## **Technical Product Data**





#### LIVE I IIIISII GOAL

#### **DESCRIPTION**

Acrylic aliphatic polyurethane Exterior surfaces Field and shop application Infra-Red reflective Available in gloss, semi-gloss, and satin sheens Reflects heat, keeping substrates cooler Chemical resistant Superior weathering and durability Anti-graffiti formulation available LEED 2009 compliant

#### **TECHNICAL DATA**

% SOLIDS by volume	34% as packaged, 38% as applied
COATINGS VOC (as packaged)	max. 50 g/l (less water & exempt compounds)
SPRAYABLE VOC (as applied)	max. 50 g/l (less water & exempt compounds)
COMPONENTS	Reflect 3000 Resin:3 parts / PC-03 (cure):1 part
POT LIFE	3 hours @ 70° F, 21° C
SHELF LIFE	one year (unopened)
REDUCERS	optional: use PCI's 16050 VOC Exempt Reducer
FLASH POINT	79° F, 26° C
MIX RATIO	3:1 (3 parts Reflect 3000 Resin : 1 part PC-03 (cure)
RECOMMENDED DRY FILM THICKNESS	1.0 mils to 3.0 mils
THERORETICAL COVERAGE	609 – 203 sq ft at recommended DFT (no loss)

#### SURFACE PREPARATION

Best results are achieved when REFLECT 3000 is applied over a two-component primer such as PCI's DTM 1300 Series High Build Primer, DTM 1400 Series Non-Sanding Primer or DTM 3000 Series Polyurethane Primer. A white primer is recommended to allow for maximum heat reflection.

Good painting practices require that before applying coatings, a test or mock-up be performed to ensure that adhesion, appearance and color meet the expectations of the owner. Coating performance is proportional to the degree of surface preparation performed prior to priming the substrate. All surfaces must be clean, dry and free of oil, grease, dirt, salt deposits or other contamination. Recommended preparation is as follows:

**Steel –** Clean the surface of all foreign material SSPC-SP1 and SSPC-SP2 or SSPC-SP3, 6, or 7. PCl's 02150 Metal Conditioner may be used to clean and treat steel substrates to eliminated oil, soap film, grease, and flash rusting.

**Aluminum -** Remove all contaminants per SSPC-SP1 and abrade using hand tool, power tool or SSPC-SP16 to obtain a profile equivalent to 220 grit sandpaper.

**Galvanized Steel –** Preparation shall meet ASTM D6386 –10. Remove all contaminants per SSPC-SP1, check for the presence of chromates or other passivation treatments per SSPC-SP16. If passivation treatment exists, brush-off blast cleaning per SSPC-SP16 is required. Complete removal of chromates or other passivating treatments must be confirmed by testing (SSPC-SP16 or ASTM B 201) prior to coating application.

**Concrete & Masonry –** Surface must be clean, dry and free of any dirt, dust, grease, oil, wax, mildew, disintegrated or chalky materials or other contaminates. Reflect 3000 is not recommended for floors.

**Previously Coated Surfaces –** Surface must be clean, dry, and free of any dirt, dust, grease, oil, wax, mildew, disintegrated or chalky materials or other contaminates. Aged coatings should be abraded to achieve an acceptable profile to provide adequate for the primer and topcoat.



# REFLECT 3000 Infra-Red Reflective Finish Coat

#### PRECISION COATINGS

#### **INSTRUCTIONS – MIX RATIO**

Stir or shake each container before mixing together. Mix thoroughly 3 parts REFLECT 3000 with 1 part PC-03 Polyurethane Activator.

**Reduction is not necessary.** However, paint may be reduced up to 10% by volume using acetone or PCI's 16050 VOC Exempt Reducer.

For faster cure times, add up to 8 oz of PCI's 12030 Urethane Accelerator per activated gallon of topcoat. For fisheyes or other related surface defects, add 1 oz of PCI's Fisheye Remover, #15000, per activated gallon of topcoat.

#### APPLICATION FOR SOLID COLORS

**Environmental Conditions:** Air and surface temperature must be above 50° Fahrenheit and no more than 95° Fahrenheit. Surface temperature must be at least 5°F (3°C) above the dew point. **Application:** Solid colors may be applied by spray, roller and brush application. Metallic colors should be applied by spray application only. Allow a 5 to 10 minute flash time between coats if spray applied. Recommended film thickness is 1.0 to 3.0 mils DFT. For detailed metallic and iridescent application instructions, see Precision Metallic and Iridescent Guidance.

