

Product Design

Thermo-Flex 1000QS (**quick set**) is a technologically advanced, high solids, fire retardant, thixotropic, acrylic elastomeric coating uniquely formulated for the protection of polyurethane foam insulation. Thermo-Flex 1000 is designed to withstand the intense heat and ultra-violet rays of **low humidity desert environments. Use Thermo-Flex 1000QS (quick set) formula when humidity before or after a light rain occurs.**

Product Use

Thermo-Flex 1000QS is used as a protective coating over polyurethane foam.

Product Application

Thermo-Flex 1000QS may be applied by medium nap rollers, brushes, or by conventional or airless spray equipment. Airless spray application is most efficient whereas rolling or brushing may be used for touch-up, flashing and edge terminations or to fill voids, pinholes, holidays or cracks. CONTACT LAPOLLA INDUSTRIES TECHNICAL SERVICE PERSONNEL FOR SPECIFIC RECOMMENDATIONS, PRICING AND AVAILABILITY OF SPRAY AND AUXILIARY EQUIPMENT. Apply Thermo-Flex 1000QS only to clean, dry, sound surfaces, free of loose particles or other foreign matter. A primer may be required subject to type and/or condition of the substrate. Consult Lapolla Technical Service Personnel for specific primer recommendations and substrate preparation procedures. Apply only to roofs that have adequate positive drainage (i.e. a minimum slope of 1/8 inch per foot). This product is not intended for areas where ponding water might occur.

Some separation may occur during shipment and storage, therefore the contents of each container should be thoroughly power mixed for ten (10) to fifteen (15) minutes before application. Thinning is not recommended. It is recommended that Thermo-Flex 1000QS be sprayed in multiple coats applied in multi-directional (north-south, east-west) passes to insure uniform film build and to avoid pinholing. Backrolling sprayed material may be necessary to fill pinholes in substrate. Final cured dry film thickness must be free of voids, pinholes, holidays, cracks or blisters.

Apply in a minimum of 2 coats with each coat at a maximum rate of 1.5 gallons per 100 square feet, for a total minimum coating rate of 3 gallons per 100 square feet. Additional coats of 1.5 gallons maximum per 100 square feet may be applied to obtain the desired final thickness of coating. The minimum allowable dry mill thickness shall be 24 mils. Granules may be broadcast into the final coating application at a rate of 35 – 40 pounds per 100 square feet. No foot traffic shall be permitted on the finished coated surface for 72 hours after application.

Processing Parameters

Thermo-Flex 1000QS is a water-based elastomeric acrylic coating which will freeze and become unusable at temperatures below 32°F. PROTECT FROM FREEZING DURING SHIPMENT AND STORAGE. Do not store material at temperatures below 50°F. Do not apply Thermo-Flex 1000QS when ambient air and substrate temperatures fall below 50°F or when there is a possibility of temperature dropping below 32°F within a 24-hour period after application.

Physical Properties

Properties	Test Method/ Requirements	Value
Cool Roof Rating Council (CRRC) Product ID:	(1001 QS White)	0770-0001
Miami-Dade County Acceptance Number:		11-0801.01
Radiative Properties:	(751 White) Solar Reflectance - Initial: Solar Reflectance - Aged: Thermal Emittance - Initial: Thermal Emittance - Aged:	0.86 0.76 0.90 0.91
Solar Reflective Index:	SRI - Initial: SRI - Aged:	109 88
Standard Colors:	TF 1001QS-White is Cool Roof Rating Council Rated: Reflectivity: .86 Emmissivity: .90	STANDARD COLORS: TF 1001QS – WHITE TF 1002QS – GRAY TF 1003QS – TAN
Tensile Strength:	ASTM D2370	300psi (±25)
Elongation:	ASTM D2370	260% (±25)
Adhesion:	ASTM C794-D 903	7.0 plf PUF(dry) 3.6 plf PUF(wet) 1.4 plf Galv. Steel (dry) 3.0 plf Galv. Steel (wet)
Hardness (Shore A):	ASTM D2240	62 (±2)
Permeability:	ASTM D1653A	11 U.S. Perms @ 20mils
Tear Resistance:	ASTM D624	85 lbs/in. (±2)
Solids by Weight:	ASTM D1644	67% (±3)
Solids by Volume:	ASTM D 2697	55% (±3)
Weight per Gallon:		11.95 (± .2)
Theoretical Coverage:	13-14 dry mills	1.5 gallons
Viscosity (cps):	ASTM D 562	110 K.U. (±8)
Reflectivity:	TF1002QS/03QS	NEW: 85% AGED: 78%
Emmissivity	TF1002QS/03QS	.89
Dry to Touch:		30 minutes
Tack Free:		4 hours
Recoat Window:		12 hours
Shelf Life:	When properly stored	1 Year

Credentials

- UL790 Rated
- Cool Roof Rating Council (CRRC) Rated
- FM Global
- Dade County Approved
- NOA 06-0320.02
- Energy Star Approved

Limitations and Precautions

Total cure of Thermo-Flex 1000QS requires complete evaporation of water. Cool temperatures and high humidity retard cure. Furthermore, all white or light colored coatings can cause a premature artificial dew zone during the curing process under certain climatic conditions. This is generated as the water in the coating evaporates, cooling the white surface and attracting moisture in the form of dew. Therefore, do not apply if climatic conditions prevent complete cure before rain, dew, or freezing temperatures.

Thermo-Flex 1000QS is not a vapor barrier coating and not recommended for use over most cold storage installations. Where a vapor barrier is required, contact Lapolla Technical Service Personnel for proper selection and installation procedures.

General Safety, Toxicity, Health Data

Material Safety Data Sheets are available on this coating material. Any individual who may come in contact with these products should read and understand the M.S.D.S. In case of emergency contact CHEMTREC EMERGENCY NUMBER at 800-424-9300.

WARNING: Avoid eye contact with the liquid or spray mist. Applicators should wear protective clothes, gloves and use protective cream on face, hands and other exposed areas.

CLEAN UP: Water

EYE PROTECTION: Safety glasses, goggles, or a face shield are recommended.

SKIN PROTECTION: Chemical resistant gloves are recommended. Cover as much of the exposed skin area as possible with appropriate clothing.

RESPIRATORY PROTECTION is MANDATORY! Respiratory protective equipment, impervious foot wear and protective clothing are required at all times during spray application. Contact Lapolla for a copy of the Model Respiratory Protection Program developed by API.

INGESTION: Do not take internally.

Consider the application and environmental concentrations in deciding if additional protective measures are necessary.

Disclaimer

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