



## **QUALITY THERMOLASTIC® WALL PLUS EXTERIOR METAL WALL COATING SYSTEM GUIDE SPECIFICATION**

### **PART 1 GENERAL**

#### **1.1 SUMMARY**

- A. Provide labor, materials, equipment and supervision necessary to install a spray or roller applied high-performance fluid-applied system to create a seamless weatherproof membrane system over above-grade metal vertical surfaces as outlined in this specification.
- B. The manufacturer's application instructions for each product used are considered part of this specification and should be followed at all times.
- C. Related Sections:
  - 1. Section 03 30 00 – Cast-in-Place Concrete
  - 2. Section 07 24 00 – Exterior Insulation and Finish Systems
  - 3. Section 07 60 00 – Flashing and Sheet Metal
  - 4. Section 07 90 00 – Joint Protection

#### **1.2 SYSTEM DESCRIPTION**

- A. QUALITY THERMOLASTIC® WALL PLUS EXTERIOR METAL WALL COATING SYSTEM shall be a complete system of compatible materials to create a seamless weatherproof membrane vertical system.
- B. QUALITY THERMOLASTIC® WALL PLUS EXTERIOR METAL WALL COATING SYSTEM shall be designated for application on the specific type of vertical surface indicated on the drawings.

#### **1.3 SUBMITTALS**

- A. Product Data:
  - 1. Submit Thermo Materials® product literature and installation instructions.
- B. Project Reference List:
  - 1. Submit list of projects as required by this specification.
- C. Samples:
  - 1. Submit samples of specified fluid-applied membrane vertical system.
  - 2. Samples shall be construed as examples of finished color and texture only.
- D. Applicator Approval:
  - 1. Submit letter from manufacturer stating applicator is approved to install the QUALITY THERMOLASTIC® WALL PLUS EXTERIOR METAL WALL COATING SYSTEM.
- E. Warranty:
  - 1. Submit copy of manufacturer's standard warranty.

## **1.4 QUALITY ASSURANCE**

- A. Supplier Qualifications:
  - 1. QUALITY THERMOLASTIC® WALL PLUS EXTERIOR METAL WALL COATING SYSTEM, as supplied by Thermo Manufacturing Systems, is approved for use on this project.
- B. Applicator Qualifications:
  - 1. A single installer shall perform the work.
  - 2. The Applicator shall be approved by Thermo Manufacturing Systems to install the specified fluid-applied membrane vertical system.
  - 3. Manufacturer's written verification of applicator approval is required.
- C. Requirements of Regulatory Agencies:
  - 1. The fluid-applied membrane vertical system shall be rated Class "A" (Spread of Flame) per ASTM E108.
  - 2. Materials used in the fluid-applied membrane vertical system shall meet Federal, State and local VOC regulations.
- D. Field Quality Control:
  - 1. Upon completion of the QUALITY THERMOLASTIC® WALL PLUS EXTERIOR METAL WALL COATING SYSTEM installation, an inspection by Thermo Manufacturing Systems or its designated third party inspection company may be required.
  - 2. Consult Thermo Manufacturing Systems for details.

## **1.5 DELIVERY, STORAGE, AND HANDLING**

- A. Delivery:
  - 1. Materials shall be delivered in manufacturer's original sealed containers with labels intact.
- B. Storage and Handling:
  - 1. Recommended material storage temperature is 40°F - 80°F. DO NOT FREEZE.
  - 2. Handle products to avoid damage to container.
  - 3. Do not store for long periods in direct sunlight.
  - 4. Keep product away from heat, sparks and open flame.

## **1.6 JOB CONDITIONS**

- A. Environmental Conditions:
  - 1. Do not proceed with application of fluid-applied membrane when surface temperature is less than 40°F.
  - 2. Fluid-applied membrane shall not be applied during precipitation or when there is a probability of precipitation during application.
  - 3. Do not apply material unless surface to receive fluid-applied membrane is clean and dry.
  - 4. Coordinate weatherproofing work with other trades. Applicator shall have sole right of access to the specified area for the time needed to complete the application and allow the fluid-applied membrane to cure adequately.
- B. Protection:
  - 1. Take all measures necessary to protect unrelated surfaces from fluid-applied membrane overspray or spillage.
  - 2. Maintain work area in a neat and orderly condition. Remove empty containers, rags and rubbish daily from site.

## **1.7 WARRANTY**

- A. Applicator must be eligible for and submit application to Thermo Manufacturing Systems prior to job start/order acceptance to determine eligibility for warranty.
- B. Upon request and after the project's completion and acceptance, following individual warranty guidelines, a fully executed specified warranty from Thermo Manufacturing Systems, LLC, shall be delivered to the Owner.

## **PART 2 - PRODUCTS**

### **2.1 MANUFACTURER**

- A. Thermo Manufacturing Systems, LLC, 301 Walnut Springs Road, PO Box 218, Lindale TX 75771, Toll Free (800) 882-7007, Fax (903) 881-8787, [www.thermomaterials.com](http://www.thermomaterials.com).

