



SECTION 04212 [04 21 13.13]

## THIN BRICK VENEER

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### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Thin brick veneer and accessories.

#### 1.2 RELATED SECTIONS

- A. Section 03300 [03 30 00] - Cast in Place Concrete: Concrete Walls prepared for brick veneer application.
- B. Section 03400 - Precast Concrete.

- C. Section 04200 [04 20 00] - Concrete Masonry Units: CMU Walls prepared for brick veneer application.
- D. Section 05400 [05 40 00] - Cold-Formed Metal Framing: Structural wall backing.
- E. Section 06112 [06 11 00] – Wood Framing and Sheathing: Structural wall backing for brick veneer application.
- F. Section 07200 [07 20 00] - I Thermal Protection.
- G. Section 07250 [07 25 00] – Weather Barriers: Water resistive barrier placed on exterior face of wall sheathing or metal studs.
- H. Section 07270 [07 27 00] - Air Barriers: Air and water resistive barrier placed on interior face of wall insulation.
- I. Section 07620 [07 62 00] - Sheet Metal Flashing and Trim: Weep screeds and wall and roof flashings.
- J. Section 07650 [07 65 00] - Flexible Flashing: Product requirements for flexible flashings for placement by this section.

### 1.3 REFERENCES

- A. ASTM C 67 - Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile
- B. ASTM D 1056 - Standard Specification for Flexible Cellular Materials—Sponge or Expanded Rubber

- C. ASTM C 1088 - Standard Specification for Thin Veneer Brick Units Made from Clay or Shale.
- D. BIA TN 28C – Technical Notes on Brick Construction, Thin Brick Veneer.

#### 1.4 SUBMITTALS

- A. Submit under provisions of Section 01300 [01 30 00].
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- C. Shop Drawings:
  - 1. Submit general placing drawings to indicate unit sizes, layout and bond patterns, spacing, location and quantities of substrate reinforcement and connectors, and structural movement related to thin brick masonry veneer assemblies.
  - 2. Include overall dimensions, framed opening requirements and tolerances, adjacent construction, affected related work, expansion and contraction joint locations, accessories, and project specific details
- D. Selection Samples: For each exposed product to be used, furnish not less than five individual brick samples and as many as required by the brick manufacture to demonstrate full color range, and texture to be expected in the finished work
- E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

- F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

## 1.5 QUALITY ASSURANCE

- A. Sourcing: All primary products specified in this section shall be supplied by a single manufacturer
- B. Manufacturer Qualifications: 10 years' experience manufacturing similar products and with production capability to meet the Project schedule.
- C. Installer Qualifications: Approved by the setting system manufacturer with minimum 2 years' experience installing similar products/
- D. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
  - 1. Finish areas designated by Architect, minimum size 48 inches (1200 mm) long by 36 inches (914 mm) high.
  - 2. Do not proceed with remaining work until workmanship and color are approved by Architect.
  - 3. Refinish mock-up area as required to produce acceptable work.
  - 4. Accepted mock-ups may remain as part of the completed work and will set the standard of acceptance for remaining work including bond, mortar, workmanship, appearance and project specific criteria indicated by the Architect.

## 1.6 PRE-INSTALLATION MEETING

- A. Convene at the Project site minimum two weeks prior to starting work of this section to discuss:
  - 1. Method and sequence of masonry construction.
  - 2. Special masonry details.
  - 3. Standard of workmanship.

4. Quality control requirements.
5. Job organization.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in the manufacturer's unopened packaging with manufacturer's identification and labels intact until ready for installation.
- B. Store in accordance with the manufacturer's instructions and the following:
  1. Store units off the ground in a clean, dry, well-ventilated area covered to prevent masonry units and related materials from getting saturated before installation.
  2. Protect from surface damage, mud, dust or materials likely to cause staining or other defects.
  3. Remove damaged or deteriorated materials from the Project site and replace with new materials to meet specified requirements.
- C. Handle materials in accordance with the manufacturer's instructions.

## 1.8 PROJECT CONDITIONS

- A. Walls to receive thin brick must be structurally sound with a deflection no less than  $L/240$ , plumb and flat within 1/4 inch (6 mm) per 10 feet (3 meters), with corners braced to meet code and design requirements and to alleviate shrinkage, raking, settling, and movement.
- B. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

## PART 2 PRODUCTS

## 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Meridian Brick (Formerly Boral Bricks and Forterra Brick); which is located at: 6455 Shiloh Rd. Suite D; Alpharetta, GA 30005; Toll Free Tel: US: 1-866-259-6263; CA: 866-263-6229; Email: [request info \(AskMeridian@meridianbrick.com\)](mailto:requestinfo@meridianbrick.com); Web: [:https://www.authenticbrick.com](https://www.authenticbrick.com)
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

