



ECO-THERM 2500 ELASTOMERIC OVER METAL ROOFS* (Application process is always to be determined based on condition of existing coatings, substrate and repaired areas. If in doubt, contact The Ultimate Coatings Company or its representative. Warranty application only by Approved Applicators.)

***For roofs coated with existing adhering coating, factory finish coat requiring primer or bare metal.**

PREPARATION OF ROOF SURFACES

Power-wash and demildew existing elastomeric or other factory painted surfaces fully with minimum pressure of 3000 psi, and scrubbing with stiff brush to ensure surface dirt and mildew are removed. Use sodium hypochlorite (bleach), detergents mixture, Concrobium or equivalent environmentally friendly mildewcide cleaners as necessary on all roofs except those with no mildew (dark spots, colored algae, etc.) whatsoever. Roofs must be fully rinsed down with water to remove any residues. In instances of dusty or salt fog conditions, rinsing between coats is required. **Rinsing before coating or priming or between coats will be required if after 72 hours no primer or coating has been applied due to dust or pollen accumulation that will interrupt the ability of products proper adhesion and durability.**

Washed surfaces must be allowed to dry overnight before **ECO-THERM** is applied.

PRIMING

All cleaned metal surfaces (painted or bare) are to be primed with Metal Primer 490 in one fully sprayed coat at a rate of ½ gallon per 100 sq ft prior to applying **ECO-THERM** system. Other repairs, where required, including caulking, sealing, taping, spot priming must also be allowed to set overnight, or according to manufacturer specifications, before top-coating with any **ECO-THERM** coating products. Deep fills of seam sealant (ECO-SEAL, etc.) will generally require two days to sufficiently cure before priming or topcoat application.

TEST PRIOR COATING TYPE WHERE UNCERTAIN

Prior coated metal roofs must be tested to ensure type of existing roof coating is not Kynar or similar fluoropolymer type product, which will require coating with KYN-PRIME 90 primer

instead of METAL PRIMER 490 because it will not bond to it. Application of **ECO-THERM** or other elastomeric in heavy coated well-cleaned test area not larger than 8" x 12". This should have reinforcing fabric applied into the wet swatch of elastomeric and then recoated with same to sandwich it in. Allow 3 full days drying time (more in colder weather) and then perform a pull test by tugging on the loose end of the reinforcing fabric in attempting to pull it off. If it strips off easily, with little or not residue left on the roof, (bottom side is shiny to the eye) then roof is Kynar coated and requires KYN-PRIME 90 Primer.

All bare metal is to be primed with METAL PRIMER 490 in one fully sprayed coat prior to any **ECO-THERM** coating application. Other repairs, where required, including caulking, sealing, taping, priming must also be allowed to set overnight, or according to manufacturer specifications, before top-coating with any **ECO-THERM** products.

Prior coated metal roofs must be tested to ensure type of existing roof coating to determine suitability for coating before confirming any specification or warranty/guarantee. All roofs to be coated must have positive drainage with no effective ponding of water beyond 48 hours.

If weather is over 80 degrees Fahrenheit and there is direct sun that causes power-washing **water to visibly evaporate**, same day application of **ECO-THERM** may be done after 3 hours drying time of the washed surfaces. This may only be done when surfaces have cooled sufficiently. SEE ALSO BELOW section titled "**WEATHER**".

APPLICATION

Primer coat: (If necessary)

Initial coat: ECO-THERM 2500 (BASECOAT) in color Ivory or Grey

Second or Third coats: ECO-THERM 2500 ELASTOMERIC

INITIAL COATING with ECO-THERM 2500 (BASECOAT):

Apply with 12" spray *at a steady moderate pace* from 12" distance above roof surfaces. Rib risers or standing seams to be sprayed separately for uniform coating thickness coverage of all contours separately from flat sections to ensure even coverage throughout, unless utilizing calibrated dual-tip spray sled or other dual-tip spray system.

FINISH COATS with ECO-THERM 2500:

If Cool Roof Specification: Apply 1.5 gallons per coat over 10' x 10' square at 70 degrees Fahrenheit (ideal). If applied thickness exceeds 1.5 gals per coat, mud-cracking can occur and topcoat may fail prematurely.

Correct minimum mils thickness ("millage") occurs at 3.0 gallons per square in 2 coats of 1.5 gallon each for 12 Years Warranty, or 12 Years No-Peel Guarantee, for 12 years expected durability. For 12 Years Warranty, total correct minimum millage occurs at 3.0

gallons total per square in 2 or 3 coats. Longer Warranty with increased gallons/millage application is required. Inquire with Manufacturer. See below for "**MILLAGE**" requirements.

If Waterproofing Specification must be minimum of 3 gallons applied as above and also includes retightening and/or replacement of all fasteners with sealing upon same with **ECO-SEAL**, or equivalent, siliconized urethane, non-plasticizing caulk product over full

primed and prepared surfaces. Sealing all seams and gaps and holes must also be done with trowel grade **ECO-SEAL**, or equivalent, and/or "triple-coursed" with heavy over-coating or seams with **ECO-THERM** or **BASECOAT** followed by embedding 4-6" reinforcing fabric into wet coat then fully applied **ECO-THERM** or **BASECOAT** applied onto each reinforcement before **BASECOAT** or **ECO-THERM 2500** full coating of roof system.

