

**SECTION 07 14 00**

**FLUID APPLIED WATERPROOFING**

**SECTION 09 34 00**

**WATERPROOFING-MEMBRANE TILING**

See attached sheet for options

**Multicoat Underlayment System**

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*This guide specification has been prepared by Multicoat Product Systems, in printed and electronic media, as an aid to specifiers in preparing written construction documents for a cold-fluid applied elastomeric waterproofing membrane. The MULTICOAT UNDERLAYMENT WATERPROOFING SYSTEM is a multi-layer protective coating which combines an elastomeric waterproofing membrane, MULASTICOAT, with resin modified cementitious top coating, MULTI-BASE. This system is designed as a underlayment waterproofing material to be topped with lightweight concrete, hard rock or similar materials for balconies and walkways. It can be applied to plywood, OSB, concrete and most other surfaces in need of waterproofing.*

*This guide specification intended use is for multiple applications. Delete the section and tile not applicable. Edit entire master to suit project requirements. Modify or add items as necessary. Delete items which are not applicable. Words and sentences within brackets [ ] reflect a choice to be made regarding inclusion or exclusion of a particular item or statement. This section may include performance, proprietary and descriptive type specifications. Edit to avoid conflicting requirements. Editor notes to guide the specifier are included between lines of asterisks to assist in choices to be made. Remove these notes before final printing of specification.*

*This guide specification is written around the Construction Specifications Institute (CSI) Section Format standards.*

*For specification assistance on specific product applications, please contact our offices or any of our local product representatives throughout the country.*

*Multicoat Product Systems reserves the right to modify these guide specifications at any time. Updates for this guide specification will be posted on the manufacturer's web site and/or in printed matter as they occur. Manufacturer makes no expressed or implied warranties regarding content, errors, or omissions in the information presented.*

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**1.GENERAL**

**1. RELATED DOCUMENTS**

- A. Drawings and other Contract Documents, listed in the agreement between the Owner and Contractor, apply to this Section.

**2. RELATED SECTIONS**

- A. 06 16 30 – Wood Underlayment Materials
- B. 09 67 00 – Fluid Applied Flooring
- C. 03 50 00 – Cementitious Decks and Underlayment

**3. SUMMARY**

- A. Section includes an elastomeric waterproofing membrane combined with resin modified cementitious top coating for underlayment applications.

4. SUBMITTALS
  - A. Product Data:
    1. Submit manufacturer's descriptive literature and product specifications for each product.
    2. Submit laboratory tests or data that validate product compliance with the performance criteria specified.
5. QUALITY ASSURANCE
  - A. Installer Qualifications:
    1. Acceptable to manufacturer with documented experience on at least 2 projects of similar nature in past 2 years and/or training provided by the product manufacturer.
  - B. Manufacturer Qualifications:
    1. Company specializing in manufacturing Products specified in this Section with minimum **[10]** years documented experience.
6. DELIVERY AND STORAGE
  - A. Deliver, store off the ground and covered, handle and protect products from moisture in accordance with manufacturer's instructions.
  - B. Deliver materials in manufacturer's unopened containers, fully identified with brand, type, grade, class and all other qualifying information. Provide Material Safety Data Sheets for each product.
  - C. Take necessary precautions to keep products clean, dry and free of damage.
7. WARRANTY
  - A. Materials are guaranteed with respect to uniformity and quality within manufacturer's specifications.
8. PROJECT CONDITIONS
  - A. Do not apply if substrate temperature is below 40°F or above 100°F, or if ambient temperature below 40°F above 100°F.
  - B. Do not apply if precipitation is expected within a twenty four (24) hour period.

## 2.PRODUCTS

1. MANUFACTURER
  - A. Multicoat Corporation 23331 Antonio Parkway, Rancho Santa Margarita, CA 92688, 877-685-8426, Email: info@multicoat.com, www.multicoat.com

## 2. MATERIALS

Underlayment waterproofing system is a multi-layer protective coating which combines an elastomeric waterproofing membrane, with resin modified cementitious top coating. This system is designed as an underlayment waterproofing material to be topped with lightweight concrete, hard rock or similar materials for balconies and walkways. It can be applied to plywood, OSB, concrete and most other surfaces in need of waterproofing.

### A. MULTICOAT MULASTICOAT Elastomeric Waterproofing Membrane

1. Tensile Strength & Elongation: 119.6 psi / Elongation 1494.5% (ASTM-D2370)
2. Tensile Bond Adhesion, PSI: 162 Cohesive (ASTM C297)
3. Low Temperature Flexibility: ½” Room Temp Pass (ASTM D522)  
(Mandrel Bend) 1” @ -5F Pass  
½” @ -5F Pass
4. Static Hydrostatic Pressure Test: Pass >45psi (ASTM C1306)
5. Hydrostatic Head: 12” Water/Film @ 40mil Pass 96 hour/no effect

### B. MULTICOAT MULTI-BASE Resin modified cementitious top coating

1. Weatherometer: 2000 hrs. – Passed (ASTM G23)
2. Compressive Strength: 2595 psi @ 45 Days air cured - (ASTM C109)
3. Abrasion Test: Passed 1000cyc-1000gms (ASTM-1242A)
4. 50-Cycle Freeze thaw: Passed (ASTM-C67)
5. Impact Resistance: MIL-D-3134F Passed

### C. MULTICOAT SCRATCH KOTE 2000 Super bonding synthetic resin modified cementitious coating which forms a hard, rough textured base coat securely bonding to a substrate.

