consult your Florock representative for recommendations. **DO NOT SPRAY APPLY THIS MATERIAL.**

Chemical Resistance	
Reagent	Spot Test Results
Skydrol	1
Brake Fluid	1
MEK	1
JP 4 Jet Fuel	1
Ammonia	1
Acetone	1
Sodium Hydroxide	1
Phosphoric Acid 10%	1
Nitric Acid 10%	1
Sodium Chloride 20%	1
Citric Acid 10%	1
Sulfuric Acid 10%	1
Sulfuric Acid 25%	1
Nitric Acid 10%	1
Hydrochloric Acid 10%	1
Acetic Acid 10%	2
Sugar Solution 10%	1
Lactic Acid 10%	1
1-1-1 Trichloroethane	1
Xylene	1
Toluene	1
Mineral Spirits	1
MIBK	5
Tincture of Iodine	2,S
AFFF	1

Rating Scale: Spot Test, ASTM D1308  
Pencil Hardness Test, ASTM D3363

- 1 - Excellent. No change in pencil hardness
- 2 - Good. 1-2 units change in pencil hardness
- 3 - Fair. 3 units change in pencil hardness
- 4 - Poor. 4 or more units change in pencil hardness
- 5 - Stains

*Note: For optional skid resistant additive, wear spiked shoes and broadcast (using whirlybird method) the aluminum oxide into the wet first coat to the desired level of skid resistance. Figure 4 -6 lbs per 1000 square feet. Use #36, #60 or #80 white aluminum oxide.*

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### 3. 2<sup>nd</sup> CRU Coat:

Apply the second coat of CRU in the same manner as the first. Allow coating to cure for a minimum of 24 hours before opening floor to foot traffic and 48 hours before allowing equipment to be moved back in. Allow a full ten days cure for complete chemical resistance.

**4. Fire Lanes and Traffic Lines:** After the final coat has cured for 24 hours, the fire lanes, traffic lines, etc., may be installed as specified. Suitable masking tape will be placed on each side of the proposed lines to give a straight edge. Line marking may be achieved by using clear Florothane CR and Florock 100% Colorant or by using Florock Floromark line marking kits. Approximately one hour after application, remove the tape. 10 - 12 hours after application, the area may be opened to light traffic.

### Instructions for Use over Existing Coatings:

1. Examine the existing coating to ensure that it is well bonded to the concrete. Any loose coating must be completely removed. Edges should be sanded to a feathered edge.

2. Clean the entire floor thoroughly with the detergent cleaner. The surface must be free of all dirt, oils, or other contaminants.

Liquid Physical Properties		
Property	Test Method	Results
Solids% by Vol/Wt	ASTM D2697	50/56
Viscosity	ASTM D1200	320 cps
SETA Flash Polyol/Acivator	ASTM D3278	101°/45°
V.O.C.gpl,blend	EPA, Method 24	234 gpl
V.O.C.lbs/gallon	EPA, Method 24	1.95 lbs

Application Data	CRU 250
Blending Ratio	1:1 by volume
Pot Life	60 minutes
Drying Time @ 70°F @ 50% RH	
Set - to touch	3 1/2 hours
Dry- to recoat	10-12 hours
Maximum Recoat	24 hours
Foot Traffic	24 hours
Full Cure	10 Days
Floor & Air Temp. Limits	55°F - 90°F
Recommended Spread Rate	310 sf/gal per coat
Dry mil @ Spread Rate	2.6 mils/coat
Recommended Clean-Up Solvent	MEK

3. 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, and wipe with Florobase thinner to ensure good adhesion of the new system. Any bare concrete should be mechanically prepared and primed with Floropoxy 4700.

**Maintenance:** Sweep away dust and debris with a broom. Clean on a regular basis with a surfactant type , mild detergent. Florock floors never need to be waxed.

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 whatsoever of a product for an intended use shall be solely up to the User.