Specifiers note: Stucco applications can be complex and may involve a variety of substrates and different applications. This specification is primarily focused on a typical application over sheathing with an asphalt felt water barrier, 2.5#/sy metal lath, 1/2” thick Cemplaster Fiberstucco and a Superior Finish. Edit as needed for your specific project or contact Master Wall Inc.® for your project needs.

PART I – GENERAL

1.01 SUMMARY
A. This document is to be used in preparing specifications for projects utilizing the Master Wall Inc.® Cemplaster Fiberstucco System.
   Related Master Wall Inc.® documents:
   1. Master Wall Inc.® Cemplaster Fiberstucco System Data Sheet
   2. Master Wall Inc.® Cemplaster Fiberstucco System Application Instructions
   3. Master Wall Inc.® Cemplaster Fiberstucco System Installation Details
   4. Master Wall product data sheets
B. Related Sections
   1. Unit Masonry – Section 04200
   2. Concrete – Sections 03300 and 03400
   3. Light Gauge Cold Formed Steel Framing – Section 05400
   4. Wood Framing – Section 06100
   5. Sealant – Section 07900
   6. Flashing – Section 07600

1.02 SUBMITTALS
A. Manufacturer’s specifications, details, installation instructions and product data
B. Manufacturer’s standard warranty
C. Applicator's industry training credentials
D. Samples for approval as directed by architect or owner
E. Sealant manufacturer’s certificate of compliance with ASTM C 1382
F. Prepare and submit project-specific details (when required by contract documents)

1.03 REFERENCES
A. ASTM Standards:
   A641 Standard Specification for Zinc-Coated (Galvanized ) Carbon Steel Wire
   A653 Specification for Sheet Steel Zinc coated (Galvanized) by the Hot-Dip Process, Commercial Quality
   B69 Specification for Rolled Zinc
   C144 Specification for Aggregate for Masonry Mortar
   C297 Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions
C578 Specification for Preformed, Cellular Polystyrene Thermal Insulation
C847 Standard Specification for Metal Lath
C897 Standard Specification for Aggregate for Job-Mixed Portland Cement-Based Plasters
C926 Standard Specification for Application of Portland Cement-Based Plaster
C1063 Standard Specification for Installation of Lathing and Furring for Portland Cement Plaster
C1177 Specification for Glass Mat Gypsum for Use as Sheathing
C1513 Standard Specification for Steel Tapping Screws for Cold-Formed Steel Framing Connections
D226 Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing
D1784 Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds

D4541 Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
E84 Test Method for Surface Burning Characteristics of Building Materials
E96 Standard Test Methods for Water Vapor Transmission of Materials
E283 Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
E330 Test Method for Structural Performance of Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference
E331 Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
E783 Standard Test Method for Field Measurement of Air Leakage Through Installed Exterior Windows and Doors
E2178 Standard Test Method for Air Permeance of Building Materials
E2357 Standard Test Method for Determining Air Leakage of Air Barrier Assemblies
G154 Recommended Practice for Operating Light-and Water-Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Nonmetallic Materials

B. Other Referenced Documents
APA Engineered Wood Association
PS 1 Voluntary Product Standard, Structural Plywood
PS 2 Performance Standard for Wood-Based Structural-Use Panels
E 30 APA Engineered Wood Construction Guide
AISI (American Iron and Steel Institute)
AISI S200-2007 North American Standard for Cold-Formed Steel Framing-General Provisions
ICC (International Code Council)
IBC 2012 and 2015 IBC (International Building Code)
ICC ES (International Code Council Evaluation Service)
AC 11 Acceptance Criteria for Cementitious Exterior Wall Coatings
AC 212 Acceptance Criteria for Water-resistant Coatings used as Water-resistant Barriers over Exterior Sheathing

C. Other Referenced Documents
American Association of Textile Chemists and Colorists AATCC-127 Water Resistance: Hydrostatic Pressure Test
UES Evaluation Report 384, Rollershield Water Barrier
Evaluation Report CCRR-0215, Master Wall Cemplaster Fiberstucco
1.04 SYSTEM DESCRIPTION

A. Structural
1. Design for maximum allowable system deflection, normal to the plane of the wall, of L/360.
2. Design for wind load in conformance with code requirements. Also consult applicable code compliance report.

B. Moisture Control
1. Prevent the accumulation of water into or behind the Cemplaster Fiberstucco, either by condensation or leakage into the wall construction, in the design and detailing of the wall assembly.
   a. Provide corrosion resistant flashing to direct water to the exterior where it is likely to penetrate components in the wall assembly, including, above window and door heads, beneath window and door sills, at roof/wall intersections, decks, abutments of lower walls with higher walls, above projecting features, and at the base of the wall.
   b. Wall System Design – design wall to eliminate vapor condensation within the wall assembly.
   c. Weather Resistant Barrier – Provide a barrier over framed construction consisting of a minimum of two-layers asphalt felt meeting ASTM D-226, Type 1, Grade D or building code-approved alternate. Verify requirements with local building code authority.
   d. Protect sills of rough openings with water resistant barrier or “peel and stick” type membranes recognized by local codes. Where casing bead is used back-to-back at expansion joints back joints with barrier membrane. Refer to Master Wall® details.

