



Application Instructions

3.01 INSPECTION

- A. Prior to the application of the QRW1 Drainage EIF System 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 MIXING

- A. Foam & Mesh (F&M) Adhesive: Mix F&M at a weight ratio of 1 to 1 with Portland Type I or I/II, white or grey cement. Mix using a ½", 400-500 RPM drill motor and Wind-lock B-MTW Mixer or equivalent. . Let stand for 3-5 minutes and remix until the desired consistency is achieved. Small amounts of clean water can be added for workability. Do not over mix.
- B. Master Wall Bagged Base Coat (MBB): Add 5 to 6 quarts of water with the 50-lb. bag in a clean bucket for mixing. Mix the MBB with a Wind-lock B-MTW Mixer or equivalent using a ½", 400-500 RPM drill motor. Let stand for 3-5 minutes and remix until the desired consistency is achieved. Small amounts of clean water can be added for workability. Do not over mix.
- C. F & M Plus: Mix F & M Plus at a weight ratio of 1 to 1 with Portland Type I or I/II, white or grey cement. Mix using a ½", 400-500 RPM drill motor and Wind-lock B-MTW Mixer or equivalent. . Let stand for 3-5 minutes and remix until the desired consistency is achieved. Small amounts of clean water can be added for workability. Do not over mix.
- D. Guardian: Mix Guardian at a weight ratio of 1 to 1 with Portland Type I or I/II, white or grey cement. Mix using a ½", 400-500 RPM drill motor and Wind-lock B-MTW Mixer or equivalent. . Let stand for 3-5 minutes and remix until the desired consistency is achieved. Small amounts of clean water can be added for workability. Do not over mix.
- E. Superior Finishes: Mix the finish coat with a Wind-lock B-MTW using a ½", 400-500 RPM drill motor. Small amounts of water can be added for workability. Mix until reaching a uniform consistency. (It is important that the same amount of water be added to each pail to ensure a consistent color.)
- F. Additives shall not be added to Master Wall Inc.'s materials unless written approval has been received from Master Wall Inc.



3.03 PREPARATION

- A. Protect contiguous work from damage during application of the QRW1 Drainage EIF System. Temporary covering may be required to prevent overspray or splattering of 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. Adhesive, Base Coats and Finishes shall not be installed when ambient air temperature is below 40°F (5°C). The temperature shall remain at or above 40°F (5°C) during mixing, application and until materials have cured.
- D. Sufficient scaffolding, manpower and tools shall be provided to prevent cold joints.
- E. Code approved weather resistive barrier such as one layer type 15 felt or equivalent shall be installed over substrate on all exterior walls before application of system begins.
- F. Flashings shall be installed as required by construction documents and Master Wall Inc.'s details in a manner to prevent the intrusion of water behind the weather resistive barrier. All flashing materials should direct the water to the exterior face of the weather resistive barrier.

3.04 INSTALLATION, GENERAL

- A. Comply with the manufacturers' current published instructions, (specifications, details, data sheets and technical bulletins) for the installation of the QRW1 Drainage EIF System.
- B. Comply with local building codes.

3.05 INSTALLATION OF DRAINAGE TRACK

- A. Drainage track must be installed at all horizontal terminations of the system; such as heads of windows, doors, and at base of the wall where system begins.
 - 1. Strike a level line on the substrate to correspond with the top of the nailing flange of drainage track.
 - 2. Remember to keep the termination at the base of the wall at least 6" (152 mm) above finished grade.
 - 3. Fasten drainage track with corrosion resistant fasteners of sufficient length to penetrate the wood studs at least ¾" (19 mm), spaced a minimum 16" o.c. (406 mm).
 - 4. Butt ends of the starter track. Miter inside and outside corners.
 - 5. Lap weather resistive barrier into drainage track.

3.06 INSTALLATION OF WALL VENT SPACER

- A. If used, install vent spacers to provide a drainage plain and ventilation.
 - 1. Install the ¼" x 3 ½" (6.4x89 mm) closed cell polyethylene sill sealer vertically and continually over each stud. Fasten approximately 2' (0.6 m) o.c.
 - 2. Install drainage mats following manufacturer's instructions.



3.07 INSULATION APPLICATION

A. Mechanical Fasteners

1. The Celotex Galvanized Quik-Cap Washer, Wind-lock ULP-402 Plate or an approved equal shall be used when fastening is required.
2. The appropriate fastener shall be used to meet the requirements of the specific project, local building code and the anticipated wind loads.
3. Wood screws shall be corrosion resistant and long enough to penetrate stud or structural members 3/4" (19 mm).
4. For light gauge metal framing, screws shall be corrosion resistant and long enough to penetrate metal framing members 3/8" (9.5 mm).
5. When fastening through sheathing to stud framing fasteners shall be installed a minimum of 12" (305 mm) o.c. vertically and 16" or 24" (406 or 610 mm) o.c. horizontally depending on the stud spacing.
6. When fastening to masonry walls fasteners shall be installed a minimum of 24" (610 mm) o.c. vertically and 16" (406 mm) o.c. horizontally.