1. Weatherometer: 2000 hrs. – Passed (ASTM G23)
2. Compressive Strength: 2595 psi @ 45 Days air cured - (ASTM C109)
3. Flexural Strength: Modulus of Rupture - 770psi (ASTM-D790)
4. Tensile Strength: 457 psi (ASTM-C190)
5. Bond Strength (Flatwise Tension): 225 psi (ASTM-C297)
6. Abrasion Test: Passed 1000cyc-1000gms (ASTM-1242A)
7. 50-Cycle Freeze thaw: Passed (ASTM-C67)
8. Impact Resistance: MIL-D-3134F Passed

## 3. ACCESSORY MATERIALS

- A. Concrete Repair: MULTICOAT SPEED MIX 2000 is a fast setting, resin modified, hydraulic cement. It is used by itself for most types of concrete repair such as leveling, filling cavities and cracks. Can be used interior or exterior, vertical, horizontal or overhead.
- B. Crack Repair: MULTICOAT SPEED BOND CRACK REPAIR SYSTEM is unique two component water based polyurethane material. SPEED BOND is used to repair cracks, holes, and depressions prior to the application of various Multicoat Systems. SPEED BOND is a two-part material packaged in a standard caulking tube which does not require any special tools.
- C. Fabric: Stitch Bond Polyester Fabric, 12” fabric furnished in a roll. Used in conjunction with MULASTICOAT to form flashing.
- D. Water: Potable.

### 3.EXECUTION

#### 1. EXAMINATION

- A. Examine substrates and adjoining construction, and conditions under which Work is to be installed. Do not proceed with Work until unsatisfactory conditions are corrected.
- B. Verify the following substrate conditions before application of waterproof lining:
  - 1. That substrate condition is satisfactory and in accordance with manufacturer's instructions.
  - 2. That concrete surfaces are free of voids, spalled areas, loose aggregate and sharp protrusions, and with no coarse aggregate visible.

#### 2. PREPARATION

- A. Substrate must be structurally sound and free from grease, oil, dirt, dust, sealers, water repellents and other foreign materials which may interfere with proper bonding.
- B. Plywood/OSB substrate: Moisture content should be below 15%. Use moisture meter to check. All above grade decks should be properly vented, sloped and flashed, including tongue and groove plywood/OSB, must be 5/8" minimum thickness, 16" minimum support spacing, edges blocked, all fastened with 8 penny ring shank nails or equivalent, on maximum 6" centers. Plywood and OSB must be nailed on all four edges. A 2.5 metal lathe is to be stapled 3" on centers; all edges overlapped 2" and stapled 1" on center.
- C. Concrete substrate: Repair cracks with Multicoat Speed Bond Crack Repair material. (See Instruction Sheet) All holes, or voids, need to be filled with Multicoat Speed Mix Hydraulic Cement. (See Instruction Sheet)

#### 3. APPLICATION

- A. General: Comply with waterproofing manufacturer's written instructions for application and curing.
- B. Coverage: MULASTICOAT: 80 to 100 sq. ft. per gallon. Stitch Bond Polyester Fabric: 10" x 324' rolls. MULTI-BASE: 60 to 80 sq. ft. per bag. SCRATCH KOTE: 175 sq. ft. per bag.
- C. Posts, coves, drains, penetrations, and other irregularities to be treated with MULASTICOAT and stitch bond polyester fabric. Embed stitch bond polyester fabric into wet MULASTICOAT. Then apply additional MULASTICOAT to saturate fabric, and allow to dry. Appropriate drip edges should be used as per local building codes.
- D. PLYWOOD: Mix and install MULT-BASE into metal lathe and trowel to thickness of lathe so that the lathe is visible but not felt. Allow to dry. Apply MULASTICOAT over entire area in two coats with brush, roller, airless sprayer or hopper gun. Allow first coat to dry to touch, usually 1-2 hours depending on ambient air temperature. Apply second coat in a crisscross pattern to first coat. Immediately broadcast sand into the 2nd coat of MULASTICOAT while it is still wet. After product has dried completely, but prior to application of the SCRATCH KOTE 2000, brush off loose sand from the substrate. Once second coat has dried, mix and apply (roller, trowel or hopper gun) a coat of SCRATCH KOTE and allow to dry (follow directions on SCRATCH KOTE and MULASTICOAT INSTRUCTION SHEET).

- E. CONCRETE: Apply MULASTICOAT over entire area in two coats with brush, roller, airless sprayer or hopper gun. Allow first coat to dry to touch, usually 1-2 hours depending on ambient air temperature. Apply second coat in a crisscross pattern to first coat. Immediately broadcast sand into the 2nd coat of MULASTICOAT while it is still wet. After product has dried completely, but prior to application of the SCRATCH KOTE 2000, brush off loose sand from the substrate. Allow MULASTICOAT to fully dry before proceeding with SCRATCH KOTE. Mix and apply SCRATCH KOTE. (Follow directions on SCRATCH KOTE and MULASTICOAT INSTRUCTION SHEET).
- F. Once the SCRATCH KOTE has dried continue with wearing surface installation.
- G. Light Weight Concrete, Brick, Stone, Tile can be mortared and set directly onto SCRATCH KOTE.
- H. NOTE: Be careful not to puncture deck surface when applying finish material as this will compromise the waterproofing membrane and cause leaks.
- I. DO NOT ALLOW MULASTICOAT TO BE EXPOSED FOR MORE THAN 24 HOURS.
- J. DO NOT ALLOW MULASTICOAT TO GET WET DURNG INSTALLATION OR DRYING.

END OF SECTION 071400