C. Grade Condition
1. Keep Cemplaster Fiberstucco a minimum of 6” (152 mm) above grade in framed construction.

D. Expansion Joints
1. Provide expansion joints where directed by the design professional at locations of building movement. Common locations include the following:
   a. Where building movement is anticipated (substrate thermal joints, masonry control joints, etc.).
   b. At dissimilar substrates.
   c. At floor lines in certain wood framed constructions.
   d. Where the Cemplaster Fiberstucco meets dissimilar materials.
2. Expansion joint design depends upon the anticipated movement. Master Wall® suggests the following minimum sizes, subject to design acceptance: Windows/Doors – 3/8” (9.5 mm), Building Expansion/Dissimilar Substrates & Materials – ¼” (13 mm), Floor Line (shrinkage) – ¾” (19 mm), masonry control joints (1/2” (13 mm) or use a control joint).
3. Sealants
   a. Shall be manufactured and supplied by others.
   b. Shall be compatible with Cemplaster Fiberstucco System materials. Refer to current Master Wall Inc.® Technical Bulletin #131 for listing of sealants approved by sealant manufacturer for use with stucco systems.
   c. The sealant backer rod shall be of closed cell.

E. Control Joints
1. Provide control joints for stucco thermal movement when lath is used where directed by the design professional. Common locations include the following:
   a. To limit cracking in the system at a maximum area of 144 ft² (13.4 m²).
   b. Length to width ratio should not be more than 2.5:1.
   c. At dissimilar substrates.
2. Increase joint requirements where thicker stucco or special structural conditions exist.
3. Typically control joints are tied to the metal lath, which is cut to make two discontinuous slabs but may be continuous if allowed locally following the recommended Technical Bulletin.
4. Double studs may be required to accommodate control joints or where it is needed to provide a fastening base for sheathing board joints.
5. When Cemplaster Fiberstucco is bonded to a solid substrate such as concrete or masonry the control joint requirements may be revised. Control joints may be aligned with any control joints in the plaster base.

F. Indicate location of joints, accessories and accessory type on architectural drawings.
G. Fire Protection
   1. Refer to manufacturer’s applicable code compliance report for other limitations and fire-resistive assemblies that may apply.

H. Vapor Retarders and barriers – The use and location of vapor retarders and/or barriers within a wall assembly is the responsibility of the project designer and shall comply with local building code requirements.

I. Dark Colors - The use of dark colors must be considered in relation to wall surface temperature as a function of local climatic conditions. Use of dark colors in high temperature climates can affect the performance of the system.

J. Flashing: Shall be provided at all roof-wall intersections, windows, doors, chimneys, decks, balconies and other areas as necessary to prevent water from entering behind the Cemplaster Fiberstucco and wall system.

1.05 PERFORMANCE REQUIREMENTS
A. Cemplaster Fiberstucco System shall have been tested as follows:

<table>
<thead>
<tr>
<th>TEST</th>
<th>METHOD</th>
<th>CRITERIA</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Water Penetration Resistance</td>
<td>AATCC 127 (Water Column) ICC ES (AC 212)*</td>
<td>Resist 21.6 in (55 cm) water for 5 hours before and after aging</td>
<td>Pass</td>
</tr>
<tr>
<td>2. Water Penetration Resistance after Cyclic Wind Loading</td>
<td>ASTM E1233 / ASTM E331</td>
<td>No water penetration beyond the inner-most plane of the wall after 15 minutes at 137 Pa (2.86 psf)</td>
<td>No water penetration</td>
</tr>
<tr>
<td>4. Water Vapor Transmission</td>
<td>ASTM E96 Method B (Water Method)</td>
<td>Measure</td>
<td>30 perms (Rollershield) 12 perms (Trowelshield)</td>
</tr>
<tr>
<td>5. Air Leakage (material)</td>
<td>ASTM E2178</td>
<td>≤ 0.004 cfm/ft² at 1.57 psf (0.02 L/s•m² at 75 Pa)</td>
<td>0.0002 cfm/ft²</td>
</tr>
<tr>
<td>6. Air Leakage (assembly)</td>
<td>ASTM E2357</td>
<td>≤ 0.04 cfm/ft² (0.2 L/s•m²) @ 75 Pa</td>
<td>0.003 L/s.m² @ 75 Pa 0.02 L/s.m² @ 300 Pa</td>
</tr>
<tr>
<td>7. Racking</td>
<td>ASTM E72 ICC ES (AC 212)*</td>
<td>No cracking in field, at joints or interface with flashing at net deflection of 3.2 mm (1/8 inch)</td>
<td>Pass</td>
</tr>
<tr>
<td>9. UV Exposure</td>
<td>ICC ES Proc. ICC ES (AC 212)*</td>
<td>210 hours of exposure</td>
<td>Pass</td>
</tr>
<tr>
<td>10. Surface Burning</td>
<td>ASTM E84</td>
<td>Flame Spread 0 – 25 for NFPA Class A, UBC Class I</td>
<td>Flame Spread: 5 Smoke Density: 5</td>
</tr>
<tr>
<td>11. Tensile Adhesion</td>
<td>ASTM C297</td>
<td>&gt;15 psi (103 kPa)</td>
<td>Dens Glass Gold 31 (215), Exterior Gypsum 28 (194), OSB 40 (277), Plywood 79 (563), Cement Board 70 (485), Copper 185 (1282), Galvanized steel 180 (1248), PVC 168 (1165), Aluminum 184 (1275), Coated Aluminum 203 (1407), Stainless Steel 183 (1269)</td>
</tr>
</tbody>
</table>

* AC212 – Acceptance Criteria for Water-Resistive Coatings Used as Water-Resistive Barriers over Exterior Sheathing, also referred to as ASTM E 2570
Fibered Stucco Weather Resistance and Durability Performance*

