



Part 1 General

1.01 GENERAL

- A. The Master Wall Soffit System is a non-structural soffit and ceiling system designed for use either on interior or exterior ceilings and soffits.

1.02 SCOPE OF WORK

- A. Provide all materials, labor, and equipment to install the Field Applied and/or Panelized Master Wall Soffit System.
- B. Related Sections:
 - 1. Light Gauge Steel Framing 05400
 - 2. Sheathing 06100
 - 3. Sheet Metal Flashing and Trim 07620
 - 4. Sealants 07900

1.03 TERMS / DEFINITIONS

- A. Applicator – The contractor that applies the Soffit System.
- B. Base Coat – The material applied to the face of the sheathing and reinforced with one or more layers of mesh to function as the exterior weather barrier.
- C. Base Coat Mixture – A field mixed blend of base coat and Portland cement.
- D. Building Expansion Joint – A joint through the entire building structure designed to accommodate structural movement.
- E. Designer – The person or firm that is responsible to create the plans and specifications for the entire project.
- F. Expansion Joint – A designed joint in the continuity of a material, assembly, or system, designed to accommodate movement.
- G. Finish Coat – An acrylic based, factory mixed decorative and protective coating that is applied to the base coat.
- H. Reinforcing Mesh – Balanced, open weave, basic glass fiber mesh(es) supplied by the manufacturer of the Soffit System, treated for compatibility with other materials of the system, which functions to strengthen the system and adds impact resistance.
- I. Mechanical Fastener – Rust resistant fasteners utilized to fasten the sheathing.
- J. Sheathing – An approved material to which the Soffit System coatings are applied.
- K. Substrate - The approved sheathing to which the Soffit System coatings are applied.



1.04 QUALITY ASSURANCE

A. Design and Detailing

1. General

- a. 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 Master Wall Soffit System.
- b. Details shall conform to Master Wall Inc.'s details and shall be consistent with the project requirements.
- c. Master Wall Inc. must approve deviations from the standard published details in writing.
- d. 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.
- e. Proper fastener spacing of the approved sheathing shall be strictly adhered to. Reference sheathing manufacturer and local code recommendations for proper fastener spacing.
- f. 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.
- g. At all locations, the reinforced base coat or approved trim shall encapsulate the edges of the approved sheathing.
- h. 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.'s information or not.



2. Sheathing

- a. The maximum deflection under full flexural design loads of the substrate system shall not exceed $L/240$.
- b. Acceptable sheathings for the Master Wall Soffit System include Exterior Gypsum Ceiling Board, Dens Glass Gold[®], Perma Base[®], FiberRock[®], Durock[®], Hardie Tex[®], or Eterspan[®]. Reference specific manufacturer for structural and installation requirements.
- c. Since the surface of the sheathing cannot be rasped smooth, the flatness and finished appearance of the Soffit System application will depend on the structural members that support the sheathing.
- d. Sheathings not approved in the manufacturer's published literature shall be approved by the manufacturer in writing prior to the application of the system.
- e. The project architect or engineer shall engineer the framing and sheathing with regard to the required structural performance.

3. Expansion Joints

- a. 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 specific locations.
- b. Double studs are required to accommodate expansion joints or where it is needed to provide a fastening base for sheathing board joints.

4. Control Joints

- a. Control joints are required at the following locations: (Reference construction documents for specific locations).
 - 1) Shall not exceed 20 lineal feet (6.1 m) in any direction.
 - 2) 160 square feet (15 sm) 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.

6. Sealants

- a. Sealants and backer rod, as required at expansion joints and dissimilar substrates, shall provide a complete watertight system. See Section 07920.
- b. The sealants in a Soffit System expansion joint, or any sealant joint that anticipates significant movement, shall be bonded to the casing bead or the reinforced base coat, not the finish coat. The color of the mesh shall not be visible and the texture of the mesh shall not be exposed within base coat at these locations.

7. Penetrations

- a. All penetrations through the system must be properly sealed to insure the integrity of the system.



B. Qualifications

1. The Soffit System Manufacturer shall have manufactured Exterior Finish Systems in the United States for at least 10 years.
2. The Applicator shall be knowledgeable in the proper installation of the Master Wall Inc. Soffit System.
3. The Applicator shall have demonstrated the ability to install the system on projects of similar size and complexity.
4. The Applicator shall provide the proper equipment, manpower and supervision on the job site to install the system in compliance with project plans and specifications.
5. Master Wall Inc. shall approve the Sheathing Board Manufacturer in writing.
6. The sealant contractor shall be experienced in the installation of high performance industrial and commercial sealants.
7. Prior to the installation of the Master Wall Soffit System, erect sample wall mock-up using materials and joint details required for final work. Provide special features as directed for sealant and contiguous work. Build mock-up at the site where directed of full thickness, indicating the proposed color, texture, and workmanship to be expected in the completed work. Obtain architect's acceptance of the mock-up in regard to aesthetic quality before start of work. Retain mock-up during construction as a standard for judging completed work. Do not alter, move, or destroy mock-up until work is completed, and until final acceptance of the project by architect.

1.05 SUBMITTALS

- A. The Applicator shall submit a list of completed projects of like size and complexity.
- B. The Applicator shall submit a certificate of training indicating that they have been given instructions on the proper installation of the Soffit System.
- C. The Applicator shall submit Soffit System Manufacturer's current literature, brochures, specifications, and details.
- D. The Applicator shall submit sufficient samples of each finish texture and color selected. The samples shall be prepared with the same tools and techniques required for the actual project. Color and texture should be approved based on the job site mock-up samples.
- E. The Applicator shall provide any shop drawings that may be applicable to the project for approval by the project architect.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver all materials in original unopened packages with labels intact. Verify all quantities, colors, and textures against bill of lading.
- B. Store all materials protected from direct exposure to weather conditions and at temperatures not less than 40° F (5° C) or greater than 110° F (43° C).
- C. Material safety data sheets (MSDS) shall be supplied for the components of the Soffit System and be available at the job site.



