



# THERMO-FLEX™ 1500HT

## TECHNICAL DATA SHEET

### 100% Acrylic Roof Coating System

#### Product Description

Thermo-Flex 1500 High Tensile (HT) is a technologically advanced, high solids, fire retardant, thixotropic, acrylic elastomeric coating uniquely formulated for the protection of polyurethane foam insulation. Thermo-Flex 1500HT is a premium quality, high tensile formulation that also withstands the damp heat and ultra-violet rays of humid environments.

Thermo-Flex 1500HT is used as a protective coating over polyurethane foam.

#### Performance Characteristics

- Superior exterior durability and UV light resistance
- Seamless, fully-adhered elastomeric membrane
- Water Resistant
- Excellent dirt pick-up resistance
- Low temperature flexibility down to -15°F
- Low maintenance/renewable
- Miami Dade Approved, NOA # 22-0913.01
- Meets CRRC Requirements
- Meets UL 790 (14353)
- Meets Federal Specification FE-TT-C 555B

#### PRODUCT CHARACTERISTICS

Standard Colors:	TF 1501HT – White   TF 1502HT – Light Gray   TF 1503HT – Tan	
Radiative Properties: (1501HT White)	Solar Reflectance - Initial: Solar Reflectance - Aged: Thermal Emittance - Initial: Thermal Emittance - Aged:	0.84 0.74 0.91 0.89
Solar Reflective Index: (1501HT White)	SRI - Initial: SRI - Aged:	105 91
Radiative Properties: (1502HT Light Gray)	Solar Reflectance - Initial: Solar Reflectance - Aged: Thermal Emittance - Aged:	0.85 0.78 0.89
Radiative Properties: (1503HT Tan)	Solar Reflectance - Initial: Solar Reflectance - Aged: Thermal Emittance - Aged:	0.85 0.78 0.89
Dry to Touch:	4 hours	
Tack Free:	12 hours	
Recoat Window:	12 hours	

#### Application Equipment

TF 1500HT 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 best for touch-up, flashing and edge terminations or to fill voids, pinholes, holidays or cracks. Brush: Synthetic filament. Roller: 1¼" nap. Airless Spray: Equipment capable of maintaining a minimum of 0.027" or greater orifice tips with 2,300 PSI at the tip. Filter screens should be thirty-mesh or larger.

Contact Huntsman Building Solutions Technical Service personnel for specific recommendations, pricing and availability of spray and auxiliary equipment.

#### PHYSICAL PROPERTIES

Properties	Test Method/Requirements	Value
Tensile Strength:	ASTM D 2370	384psi (±25) @ 70°F
Elongation:	ASTM D 2370	341% (±25) @ 70°F
Adhesion:	ASTM C794-D 903	5.0 pli PUF (wet) 11.9 plf Galv. Steel 5.0 Kynar coated metal ( wet)
Fungi Resistance	ASTM G21	no growth

Permeability:	ASTM D 1653A	9 U.S. Perms @ 20mils
Solids by Weight:	ASTM D 1644	60%
Solids by Volume:	ASTM D 2697	51%
Weight per Gallon:	ASTM D 1475	10.7 (±.2)
Theoretical Coverage:	13-14 dry mils	1.5 gallons
Viscosity (cps):	ASTM D 562	114 K.U. (±8)

#### Surface Preparation & Priming

Apply only to roofs with adequate positive drainage (i.e. a minimum slope of 1/4 inch per foot). This product is not intended for areas where ponding water might occur. All surfaces must be clean, dry, and sound; free of loose and peeling coatings and mastics, grease, oil, efflorescence, curing agents, form release agents, dirt, mildew and other detrimental foreign matter that will adversely affect adhesion and product performance. Make sure roof is well vented. A primer may be required subject to type and/or condition of the substrate. If surface is one which requires an application of TF Primer, Consult Huntsman Building Solutions Technical Service Personnel for specific primer recommendations and substrate preparation procedures.

#### Application Guidelines

Apply TF 1500HT directly to spray polyurethane foam on the same day as the installation whenever possible. Do not allow SPF to remain uncoated for more than 48 hours. Lower temperatures and higher humidity prolong drying and cure time. Apply only when air, surface, & product temperature is between 55°F. DO NOT apply when temperatures may drop below the dew point or below 40 °F within 6 hours after application. Apply first coat of TF 1500HT over clean, dry surface. After a curing period of approximately three to eight hours (depending on humidity and temperature) apply second coat. Avoid application late in the day when dew or condensation is likely to form or when rain is expected. It is recommended that TF 1500HT be applied in multiple coats and in multi-directional (north-south, east-west) passes to ensure uniform film build. 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 mil thickness shall be no less than 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 depending on curing conditions after application.

#### Clean Up:

Promptly clean hands, tools, and equipment with warm soapy water.

#### Product Handling:

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. Product should never be thinned. TF 1500HT 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.

#### SHELF LIFE:

One year from manufactured date when stored properly.

#### Packaging

U.S. MEASURES: 5-gal. pails, 55-gal. drums & 275-gal. totes.

WEIGHT PER U.S. GALLON: 10.7 lbs.

#### Limitations

Do not use on surfaces demonstrating hydrostatic or high vapor pressure. This product is not intended for use in areas where ponding water may be present. Ponding water issues must be eliminated prior to the application of this coating.

#### General Health & Safety Precautions

This product is intended for use by trained professional personnel. Safety Data Sheets are available and any individual who may come in contact with these products should read and understand the S.D.S. In case of emergency contact CARECHEM EMERGENCY NUMBER at (866) 928-0789.

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

**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 Huntsman Building Solutions for a copy of the Respiratory Protection Program developed by OSHA.

**INGESTION:** Do not take internally. Consider the application and environmental concentrations in deciding if additional protective measures are necessary.

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