<table>
<thead>
<tr>
<th>TEST</th>
<th>METHOD</th>
<th>CRITERIA</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Freeze/Thaw</td>
<td>ASTM C67</td>
<td>Pass All Code Criteria</td>
<td>Pass</td>
</tr>
<tr>
<td>2. Compressive Strength</td>
<td>ASTM C109</td>
<td>1900 psi</td>
<td>Pass</td>
</tr>
<tr>
<td>3. Transverse Wind Load</td>
<td>ASTM E330</td>
<td>Withstand positive and negative wind loads as specified by the building code.</td>
<td>+/- 150 psf Ultimate. Allowable varies by Code</td>
</tr>
</tbody>
</table>

Fire Performance

<table>
<thead>
<tr>
<th>TEST</th>
<th>METHOD</th>
<th>CRITERIA</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Surface Burning (individual components)</td>
<td>ASTM E84</td>
<td>Individual components shall each have a flame spread of 25 or less, and smoke developed of 450 or less</td>
<td>Flame Spread: 0 Smoke Developed: 0</td>
</tr>
<tr>
<td>2. Fire Rating</td>
<td>ASTM E119</td>
<td>One Hour</td>
<td>Pass</td>
</tr>
</tbody>
</table>

1.06 QUALITY ASSURANCE

A. Qualifications
1. System Manufacturer: Shall be Master Wall Inc.®. All materials shall be manufactured or sold by Master Wall Inc.® and shall be purchased from Master Wall Inc.® or its authorized distributors.
2. Contractor: Shall be knowledgeable in the proper installation of the Master Wall Inc.® Cemplaster Fiberstucco System and shall be experienced and competent in the installation of stucco. Additionally, the contractor shall possess a current Master Wall Inc.® applicator certificate issued by Master Wall Inc.®

B. Regulatory Requirements
1. The EPS shall be separated from the interior of the building by a minimum 15-minute thermal barrier.
2. The use and maximum thickness of EPS shall be in accordance with the applicable building codes.

C. Mock-Up
1. The contractor shall, before the project commences, provide the owner/architect with a mock-up for approval.
2. The mock-up shall be of suitable size as required to accurately represent the products being installed, as well as each color and texture to be utilized on the project.
3. The mock-up shall be prepared with the same products, tools, equipment and techniques required for the actual application. The finish used shall be from the same batch that is being used on the project.
4. The approved mock-up shall be available and maintained at the job site.
5. For panelized construction, the mock-up shall be available and maintained at the panel fabrication location.

1.07 DELIVERY, STORAGE AND HANDLING

A. All Master Wall Inc.® materials shall be delivered to the job site in the original, unopened packages with labels intact.
B. Upon arrival, materials shall be inspected for physical damage, freezing, or overheating. Questionable materials shall not be used.
C. Deliver all materials in original unopened packages with labels intact. Verify all quantities, colors, and textures against bill of lading.
D. Store all materials protected from direct exposure to weather conditions and at temperatures not less than 40°F (4°C) or greater than 110°F (43°C).
E. Stack insulation board flat, fully supported off the ground and protected from direct exposure to the sun.
F. Material Safety Data Sheets (MSDS) or Safety Data Sheets (SDS) shall be supplied for the components of the system and be available at the job site.
1.08 PROJECT CONDITIONS
A. Ambient air temperatures shall be 40°F (4°C) or greater and rising at the time of installation of the Master Wall Inc.® products and shall remain at 40°F (4°C) or greater for at least 24 hours after application.
B. Provide supplemental heat and protection as required when the temperature and conditions are not in accordance with installation requirements. Sufficient ventilation and time shall be provided to ensure that materials have sufficiently dried prior to removing supplemental heat.
C. Adequate protection shall be provided to prevent weather conditions (humidity, temperature, and precipitation) from having an affect on the curing or drying time of Master Wall Inc.® materials.
D. Adjacent materials and the Cemplaster Fiberstucco System shall be protected during installation and while curing from weather and shall be protected from site damage.
E. Coordinate installation of the Cemplaster Fiberstucco System with related work specified in other sections to ensure that the wall assembly is protected to prevent water from getting behind the system. The cap flashing shall be installed as soon as possible after the finish coat has been applied. When this is not possible, temporary protection shall be provided immediately in this area.
F. All sealant work shall be installed in a timely manner. Protect open joints from water intrusion during construction with backer rod, or temporary covering, until permanently sealed.
G. Sufficient manpower and equipment shall be employed to ensure a continuous operation, free of cold joints, scaffolding lines, texture variations, etc.
H. Existing Conditions - The contractor shall have access to electric power, clean water, and a clean work area at the location where the Master Wall Inc.® materials are to be applied.

1.09 SEQUENCING AND CFSCHEDULING
A. Installation of the Cemplaster Fiberstucco System shall be coordinated with other construction trades.
B. Sufficient manpower and equipment shall be employed to ensure a continuous operation, free of cold joints, scaffolding lines, texture variations, etc.

1.10 LIMITED MATERIALS WARRANTY
A. Provide a manufacturer’s warranty against defective material upon request.

1.11 MAINTENANCE
A. Maintenance and repair shall follow the procedures noted in Master Wall Inc.® Technical Bulletins #112 and #129.

PART II – PRODUCTS

2.01 MANUFACTURER
A. All components of the Cemplaster Fiberstucco System shall be supplied or obtained from Master Wall Inc.® or its authorized distributors. Substitutions or additions of materials other than specified will void the warranty.

