



THERMOLENE[®] SEBS CONCRETE ROOF RESTORATION SYSTEM

GUIDE SPECIFICATION

PART 1 GENERAL

1.1 SUMMARY

- A. Provide labor, materials, equipment and supervision necessary to install a fluid-applied roofing system as outlined in this specification to new or existing concrete surfaces.
- B. The Manufacturer's Application Instructions for each product used is considered part of this specification and should be followed at all times.
- C. Related Sections:
 - 1. Cast-In-Place Concrete: Section 03 30 ___.
 - 2. Flashing and Sheet Metal: Section 07 60 ___.
 - 3. Roof Accessories: Section 07 72 ___.
 - 4. Joint Sealants: Section 07 92 ___.

1.2 SYSTEM DESCRIPTION

- A. THERMOLENE[®] SEBS CONCRETE ROOF RESTORATION shall be a complete system of compatible materials supplied by THERMO MATERIALS[®] to create a seamless waterproof membrane.
- B. THERMOLENE[®] SEBS CONCRETE ROOF RESTORATION shall be designated for application on the specific type of deck indicated on the drawings.

1.3 SUBMITTALS

- A. Product Data: Submit THERMO MATERIALS[®] product literature and installation instructions.
- B. Project Reference List: Submit list of projects as required by this specification.
- C. Samples: Submit samples of specified fluid-applied roofing system. Samples shall be construed as examples of finished color and texture of the system only.
- D. Applicator Approval: Submit letter from manufacturer stating applicator is approved to install the THERMOLENE[®] SEBS CONCRETE ROOF RESTORATION system.
- E. Warranty: Submit copy of manufacturer's standard warranty.

1.4 QUALITY ASSURANCE

- A. Supplier Qualifications: THERMOLENE[®] SEBS CONCRETE ROOF RESTORATION, as supplied by THERMO MATERIALS[®] is approved for use on this project.
- B. Applicator Qualifications: Applicators shall be approved/certified to install specified system.
- C. Requirements of Regulatory Agencies: Materials used in the fluid-applied roofing system shall meet Federal, State and local VOC regulations.
- D. Field Quality Control: Upon completion of the fluid-applied roofing installation, an inspection by THERMO MATERIALS[®] or its designated third party inspection company may be required. Consult THERMO MATERIALS[®] for details.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Materials shall be delivered in original sealed containers, clearly marked with supplier's name, brand name and type of material.
- B. Storage and Handling: Recommended material storage temperature is 75°F (23.8°C). Handle products to avoid damage to container. Do not store for long periods in direct sunlight.

1.6 JOB CONDITIONS

- A. Environmental Conditions:
 - 1. Do not proceed with application of fluid-applied materials when surface temperature is less than 40°F (4.4°C), or if precipitation is imminent.
 - 2. Do not apply material unless surface to receive fluid-applied membrane is clean and dry.

1.7 WARRANTY

- A. Upon request, THERMO MATERIALS® shall offer the manufacturer's standard warranty upon receipt of a properly executed warranty request form.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. THERMO MATERIALS®, 301 Walnut Springs Rd., Lindale, TX 75771, Toll Free (800) 882-7007, Fax (903) 881-8787, www.thermomaterials.com.

2.2 MATERIALS

- A. Fluid-Applied Roofing Materials:
 - 1. Elastomeric Primer Membrane: SEBS Acrylic or Co-Bond Epoxy Primer.
 - 2. Elastomeric Base/Intermediate/Top Membrane: Thermolene® SEBS Reflective. Standard colors are gray or white.
 - 3. Flashing/Reinforcement Fabric: Thermopolyester SB-075 or Self-adhering THERMO TAPE.
 - 4. Sealant: Thermolene® SEBS sealant by THERMO MATERIALS®.
 - 5. Flashing Mastic: Thermolene® SEBS Mastic (Drains, Penetrations, Curbs, Parapet Walls, Scuppers).
 - 6. Pitch Pan Sealant: Thermolene® SEBS Pitch Pan Sealant (Restoring Old Pitch Pans).
 - 7. Gas Line Product: Thermolene® SEBS Safety Yellow Membrane (Restore Old Exterior Gas Lines).
- B. Physical properties of cured fluid-applied system used on this project are:

PERFORMANCE REQUIREMENTS OF CURED FILM			
PHYSICAL PROPERTIES	TEST METHOD	BASE COAT	TOPCOAT
Tensile Strength	ASTM D412	800 psi	2,140 psi
Elongation	ASTM D412	400%	830%
Permanent Set	ASTM D412	<8%	<10%
Tear Resistance	ASTM D1004	151 lb/in	255 lb/in
Water Resistance	ASTM D471	<3% @ 7 days	<3% @ 7 days
MVT @ 30 mils	ASTM E96	1.1 English	1.6 English
Taber Abrasion	ASTM D4060	N/A	N/A
Shore A	ASTM D2240	65 - 75	55 - 65
Adhesion	ASTM D903	15+ pli	15+ pli
Weathering Resistance	ASTM D822	N/A	Slight Chalk
Thermal Shock	Alternate Heat/Cold	No Loss of Adhesion	No Loss of Adhesion