1.07 JOB CONDITIONS

- A. Ambient air temperatures shall be 40° F (5° C) or greater and rising at the time of installation of the Master Wall Inc. products and shall remain at 40° F (5° 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 Soffit System shall be protected during installation and while curing from weather and shall be protected from site damage.
- E. Coordinate installation of the Master Wall Soffit System with related work specified in other sections to ensure that the wall assembly is protected to prevent water from getting behind the weather barrier. 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 sealants 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.

1.08 REPAIR AND MAINTENANCE

- A. Refer to Master Wall Inc. specific repair and maintenance procedures.
- B. Sealants and flashings shall be inspected annually to verify that the products are not allowing water intrusion behind the weather barrier. If sealant and/or flashings are allowing water intrusion behind the weather barrier, repairs should be made immediately.

1.09 LIMITED MATERIALS WARRANTY

- A. A Limited Materials Warranty shall be issued upon the receipt of a properly completed warranty request form.



PART 2 PRODUCTS

2.01 GENERAL

- A. All components of the Master Wall Soffit System shall be obtained from Master Wall Inc. or its authorized distributors. No substitutions of, or additions of, other materials shall be submitted without prior written permission from Master Wall Inc. Substitutions or additions will void the warranty.

2.02 MATERIALS

- A. Casing Bead, Control Joints and Termination Beads: Properly sized to the sheathing and manufactured by Vinyl Corp., Plastic Components, or approved equal shall be used in accordance with Master Wall Inc. details. Products may either be surface applied or fully encasing the sheathing.
- B. Mechanical Fasteners: A rust resistant fastener approved by the sheathing 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.
- C. Reinforcing Mesh
 1. Detail Mesh – nominal 4.5 oz./sq. yd. open weave glass fiber fabric, treated for alkaline resistance and compatibility with Master Wall Base Coats, and conforming to ASTM D-76, D-579, D-5035, and MIL-Y-1140.
 2. Standard Mesh – nominal 4.5 oz./sq. yd. open weave glass fiber fabric, treated for alkaline resistance and compatibility with Master Wall Base Coats, and conforming to ASTM D-76, D-579, D-5035, and MIL-Y-1140.
- D. Base Coats
 1. F & M Plus: An acrylic-based product mixed one-to-one by weight with Portland cement designed for use with reinforcing mesh as the base coating over the approved sheathing board. (Because the sheathing board cannot be rasped to a level surface, F & M Plus is recommended for use as the base coat in the Master Wall Soffit System.)
 2. Foam & Mesh (F&M) Adhesive: An acrylic-based product mixed one-to-one by weight with Portland cement designed for use with reinforcing mesh as the base coating over the sheathing board.
 3. Bagged Base Coat (MBB): A polymer based cementitious product mixed with 5 to 6 quarts of water for use as a base coating over the sheathing board.
- E. Water Resistant 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 sheathing board.



- F. Finish: Master Wall Inc.'s Superior Finishes are acrylic-based wall coatings available in a variety of colors and textures. The following textures are available:
1. Perfect - riled texture
 2. Spray – sand type texture
 3. R-Coarse – coarse riled texture
 4. Desert Sand – coarse sand texture
 5. Refinish – fine texture used to create numerous finishes
 6. Superior Stone & Aggrestone Finishes – clear acrylic matrix filled with colored ceramic beads

Note: The above textures excluding Superior Stone & Aggrestone Finishes are also available in the Silicone Coat product line, the Elastomeric & Elastomeric Plus product line, and the Excel additive. Superior Silicone Coat combines acrylic and the siloxane polymers to provide the maximum resistance to moisture. Superior Elastomeric utilizes elastomeric polymers to enable the finishes to bridge minor cracking. Excel provides additional protection from mildew and algae.

- G. Water: Shall be clear, clean and potable without any foreign matter in the solution that may affect the color and setting qualities of the cement, base or finish coat.
- H. Cement: Type I or I-II Portland cement meeting ASTM C-150.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Prior to installation of the Soffit System, the contractor shall verify that the substrate:
1. Is an approved substrate.
 2. Is flat within 6.4 mm (1/4 in) in a 3.05 m (10 ft) radius.
 3. Is sound, dry, connections are tight, has no surface voids, projections or other conditions that may interfere with the Soffit System installation or performance.
- B. Prior to the installation of the Soffit 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 finish 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 as 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.



C. Prior to the installation of the Soffit System, the contractor shall notify the general contractor, and/or architect, and/or owner of all discrepancies.

3.02 PREPARATION

- A. The finish 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 finish 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 INSTALLATION

- A. The system shall be installed in accordance with the current Master Wall Inc. Soffit 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 Soffit System, adhere according to Master Wall Inc. and local requirements.

3.04 FIELD QUALITY CONTROL

- A. The contractor shall be responsible for the proper application of the finish 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, workmanship and as to the specific products used.
- D. 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.'s recommendations.

3.05 CLEANING

- A. All excess Soffit System materials shall be removed from the job site by the contractor in accordance with contract provisions and as required by applicable law.
- B. All surrounding areas, where the Soffit System has been installed, shall be left free of debris and foreign substances resulting from the contractor's work.



3.06 PROTECTION

- A. The Soffit 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.