B. Installation

1. Approved substrates for application:
Exterior Grade Gypsum Sheathing ASTM C-79*, Dens Glass Gold ASTM C-1177*, Fiber Bond*, Durock*, PermaBase*, painted/unpainted Masonry, Concrete, Brick, 1/2" CDX Exterior Grade Plywood, 1/2" OSB Exterior Grade Sheathing
* Mechanical fasteners must be secured to framing.
2. Make sure weather resistive barrier is lapped over and into drainage track.
3. Attach Insulation Board using appropriate fastener combined with fastener plate.
4. See Master Wall Inc.'s details for suggested fastener pattern.
5. Fastening patterns shall be determined by the requirements of the geographical conditions of the area, local code requirements and the performance of the fasteners, washers and their test results in conjunction with the specified substrate and the thickness of insulation board specified for use.
6. Install fasteners so that the face of the fastener plate is flush or slightly recessed into the surface of the insulation board. Do not puncture the surface of the insulation board with the fastener plate.
7. The application of the insulation board shall commence at the base of the wall in the drainage track from a level line of support.
8. The insulation board shall be installed so that the vertical joints are staggered.
9. Insulation boards shall be interlocked at the inside and outside corners.
10. Insulation board joints shall be offset from the sheathing joints a minimum of 6".
11. Insulation board joints shall be offset from the corners of openings.



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12. 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.
13. Provide a proper joint through insulation board where expansion joints occur in substrates and where required in the system.
14. The insulation board shall be butted tightly. Any gaps greater than 1/16" (1.6 mm) between insulation boards shall be filled with slivers of insulation board. Adhesive shall not be used to adhere foam when filling gaps.
15. Gaps between insulation boards shall not be filled with adhesive or base coat materials.

3.08 BASE COAT PREPARATION

- A. Inspect insulation board to ensure the installation meets the requirements set forth in 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" (229x305 mm) diagonal reinforcement at all windows, doors, louvers, or other penetration corners. Apply field mesh as soon as possible after diagonal mesh application.
- C. Reference architectural documents for locations of designed impact classifications.

3.09 BASE COAT APPLICATION

- A. Apply the base coat to the entire surface of the insulation board to the thickness required for the specified reinforcing mesh to be applied in a given area.
 1. Standard, Detail and Hi-Tech Mesh requires a nominal 1/16" (1.6 mm).
 2. Medium, Strong and Ultra Mesh requires a nominal 3/32" (2.4 mm).
- B. 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.
- C. Lap mesh 2 1/2" (64 mm) minimum on all sides. (Do not lap Strong or Ultra mesh.)
- D. Reinforcing Mesh shall be continuous through all interior and exterior corners extending beyond the corner a minimum of 12" (305 mm) from both directions creating a minimum of two layers of standard reinforcing mesh on all interior and exterior corners.
- E. Standard and Hi-Tech reinforcing mesh can be applied in a single layer.
- F. Medium Mesh can be applied in one layer yet it may require an additional coat of base coat mixture to properly embed the mesh after the first coat has dried.
- G. Strong and Ultra Mesh require a second layer of base coat reinforced with Standard or Hi-Tech Mesh.
- H. Insulation Board shapes shall have reinforcing mesh embedded into the base coat.
- I. Allow the base coat to cure a minimum of 12 hours prior to additional base coat or finish coat applications.



3.10 SUPERIOR FINISH COAT APPLICATION

- A. 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.
- B. 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.
- C. Trowel Application – (Perfect, Spray, R-Coarse, Desert Sand, Refinish)
 - 1) Apply the Superior Finish to the clean, dry and cured base coat with a stainless steel trowel.
 - 2) Level the surface to a uniform thickness of 3/32" to 1/8" (2.4-3 mm).
 - 3) Float the Finish with a plastic float in a uniform motion to achieve the desired texture. (Refinish cannot be floated. A second application of the Refinish shall be applied to create the desired texture.)
- D. Spray Application – (Perfect, Spray, R-Coarse, Desert Sand, Refinish)
 - 1) Prime surface with Master Wall Inc. Primecoat or Roller-Flex tinted to match the selected finish color. Allow Primecoat or Roller-Flex to cure a minimum of 12 hours prior to finish coat application.
 - 2) 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.
 - 3) Be cautious of flooding an area with too much finish because it may appear shinier when it dries.
- E. Superior Stone or Aggrestone Finish
 - 1) Prime surface with Master Wall Inc. Primecoat or Roller-flex tinted to match the predominate color of stone in the selected finish color. Allow Roller-Flex to cure a minimum of 12 hours prior to finish coat application.
 - 2) Superior Stone Finish should be applied in two coats. The first coat can be trowel or spray applied.
 - a) Trowel application - Apply the Superior Stone or Aggrestone Finish to the clean, dry and cured base coat with a stainless steel trowel. Trowel finish uniformly then scrape down to a thickness equal to the size of the aggregate. Trowel to eliminate trowel marks and irregularities.
 - b) Spray application - Using a conventional plaster hopper gun or a proven pump, spray two coats of the finish over the primed base coat to achieve desired texture. If the first coat was trowel applied, a minimum of one spray coat is required as the finish coat. Use 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. The first coat shall dry a minimum of one hour prior to the application of the second coat. Be cautious of flooding an area with too much finish because it may appear shinier when it dries.
- F. Provide protection from rain and temperatures below 40°F (4°C) for a minimum of 24 hours after application. Longer protection may be necessary during lower temperatures and/or higher humidity conditions.



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3.11 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).

Disclaimer

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