



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, mixed metal oxides, inorganic, highly solar-reflective pigments. **THERMO-SEAL® 1000** is thermoplastic technology designed to be used as a field-applied renewal coating engineered for sloped metal, concrete, cementitious and clay type roof tiles in high exposures. Unsurpassed resistance to dirt and damage due to exceptional surface hardness coupled with alkaline friendly molecular level bonding (cross-linking) yields longer term wear characteristics exceeding existing standards. For use as a *maintenance* coating for 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 renewal capability. Designed for moderate and steep-slope roof applications, it is a non-fading, low VOC, mixed-metal oxide 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 7.2 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) INITIAL RATINGS:

THERMO-SEAL 1000 color > Esperance (terracotta)

Solar Reflectance (SR) Thermal Emissivity (TE)

.41 (ASTM Testing Protocol C-1371) .90 (ASTM Testing Protocol C-1371)

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

Depending upon substrate roof type, etch, clear sealer basecoat or bonding primer will be required. For full warranty, two finish coats and GlazeCoat top sealer are required. Inquire with manufacturer in advance to determine correct procedure and basecoat. Warranty work must be performed by 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%
Coverage (per U.S. gal.)	185-225 sq feet
Theoretical Yield	6.0*mils
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 or 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.

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 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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