PART I – GENERAL

1.01 SUMMARY
A. This document is to be used in preparing specifications for projects utilizing the Master Wall Inc.® Stucco Cement Board Coatings applied over approved cement boards and designed to provide drainage of incidental water entering the system. Related Master Wall Inc.® documents:
1. Master Wall Inc.® Stucco Cement Board Coatings with Drainage System Data Sheet
2. Master Wall Inc.® Stucco Cement Board Coatings with Drainage System Application Instructions
3. Master Wall Inc.® Stucco Cement Board Coatings with Drainage 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:
   ASTM C150 Standard Specification for Portland Cement
   ASTM C297 Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions
   ASTM C578 Specification for Preformed Cellular Polystyrene Thermal Insulation
   ASTM C1177 Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing
   ASTM C1396 (formerly C 79) Standard Specification for Gypsum Board
ASTM D1784 Specification for Rigid Poly (Vinyl Chloride) (PVC) and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds


ASTM D3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber


ASTM E96 Test Methods for Water Vapor Transmission of Materials

ASTM E330 Test Method for Structural Performance of Exterior Windows, Doors and Curtain Walls by Uniform Static Air Pressure Difference


ASTM E2178 Test Method for Air Permeance of Building Materials

ASTM E2357 Standard Test Method for Determining Air Leakage of Air Barrier Assemblies


ASTM G23 Standard Practice for Operating Light-Exposure Apparatus (Carbon-Arc Type) with and without Water for Exposure of Nonmetallic Materials

ASTM G53 Practice for Operating Light- and Water-Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Nonmetallic Materials

B. Other Referenced Documents

American Association of Textile Chemists and Colorists AATCC-127 Water Resistance: Hydrostatic Pressure Test

APA Engineered Wood Association E30, Engineered Wood Construction Guide
1.04 SYSTEM DESCRIPTION

A. General: Master Wall Inc.® Stucco Cement Board Coatings applied over approved cement boards and designed to provide drainage of incidental water entering the system, consisting base coat, reinforcing mesh and finish. The cement board shall be attached over a structural substrate and air/water barrier in accordance with the Stucco Cement Board Coatings with Drainage application Details.

B. Methods of Installation

1. Field Applied: The Stucco Cement Board Coatings with Drainage System is applied to the substrate system in place.

2. Panelized: The Stucco Cement Board Coatings with Drainage System is shop-applied to the prefabricated wall panels.

C. Design Requirements

1. Sheathing & Stucco Cement Board
   a. The maximum deflection under full flexural design loads of the substrate system shall not exceed \( L/360 \).
   b. Acceptable sheathings for the Stucco Cement Board Coatings shall be designed for their intended use by the design professional.
   c. Since the surface of the sheathing and stucco cement board cannot be rasped smooth, the flatness and finished appearance of the Stucco Cement Board Coatings application will depend on the structural members that support the sheathing.
   d. The project architect or engineer shall engineer the framing, sheathing and stucco cement board with regard to the required structural performance.

2. The substrate shall be flat within 6.4 mm (1/4 in) in a 3.05 m (10 ft) radius.

3. The slope of inclined surfaces shall not be less than 6:12, and the length shall not exceed 305 mm (12 in).

4. Sheathing is required for conditioned northern climates and where necessary for structural concerns in all climates. Non-conditioned northern climates (above the 4000 heating degree day line) and southern climates may not require sheathing. Designer to determine the necessity and use of the sheathing.

5. When the outside temperatures differ considerably from the building’s interior temperature, airborne dirt can accumulate on colder regions of walls causing “shadowing” or “spotting”, particularly over fasteners and framing. This is not considered a failure of the system or the Master Wall materials.

6. Weather Resistant Barrier
   a. Code approved weather resistive barrier shall be installed over framing on all exterior walls before application of the cement board begins.
   b. Do not use a vapor barrier (i.e. plastic sheet) on the exterior wall behind the exterior sheathing.
   c. Weather resistant barrier shall be installed horizontally with upper layers overlapping lower layers a minimum of 2" (51 mm). Vertical joints shall overlap a minimum of 6" (152 mm).
   d. Wrap weather resistive barrier into rough openings at windows, doors, mechanical equipment, and any other openings through the system. Reference Master Wall Inc.'s details.
   e. Lap weather resistive barrier over attachment flange of drainage track a minimum of 2" (51 mm).
   f. Alternatively, Master Wall Rollershield may be used as the water barrier over approved substrates.