2.3 ACCESSORIES

- A. Primers: Concrete and metal primers as recommended by manufacturer.
- B. Fabric reinforcement and waterproofing coverings for expansion joints shall be compatible with specified fluid-applied roofing system.
- C. Miscellaneous materials such as adhesives, metal vents and drains shall be a composite part of the roof system and shall be compatible with the fluid-applied roofing system.
- D. Granules or Aggregates (Optional): Consult THERMO MATERIALS® for recommendations.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Concrete: Verify that the work done under other sections meets the following requirements:
 - 1. The concrete deck surface is free of ridges and sharp projections. If metal forms or decks are used, they should be ventilated to permit adequate drying of concrete on exterior exposed deck.
 - 2. The concrete was cured for a minimum of 28 days. Water-cured treatment of concrete is preferred. The use of concrete curing agents, if any, shall be of the sodium silicate base only; others require written approval by THERMO MATERIALS®.
 - 3. The concrete was finished by a power or hand steel trowel followed by soft hair broom to obtain light texture or "sidewalk" finish.
 - 4. Damaged areas of the concrete deck are restored to match adjacent areas. Use Thermolene® SEBS Mastic, Mastecell, and sand for filling and leveling.
 - 5. Verify that there are no areas of ponding water concerns on any part of the roof that will not dry up within 48 hours.

3.2 PREPARATION

- A. Protection:
 - 1. Keep products away from heat, sparks, and flames. Do not allow use of spark producing equipment during application and until vapors are gone. Post "No Smoking" signs.
 - 2. The overspray and/or solvents from spraying fluid-applied roofing materials can carry considerable distances and care should be taken to do the following:
 - a. Post warning signs a minimum of 100 feet from the work area.
 - b. Mask off or cover all air intakes near the work area to prevent odors from entering occupied areas of the building or structure.
 - c. Set up wind breaks when needed.
 - d. Minimize or exclude all personnel not directly involved with the fluid-applied roofing application.
 - e. Have CO₂ or other dry chemical fire extinguishers available at the jobsite.
 - f. Provide adequate ventilation.
 - 3. Protect plants, vegetation and animals which might be affected by the fluid-applied roofing installation. Use drop cloths or masking as required.
- B. Surface Preparation:
 - 1. Cleaning: The surface must be clean, sound, dry and free of any materials that would inhibit proper adhesion of the Thermolene® SEBS sealant and fluid-applied roofing materials. To achieve a clean surface, it may require the use of cleaners, high pressure-washing, scraping, power brooming, vacuuming or other means to remove all contaminants.
 - 2. Cracks and Cold Joints: Visible hairline cracks (**up to 1/16" in width**) in concrete shall be cleaned, primed and treated with Thermolene® SEBS Mastic material a minimum distance of 3" on each side of crack to yield a total thickness of 30 dry mils. Large cracks (**over 1/8" in width**) and cold joints in concrete shall be detailed with Self-adhering THERMO TAPE, and Thermolene® SEBS Mastic 3" on each side of crack to yield a total thickness of 30 dry mils.
 - 3. Control Joints: Seal secondary control joints with Thermolene® SEBS sealant. Sealant shall be applied to inside area of joint only, not applied to deck surface. Detail sealed joints with minimum Self-adhering THERMO TAPE, and Thermolene® SEBS Mastic 3" on each side of control joint to yield a total thickness of 30 dry mils.
 - 4. Surface Condition: Surface shall be clean and dry prior to fluid-applied application.

3.3 APPLICATION

A. Elastomeric Fluid-Applied Application:

10 Year Warranty Requirements

1. Primer: Apply SEBS Acrylic or CoBond primer @ a rate of 1/3 Gallons per 100 square feet in strict accordance with procedures outlined by THERMO MATERIALS® and allow to cure.
2. Base Membrane: Apply Thermolene® SEBS Reflective at a rate of 2.0 gallons per 100 square feet in strict accordance with procedures outlined by THERMO MATERIALS® and allow to cure.
3. Top Membrane: Apply Thermolene® SEBS Reflective at a rate of 1.5 gallons per 100 square feet in strict accordance with procedures outlined by THERMO MATERIALS® and allow to cure. Application of top membrane shall be in a perpendicular direction to the previous fluid-applied membrane.

Total system of fluid-applied membrane to average 52 wet mils or 42 DFT.

*Note: Thickness values of cured film are averages and can vary due to finish of surface.

3.4 CLEANING

- #### A. Remove debris resulting from completion of fluid-applied roofing operation from the project site.

3.5 PROTECTION

- #### A. After completion of application, do not allow traffic on fluid-applied surfaces for a period of at least 48 hours at 75°F and 50% R.H., or until completely cured.

END OF SECTION

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