2.02 MOISTURE BARRIER (WRB)
(supplied by various manufacturers) (Typical Application/Optional Component) <edit>
A. WRB01 Minimum 2-layers of 15-lb/100 ft2 (0.683 kg/m2) vapor permeable asphalt saturated felt in compliance with ASTM D 226, Type I or similar in accordance with building code.
B. WRB02 Tyvek® StuccoWrap® or approved equal sheet weather resistive barrier with a minimum 15-lb/100 ft2 (0.683 kg/m2) vapor permeable asphalt saturated felt in compliance with ASTM D 226, Type I or similar in accordance with building code.
C. WRB03 Master Wall® Rollershield LAB, Liquid Applied Air and Water Barrier over an approved sheathing substrate with a minimum 15-lb/100 ft2 (0.683 kg/m2) vapor permeable asphalt saturated felt in compliance with ASTM D 226, Type I or similar in accordance with building code.
D. WRB04 Master Wall® Rollershield LAB, Liquid Applied Air and water barrier over concrete or masonry substrates with asphalt-based slip sheet.
E. Peel & Stick Tape: Compatible with moisture barrier, optional behind control joints. <edit>
F. Other weather barrier meeting the local building code criteria and accepted by Master Wall Inc.®
2.03 CONTINUOUS INSULATION (CI)  
(supplied by various manufacturers) (Typical Application/Optional Component)

A. Extruded polystyrene insulation board meeting ASTM C578 Type IV and IBC/IRC requirements for foam plastic insulation. Use manufacture approved sealing tapes at insulation board joints. Dow® Styrofoam™ Scoreboard, Owens Corning® Foamular® 150 or approved equivalent.

B. CI00 No continuous insulation used.
C. CI01 1” (25.4 mm) insulation thickness (R-5 @75F).
D. CI02 1.5” (38 mm) insulation thickness (R-7.5 @75F).
E. CI03 2” (50.8 mm) insulation thickness (R10 @75F).
F. CI04 External Insulation (Reference External Insulation information)

G. Provide closure where insulation board is exposed at grade. Reference EIFS Plastic Accessories data sheet. *Special lath attachment required. See 2.12.

2.04 DRAINAGE SPACER (DRS)  
(supplied by various manufacturers) (Typical Application/Optional Component)

A. DRS00 No drainage spacer used.
C. DRS02 Colsella Dörken Delta®-Dry or Delta®-Dry Plus High Performance Rainscreen System.

2.05 CEMPLASTER FIBERSTUCCO (CFS)  
(Typical Application/Option)

A. Master Wall® Cemplaster Fiberstucco - factory proportioned, fiber reinforced Portland cement based stucco for trowel or pump application, field mixed with graded sand (ASTM C 897) and water.
B. Master Wall® Ready Cemplaster Fiberstucco - factory proportioned, fiber reinforced Portland cement based stucco for trowel or pump application, field mixed with water.
C. Approved Quikrete® stucco supplied by an authorized Master Wall® distributor and approved in Master Wall Inc. @ warranty program.

D. Installed thickness shall be: 3/8” (9.5 mm) CFS01, 1/2” (12.7 mm) CFS02, 3/4” (19 mm) CFS04, 7/8” (22.2 mm) CFS05.

2.06 STUCCO BONDING AGENTS AND ADDITIVES (SA)  
(Typical Application/Optional Component)

A. BA57-water based acrylic resin bonding agent for brush or roller application to prepared masonry or concrete surfaces for direct application to porous substrates.
B. SA00 No stucco additive used.
C. SA01 Master Wall® Stucco Ad Liquid, mixed 3 quarts (2.8 liters) per mix of Cemplaster Fiberstucco, 1 quart (0.95 liters) of Ready Cemplaster Fiberstucco.
D. SA02 Master Wall® Stucco Ad Liquid, mixed 2 gallons (7.6 liters) per mix of Cemplaster Fiberstucco, 3 quarts (2.8 liters) of Ready Cemplaster Fiberstucco.
E. SA03 Master Wall® Stucco Ad Liquid, mixed 5 gallons (19 liters) per mix of Cemplaster Fiberstucco, 1-1/2 gallons (5.7 liters) of Ready Cemplaster Fiberstucco.

2.07 LEVELING BASE COATS (LBC)  
(Typical Application/Optional Component)

A. LBC00 No leveling base coat used.
B. LBC01 Leveling base coat of Master Wall® F&M, F&M Plus, MBB, MBB Plus, Guardian or WeatherStop.
C. LBC02 Reinforced leveling base coat of Master Wall® F&M, F&M Plus, MBB, MBB Plus, Guardian or WeatherStop embedded in Master Wall® Standard Mesh.
2.08 FOAM TRIM <edit>
A. Decorative foam trim pieces using Master Wall® materials and recommendations in accordance with the Foam Shapes product data sheet.

2.09 PRIMER (PRIME) <edit>
A. PRIME00 No primer used.
B. PRIME01 Master Wall® Primecoat or Sanded Primecoat: acrylic-based tinted primer.