7. Expansion Joints
   a. Design and location of expansion joints in the Stucco Cement Board Coatings with Drainage System is the responsibility of the project designer and shall be noted on the project drawings. As a minimum, expansion joints shall be placed at the following locations:
      1) Where expansion joints occur in the substrate system.
      2) Where building expansion joints occur.
      3) At floor lines in wood frame construction (Reference Technical Bulletin #140).
      4) At floor lines of non-wood framed buildings where significant movement is expected.
      5) Where the Stucco Cement Board Coatings with Drainage System abuts dissimilar materials.
      6) Where the substrate type changes
      7) Where prefabricated panels abut one another
      8) Where significant structural movement occurs such as changes in roofline, building shape or structural system.
8. Control Joints
   a. Control joints are required and located by the designer in the stucco cement board at the following
      locations: (Reference construction documents for specific locations).
      1) Shall not exceed 20 lineal feet in any direction.
      2) 160 square feet equals maximum overall area.
      3) One dimension shall not exceed 2 ½ times the other dimension.
      4) At all dissimilar substrate transitions.
   b. Double studs may be required to accommodate control joints or where it is needed to provide a
      fastening base for sheathing board joints.

9. Terminations
   a. Interior foam expanding foam sealant may be required behind penetration openings.
   b. The Stucco Cement Board Coatings with Drainage System shall be held back from adjoining materials
      around openings and penetrations such as windows, doors and mechanical equipment a minimum of
      12.7 mm (1/2 in) for sealant application. Sealant joints shall be properly sized and designed for their
      anticipated movement (Reference Master Wall Inc.® Technical Bulletins #148 & 149).
   c. The system shall be terminated a minimum of 152 mm (6 in) above finished grade.
   d. Sealants
      1) Shall be manufactured and supplied by others.
      2) Shall be compatible with Stucco Cement Board Coatings with Drainage System materials. Refer to
         current Master Wall Inc.® Technical Bulletin #131 for listing of sealants approved by sealant
         manufacturer for use with stucco systems.
      3) The sealant backer rod shall be of closed cell.

10. 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.

11. 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.

12. 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 Stucco Cement Board Coatings with
    Drainage System and wall system.
### 1.05 PERFORMANCE REQUIREMENTS

A. Stucco Cement Board Coatings with Drainage System shall have been tested as follows:

#### 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. Accelerated Weathering</td>
<td>ASTM G 153 (Formerly ASTM G 23)</td>
<td>No deleterious effects at 2000 hours when viewed under 5x magnification</td>
<td>Pass</td>
</tr>
<tr>
<td>2. Accelerated Weathering</td>
<td>ASTM G 154 (Formerly ASTM G 53)</td>
<td>No deleterious effects at 2000 hours</td>
<td>Pass</td>
</tr>
<tr>
<td>3. Freeze/Thaw Resistance</td>
<td>ASTM E 2485</td>
<td>No deleterious effects at 10 cycles when viewed under 5x magnification</td>
<td>Pass</td>
</tr>
<tr>
<td>4. Water Penetration</td>
<td>ASTM E 331 (modified per ICC-ES AC 235)</td>
<td>No water penetration beyond the plane of the base coat/insulation board interface after 15 minutes at 6.24 psf (299 Pa) or 20% of design wind pressure, whichever is greater</td>
<td>Pass at 2.86 psf (137 Pa), 6.24 psf (299 Pa), and 12.0 psf (575 Pa) consecutively</td>
</tr>
<tr>
<td>5. Water Resistance</td>
<td>ASTM D 2247</td>
<td>No deleterious effects at 14 day exposure</td>
<td>Pass @ 28 days</td>
</tr>
<tr>
<td>6. Salt Spray</td>
<td>ASTM B 117</td>
<td>No deleterious effects* at 300 hours</td>
<td>Pass @ 300 hrs</td>
</tr>
<tr>
<td>7. Abrasion Resistance</td>
<td>ASTM D 968</td>
<td>No cracking or loss of film integrity at 528 quarts (500 L) of sand</td>
<td>Pass</td>
</tr>
<tr>
<td>8. Mildew Resistance</td>
<td>ASTM D 3273</td>
<td>No growth supported during 28 day exposure period</td>
<td>Pass</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 E 84</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>
</tbody>
</table>

