



THERMO-SEAL® 1000 **HIGHLY SOLAR-REFLECTIVE ROOF COAT**

THERMO-SEAL® 1000 is a high-build, single component, 100% top acrylic technology incorporating exceptional dirt resistance, cross-linking adhesion and intrinsic, inorganic mixed-metal oxides, comprising highly solar-reflective pigments. **THERMO-SEAL® 1000** is a field-applied renewal coating engineered for sloped metal, concrete, cementitious and clay type roof tiles in high exposures with slope. Unsurpassed resistance to dirt and damage due to superior surface hardness coupled with alkaline friendly, molecular level substrate bonding (cross-linking) yields longer term wear characteristics exceeding existing standards and original tile performance. For use as a maintenance coating for prior coated tile and metal roofs, after priming or sealing, with two finish coats standard. Waterproofing occurs at specified millage and exceeds original design in most cases providing exceptional durability and future renewal capability. Designed for moderate and steep-slope roof applications, low-fading, low VOC, pigment system that meets Green Seal GS-11, and LEED Credit requirements for reflectance, emissivity and low VOCs.

It can be made in almost any color including Black.

At this time, **THERMO-SEAL 1000** complies with many utility energy rebate programs requiring .40 Solar Reflectance (SR) or higher. **THERMO-SEAL 1000** is highly thermal emissive in all colors and in this way also meets LEED Credit requirements. **THERMO-SEAL 1000** exceeds both California Title 24 regulations and South Coast Clean Air Rule 1113. This product contains no plasticizers, soaps or ethylene glycol.

COOL ROOF RATING COUNCIL (CRRC) SOLAR REFLECTANCE (SR) and THERMAL EMISSIVITY (TE) RATINGS (2009):

CRRC Initial Ratings for color > Cinnamoie (terracotta range)

<u>SR</u>	<u>TE</u>
.41	.90

CRRC Initial Ratings for color > Russet Crowe (brick red range)

<u>SR</u>	<u>TE</u>
.45	.91

CRRC Initial Ratings for color > Cassowary Blue (blue-gray range)

<u>SR</u>	<u>TE</u>
.39	.88

CRRC Initial Ratings for color > Derwent Water (blue-gray range)

<u>SR</u>	<u>TE</u>
.48	.92

Solar Reflectance of many custom colors are noted on our Independent Laboratory Tests for **THERMO-SEAL Stock Colors Chart**. SR and TE values for 1000 and 1500 are the same on a same color basis. For further information, please see these on our website at: www.ultimatecoatings.net

Depending upon substrate roof type, use of CLEAR MASONRY SEALER 990 or METAL PRIMER 490 will be required. For full warranty, two finish coats over CMS 990 and GlazeCoat top sealer are required. Inquire with manufacturer in advance to determine correct procedure and basecoat. Warranty work must be performed by an Approved Applicator.

THERMO-SEAL® 1000 Properties (all colors):

Solids By Volume	41+/- 2%
Solids By Weight	53 +/- 2%
Tensile Strength	501 psi
Hardness	92.1 Duro
Permeance (@ 5 mils)	15 perms
Density	11.1 lbs/gal
V.O.C.	<25 g/L
Solvent:	Water thinned
Hiding	97.3%
Sheen (semi-gloss)	40.0%
Coverage (per gallon)	185-225 sq feet (substrate and temperature dependent)
Theoretical Yield	6.0 mils DFT*
Temperature Limits	-30 to +210 degrees Fahrenheit
Hazardous Materials	None (no CA Prop. 65 chemicals).
100% Acrylic Co-polymer with Inert pigments.	
Non-flammable	

***Theoretical Yield for two coats. Does not take into account application losses, thickness variations in application, porous or textured substrate, weather contingent performance.**

THERMO-SEAL® Color dependent values:

Solar Reflectance (range) 39 - 84%**

Thermal Emissivity (range) 87- 93%**

** Color dependent. Highest values are for color white and light colors.

The following Tests have been satisfactorily Passed for this product:

ASTM 6083 - weathering/ performance series

ASTM G26 - accelerated weathering

ASTM D 358 - water resistance

Federal Spec TTC - 555B wind driven rain

ASTM E96 - water vapor transmission

ASTM G21 - fungi resistance

ASTM D522 - flexibility

ASTM D624 - tear resistance

D412 - tensile strength

Shore A - hardness

ASTM CRRC Protocol C-1549 solar reflectance

ASTM CRRC Protocol C-1371 thermal emissivity

LIMITATIONS AND PRECAUTIONS:

Do not apply product when ambient temperature is below 50 F. degrees or above 90 F. degrees.

Cold temperature and/or high humidity will retard drying and may denature product.

Store in tightly closed container and protect from freezing. Freezing of unopened product with cause denaturing. Shelf life approximately 1 year. Not intended as a vapor or fire barrier. Not intended to provide waterproofing to entire roof system.

Disclaimer: Liability is limited strictly to replacement of product. Our data is based on information from laboratory tests that are believed to be accurate. All recommendations made without warranty. No liability or responsibility for product relative to coverage, performance or injury is assumed.

The Ultimate Coatings Company

www.ultimatecoatings.net

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