### **2.2 MATERIALS**

- A. Fluid-Applied Membrane Materials:
1. Cleaner: Thermoclean® Surface Cleaner.
  2. Elastomeric Base/Surface Membrane: Thermolastic® Wall Plus. Standard colors are gray or white.
  3. Primer:
    - a. Light surface rust treatment: Thermo Rust Inhibitor.
    - b. Moderate surface rust treatment: Thermo Rust Converter.
  4. Flashing Mastic: Thermolastic® T-60 or Thermolastic® Fibrated Mastic.
  5. Sealant: Thermolastic® Acrylic Sealant.
- B. Typical physical properties of the fluid-applied membrane materials used on this project are:

<b>PHYSICAL PROPERTIES</b>	
<b>PROPERTY</b>	<b>VALUE</b>
Viscosity (KU)	92
Viscosity (cPs)	12,000
Solids Content by Weight	60% ± 2%

### **2.3 ACCESSORIES**

- A. Miscellaneous materials such as backer rods or compression tubes shall be approved by the manufacturer of the high-performance fluid-applied membrane.
- B. All materials shall be applied and/or installed in accordance with its manufacturer's recommendations.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Inspect existing metal wall surface to receive the fluid-applied membrane. **Metal panels with no integrity due to excessive rust and deterioration, shall be replaced.** All other areas of rust must be prepared and primed as required.
- B. Examine existing surface for loose fasteners, gapped seams, surface rust, pitting and scaling.
- C. Inspect surface to insure they are clean, smooth, sound, properly prepared and free of moisture, dirt, algae and debris.
- D. Verify all critical areas in the vicinity of the application area are suitably protected.

### **3.2 PREPARATION**

- A. Protection:
1. Keep products away from heat, sparks and flames. Do not allow the use of spark producing equipment during application until vapors are gone. Post "No Smoking" signs.
  2. The overspray from fluid-applied material 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. Close or cover air intakes into building and/or air conditioner intakes.
  - c. Set up wind breaks when needed.
  - d. Minimize or exclude all personnel not directly involved with fluid-applied membrane application.
  - e. Have CO<sub>2</sub> 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 fluid-applied membrane installation. Use drop cloths or masking as required.

B. Surface Preparation:

1. This section of the specification does not extensively outline procedures to correct existing construction defects or distress. The applicator should outline this work before work commences and shall be performed observing good trade practices.
2. Remove dirt and foreign material detrimental to adhesion or application of fluid-applied membrane vertical system. Pressure wash using a minimum 3,000 psi power washer with Thermoclean® Surface Cleaner and water. In areas where the existing surface prohibits pressure washing, clean these areas by hand using Thermoclean® Surface Cleaner and water. **If algae and mildew is growing on the surface, cleaning must include bleach in the washing of the surface.** Mix solution of one tablespoon Thermoclean® Surface Cleaner and two pints of liquid bleach in one gallon of water to clean areas with algae and/or mildew. It is very important to remove all water and bleach residue used to clean the surface. Rinse well with clean water and allow to completely dry
3. Metal surfaces having loose scale or rust, must be cleaned and primed prior to the fluid-applied membrane application as job conditions dictate. Areas with light rust conditions will be treated with Thermo Rust Inhibitor at a rate of 200 square feet per gallon. Areas with moderate rust conditions will be treated with Thermo Rust Converter at a rate of 200 square feet per gallon.
4. Tighten all loose fasteners and replace stripped fasteners with oversized version of the same fastener, i.e. aluminum, galvanized, or stainless must remain as designed by the manufacturer.
5. On all vertical seams, apply Thermolastic® Acrylic Sealant or Thermolastic® Fibrated Mastic when there is a joint that will be efficiently filled. Smooth out lumps or imperfections in the application while still wet. Allow to thoroughly cure.
6. Apply Thermolastic® Acrylic Sealant or Thermolastic® Fibrated Mastic around fasteners and strike or tool into place to achieve a smooth transition. Allow to thoroughly cure.
7. Allow prepared surfaces to cure completely before proceeding with fluid-applied membrane application.

### **3.3 APPLICATION**

A. Fluid-Applied Membrane Application:

- B. Base Membrane: Apply Thermolastic® Wall Plus fluid-applied membrane at a rate of 1 gallon per 150-200 square feet to all surfaces that will receive the fluid-applied membrane vertical system to yield an average of 8-10 wet mils in strict accordance with procedures outlined by Thermo Manufacturing Systems. Back roll open texture surfaces to achieve uniformity. Allow application to fully cure.
- C. Surface Membrane: When base membrane is cured, apply Thermolastic® Wall Plus fluid-applied surface membrane at a rate of 1 gallon per 150-200 square feet to yield an average of 8-10 wet mils. Back roll open texture surfaces to achieve uniformity. Application of this pass shall be in a perpendicular direction to the previous installed membrane. Allow application to fully cure.

### **3.4 FIELD QUALITY CONTROL**

E. Manufacturer's Field Services:

1. Inspection by the fluid-applied membrane manufacturer's representative may be required to verify the proper installation of the system. Any areas that do not meet the minimum standards for application as specified herein shall be corrected at the contractor's expense. Manufacturer's inspection or verification shall not constitute acceptance of responsibility for any improper application of material.

### **3.5 CLEANING**

- A. Clean any splatters or spills with water before material dries. Once dried, material can only be removed mechanically.
- B. Remove temporary coverings and protection from adjacent work areas.
- C. Remove debris, resulting from completion of fluid-applied membrane application, from the project site.

**END OF SECTION**

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