#### Component Performance

<table>
<thead>
<tr>
<th>TEST</th>
<th>METHOD</th>
<th>CRITERIA</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alkali Resistance of Reinforcing Mesh</td>
<td>ASTM E2098 (formerly EIMA 105.01)</td>
<td>Greater than 120 pli (21 dN/cm) retained tensile strength</td>
<td>Pass</td>
</tr>
<tr>
<td>2. Requirements for Rigid PVC Accessories</td>
<td>ASTM D 1784</td>
<td>Meets cell classification 13244C</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.® Stucco Cement Board Coatings with Drainage System and shall be experienced and competent in the installation of Exterior Finish Systems. 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. 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 Stucco Cement Board Coatings with Drainage System shall be protected during installation and while curing from weather and shall be protected from site damage.
E. Coordinate installation of the Stucco Cement Board Coatings with Drainage 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, and 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 SCHEDULING
A. Installation of the Stucco Cement Board Coatings with Drainage 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, scaffold 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 Stucco Cement Board Coatings with Drainage 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 MATERIALS
A. Portland Cement: Shall be Type I or II, meeting ASTM C 150, white or gray in color, fresh and free of lumps.
B. Water: Shall be potable, clean and free of foreign matter.
C. Metal Flashing Components: Complying with SMACNA Recommendations. Reference Section 07620.
E. Window & Door Systems: Detailed by the designer and suitable for the regional application. Reference Section 08000.

2.03 COMPONENTS
(Typical Application/Optional Component)
A. Starter Tracks/Drainage Tracks/Startte Flashing
   2. Vinyl Corp. PB Starter Strip/Casing Bead product # CBS 150-16W or Plastic Components Starter Trac product # STWP-15 shall be used in accordance with Master Wall Inc.® details.
   3. Alternate termination methods may be used in accordance with Master Wall Inc.® details and recommendations.
B. Mechanical Fasteners
   1. A rust resistant fastener approved by the Stucco Cement Board manufacturer shall be used to properly fasten the sheathing. The appropriate fastener shall be used to meet the requirements of the specific project, local building code and the anticipated wind loads. Wind-Lock Hard-Roc Sheathing Fasteners (F-HR) or approved equal.
C. Drainage Mats
   1. Where required drainage mats shall be approved by Master Wall Inc.
D. Sheathing & Cement Board Stucco
   1. Sheathing: Applied over framing and may be designed to satisfy structural requirements or fire-resistive construction. Exterior gypsum sheathing (ASTM C-79, Dens Glass Gold, Exposure 1 or exterior plywood (grade C-D or better), Exposure 1 Oriented Strand Board (OSB).
   2. Stucco Cement Board: Cementitious panels meeting ASTM C-1325. National Gypsum PermaBase (1/2” min.), USG Durock (1/2” min.), James Hardie Hardiepanel Smooth (5/16”) or approved equal.
Stucco Cement Board Coatings with Drainage
Section 09 93 63

E. Reinforcing Mesh
   1. Detail Mesh
   2. Standard Mesh

F. Base Coats
1. Master Wall Inc.® Foam & Mesh (F&M) Adhesive: An acrylic-based product mixed one-to-one by weight with Portland cement for use with reinforcing mesh as the base coating over the cement board.
2. Master Wall Bagged Base Coat (MBB): A polymer based cementitious product mixed with 5 to 6 quarts of water for use with reinforcing mesh as the base coating over the cement board.
3. F&M Plus: An acrylic-based high build product mixed one-to-one by weight with Portland cement designed for use with reinforcing mesh as the base coating over the cement board. (This product shall be used where indicated on the construction drawings when a leveling base coat is required.)
4. Expanded Polystyrene Base (EPSB): a 100% pure acrylic polymer based noncementitious base coat.

G. Water Resistant Adhesive & Base Coat
1. Guardian – An acrylic-based product mixed one-to-one by weight with Portland cement for use as a base coat with reinforcing mesh over cement board. (This product should be used as designated on the construction drawings where additional resistance to moisture is needed.)

