



Insulation Specification – SPF

Sprayed-on Rigid Polyurethane Foam (SPF) with Acrylic Top-Coat

Niles Steel Tanks sprayed-on rigid insulation with acrylic topcoat exceeds ASHREE 90.1 requirements with 2.25" of high-density polyurethane foam with an "R" value of R-16. SPF meets requirements for California Title 24. Niles spray foam insulation has the best fire spread rating with a class I foam with less than a 25-flame spread rating suitable for boiler room applications.

The 100% acrylic topcoat is formulated for applications over spray polyurethane foam and is designed to withstand extreme weather and a full range of environmental conditions.

The 2 component polyurethane foam is applied at ambient temperatures, directly to the vessel in the desired thickness. The topcoat is then applied from a high-pressure spray gun.

Spray Polyurethane Foam:

Specific Gravity:	1.17 – 1.19
Viscosity:	800 – 1300
Density:	@ 2" 2.10 – 2.35
	@4" 1.88 – 1.99
Closed Cell Content:	>90%
K-Factor, initial:	0.155 – 0.170
Permeance:	2.91 (perms)
	2.99 (perm inch)
Dimensional Stability:	+3.3 to +8.2 - Dry Age 28 days (158°F, Dry)
	-0.37 to -0.96 – Freeze 14 day (-20°F)
Flame Spread:	25 - ASTM E-84
Smoke Development:	450
R Value:	7.2/ inch
Max. Thickness:	4"



Acrylic Coating

Topcoat:	1 coat white, 12 mils
Texture:	Smooth
Grade:	Spray or Roll
Base:	100% Acrylic
Solids by weight:	66% (+/-3)
Solids by volume:	55% (+/-3)
Weight per gallon:	11.65 (+/-2)
Tensile Strength:	300 psi (+/-25)
Elongation:	260% (+/-25)
Durometer hardness:	62 Shore A (+/-2)
Tear Resistance:	85 lbs/ in.
Permeance:	11 U.S. Perms @ 20 mils
Viscosity:	110 K.U. (+/-8)
Codes/ Approvals:	Energy Star, ICC, UL, ASTM D6083
Reflectivity:	New 85%, Aged 78%
Emmissivity:	.89