DO NOT ATTEMPT TO APPLY ECO-THERM COATING OF SURFACES WITH A SINGLE COAT. THE COATING WILL NOT PERFORM CORRECTLY AND WILL NOT LAST FOR FULL WARRANTY or GUARANTEED TIME PERIOD.

EQUIPMENT

Commercial Airless sprayer: Capable of min. 2500 psi @ minimum 2.0 gallons per minute. Tip Orifice: .0035" best tips 635 or 835 (630-635, 830-835 tips - okay). Millage Gauge: Acquire same from paint store and use to check first wet coats applied and confirm mil thickness. See spec below under "**MILLAGE.**" Spot Indirect Thermometer: For handheld reading of spot temperatures of roof surfaces.

MILLAGE

Wet Film Thickness (WFT) must be NO LESS than 27-31 mils WFT @ 1.5 gallons per coat per square. (@ 1 gallon rate = 18-22 mils WFT per coat per square). Finished 24-28 mils Dry Film Thickness (DFT) applied @ 1.5 gallons application rate per coat for 2 coats total.

Provided applicator follows these guidelines under warm weather, non-moist conditions, these values must comply in order to receive any warranty or guarantee from the Manufacturer. Work must be checked to assure millage and applicator/foreman is required to check this work as work progresses. Weather conditions that are cold or hotter will effect the coating build thickness and cure times. Colder weather will cause a greater quantity of product to be used because material is thicker. Hotter weather can cause more product to be used because material can dry overly fast.

WEATHER

Steady weather conditions at temperature of 60 to 85 F. is ideal. No rain or moisture expected within 24 hrs. Overnight and surface temperatures above 50 degrees. Fog, high humidity, lower temperatures will slow drying. Sticky surfaces after overnight dry means that the **ECO-THERM** coating must be allowed to dry further before recoating.

DO NOT APPLY WHEN EXTERIOR AIR TEMPERATURE IS 90 DEGREES FAHRENHEIT OR ABOVE. DO NOT APPLY WHEN SURFACE TEMPERATURE EXCEEDS 110-120 FAHRENHEIT DEGREES. DO NOT APPLY WHEN NIGHTTIME TEMPS WILL BELOW 50 DEGREES.

APPLICATOR RESPONSIBILITY:

You must use good professional judgment and follow these guidelines or ECO-THERM will not bond properly and will blister and fail prematurely. In the case of Applicator failure to apply coating according to these product application guideline procedures, Applicator will be at fault when problems are determined to be due to application error and will not be able to be covered by product warranty, guarantee.

Photos must be taken at before application and at each application step, as well as of the finished job per roof and supplied to THE ULTIMATE COATINGS COMPANY for any Warranty to be issued.

ADDITIONAL CAUTIONS FOR ECO-THERM APPLICATORS:

YOU MUST BE AN APPROVED APPLICATOR WITH PREAPPROVED SPECIFICATIONS CONFIRMED WITH MANUFACTURER TO OFFER ANY WARRANTY or GUARANTEE WORK.

NEVER SINGLE COAT. COMPLETED COATING SYSTEMS MUST HAVE AT LEAST 2 COMPLETED ECO-THERM COATS AT AGREED MILLAGE.

DO NOT WALK - ON ECO-THERM COATED SURFACES FOR MINIMUM OF 4 HOURS. AFTER APPLICATION. DO NOT APPLY ON UNWASHED or UNPREPARED SURFACES.

BEST APPLICATION TIMES IN WILL BE EARLIER MORNING AND LATEST AFTERNOON DURING WARM WEATHER. JUST BECAUSE SUN IS NO LONGER OVERHEAD DOES NOT MEAN THAT SURFACES ARE NOT TOO HOT TO TOPCOAT.

YOU MUST RECHECK SURFACE TEMPERATURES WHEN IT IS HOT WEATHER.

IF IN DOUBT, USE SPOT INDIRECT THERMOMETER TO CHECK SURFACE TEMPERATURES. YOU MUST BE AWARE OF SUN OVERHEAD CAUSING OVERLY HOT SURFACE TEMPERATURES THAT WILL REQUIRE YOU TO DELAY.

COLDER WEATHER WILL RETARD DRYING TIMES FOR RECOAT. DAYS BELOW 60 DEGREES AND NIGHTS IN 40's to 50's WILL REQUIRE CAUTION AND SHORTENED WORK DAYS TYPICALLY 10:00-11:00 AM to ENDING NOT LATER THAN 2:00 PM TO ALLOW DRYING BEFORE COLD NIGHTS AND MOISTURE CONDENSATION ON ROOFS.

TACKY COATING AFTER OVERNIGHT DRYING CANNOT BE RECOATED UNTIL DRY.

IT IS ACCEPTABLE TO TARP SURFACES TO KEEP COOL PRIOR TO COATING WHEN NECESSARY SO LONG AS SURFACES ARE NOT OVERHEATED BY TIME OF COATING.

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