

application instructions

THERMCOTE/A-5™ & A-10™ SLOPED NON-METAL ROOF APPLICATION

MATERIAL ESTIMATION

CHLORINE BLEACH	1 QT per 5 Gal. of water for 100 sq.ft.	
THERMAPATCH™	1 Gal. Fills 175 cu. inches	Caulk and Seal all cracks 1/8" or greater
POLYMESH™ (see Step 4)	Rolls available in 4" & 12" W x 300' 40"W x 324" L Use quantity as needed.	Tape any seams necessary; lay POLYMESH™ into ELASTOPRIME within 15 minutes of applying the primer - at 1 1/4 to 3 Gal./100 S.F.)
ELASTOPRIME™	Porous Substrates: 50 - 150 sq.ft./gal Non-Porous: 100 - 150 sq.ft./gal	Refer to STEP 5. NOTE: 1 coat is required with ThermCote/A-10*
THERMCOTE/A-5™ (Two coats REQUIRED) OR THERMCOTE/A-10™ (Two coats REQUIRED)*	Approximate Coverage: Porous Substrates: 2 coats, each at 80 sq.ft./gal per coat. (Film thickness at 80 sq.ft./gal/coat: 18-19 wet mils = 11-12 dry mils)** Non Porous: 2 coats, each at 100-150 sq.ft./gal per coat. (Film thickness at 100 sq.ft./gal/coat: 15-16 wet mils = 9-10 dry mils)	
NOTE: THE MORE POROUS, ROUGH OR UNEVEN THE SURFACE, THE MORE PRODUCT NEEDED PER SQUARE FOOT		

* for 12 Year Renewable Warranty validation of application with ThermCote/A-10™

** when applied at a minimum of 20 dry mil film thickness, product meets or exceeds the standards specified in Title 24, California Code of Regulations, Part 6, Section 118 (f), Mandatory Requirements for Cool Roofs, Sub-Section 2.

GETTING STARTED

All coatings must be stirred manually or mechanically before being used (except for THERMAPATCH™). Do not let products freeze. Do not use any of these products at temperatures below 45 degrees Fahrenheit. Apply all products to dry surfaces only and do not apply products when they will be subjected to rain or heavy dew before they have had enough time to dry (Check Product Data Sheets). **Do not thin any products unless specifically mentioned within this application specification manual.**

STEP 1:

VISUAL INSPECTION and REPLACEMENT of DAMAGED BUILDING MATERIALS

The substrate to be coated must be in SOUND condition. Physically inspect the surface area for missing or damaged building materials. Replace and/or repair all damaged areas back to sound and solid condition. Inspect for any existing leaks and be sure to repair leaks prior to the application of coating. Make sure roof is adequately vented. Check with a roofing contractor, if necessary.

STEP 2:

PRESSURE CLEANING

High Pressure Blast entire roof surface with at least 1500 P.S.I. of pressure using a water and chlorine solution (approximately 1 quart chlorine- 2-3 Quarts for more severe mold & mildew presence - to 5 gallons of water). Thoroughly remove all dirt, oil, grease, residues, mold, mildew, algae and any other surface contaminants. Severe mildew may require a stronger concentration of chlorine or pure chlorine applied with a pump sprayer, letting it penetrate for about 1¼ to ½ hour and then scrubbing with a broom or roof brush before rinsing. When roof is completely cleaned, rinse with water only. Let roof surface dry at least 12 hours before continuing. **THERMCOTE/A-5™ and A-10™** has excellent

mildew resistance, but WILL NOT kill mildew already on the surface.

STEP 3:

REPAIRING SURFACE & PATCHING IMPERFECTIONS

After surface has thoroughly dried, Patch and Caulk all cracks, crevices, fractures, holes, valleys, vents, voids, etc., with THERMAPATCH™. Use a trowel or stiff brush to apply. Multiple coats are better than one thick coat. The thicker THERMAPATCH™ is applied the longer it will take to dry. Wait at least 4 hours before applying a second coat of THERMAPATCH™ and let final application dry at least 24 hours before continuing to next step. THERMAPATCH™ dries from top to bottom, so be careful when working around a caulked area since it will be skin dry only. There is no problem coating over THERMAPATCH™ even if it is not completely dry, since it is a high solids material.

NOTE: THERMAPATCH™ allows minimal shrinkage, but the thicker it is applied the more it will shrink. Check THERMAPATCH™ after 24 hours for shrinkage.