H. Primer – Especially useful under dark colors
1. Primecoat Primer - Acrylic-based tintable primer
2. Sanded Primecoat Primer - Acrylic-based tintable primer with sand

I. 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
4. Versatex 0.5 (Refinish) – Fine texture used to create numerous finishes

J. Finish Enhancements
1. Silicone Coat - Factory added silicone enhancement for better water resistance and to keep buildings cleaner.
2. Excel Mildew Enhancement - Factory added mildew booster exceeding ASTM D3273 requirements.
3. Elastomeric Plus - Increases flexibility and bridges minor hairline cracks.

K. Specialty Finishes
1. Superior Stone
2. Aggrestone
3. Luma
4. Plaster Flex
5. Metallic Cote
6. Savannah
7. Marbleflex
8. Travertine
9. Eco Glass
10. Aggrelime
11. Brick Finish System

L. Accents & Coatings
1. Roller-flex architectural coating
2. Elasto-flex elastomeric architectural coating
3. Clearshield clear protective coating
4. Vintique antiquing accent

PART III – EXECUTION

3.01 EXAMINATION
A. Prior to installation of the Stucco Cement Board Coatings with Drainage System, the contractor shall verify that the substrate:
   1. Is of a type listed in the specifications.
   2. Is flat within 6.4 mm (1/4 in) in a 3 m (10 ft) radius.
   3. Is sound, dry, connections are tight, has no surface voids, projections or other conditions that may interfere with the Stucco Cement Board Coatings with Drainage System installation or performance.
B. Prior to the installation of the Stucco Cement Board Coatings with Drainage System, the architect or general contractor shall insure that all needed flashings and other waterproofing details have been completed, if such completion is required prior to the Stucco Cement Board Coatings with Drainage application. Additionally, the Contractor shall ensure that:
   1. Metal roof flashing has been installed in accordance with Asphalt Roofing Manufacturers Association (ARMA) Standards.
   2. Openings are flashed in accordance with the Stucco Cement Board Coatings with Drainage System Installation Details or as otherwise necessary to prevent water penetration.
   3. Chimneys, Balconies, and Decks have been properly flashed.
   4. Windows, Doors, etc. are installed and flashed per manufacturer's requirements and the Stucco Cement Board Coatings with Drainage System Installation Details.
C. Prior to the installation of the Stucco Cement Board Coatings with Drainage System, the contractor shall notify the general contractor, and/or architect, and/or owner of all discrepancies.

3.02 PREPARATION
A. Stucco Cement Board Coatings with Drainage materials shall be protected by permanent or temporary means from inclement weather and other sources of damage prior to, during, and following application until completely dry.
B. Protect adjoining work and property during Stucco Cement Board Coatings with Drainage installation.
C. The substrate shall be prepared as to be free of foreign materials, such as, oil, dust, dirt, form release agents, efflorescence, paint, wax, water repellents, moisture, frost and any other condition that inhibit adhesion.

3.03 GENERAL GUIDELINES
A. The system shall be installed in accordance with the current Master Wall Inc.® Stucco Cement Board Coatings with Drainage System Application Instructions.
B. The overall minimum base coat thickness shall be sufficient to fully embed the mesh.
C. Sealant shall not be applied directly to textured finishes.
D. When installing the Stucco Cement Board Coatings with Drainage System, adhere according to Master Wall Inc.® and local requirements.
3.04 STUCCO CEMENT BOARD COATINGS INSTALLATION

A. Design Considerations

1. The minimum slope of inclined surfaces shall not be less than 6" (152 mm) in 12" with a maximum length of 12" unless approved in writing by Master Wall Inc.®. Inclined surfaces which are or could be defined as roofs by the building codes or application are not approved by Master Wall Inc.®

2. The use of dark colors must be considered in relation to wall surface temperature as a function of local climatic conditions.

3. The Insulation Board, if used, shall be separated from the interior of the building by a 15-minute thermal barrier.

4. It is the responsibility of the architect and the purchaser to determine if a product is suitable for their intended use. The architect or designer of the project shall be responsible for all decisions pertaining to the design, details, structural capability, attachment details, shop drawings and the like. Master Wall Inc.® has prepared specifications, details and data sheets to assist as guidelines for the use and installation of the products. Master Wall Inc.® is not responsible for the design, details, structural capability, attachment details and shop drawings whether it is based on Master Wall Inc.® information or not.

5. Expansion joints in the system are required at building expansion joints, at prefabricated panel joints, where substrates change, at floor lines in wood framed construction, and where structural movement is anticipated. Reference construction documents for exact locations.