2.10 FINISH COAT (FIN) <edit>
A. FIN01 Superior Finishes: Master Wall Inc.® Superior Finishes are acrylic-based wall coatings available in a variety of colors and textures. The following textures are available:
   1. Perfect2.0 (Perfect) - riled texture
   2. Fine Sand 1.0 (Spray) – sand type texture
   3. Medium Sand 1.5 (Desert Sand) – coarse sand texture
   5. Versatex 0.5 (Refinish) – Fine texture used to create numerous finishes
B. FIN02 Superior Elastomeric Plus Finish: Master Wall Inc.® Superior Finishes using elastomeric polymers to bridge minor cracking. The following textures are available:
   1. Perfect2.0 (Perfect) - riled texture
   2. Fine Sand 1.0 (Spray) – sand type texture
   3. Medium Sand 1.5 (Desert Sand) – coarse sand texture
   5. Versatex 0.5 (Refinish) – Fine texture used to create numerous finishes
C. Finish Enhancements
   1. Silicone Coat FA02 - Factory added silicone enhancement for better water resistance and to keep buildings cleaner.
   2. Excel Mildew Enhancement FA01 - Factory added mildew booster exceeding ASTM D3273 requirements.
D. Specialty Finishes
   1. Superior Stone
   2. Aggrestone
   3. Lumia
   4. Plaster Flex
   5. Metallic Cote
   6. Savannah
   7. Marbleflex
   8. Travertine
   9. Eco Glass
   10 Aggrelime
   11. Brick Finish System
E. Accents & Coatings
   1. Roller-flex architectural coating
   2. Elasto-flex elastomeric architectural coating
   3. Clearshield clear protective coating
   4. Vintique antiquing accent
2.11 LATH
(supplied by others; select one depending on type construction) (Typical Application/Optional Component)

A. CFS01, 3/8” thick Cemplaster Fiberstucco Minimum No. 17 gauge galvanized steel woven wire fabric in compliance with ASTM C 1032.
B. CFS03, 1/2” thick Cemplaster Fiberstucco Minimum 2.5 lb./yd2 (1.4 kg/m2) self furred galvanized steel diamond mesh metal lath in compliance with ASTM C 847.
D. CFS03-TT, 1/2” thick Cemplaster Fiberstucco Minimum 2.5 lb./yd2 (1.4 kg/m2) self furred stainless steel diamond mesh metal lath in compliance with ASTM C 847, 304 or 316 stainless steel.
E. CFS04, 3/4” thick Cemplaster Fiberstucco Minimum 3.4 lb./yd2 (1.8 kg/m2) self furred galvanized steel diamond mesh metal lath in compliance with ASTM C 847.
G. CFS04-SS, 3/4” thick Cemplaster Fiberstucco Minimum 3.4 lb./yd2 (1.8 kg/m2) self furred stainless steel diamond mesh metal lath in compliance with ASTM C 847, 304 or 316 stainless steel.
H. CFS05, 7/8” thick Cemplaster Fiberstucco Minimum 3.4 lb./yd2 (1.8 kg/m2) self furred galvanized steel diamond mesh metal lath in compliance with ASTM C 847.
J. CFS05-SS, 7/8” thick Cemplaster Fiberstucco Minimum 3.4 lb./yd2 (1.8 kg/m2) self furred stainless steel diamond mesh metal lath in compliance with ASTM C 847, 304 or 316 stainless steel.
K. Striplath Minimum 4” x 12” (102 mm x 305 mm), in types and weights noted above.

2.12 MECHANICAL FASTENING & ATTACHMENT (by others)

A. Appropriate non-corroding fasteners, depending on the type framing or substrate:
1. Wood Framing—minimum 11 gauge, 7/16 inch (11 mm) diameter head galvanized roofing nails with minimum ¾ inch (19 mm) penetration into studs or minimum #8 Type S wafer head fully threaded corrosion resistant screws with minimum ¾ inch (19 mm) penetration into studs.
2. Steel Framing—minimum #8 Type S or S-12 wafer head fully threaded corrosion resistant screws with minimum 3/8-inch (9.5 mm) penetration into studs.
3. Concrete or Masonry—minimum # 8 wafer head fully threaded corrosion resistant screws for masonry with minimum 1 inch (25 mm) penetration into substrate and approved corrosion resistant hand, power or powder actuated stub nails with a minimum 3/8” (9.5 mm) heads.
4. For stainless steel, use washers with galvanized fasteners or use stainless steel fasteners to avoid galvanic reaction.
B. Tie Wire—18 gauge galvanized and annealed low-carbon steel in compliance with ASTM A 641 with Class I coating, 18 ga stainless steel wire for stainless steel lath and accessories.
C. Support Plates – For Continuous Insulation (CI) thicknesses of 1.5” (38 mm) or greater, CI02 and CI03 use an approved accessory plate. Wind-Lock Lath Lock or ULP 302, Demand DP300, Buildex Gridmate or Master Wall® approved equal.

2.13 ACCESSORIES
(by others) (Typical Application/Optional Component)

A. Weep screed, casing bead, corner bead, cornerite, corner lath, expansion and control joint accessories. All accessories shall meet the requirements of ASTM C 1063 and its referenced documents:
1. PVC plastic in compliance with ASTM D 1784, cell classification 13244C.
2. Galvanized metal in compliance with ASTM A653 with G60 coating.
4. 304 stainless steel trim manufactured in accordance with ASTM C841.
B. All accessories shall have perforated or expanded flanges and shall be designed with grounds for the specified thickness of the Cemplaster Fiberstucco.
2.14 JOB MIXED INGREDIENTS
A. Water: Clear, clean and potable without any foreign matter in the solution that may affect the color and setting qualities of the cement, adhesive, base or finish coat.
B. Sand: Clean, well graded sand free of deleterious materials in compliance with ASTM C897.
C. Cement: Type I or I-II Portland cement meeting ASTM C150.