STEP 4:

TAPING SEAMS and TROUBLE AREAS

(If applicable, otherwise proceed to STEP 5) Tape all visible seams, large cracks and fractures prone to water intrusion on roof surface. Apply a liberal coat of PRIMER (ELASTOPRIME™) at 10 - 12 mils wet film thickness, directly to the affected area using brush, roller or airless sprayer and lay the POLYMESH™ directly onto the WET PRIMER. Tape must be put down before PRIMER has had a chance to start drying (approximately 15 minutes). Using a brush or roller **WET with ELASTOPRIME™**, VERY GENTLY pat down the mesh into the primer by rolling ONCE in ONE direction only.

Small wrinkles and folds are not a problem After all areas are taped let dry for 1 to 2 hours and apply a second light coat of PRIMER at 5 - 8 mils wet over the top of the tape. Let the taping procedure dry for at least 2 hours before continuing.

**STEP 5:
PRIMER COAT**

(OPTIONAL –but required for 6 year warranty with THERMCOTE/A-5 and 12 year warranty for THERMCOTE/A-10)

Apply **ELASTOPRIME™** using 1) a large roller with at least a 1 inch nap, or 2) at least a 3,000 P.S.I. airless sprayer with at least a .025 tip. When spraying or rolling **ELASTOPRIME™**, it must be applied perpendicular to the slope of the roof. Example: If the slope of the roof runs from North to South then the coating must be applied spraying from East to West. This will be the start of a checkerboard application pattern. *See diagram below.*

Apply the **ELASTOPRIME™** at a rate of 100 - 150 square feet per gallon (depending on the porosity of the surface) covering the entire roof surface. Please note that more primer will be needed, if heavy alligator skin is present. If achieving a smooth surface on granulated roofing materials is desirable, one or two heavy coats of **ELASTOPRIME™** may need to be applied before top coating. Multiple coats need to be applied in cross hatch method (see below) Wet film thickness of as much as 10 - 12 mils wet resulting in dry film thickness of 4 - 5 mils per coat. Let **ELASTOPRIME™** dry at least 12 hours before continuing. Beware of sagging when applying **ELASTOPRIME™** very heavy on sloped roofs.

**STEP 6:
FIRST COAT of FINISH TOPCOAT**

Be sure entire surface is clean and free of all moisture. Be sure the entire area to be coated is primed, if not spot prime specific areas. Apply **THERMCOTE/A-5™** or **THERMCOTE/A-10™** using 1) at least a one inch nap large roller, or 2) at least a 3,000 P.S.I. airless sprayer with at least a .027 tip. The first coat of **THERMCOTE/A-10™** must be applied perpendicular to the coat of PRIMER to achieve a checkerboard pattern. *See diagram below.*

Apply the first coat of **THERMCOTE/A-5™** or **A-10™** at a rate of 80 - 150 square feet per gallon per coat (depending upon the porosity and surface type of substrate – refer to Film Thickness chart on Page 1 for information regarding correct coverage rate for your substrate type) over the entire roof surface. Let dry at least 12 hours before continuing.

**STEP 7:
SECOND COAT of FINISH TOPCOAT**

Be sure entire surface is clean and free of all moisture. Be sure the entire roof area is completely coated, if not then spot coat specific areas.

Apply **THERMCOTE/A-5™** or **A-10™** using 1) brush, 2) at least a one inch nap roller, or 3) at least a 3,000 P.S.I. airless sprayer with at least a .027 tip.

When Spraying or Rolling **THERMCOTE/A-5™** or **A-10™**, the second coat must be applied perpendicular to the first coat of **THERMCOTE/A-5™** or **A-10™** completing the checkerboard pattern. *See diagram below.*

Apply the second coat a rate of 80 - 150 square feet per gallon per coat (refer to Film Thickness chart on Page 1 for correct coverage rate for your substrate type) over the entire roof surface. Let dry at least 24hours before your Final Evaluation.

**STEP 8:
FINAL EVALUATION**

At this time a detailed evaluation of the completed job will determine the quality of the workmanship and whether strict application specifications have been met. The entire roofing surface must be completely coated & sealed. Be sure to check that all roof areas are completely coated & sealed under permanently placed roof items such as roof top air conditioning units.

Divide roof into 1,000 square feet sections and randomly check one spot in each section for a dry film thickness of at least 20 mils. Remember to touch up the penetration made by the dry film thickness gauge. If specifications have not been met, determine how much material will be required to meet specifications and recoat. Check dry film thickness again until specifications has been met.

