



UltraKote 3

Three Coat Stucco Specification

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. UltraKote Exterior Wall System: Three Coat Stucco, Acrylic Primer and Finish coat.

1.02 RELATED SECTIONS

- A. Concrete 03300
- B. Masonry 04200
- C. Plywood 04500
- D. Cold-formed metal framing: Light gauge load-bearing metal framing. 05400
- E. Rough carpentry: Wood framing. 06100
- F. Building paper 07260
- G. Sealants 07900
- H. Doors and windows 08000
- I. Metal support systems 09100
- J. Non-load-bearing wall framing: Non-load-bearing metal framing systems. 09110
- K. Metal lath 09206
- L. Gypsum substrates 09250

1.03 SYSTEM DETAILS

- A. ULTRAKOTE 3™ WALL SYSTEM: is a stucco system comprised of 3/8" – 7/8" thick hard coat stucco, UltraPrime (acrylic primer) or Stucco Conditioner and DuraTex (acrylic) or UltraFlex (elastomeric) finish coat.

- B. DESIGN REQUIREMENTS:
 - 1. The system shall be installed in strict accordance with current recommended published details and product specifications from the system's manufacturer.
 - 2. Sealants and backer rod as required at dissimilar materials and expansion joints shall provide a complete watertight system.
 - 3. Minimum slope for all projections shall be 1:4 with a maximum length of 12".
 - 4. Substrates shall be securely fastened with nails, staples or screws.
 - 5. Expansion Joints: location and design of expansion joints is the responsibility of the designer or architect and shall be shown on the project drawings. As a minimum, expansion joints shall be located at:
 - a. Where building expansion joints occur.
 - b. At floor lines in wood frame construction.
 - c. Where the UltraKote Wall System abuts dissimilar materials.

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1.04 SYSTEM DESCRIPTION

- A. WEATHER BARRIER:
1. Minimum Grade D building paper complying with federal specifications UUB 790a or asphalt rag felt complying with UL standard number 55-A or other code-recognized equivalent. One layer of Grade D 60 minute paper with one layer of EPS or extruded poly styrene with tongue and groove edges or two layers Grade D 60 minute paper are required by the Uniform Building Code (UBC) for wood based sheathings. Check applicable code and code compliance report for appropriate type.
- B. INSULATION BOARDS:
1. EPS (Expanded Polystyrene) 2' x 8' tongue and groove nominal 1.5 lb/ft. that meets ASTM C 578 Type 1 Flame spread less than 25, smoke development less than 450 per ASTM 84. (Note: minimum required thickness is 1 inch and maximum thickness is 1.5").
 - a. Air dried (aged) six weeks prior to installation.
- C. INSULATION BOARD FASTENERS:
1. Galvanized roofing nails with 1" penetration into framing member.
- D. Metal Lath or Woven Wire:
1. 1 1/2" self furred galvanized steel woven wire fabric (minimum 17 gauge) is required. Other laths shall comply with ASTM C933-80 (welded) and ASTM C1032-86 (woven).
 2. Expanded metal lath that meets ASTM C847-93. Furring and self furring requirements shall be as set forth for wire-fabric lath. Minimum weight is 0.665 kg/m² (2.5 lb/yd²)
- E. ULTRAKOTE BASE COATS:
1. UltraKote™ fiber reinforced concentrate or UltraKote™ Premix.
- F. PLASTER SAND:
1. Plaster sand must be clean and free of deleterious amounts of loam, clay, silt, soluble salts and organic matter. Sampling and testing must comply with ASTM C144. The graduation of the plaster sand must be as follows:
U.S. Standard Sieve retained by weight: ±2 percent

| | Min. | Max. |
|---------|------|------|
| No. 4 | - | 0 |
| No. 8 | 0 | 10 |
| No. 16 | 10 | 40 |
| No. 30 | 30 | 65 |
| No. 50 | 70 | 90 |
| No. 100 | 95 | 100 |