#### **SPRAY GUN SET-UP & PRESSURE**

<u>Type</u>	Fluid Tip	Spraying Pressure
Siphon Feed	1.4mm – 1.7mm	40-65-PSI
Gravity Feed	1.3mm – 1.4mm	40-65 PSI
HVLP Siphon	1.6mm – 1.8mm	max. 10 PSI @ the air cap
HVLP Gravity	1.3mm – 1.5mm	max. 10 PSI @ the air cap
Pressure Pot	1.1 mm- 1.3 mm	29 PSI - 58 PSI
Airless Spray	Double Orifice 312 through 512 Fine Finish Tips for clears and solid colors only. Airless spray application not recommended for metallic finishes.	

#### **DRY TIMES**

may be air dried or force dried

Dry times @ 70°F (21°C) and 50% RH

Dust Free 15 minutes

Tack Free 3 hours

Dry Time 24 hours

Recoat May be recoated with itself at any stage. Sanding will become necessary after 24

hours.

Force Drying: 140° F for 20 min. Allow a 10 min. cool down time.

## **CLEAN UP**

Clean all spray equipment immediately after use. Acetone may be used to clean spray equipment. PCl's 17000 Gun Cleaner is a VOC exempt cleaner and is recommended for cleaning application equipment used to apply the REFLECT 3000 system.

Refer to Material Safety Data Sheet for proper handling of products listed in this bulletin.

DISCLAIMER: The technical information and suggestions for use have been complied for your guidance and usage. Such information is based on Precision Coatings, Inc. experience and research and is believed to be reliable. As PCI has no control over conditions in which the product is used, stored, or otherwise handled, the above information does not constitute a warranty. Buyers must assume responsibility for the suitability of the product for their purposes

11/2016

# REFLECT 3000 Infra-Red Reflective Finish Coat



## **PERFORMANCE DATA**

	SYSTEM	
TEST METHOD	(7 day, ambient temp. cure)	RESULTS
ASTM D-3359	Cold Rolled Steel	
Adhesion	Q-Panel Solvent wipe 02150 Metal Conditioner 1.4 mils DFT Reflect 3000 Topcoat	100% retention (no tape off)
ASTM D-4587	Cold Rolled Steel	Gloss - Pass after 2020 hours
QUV Resistance Accelerated Weathering	Q-Panel Solvent wipe 02150 Metal Conditioner 1.4 mils DFT Reflect 3000 Topcoat	delta E color change - Pass after 2020 hours  No blistering, rusting, checking or cracking
ASTM B-117	Cold Rolled Steel	
Salt Fog	Q-Panel	No face blistering after 500 hours
	Solvent wipe 02150 Metal Conditioner 1.4 mils DFT Reflect 3000 Topcoat	No face corrosion after 500 hours
ASTM D-2287	Cold Rolled Steel	N. I
Humidity Resistance	Q-Panel Solvent wipe 02150 Metal Conditioner 1.4 mils DFT Reflect 3000 Topcoat	No blistering, cracking, softening or delamination after 500 hours  Gloss - 97% retention after 500 hours
ASTM D-4214	Cold Rolled Steel	
Caulk Resistance	Q-Panel Solvent wipe 02150 Metal Conditioner 1.4 mils DFT Reflect 3000 Topcoat	Rating of 8 minimum
ASTM D-5402	Cold Rolled Steel	Xylene - 200 double rubs no effect
Chemical Resistance	Q-Panel	Methyl ethyl ketone (MEK)-200 double rubs no effect
solvent rubs	Solvent wipe 02150 Metal Conditioner 1.4 mils DFT Reflect 3000 Topcoat	87 octane unleaded gasoline - 200 double rubs no effect.
ASTM D-522	Cold Rolled Steel	
Flexibility	Q-Panel Solvent wipe 02150 Metal Conditioner 1.4 mils DFT Reflect 3000 Topcoat	180 degree bend, 1/4" mandrel - pass

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## **PRECISION COATINGS**