



VersaFlex Incorporated
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Material Processing & Handling Information

Material: FSS 50DM FR

Material Type: Fast Set Spray Polyurea Coating

Application: Metal 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)	Fusion AP (Air Purge) Fusion MP (Mechanical Purge) GX-7 Standard (Mechanical Purge) GX-8 (Mechanical Purge) Probler (Air Purge) Probler P2 (Air Purge)
Gusmer:	FF 2500 (Hydraulic) FF 3500 (Hydraulic) H-20/35 (Pro Hydraulic)	GX-7 Standard (Mechanical Purge) GX-7 400 (Mechanical Purge) GX-7 DI (Mechanical Purge) GX-8 (Mechanical Purge) Gap Pro (Air Purge)
GlasCraft:	MX, MXII (Pneumatic) MH, MHII, MHIII (Hydraulic) SuperMaxi, Guardian A Series	Probler (Air Purge) Probler P2 (Air Purge)
Gama:		Master Gun (Air Purge)
Process Temperature:	170° F optimum (150°F min., 190°F max)	
Process Pressure:	2,000 - 2,500 psi optimum (1,700 psi min., 3,500 psi max)	
Gel Time:	6 - 8 seconds	
Tack Free:	12 - 15 seconds	
Light Traffic:	60 minutes	
Moisture Content:	Calcium Chloride test: 3 lb./24 hr./1,000 ft ² Tramex concrete moisture meter: 5% maximum	
Application Temperature:	-20°F and higher Note that FSS 50DM FR will cure at sub-freezing temperatures, but the effects may impact the application in a variety of ways. It is recommended that material and equipment ambient temperatures be kept at 50°F and above.	
Dew Point:	Substrate temperature must be 5°F above dew point and rising before application of coating materials.	
Surface Prep:	Minimum acceptable preparation levels for proper adhesion are SSPC-SP 6.	

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
 Sulfates - 10 immersion, 20 non-immersion

Surface Primer: Concrete & other porous substrates: **VersaFlex** Quick Mender (8 to 10 wet mils): Two-component sealer and primer. Maximum overcoat time: 24 hours, after which a light recoat is required (2 to 4 wet mils). Do not use Quick Mender on steel.

All substrates: **VersaFlex** VF 20 (8 to 10 wet mils): Two-component primer. Maximum overcoat time: 72 hours, after which a light recoat is required.

Steel only: **VersaFlex** PW-1 (2 to 3 wet mils): Single component primer. Maximum overcoat time: 24 hours, after which a light recoat is required (1 to 2 wet mils).

Adhesion Testing: Light service: 500 psi
 Heavy service: 750 psi

Coating Application: Coating thickness will vary by substrate profile and intended use. Consult **VersaFlex** for specific information.

**** Please consult the VersaFlex Spray Gun Configuration Recommendation PDF for specific modules and tips.**

	Storage Temp	Storage	Special Handling
'A' Side	50°F min. 70°F 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	50°F min. 70°F 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.