1.04 SYSTEM DESCRIPTION (cont.)

- G. WATER: Clean and potable with no foreign material.
- H. PRIMER:
 - 1. UltraKote Stucco Conditioner™: A 100% ready mixed clear penetrating sealer with no fillers that will equal the suction of the base coat, providing a smooth even surface for the application of UltraKote Finishes.
 - 2. UltraPrime™: A 100% acrylic ready mixed moisture resistant primer and sealer that equal the suction of the base coat, providing a smooth even surface for the application of UltraKote Finishes.
- I. FINISHES:
 - 1. DuraTex™: An acrylic finish available in multiple textures.
 - 2. UltraFlex™: An elastomeric finish available in multiple textures.

PART 2 – ACCESSORIES

- A. TRIM:
 - 1. Casing bead, corner bead, expansion joint and weep screed accessories shall meet the requirements of ASTM C1063. Accessories shall be: vinyl, meeting ASTM D1784; galvanized, meeting ASTM A525 and ASTM A526; or zinc, meeting ASTM B69. Zinc accessories are recommended where highly humid or salt-laden service conditions exist.
 - 2. Expansion and/or control joints will be installed as required within the field of the stucco system. Specific locations are the responsibility of first the design professional followed in order by the builder, and then the stucco manufacturer. In the absence of specific locations or system details, expansion and/or control joints should be located in accordance with ASTM C-1063.
- B. FASTENERS:
 - 1. Fasteners shall comply with ASTM C1063 for type and size of fastener to secure material in place.

PART 3 – EXECUTION

3.01 INSPECTION

- A. SUBSTRATE:
 - 1. Acceptable substrates are tongue and groove EPS (Expanded Polystyrene), water resistive core gypsum sheathing (ASTM C 79), Dens-glass Gold, cement boards, concrete and unit masonry, exposure 1 OSB, exposure 1 or plywood sheathing (grade C-D or better).
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2. Substrate is sound, dry, and free from defects or other foreign materials. Inspect substrate to ensure that there are no irregularities greater than 1/4" in a 8' span.
 3. Sheathings must be securely fastened per applicable local codes.
- B. FLASHINGS:
1. Heads, jambs and sills of all openings must be flashed with a minimum 9" strip of secondary moisture barrier prior to window/door, HVAC, etc., installation.
 2. Windows and openings shall be flashed according to design and building code requirements.
 3. Individual windows that are ganged to make multiple units require continuous head flashing and/or the joints between the units must be fully sealed.
- C. UTILITIES:
1. The system must be properly terminated at all lighting fixtures, electrical outlets, hose bibs, dryer vents, etc.
- D. DECK:
1. Wood decks must be properly flashed prior to system application (refer to UltraKote Detail Drawings).
- E. ROOF:
1. Verify that all roof flashings have been installed in accordance with the guidelines set by the Asphalt Roofing Manufactures Association (ARMA).

3.02 MIXING

- A. ULTRAKOTE 1™:
1. Use mixer which is clean and free of foreign substances.
 2. Add 5-6 gallons of clean potable water to mixer.
 3. Add one bag of UltraKote™ 80lb. concentrate.
 4. Add 240 lbs. of ASTM C144 plaster sand.
 5. Mix for 3-4 minutes at normal mixing speed. Let sit for 2-3 minutes then remix and add a small amount of water if necessary to achieve desired consistency.
- B. ULTRAKOTE DB™:
1. Use a clean plastic pail that is clean and free of foreign substances.
 2. Add 5-6 quarts of clean potable water to pail.
 3. Add small amounts of mix and drill after each increment. Add enough material to achieve a lump free homogeneous consistency ((Do Not Exceed 450 rpm).
 4. Let stand for 4-5 minutes and then re-drill adding a small amount of water to achieve desired consistency.
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- C. FINISH:
1. Thoroughly mix the factory prepared finish with a drill mixer to a homogeneous consistency (Do Not Exceed 450 rpm).
 2. A small amount of water can be added to achieve desired consistency.
 3. Additives are not permitted.
 4. Clean rim of pail and close container when not in use.