B. Mixing

1. Mix the products following the instructions on the product data sheets.

2. Additives shall not be added to Master Wall Inc.® materials unless written approval has been received from Master Wall Inc.®

C. Preparation

1. Protect contiguous work from damage during application of the Stucco Cement Board Coatings with Drainage. Temporary covering may be required to prevent over spray or splattering of exterior finish coatings on other work.

2. Protect substrate from inclement weather during installation. Prevent infiltration of moisture behind the system.

3. Adhesive, Base Coats and Finishes shall not be installed when ambient air temperature is below 40ºF (4ºC). The temperature shall remain at or above 40ºF (4ºC) during mixing, application and until materials have cured.

4. Sufficient scaffolding, manpower and tools shall be provided to prevent cold joints.

5. Flashings, water barriers and drainage spacers (if used) shall be installed as required by construction documents and Master Wall Inc.® details in a manner to prevent the intrusion of water behind the cement board and wall system. All flashing materials should direct the water to the exterior face of the finished system.

D. Installation, General

1. Reference architectural details for full wall system requirements.

2. Comply with the manufacturers’ current published instructions, (specifications, details, data sheets and technical bulletins) for the installation of the Stucco Cement Board Coatings with Drainage EIF System.

3. Comply with local building codes.

4. Verify that all flashings and other items are in place.

E. Drainage Track or Termination Option

1. Install the L-flashing or alternate termination method where the system ends at the foundation. Install flashing at least 6" (152 mm) above grade, at least ¾" (19 mm) above structurally supported paving/patios, or at least 2" (51 mm) above unsupported patios in accordance with manufacturer’s instructions.
3.05 FIELD QUALITY CONTROL

A. The contractor shall be responsible for the proper application of the Stucco Cement Board Coatings with Drainage materials.

B. Master Wall Inc.® assumes no responsibility for on-site inspections or application of its products.

C. If required, the contractor shall certify in writing the quality of work performed relative to the substrate system, details, installation procedures and as to the specific products used.

D. If required, the EPS supplier shall certify in writing that the EPS meets Master Wall Inc.® specifications.

E. If required, the sealant contractor shall certify in writing that the sealant application is in accordance with the sealant manufacturer’s and Master Wall Inc.® recommendations.

F. Acceptable weather resistive barriers for the Stucco Cement Board Coatings with Drainage System shall be:
   1. Code approved weather resistive barrier or a code-recognized equivalent such as Tyvek® StuccoWrap® shall be installed over substrate on all exterior walls before application of system begins in accordance with the manufacturer’s recommendations.
   2. Weather resistive barrier shall be installed horizontally with upper layers overlapping lower layers a minimum of 2”. Vertical joints shall overlap a minimum of 6”.
   3. Wrap weather resistive barrier into rough openings at windows, doors, mechanical equipment, and any other openings through the system. Overlap sill flashing tape at jambs at least 2”. Reference Master Wall Inc. details and technical bulletins for additional information.
   4. Lap weather resistive barrier over attachment flange of drainage track a minimum of 2”.

G. Acceptable optional drainage mat materials for the Stucco Cement Board Coatings with Drainage System shall be:
   1. Advanced Building Products Inc. Mortairvent: Rainscreen Mat with Backer Fabric, 6 mm & 10 mm
   5. Install drainage mat materials in accordance with manufacturer’s details and/or accepted industry practices.

H. Master Wall Inc.’s current published details, specifications, data sheets, technical bulletins and other literature/information are minimum standards and guidelines that shall be followed when designing and detailing a project with the Stucco Cement Board Coatings with Drainage EIF System.

I. Details shall conform to Master Wall Inc.’s details and shall be consistent with the project requirements.

J. Master Wall Inc. must approve deviations from the standard published details in writing.

K. The architect, engineer or the designer of the project should determine where the dew point would occur in relationship to the wall assembly and the project location during summer and winter conditions.

