

# application instructions

## THERMCOTE/A-PW5 FLAT ROOF APPLICATION With Meshing Trouble Areas

### MATERIAL ESTIMATION

CHLORINE BLEACH	1 QT per 100 S.F.	
THERMAPATCH™	1 GAL. Fills 175 cu. inches	Caulk and Seal all cracks 1/8" or greater
POLYMESH™ (see Steps 4 and 5)	Rolls available in 4" & 12" W x 300' 40"W x 324" L Use quantity as needed.	Lay POLYMESH into ELASTOPRIME within 15 minutes of applying primer at rate of 1 ¼ to-3 Gal. per 100 sq.ft., depending on porosity of roofing substrate
ELASTOPRIME™	Porous Substrates: 50-150 sq.ft./gal Non-Porous: 100 – 150 sq.ft./gal	1 coat required over entire roof to validate 6 year renewable warranty
THERMCOTE/A-PW5™ <i>Ponding Water Formula</i>  (Two coats REQUIRE to validate 6 year renewable warranty – otherwise 5 year warranty)	<b>Approximate Coverage:</b> <b>Porous Substrates:</b> 2 coats, each at 80 sq.ft./gal. <b>per coat</b> <i>(Film Thickness at 80 sq.ft./gal/coat: 18-19 wet mils = 11-12 dry mils) *</i> <b>Non-Porous:</b> 2 coats, each at 100 – 150 sq.ft./gal, <b>per coat</b> <i>(Film Thickness at 100 sq.ft./gal/coat: 15-16 wet mils = 9-10 dry mils)</i>	

**NOTE: THE MORE POROUS, ROUGH OR UNEVEN THE SURFACE, THE MORE PRODUCT NEEDED PER SQUARE FOOT.**

\* 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 to 5 gallons of water). Thoroughly remove all dirt, oil, grease, residues, mold, mildew, algae and any other surface contaminants. Severe mildew requires a stronger concentration of chlorine. When roof is completely cleaned, rinse with water only. Let roof surface dry at least 12 hours before continuing.

THERMCOTE/A-PW5™ has excellent mildew resistance, but this product 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 may ONLY be "skin dry." 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 VENT PIPES, VENTS, etc. (If Applicable)

(If necessary and desirable, otherwise proceed to STEP 5). Tape around all vent pipes and exhaust vents. Apply a liberal coat of ELASTOPRIME™ at 10-12 mils wet film thickness, directly to the affected area using brush, roller or airless sprayer and lay the POLYMESH™ (cut to appropriate size) directly onto the WET ELASTOPRIME™. The POLYMESH™ tape must be put down before ELASTOPRIME™ has had a chance to start drying (approximately 15 minutes). After all areas are taped let dry for 1 to 2 hours and apply a second light coat of ELASTOPRIME™ 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:**

**"SPOT MESHING" TROUBLE AREAS**

With a roller, apply **ELASTOPRIME™** at the rate of 1 ¼ to 3 Gal per 100 sq.ft. onto the areas to be "MESHED." *Within 15 minutes* of applying **ELASTOPRIME™**, roll out the **POLYMESH™** flat on top of the **ELASTOPRIME™**. Lay down the mesh as smoothly as possible. Small wrinkles and folds are not a problem. Using a large roller **WET with ELASTOPRIME™**, **VERY GENTLY** pat down the mesh into the primer by rolling **ONCE** in **ONE** direction only. If multiple rows of mesh are needed for an area, the rows should be laid down starting at the lowest part of the roof. Each section of the mesh should overlap the previously laid down section by about 2 inches on each side. As the **POLYMESH™** has to be embedded within 15 minutes after application of the **ELASTOPRIME™**, the embedding of the mesh into the primer has to be done in sections, depending on the size of the roof. Apply an additional thin coat of **ELASTOPRIME™** over the meshed areas.

**STEP 6:**  
**PRIMER COAT**

Start the **ELASTOPRIME™** primer coat over the entire roof at least 4 hours later, although the "spot-meshed" areas may still feel tacky. Apply the **ELASTOPRIME™** primer top coat at a rate of 50 -150 sq.ft./gal over "Spot-Meshed" and non-meshed areas (more primer is needed in areas where heavy alligator skin is present).

Apply **ELASTOPRIME™** using a: 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 .025 tip, at the rate of 33 to 50 sq.ft./gal, covering the entire roof surface. - Wet film thickness of 10 - 12 mils wet resulting in dry film thickness of 4 - 5 mils.

When spraying or rolling **ELASTOPRIME™**, it must be applied perpendicular to the slope of the roof. This will be the start of a checkerboard application pattern. *See diagram below.*

Example: If the slope of the roof runs from North to South, then the coating will be applied spraying from East to West. The same applies to embedding the 18" or 36" wide **POLYMESH™** on the troubled areas.

**STEP 7:**

**FIRST COAT of FINISH TOPCOAT**

Be sure entire surface is clean and free of all moisture. Apply **THERMCOTE/A-PW5™** using 1) a large roller with at least a one inch nap, or 2) at least a 3,000 P.S.I. airless sprayer with at least a .027 tip. When Spraying or Rolling **THERMCOTE/A-PW5™**, the first coat of **THERMCOTE/A-PW5™** must be applied perpendicular to the coat of PRIMER to achieve a checkerboard pattern. *See diagram below.*

Apply the first coat of **THERMCOTE/A-PW5™** at a rate of 80 - 150 square feet per gallon per coat (refer to Film Thickness chart on Page 1 correct coverage rate for your substrate) over the entire roof surface. Let dry at least 12 hours before continuing.

**STEP 8:**

**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, spot coat specific areas. Apply **THERMCOTE/A-PW5™** as outlined under Step 7.

When spraying or rolling **THERMCOTE/A-PW5™**, the second coat of **THERMCOTE/A-PW5™** must be applied perpendicular to the first coat of THERMCOTE/A-PW5™ completing the checkerboard pattern. *See diagram below.* Let dry at least 24 hours before your Final Evaluation.

**STEP 9:**

**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.

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