

07545S01- FLUID APPLIED ROOFING (Foam Type) GUIDELINES

1. FOAM

Foam shall be applied in no less than 1/2" layers to a total minimum thickness of 1" (with a tolerance of -0" to +1/4"). The minimum 1" thickness in any given area must be applied the same day. The finished surface shall be free of excessive ridges and humps.

2. INSULATION

Minimum insulation value of a foam roof shall be R14 (1 inch thickness).

3. COATING APPLICATION

1. Apply the base coat at the rate of three (3) gals. per 100 sq. ft. in a minimum of 2 coats to achieve an average thickness of 37.5 dry mils.
2. Apply the top coat at the rate of 1 3/4 gallons per 100 sq. ft. in a minimum of 2 coats to achieve an average thickness of 21 dry mils.
3. Total system thickness (base and top coats) shall average 58.5 dry mils with a minimum coating thickness of the system at any point on the roof being 30 dry mils of which 10 dry mils must be top coat.

4. GRANULES

Granules shall be applied to the roof to enhance the wear surface and improve friction for walking. After completing the 10 year specification, apply a top coat at the rate of 3/4 gallon per 100 square feet and broadcast 30 lbs. of granules per 100 sq. ft. into the wet coating. Apply a final coat of white top coating to completely encapsulate the granules at a rate of 3/4 gallon per 100 square feet.

5. WALKWAYS

Walkways should be minimum 4 ft. wide and extend up to and around all mechanical equipment. Apply grey top coat at 1 gal. per 100 sq. ft. as indicated on the drawings directly over the finished roof surface. Granules in addition to those already in the white top coat shall be broadcast at 30 lbs. per 100 sq. ft. in the wet coating and then be encapsulated by a second coating of grey top coating 1 gallon per 100 square feet.

6. WARRANTY

The roof, materials and workmanship shall be warranted, on a single document, by the Manufacturer and the approved Contractor for a period of ten (10) years.

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7. PHYSICAL PROPERTIES: FOAM

The performance requirements for the urethane foam are as in the following chart. These numbers are MINIMUMS.

<u>PHYSICAL PROPERTY</u>	<u>URETHANE FOAM</u>	<u>ASTM TEST</u>
Density	2.8-3.2 pcf	D1622
Compressive Strength	50 psi	D1621
Tensile Strength	80 psi	D1623
Closed Cell Content	90% min.	D1940
Dimensional Stability 158 degrees F, 100% RH, 28 days	+8% max.	D2126
K factor (aged)	0.15	C518
Flame Spread	75 max.	E84

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8. PHYSICAL PROPERTIES: URETHANE COATINGS

The performance requirements for the elastomeric coating are as in the following chart. These numbers are MINIMUMS.

<u>PHYSICAL PROPERTY</u>	<u>BASE COAT</u>	<u>TOP COAT</u>	<u>ASTM TEST</u>
Tensile Strength, psi	400	2500	D412
Elongation @ Break @ 75 deg. F, % min.	500	450	D412
Permanent Set @ Break, min. %	25	25	D412
Hardness Shore "A"	46-54	78-86	D2240
Tear Resistance	85	230	D1004
Thermal Shock	No loss Adhesion	No Loss Adhesion	Alternate Heat/Cold
Moisture Vapor Transmission	0.91 Perms @ 28 mils	2.75 Perms @ 12 mils	E96 Proc. E
Fire Resistance of System		U.L. 790 Class A by UL	E108

9. DRAINAGE

Roofs will not be designed to allow ponding of water. Tapered foam, additional drains, scuppers, etc shall be designed into the roof system to insure good drainage.

10. SCUPPERS

Overflow scuppers shall be provided to insure that the roof deck will not be overloaded by clogged drains.