L. Drip details shall be specified in accordance with Master Wall Inc.’s published details.

M. At all locations the reinforced base coat, trim accessories or the substrate shall encapsulate the approved insulation board.
3.06 STUCCO CEMENT BOARD APPLICATION
A. Mechanical Fasteners
   1. A rust resistant fastener approved by the sheathing manufacturer shall be used to properly fasten the Stucco Cement Board. Appropriate fastener shall be used to meet the requirements of the specific project, local building code and the anticipated wind loads.
B. Installation
   1. Approved substrates/sheathings for application:
      a) PermaBase
      b) Durock
      c) James Hardie Hardiepanel Smooth
   2. Make sure the weather resistive barrier is lapped over and into the drainage track and onto the flange of the casing bead.
   3. Attach sheathing using appropriate fastener.
   4. Fastening patterns shall be determined by the requirements of the geographical conditions of the area, local code requirements and the performance of the fasteners and their test results in conjunction with the specified substrate and the thickness of sheathing specified for use.
   5. Install fasteners so that the face of the fastener head is flush or slightly recessed into the surface of the sheathing board.
   6. The application of the sheathing board shall commence at the base of the wall in the drainage track from a level line of support.
   7. The Stucco Cement Board shall be installed so that the vertical joints are staggered.
   8. Stucco Cement Board joints shall be offset from the corners of openings.
   9. Allow for proper spacing at windows, doors, penetrations and other openings so that sealant systems can be installed in accordance with Master Wall Inc.’s specification, details and the construction documents.
10. Provide a proper joint through sheathing board where building expansion joints are detailed and where required in the system.
11. Double studs are required if needed to accommodate control joints, expansion joints, or where it is needed to provide a fastening base for sheathing board joints.
12. The sheathing board shall be butted tightly.

3.07 CONTROL JOINTS
A. Mechanically attach the control joints in accordance with construction documents, the recommendations of the manufacturer of the control joint, and Master Wall Inc.’s specifications and details.
B. Fasten control joint with corrosion resistant fasteners of sufficient length to penetrate the wood studs at least 1” (25 mm), and the steel.

3.08 BASE COAT PREPARATION
A. Inspect Stucco Cement Board to ensure the installation meets the requirements set forth in the sheathing manufacturer’s installation instructions, Master Wall Inc.’s specification, details, data sheets, technical bulletins and the construction documents. Make necessary repairs to ensure the installation meets the requirements prior to commencement of the base coat application.
B. Install minimum 9” x 12” (229 mm x 305 mm) diagonal reinforcement at all windows, doors, louvers, or other penetration corners. Apply field mesh as soon as possible after diagonal mesh application.
3.09 CEMENT BOARD MESH APPLICATION
A. Center the Master Wall Cement Board Mesh over all Stucco Cement Board joints, inside and outside corners and all breaks in the board. Lap mesh a minimum of 2-1/2” (64 mm).
B. Immediately apply base coat to the Cement Board Mesh and taper the base coat to a featheredge. Alternatively, embed the Cement Board Mesh into wet base coat.
C. Allow the base coat to cure a minimum of 12 hours prior to additional base coat or finish coat applications.

3.10 BASE COAT APPLICATION
A. Base Coat Application
1. Apply the base coat to the entire surface of the cement board to the thickness required for the specified reinforcing mesh to be applied in a given area.
   a. Standard, Detail and Hi-Tech Mesh require a nominal 1/16” (1.6 mm).
2. 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.
3. Lap mesh 2 ½” (64 mm) minimum on all sides.
4. Reinforcing Mesh shall be continuous through all interior and exterior corners extending beyond the corner a minimum of 12” from both directions creating a minimum of two layers of standard reinforcing mesh on all interior and exterior corners.
5. EPS shapes shall have reinforcing mesh embedded into the base coat.
6. Allow the base coat to cure a minimum of 12 hours prior to additional base coat or finish coat applications.

3.11 FINISH COAT APPLICATION
A. Superior Finish Coat Application
1. Surface irregularities in the base coat, such as trowel marks 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 90º 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.

3.12 JOB SITE CLEANUP
Master Wall Guide Specification SC
Issued: 1/1/16
Page 13 of 14
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).

3.13 PROTECTION
A. Stucco Cement Board Coatings with Drainage 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
This Specification is published for general informational purposes only and is not intended to imply that these are the only materials, procedures, or methods, which are available or suitable. Materials, procedures, or methods may vary according to the particular circumstances, local building code requirements, design conditions, or statutory and regulatory requirements. While the information in this specification is believed to be accurate and reliable, it is presented without guarantee or responsibility on the part of Master Wall Inc.®