

application instructions

THERMCOTE/A-PW5

CONCRETE ROOFS & DECKS

MATERIAL ESTIMATION

CHLORINE BLEACH MURADIC ACID	1 QT per 100 S.F. 1 PINT per 100 S.F. -Approximately	
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./100 S.F. - depending on porosity of concrete
ELASTOPRIME™	Porous Substrates: 50-100 sq.ft./gal Non-Porous: 100 – 150 sq.ft./gal	1 coat required - depending on porosity of concrete to validate 6 year warranty - otherwise 5 year warranty*
THERMCOTE/A-PW5™ <i>(Two coats REQUIRED to validate 5 or 6 year warranty)</i> THERMCOTE/A-10™ <i>may be used if the roof or deck does not have any ponding water</i>	Approximate Coverage: Porous Substrates: 2 coats, each at 80 sq.ft./gal. per coat <i>(Film Thickness at 80 sq.ft./gal/coat: 18-19 wet mils = 11-12 dry mils)*</i> Non-Porous : 2 coats, each at 100 – 150 sq.ft./gal, per coat <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

Finished surfaces of sound, clean, and dry cast-in-place, concrete decks should use this specification. 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

PRESSURE WASH to achieve a clean surface free of dirt, oil, residues, and other coatings or contaminants and/or scrub surface thoroughly with TSP and rinse. Chalky surfaces and areas of chipping, flaking, or peeling old paint shall be made sound by additional scraping, and sanding as necessary. 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.

NEW CONCRETE must be properly water cured and at least 28 days old. Surface must be dry. All concrete deck surfaces must pass a four (4) to six (6) hour "tape" test for dampness. Tape a thick plastic cover (bag) to the deck for period. If moisture is found on the underside of the bag or plastic the concrete needs to dry more. Repeat the test until no moisture is found. Only then continue by using Muradic Acid for etching of heavily soiled and / or smoothly finished concrete. Dilute 1 part of acid to 10 part of water and clean as suggested for the chlorine solution.

STEP 3:

REPAIRING SURFACE & PATCHING IMPERFECTIONS

Install all expansion control joints, protrusions, vents, and/or flashing according to local codes and practices in your local area. Fill all cracks, seams, and indentations less than 1/16" with **THERMAPATCH™**, or other polymerized grout. Finish as smoothly as possible. Cracks exceeding 1/16" wide must be routed or saw cut. Repeat procedure as described above. Other urethane - based caulking can be used if **THERMAPATCH™** is not available. Vacuum or power blow all dust, dirt, or other contaminants before continuing.

When using **THERMAPATCH™** 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 **THERMAPATCH™** coat 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 as 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 SEAMS (If Applicable)

Reinforce all **joins** and flashing areas as follows: With brush or roller apply a liberal 6" wide wet coat of **ELASTOPRIME™**. Within 15 minutes, embed the **POLYMESH™** into the **ELASTOPRIME™**. Avoid wrinkles or gaps between the material and the surface. The **POLYMESH™** may be cut and overlaid. Let dry for 1-2 hours before applying a second coat of **ELASTOPRIME™** overlapping 1" each side. Let dry for at least 2 hours before continuing

STEP 5:

TAPING VENT PIPES, VENTS, etc.

(If necessary and desirable, otherwise proceed to STEP 6). 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 spray 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 at least 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 6:

PRIMER COAT (see Step 5 before proceeding)

Apply **ELASTOPRIME™** 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 .025 tip. When spraying or rolling **ELASTOPRIME™**, it must be applied perpendicular to the slope (if any) of the roof. Example: If the slope of the roof runs from North to South then the coating will be applied spraying from East to West. This will be the start of a checkerboard application pattern. *See diagram below.* Apply **ELASTOPRIME™** at a rate of 50 – 150 sq.ft./gal (depending on porosity of surface), covering the entire roof surface. Wet film thickness of 10 - 12 mils wet will result in dry film thickness of 4 - 5 mils at 100 sq.ft./Gallon.

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 (depending upon porosity of surface type of substrate – refer to Film Thickness chart on Page 1 for 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.*

Apply the second 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 for correct coverage rate for your substrate type) over the entire roof surface. 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 installed 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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Creating a Checkerboard Pattern Using SPRAYER or ROLLER

