PolyVers International
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Material Processing & Handling Information

Material: **PV 350 (VF 350)**

Material Type: Fast Set Spray Polyurea Coating

Application: Concrete, Tile, Cement Block, Wood and other porous substrates

Application Process: High pressure heated equipment with impingement gun

Process Equipment:	Pumps	Dispensing Gun
Graco:	EXP-1 (Electric) EXP-2 (Electric) EXP-3 (Pneumatic) H-XP2 (Hydraulic) H-XP3 (Hydraulic) H-VR (Hydraulic)	Fusion AP (Air Purge) Fusion MP (Mechanical Purge)
Gusmer:	FF 2500 (Hydraulic) FF 3500 (Hydraulic) H-20/35 (Pro Hydraulic)	GX-7 400 (Mechanical Purge) GX-7 DI (Mechanical Purge) GAP Pro (Air Purge)
GlasCraft	MX, MXII (Pneumatic) MH, MHII, MHIII (Hydraulic)	Probler (Air Purge)

Process Temperature:	66°C (150°F) min, 71°C (160°F) max
Process Pressure:	2,000 - 2,500 psi optimum (1,700 psi min, 3,500 psi max)
Gel Time:	10 seconds
Tack Free:	15 seconds
Light Traffic:	60-120 minutes
Full Cure:	7 days

Moisture Content:	Calcium chloride test: 3 lb/24 hr/1,000 ft^2 Tramex concrete moisture meter: 5% maximum
Application Temperature:	-29°C (-20°F) and higher. Note that **PV 350** will cure at these temperatures, but the effects from these conditions will impact the application in a variety of ways. It is recommended that material and equipment ambient temperatures be kept at 10°C (50°F) or above. Frozen concrete substrates with high moisture content will affect coating adhesion and long-term performance.
Dew Point:	Substrate temperature must be -15°C (5°F) above dew point and rising before application of coating materials.
Surface Prep:	Abrasive blast per ICRI Technical Guideline No. 03732 or SSPC SP13. Achieve a concrete surface profile of ICRI CSP-3 to CSP-5.

Surface contaminates:	Check for soluble salts on surfaces to be coated. Test with Chlor*Test. If amount of soluble salts exceeds recommended limits, treat with Chlor*Rid. Repeat process until acceptable limits are reached. Maximum amounts of soluble salts (micrograms per square centimeter): Chlorides 3 immersion, 7 non-immersion Nitrates 5 immersion, 10 non-immersion Sulphates 10 immersion, 20 non-immersion
Substrate Parging:	Formed walls with honeycombing or concrete surfaces with large exposed aggregate. Recommended that the surface is rubbed or parged to eliminate surface defects. Use Five Star Structural Concrete.
Surface Primer:	PV 30 (3 to 5 wet mils): Two-component epoxy and primer. Maximum overcoat time: 24 hours depending on environmental conditions. PW-1 (4 to 6 wet mils): Single component primer. Maximum overcoat time: 24 hours, after which a light recoat is required (1 to 2 wet mils).
Adhesion Testing:	Adhesion to concrete: Minimum 150 psi. Cohesive failure of concrete is optimum. Pull values will vary depending on concrete strength.
Coating Application:	Coating thickness will vary depending on intended use, surface roughness and profile. The International Concrete Repair Institute (ICRI) has developed a standard for Concrete Surface Profile (CSP) ranging between 1 (smoothest) and 9 (Roughest). The following chart gives approximate minimum coating thickness to achieve a continuous coating using the ICRI CSP standard. CSP-1 & CSP-2 45 – 55 mils CSP-3 55 - 60 mils CSP-4 60 – 65 mils CSP-5 65 – 70 mils CSP-6 70 – 75 mils CSP-7 75 – 80 mils CSP-8 80 - 85 mils CSP-9 85 – 90 mils

	Storage Temp	Storage	Special Handling
A Side	10°C (50ºF) min 21°C (70ºF) optimum	Keep dry. Keep from freezing. Store in covered temperature controlled environment if possible.	Use dry air desiccant for intake vent on drum.
B Side	10°C (50ºF) min 21°C (70ºF) optimum	Keep dry. Keep from freezing. Store in covered temperature controlled environment if possible.	Mix well with mixer to re-disperse any settled pigment.

Safety:	Please consult product MSDS for full details. Safety glasses, Rubber gloves, Protective clothing, Organic vapor or fresh air respirator.