2.15 MIXING
A. Mix products in accordance with manufacturer’s recommendations.

PART III – EXECUTION

3.01 INSPECTION
A. Prior to the application of Master Wall Inc.® Cemplaster Fiberstucco, the substrate shall be examined for compliance with the contract documents and Master Wall Inc.® specifications. The substrate shall have no planar irregularities greater than ¼” in 10’ (6.4 mm in 3.05 m). The General Contractor and Architect shall be advised in writing of any discrepancies. Work shall not proceed until unsatisfactory conditions are corrected.

3.02 PREPARATION
A. Protect contiguous work from damage during application of the Cemplaster Fiberstucco. Temporary covering may be required to prevent over spray or splattering of exterior finish coatings on other work.
B. Protect substrate from inclement weather during installation. Prevent infiltration of moisture behind the system that may affect the substrate.
C. Cemplaster Fiberstucco, Adhesive, Base Coats and Finishes shall not be installed when ambient air temperature is below 40ºF (5ºC). The temperature shall remain at or above 40ºF (5ºC) during mixing, application and until materials have cured.
D. Sufficient scaffolding, manpower and tools shall be provided to prevent cold joints.
E. The substrate shall be clean and dry.
F. Flashings shall be installed as required by construction documents and Master Wall Inc.® details in a manner to prevent the intrusion of water behind the Cemplaster Fiberstucco. All flashing materials should direct the water to the exterior face of the finished system.
G. Concrete (Cast-in-Place)
   1. Provide a surface that is slightly scarified, water absorbent, straight and true to within ¼” in 10’-0” (6.4 mm in 3.05 m). Grind down any projections and remove any form release agents by an appropriate method. Establish surface profile by sandblasting, water blasting, wire brushing, chipping or other appropriate means. Remove all dust, dirt, grease, laitance or other bond inhibiting material. Pre-moisten highly absorbent surfaces with water or BA57 prior to placement of Cemplaster Fiberstucco.
H. Concrete Masonry Units
   1. Remove projecting joint mortars so it is even with the plane of the wall. Remove surface contaminants such as efflorescence, existing paint or any other bond inhibiting material by sandblasting, water blasting, wire brushing, chipping or other appropriate means. Pre-moisten highly absorbent surfaces with water or BA57 prior to placement of Cemplaster Fiberstucco.
I. Gypsum Sheathing in compliance with ASTM C1396, Glass Mat Faced Gypsum Sheathing in compliance with ASTM C 1177 and Exterior or Exposure 1 wood-based sheathing (plywood and OSB [Oriented Strand Board]).
   1. Verify acceptable installation of sheathing according to the type of sheathing specified.
   2. Protect the substrate with a moisture barrier as required by the applicable code and install lath and accessories.

3.03 INSTALLATION, GENERAL
A. Comply with the manufacturers’ current published instructions, (specifications, details, data sheets and technical bulletins) for the installation of the Cemplaster Fiberstucco.
B. Mix materials in accordance with Master Wall® literature.
C. Comply with local building codes.
3.04 MOISTURE BARRIER (WRB) INSTALLATION

(supplied by various manufacturers) (Typical Application/Optional Component) <edit>
A. WRB01 Apply 15-lb/100 ft² (0.683 kg/m²) vapor permeable asphalt saturated felt in compliance with ASTM D 2266. Type I or similar in accordance with building code. Apply shingle fashion lapping the water barrier 2” (50 mm) horizontally and 6” (15 cm) horizontally. Apply in the same manner if used as a single-layer slip sheet.
B. WRB02 Tyvek® StuccoWrap® or building code approved equal sheet weather resistant barrier. Install in strict accordance with manufacturer’s recommendations.
C. WRB03 Master Wall® Rollershield LAB, Liquid Applied Air and Water Barrier over an approved sheathing substrate with a single layer of WRB01 as a slip sheet. Install in strict accordance with the Master Wall® Rollershield LAB installation instructions. Use Rollershield and Rollershield Flashing Tape in accordance with installation recommendations.
D. WRB04 Master Wall® Rollershield LAB, Liquid Applied Air and water barrier over concrete or masonry substrates with a single layer of WRB01 as a slip sheet. Install in strict accordance with the Master Wall® Rollershield LAB installation instructions. Use Rollershield and Rollershield Flashing Tape in accordance with installation recommendations.
E. Peel & Stick Tape: Install in strict accordance with manufacturer’s recommendations where shown on drawings, optional/required behind control joints. <edit>

3.05 CONTINUOUS INSULATION (CI)

(supplied by various manufacturers) (Typical Application/Optional Component) <edit>
A. CI00 No continuous insulation used.
B. CI01 1” (25.4 mm) insulation thickness (R-5 @75F).
C. CI02* 1.5” (38 mm) insulation thickness (R-7.5 @75F).
D. CI03* 2” (50.8 mm) insulation thickness (R-10 @75F).
E. CI04 External Insulation (Reference External Insulation information)
F. Install insulation tightly in accordance with Master Wall Inc.® and manufacturer recommendations in a running bond pattern, interlock inside and outside corners.
G. Fasten insulation boards in place using approved fastening method in the center of the board at framing locations.
H. If the insulation is being used as a weather resistant barrier (WRB), seal in accordance with manufacturers recommendations.
I. Provide closure where insulation board is exposed at grade. Reference Plastic Accessories data sheet.
   *Special lath attachment required. See 2.12.