3.03 APPLICATION:

- A. Apply to approved substrates in accordance with manufacturer's instruction and local code requirements.
- B. Apply UltraBond™ substrate bonding agent as per specifications to areas that will receive UltraKote 3™ the same day.
- C. Secondary weather barrier (Not required on unit masonry/non-insulated concrete substrates).
1. Installation should be in accordance with the secondary weather barrier manufacturer's specifications and applicable building code requirements. Alternative methods may be used to wrap openings.
 2. The secondary weather barrier shall be free of any damage such as holes or breaks, and must be applied to all surfaces to receive the system.
 3. For optimum effectiveness, wrap the secondary weather barrier into rough openings (doors, windows, etc.) to increase the level of protection to the building frame and interior.
 4. Coordinate work with other trades to assure proper sequencing, detailing and installation of materials.
- D. Lath:
1. Wire fabric lath
 - a. Wire or lath shall be applied with minimum 1" end laps and side laps.
 - b. Furring crimps shall occur at maximum 6" intervals each way. Furring crimps shall provide a minimum 1/8" clearance from the substrate after installation.
- OR
1. Metal Lath:
 - a. The metal lath shall be applied with minimum 1/2" side laps and 1" end laps.
 - b. When end laps occur between supports, lace or wire ties the ends of the sheets with tie wire.
 - c. Refer to ASTM C1063 for additional information.
 - d. Corrosion-resistant fasteners for lath attachment shall penetrate a minimum of 1" into wood framing.
 - e. Apply the UltraKote 3™ Stucco System over steel framing (minimum No. 20 gauge, 0.912 mm (0.0359" thick). Lath is secured to framing using NO. 8-18, S-12, pan head screws, self tapping screws spaced a maximum of 6" vertical on center to studs.
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3.03 APPLICATION:

- A. Apply to approved substrates in accordance with manufacturer's instruction and local code requirements.
- B. Apply ShurBond™ substrate bonding agent as per specifications to areas that will receive UltraKote 3™ the same day.
- C. Secondary weather barrier (Not required on unit masonry/non-insulated concrete substrates).
 - 1. Installation should be in accordance with the secondary weather barrier manufacturer's specifications and applicable building code requirements. Alternative methods may be used to wrap openings.
 - 2. The secondary weather barrier shall be free of any damage such as holes or breaks, and must be applied to all surfaces to receive the system.
 - 3. For optimum effectiveness, wrap the secondary weather barrier into rough openings (doors, windows, etc.) to increase the level of protection to the building frame and interior.
 - 4. Coordinate work with other trades to assure proper sequencing, detailing and installation of materials.
- D. Lath:
 - 1. Wire fabric lath
 - a. Wire or lath shall be applied with minimum 1" end laps and side laps.
 - b. Furring crimps shall occur at maximum 6" intervals each way. Furring crimps shall provide a minimum 1/8" clearance from the substrate after installation.

OR

 - 1. Metal Lath:
 - a. The metal lath shall be applied with minimum ½" side laps and 1" end laps.
 - b. When end laps occur between supports, lace or wire ties the ends of the sheets with tie wire.
 - c. Refer to ASTM C1063 for additional information.
 - d. Corrosion-resistant fasteners for lath attachment shall penetrate a minimum of 1" into wood framing.
 - e. Apply the UltraKote 3™ Stucco System over steel framing (minimum No. 20 gauge, 0.912 mm (0.0359" thick). Lath is secured to framing using NO. 8-18, S-12, pan head screws, self tapping screws spaced a maximum of 6" vertical on center to studs.

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- E. Trim Junction:
1. When two pieces of trim abut:
 - a. Set intersection of trim in a minimum 4" bed of trim sealant approved by UltraKote Products, Inc.
 - b. Allow 1/8" – 3/16" gap between the abutting trim pieces. Do not overlap trim.
 - c. Attach the trim in accordance with manufacturer's specifications. True expansion joints must be fastened to the structural substrate.
 2. When two or more pieces of trim intersect:
 - a. The vertical trim piece shall be continuous with all horizontal pieces.
 - b. Miter all corners at intersections of trim.
 - c. Set intersection of trim in a minimum 4" bed of trim sealant approved by UltraKote Products, Inc.
 - d. Allow 1/8" – 3/16" gap between the intersecting trim pieces. Do not overlap trim.
 - e. Attach the trim in accordance with manufacturer's specifications. True expansion joints must be fastened to the structural substrate.
- F. Application over open framing:
1. The weather-resistive membrane is placed over open wood or steel framing spaced a maximum of 24" on center. Wall bracing, in accordance with the applicable code, shall be installed. Square wall corners and parapet corners, metal corner reinforcement is optional. The 2' x 8' tongue and groove expanded polystyrene insulation board shall be placed horizontally with the tongue facing upward and temporarily held in place with galvanized staples or roofing nails. Self tapping screws shall be used to temporarily fasten the board to metal framing. Vertical butt joints shall be staggered a minimum of one framing space from the adjacent courses and occur directly over framing.
 2. The lath shall be applied tightly over the insulation board and fastened through the board to wood framing with minimum 2" No. 11 gauge shaft diameter, 11.1 mm head diameter, galvanized roofing nails or No. 16 gauge galvanized staples spaced a maximum of 6" on center with a minimum 1" penetration into wood framing. Staples shall have a minimum 1/2" crown width. Stapling shall be utilized only in wood species having a minimum specific gravity of 0.42. The lath shall be fastened to all steel framing members using No. 8-18, S-12, pan head, self-tapping screws spaced a maximum of 6" on center to all framing. The screws shall penetrate framing at least 1/4". The wire lath shall be applied with minimum 1" end laps.
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- G. UltraKote 3
1. Following surface preparation and installation of the lath and accessories apply the UltraKote 3™ to a thickness of 3/8" to 1/2", completely embedding the lath. Allow this UltraKote 3™ scratch coat to cure a minimum of 7 days prior to the brown coat.
 2. Apply UltraKote 3™ to a thickness of 3/8" to 1/2", over the scratch coat, filling in the system using the casing and control joints as screeds. Allow the ShureKote 3™ brown coat to cure a minimum of 7 days prior to applying the UltraKote Finish.
 3. Use rod and darby to level the applied brown coat.
 4. After initial set begins, trowel or float out imperfections, voids or holes.
 5. Damp cure for a least 48 hours by lightly and evenly fogging the surface with water at least twice a day. Direct sunlight, hot temperatures, low humidity and windy conditions may make additional fogging necessary.
 6. Allow UltraKote 3™ to cure a minimum of 7 days prior to finish coat application.
- H. Adhesively attach EPS insulation board shapes over cured stucco using UltraKote Foam-Kote™ and ensure that EPS is completely encapsulated in base coat and reinforcing mesh. Mesh must be completely embedded in wet base coat so that no mesh color is visible. Reinforcing mesh from EPS shapes should extend a minimum of 6" onto UltraKote 3™. Base coat should be feathered out onto UltraKote 3™.
- I. UltraKote UltraPrime™:
1. Apply UltraPrime™ to the UltraKote 3™ with a sprayer, 3/8" nap roller, or a quality latex paint brush at a rate of 175-225 ft²per gallon.
 2. UltraPrime™ shall be dry to the touch before proceeding to the UltraKote™ finish coat application.
- J. UltraKote finish coat:
1. Apply finish directly to the UltraKote 3™ with a clean stainless steel trowel.
 2. Apply and level finish during same operation to minimum obtainable thickness consistent with uniform coverage.
 3. Maintain a wet edge on finish by applying and texturing continually over the wall surface.
 4. Work finish to corners, joints, or natural breaks and do not allow material to set up within an uninterrupted wall area.
 5. Float finish to achieve final texture.

3.04 CLEANING

- A. Clean material from adjacent surfaces as recommended by manufacturer.
- B. Remove surplus material and debris, including field sample, from site.

3.05 PROTECTION

- A. Protect base coat from rain, snow and frost for 48-72 hours following application.
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