3.06 DRAINAGE SPACER (DRS)

(supplied by various manufacturers) (Typical Application/Optional Component) <edit>
A. DRS00 No drainage spacer used.
C. DRS02 Colsella Dörken Delta®-Dry or Delta®-Dry Plus High Performance Rainscreen System. Install in strict accordance with manufacturer’s recommendations. Attach drainage spacer at framing locations only.
3.07 ACCESSORY, LATH AND CEMPLASTER FIBERSTUCCO INSTALLATION

After satisfactory inspection of surfaces and correction of any deviations from specification requirements commence the Cemplaster Fiberstucco installation in accordance with A or B below.

A. Installation over new cast-in-place concrete or concrete masonry units (unreinforced):
   1. Install foundation weep screed at the base of the wall.
   2. Install casing beads at Cemplaster Fiberstucco terminations—doors, windows and other through wall penetrations. Install two piece expansion joints, back-to-back casing beads or control joints at joints in the supporting construction, building expansion joints, where the Cemplaster Fiberstucco is to be installed over dissimilar construction or substrates, at changes in building height, at floor lines, columns, and cantilevered areas as directed on the construction documents. Install corner bead at outside corners and corner lath at inside corners. Install full accessory pieces where possible and avoid small pieces. Seal adjoining pieces by embedding ends in sealant. Abut horizontal into vertical joint accessories. Attach at 6 inches (152 mm) on center into concrete/masonry with appropriate fasteners.
   3. Pre-moisten concrete masonry units and absorbent concrete with BA57 prior to the placement of Cemplaster Fiberstucco.

B. Installation over frame construction with sheathing and reinforced masonry with a WRB:
   1. Weep Screed Installation
      a. Install foundation weep screed at the base of the wall securely to framing with the appropriate fastener. Locate foundation weep screed so that it overlaps the joint between the foundation and framing by a minimum of 1 inch (25 mm). Locate the foundation weep screed minimum 4 inches (101 mm) above earth grade, 2 inches (51 mm) above finished grade (paved surfaces, for example).
   2. Weather Protection
      a. Weather barrier will lap onto foundation weep screed as noted in Master Wall® details.
      b. Verify that WRB installation is complete as noted in Section 3.04.
   3. Casing Bead and Expansion Joint Installation
      a. Install casing beads at Cemplaster Fiberstucco terminations—doors, windows and other through wall penetrations. Install expansion joints (or back-to-back casing beads) at building expansion joints, where the Cemplaster Fiberstucco is to be installed over dissimilar construction or substrates, at changes in building height, at floor lines, columns, and cantilevered areas. Install full accessory pieces where possible and avoid small pieces. Seal adjoining pieces by embedding ends in sealant. Abut horizontal into vertical joint accessories. Attach at 6-inch (152 mm) centers into framing with appropriate fasteners.
      (Note: refer to architectural drawings for joint locations and accessory type. Moisture protection must be continuous behind joints and accessories.)
   4. Control Joint Installation
      a. Install control joints every 144 ft² (13.4 m²) for walls and 100 ft² (9.3 m²) maximum (as indicated on the construction documents). Tack in place as insure proper alignment during the application of the lath. Wire tie control joints to lath at 6 inches (152 mm) on center if framing members aren’t present under the accessory.
      b. Seal any exposed ends and edges preferably by setting them in sealant during installation to prevent water entry.
      c. Install peel and stick flashing tape under wall control joint locations if specified. <not a requirement, edit>
   5. Lath Installation
      a. Diamond Mesh Metal Lath
         1) General--install metal lath with the long dimension at right angles to structural framing. Terminate lath at expansion joints. Do not install continuously beneath joints.
         2) Seams/overlaps – overlap side seams a minimum of ½ inch (13 mm) and end seams a minimum 1-inch (25 mm). Stagger end seams. Overlap casing beads and expansion joints minimum 1 inch (25 mm) over the narrow wing accessories and 2 inches over expanded flange accessories.
         3) Attachment--fasten securely through sheathing into structural framing at 6 inches (152 mm) on center maximum vertically and 16-24 inches (41-61 cm) on center horizontally*. Wire tie horizontal laps at 8 inches (204 mm) on center at: side laps, accessory overlaps, and where end laps occur between supports.
a. Welded wire fabric lath—follow installation as for metal lath except overlap all seams by one mesh minimum. (*Note: the type fastener selected, its layout and pullout or withdrawal value from the supporting construction must be verified and approved by the project engineer/architect with respect to design wind load and local building code requirements).  
   b. Paper-backed lath—follow installation as for metal lath.  Lap lath over lath, not paper to lath overlap.  For horizontal overlaps the paper backing must lap shingle style behind the lath-to-lath overlap.  
   c. Structa Wire Products – follow manufacturer’s instructions for installation.  

6. Apply Striplath, minimum 4” x 12” (102 mm x 305 mm), in type and weights of selected lath at casing bead corners if control joints are not used on windows and doors.  

7. Inside and Outside Corners  
   a. Install corner lath at inside corners and corner bead at outside corners over lath.  Attach through lath into framing at 6 inches (152 mm) on center with appropriate fasteners.  

8. Cemplaster Fiberstucco Application  
   a. Mix Master Wall® Cemplaster Fiberstucco in strict accordance with Master Wall Inc.® recommendations adding additional components identified in the project specifications.  
   b. When mixing add Master Wall® Stucco Ad Liquid in quantities noted in SA01 assemblies.  
   c. Scratch Coat: apply Cemplaster Fiberstucco with sufficient pressure to key into and embed the metal lath (if used).  Apply sufficient material, approximately half the Cemplaster Fiberstucco ground thickness to cover the metal lath and to permit scoring the surface.  Score the Cemplaster Fiberstucco horizontally upon completion of each panel in preparation for brown coat if a “double back” application of a wet scratch and brown coat isn’t being used.  
   d. Brown Coat: as soon as the scratch coat is firm enough to receive the brown coat without damage, apply the brown coat with sufficient pressure to ensure intimate contact with the first coat to an approximate thickness as needed to bring the Cemplaster Fiberstucco to a uniform thickness that matches the grounds of the accessories.  Use a rod or straight edge to bring the surface to a true, even plane.  Fill depressions in plane with Cemplaster Fiberstucco.  
   e. After the Cemplaster Fiberstucco has become slightly firm float the surface lightly with a Darby or wood float to densify the surface and to provide a smooth, even surface.  
   f. Moist cure using fogging, plastic films or other method acceptable to the design professional for 48-72 hours.  Mixes with Master Wall® Stucco Ad Liquid do not need moist curing.  
   g. Allow to fully cure until clean, dry and hard before finishing:  
      • Typically 7-14 days if no Master Wall® Stucco Ad Liquid is used.  
      • After 72 hours if Master Wall® Stucco Ad Liquid is used provided the Cemplaster Fiberstucco is clean, dry and hard.  
      • After 24 hours if using a leveling base coat (LBC)  
   h. See Master Wall® Technical Bulletins and data sheets for additional curing, drying and application recommendations.  

(Note: The proper time to float is when the wood float no longer sticks to the surface of the Cemplaster Fiberstucco)  

9. Leveling Base Coat (LBC01 and LBC02)  
   a. Ensure that the surface of the Cemplaster Fiberstucco is cured, clean, dry, and free of efflorescence, oil or other contaminants that would impair adhesion.  
   b. Mix Leveling Base Coat materials in accordance with Master Wall Inc.® recommendations  
   c. LBC01: Apply the base coat to the entire surface of the Cemplaster Fiberstucco approximately 3/32” (2.4 mm) thick.  
   d. LBC02: Apply the base coat to the entire surface of the Cemplaster Fiberstucco approximately 3/32” (2.4 mm) thick.  Immediately embed Master Wall Inc.® reinforcing mesh into wet base coat with a trowel, working from the center toward the edges, until the mesh is fully covered and a smooth surface is achieved.  The color of the mesh shall not be visible but a slight mesh pattern may be visible.  Lap mesh 2 ¼” (64 mm) minimum on all sides.  Reinforcing Mesh shall be continuous through all interior and exterior corners extending beyond the corner a minimum of 12” (30 cm) from both directions creating a minimum of two layers of standard reinforcing mesh on all interior and exterior corners.
e. Allow to dry a minimum of 12 hours at room temperature before finishing.

10. Primecoat Application (PRIME01)
   a. Apply Primecoat or Sanded Primecoat: Apply evenly according to the data sheet using brush, roller or proper spray equipment over the clean, dry Cemplaster Fiberstucco and foam shape build-outs and allow to dry thoroughly before applying finish.

B. Superior Finish Coat Application (FIN01 and FIN02)
   1. Surface irregularities in the base coat, such as trowel marks, insulation board lines and reinforcing mesh laps shall be corrected prior to the finish application.
   2. Apply the Master Wall Inc.® Superior Finish in the color and texture as approved by the project owner or the project architect with sufficient manpower and equipment to insure a continuous operation without cold joints, scaffolding lines etc. Texture finish shall match approved jobsite samples. Thickness and coverage will vary depending on the specified final appearance.
   3. Trowel Application – (Perfect 2.0, Fine Sand 1.0, Medium Sand 1.5, Versatex 0.5)
      a. Apply the Superior Finish to the clean, dry and cured base coat with a stainless steel trowel.
      b. Level the surface to a uniform thickness of 3/32” to 1/8” (2.4-3.2 mm).
      c. Float the Finish with a plastic float in a uniform motion to achieve the desired texture. (Versatex 0.5 cannot be floated easily. A second application of the Versatex 0.5 may be applied to create the desired texture.)
   4. Spray Application – (Perfect 2.0, Fine Sand 1.0, Medium Sand 1.5, Versatex 0.5)
      a. Prime surface with Master Wall Inc.® Primecoat or Sanded Primecoat tinted to match the selected finish color. Allow Primecoat or Roller-Flex to cure a minimum of 12 hours prior to finish coat application.
      b. Using a conventional plaster hopper gun or a proven pump, spray finish over the primed base coat to achieve desired texture using a circular overlapping pattern keeping the spray gun at a 90° angle to the surface and maintaining the same distance to the wall at all times.
      c. Be cautious of flooding an area with too much finish because it may appear shinier when it dries.
   5. Specialty Finishes: Follow individual product data sheet application instructions.

3.08 JOB SITE CLEANUP
   A. Clean work area in accordance with contract documents removing all excess materials, droppings and debris. Clean adjacent surfaces.
   B. Other trades may now install their work – Sheet Metal (Section 07620), Sealants (Section 07900), Mechanical (Section 15000), Electrical (Section 16000).

3.09 PROTECTION
   A. Cemplaster Fiberstucco System shall be protected from inclement weather and other sources of damage until dry and permanent protection in the form of flashings, sealants, etc. are installed.

Disclaimer
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