## 2.2 THIN BRICK

- A. Thin Brick: ASTM C 1088, Type TBS, tested in accordance with ASTM C 67, as manufactured by Meridian Brick.
- B. Brick Color and Size
  - 1. Alamo:
    - a. Size Flats: Queen 3/4 inch T by 2-3/4 inches H by 7-5/8 inches L.
    - b. Size Corners: Queen 3/4 inch T by 2-3/4 inches H by 7-5/8 inches and 2-3/4 inches L.
  - 2. Amaro:
    - a. Size Flats: Modular 5/8 inch T by 2-1/4 inches H by 7-5/8 inches L.
    - b. Size Corners: Modular 5/8 inch T by 2-1/4 inches H by 7-5/8 inches and 3-1/2 inches L.
  - 3. Capers Island:

- a. Size Flats: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches and 2-3/4 inches L.
4. Coastal Bluff:
  - a. Size Flats: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches and 2-3/4 inches L.
5. Colony Bay:
  - a. Size Flats: Modular 5/8 inch T by 2-1/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Modular 5/8 inch T by 2-1/4 inches H by 7-5/8 inches and 3-1/2 inches L.
6. Cordoba:
  - a. Size Flats: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches and 2-3/4 inches L.
7. Cottonwood:
  - a. Size Flats: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches and 3 inches L.
8. Fireside:
  - a. Size Flats: King 5/8 inch T by 2-5/8 inches H by 9-5/8 inches L.
  - b. Size Corners: King 5/8 inch T by 2-5/8 inches H by 9-5/8 inches and 2-3/4 inches L.
9. Grand Chenier:
  - a. Size Flats: King 5/8 inch T by 2-5/8 inches H by 9-5/8 inches L.
  - b. Size Corners: King 5/8 inch T by 2-5/8 inches H by 9-5/8 inches and 2-3/4 inches L.
10. Grand River:

- a. Size Flats: Modular 5/8 inch T by 2-1/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Modular 5/8 inch T by 2-1/4 inches H by 7-5/8 inches and 3-1/2 inches L.
11. Madrono: This product is not recommended for exterior application in regions with increased winter rainfall combined with multiple freeze/thaw cycles.
- a. Size Flats: King 5/8 inch T by 2-5/8 inches H by 9-5/8 inches L.
  - b. Size Corners: King 5/8 inch T by 2-5/8 inches H by 9-5/8 inches and 2-3/4 inches L.
12. Magnolia Bay:
- a. Size Flats: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches and 2-3/4 inches L.
13. Marsh Pointe:
- a. Size Flats: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches and 2-3/4 inches L.
14. Meadow Brook:
- a. Size Flats: Modular 5/8 inch T by 2-1/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches and 3-1/2 inches L.
15. Mt Rushmore:
- a. Size Flats: Queen 3/4 inch T by 2-3/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Queen 3/4 inch T by 2-3/4 inches H by 7-5/8 inches and 2-3/4 inches L.
16. Old Edisto:
- a. Size Flats: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches L.



- b. Size Corners: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches and 2-3/4 inches L.
17. Old Guignard:
- a. Size Flats: Queen 3/4 inch T by 2-3/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Queen 3/4 inch T by 2-3/4 inches H by 7-5/8 inches and 2-3/4 inches L.
18. Old Williamsburg:
- a. Size Flats: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches and 3 inches L.
19. Shiawasse:
- a. Size Flats: Modular 5/8 inch T by 2-1/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Modular 5/8 inch T by 2-1/4 inches H by 7-5/8 inches and 3-1/2 inches L.
20. Silverado: This product is not recommended for exterior application in regions with increased winter rainfall combined with multiple freeze/thaw cycles.
- a. Size Flats: King 5/8 inch T by 2-5/8 inches H by 9-5/8 inches L.
  - b. Size Corners: King 5/8 inch T by 2-5/8 inches H by 9-5/8 inches and 2-3/4 inches L.
21. Swan Creek:
- a. Size Flats: Modular 5/8 inch T by 2-1/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Modular 5/8 inch T by 2-1/4 inches H by 7-5/8 inches and 3-1/2 inches L.
22. Tobacco Road:
- a. Size Flats: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches L.
  - b. Size Corners: Queen 5/8 inch T by 2-3/4 inches H by 7-5/8 inches and 2-3/4 inches L.

- C. Shapes: Provide flats and corner shapes as required.
- D. Mortar Joint Thickness: 3/8 inch Standard unless otherwise indicated on the Drawings.
- E. Mortar Joint shape: Tooled concave unless otherwise indicated on the Drawings.

### 2.3 ACCESSORIES

- A. Water Resistive Barrier: Coordinate with assemblies specified in Section 07279 Air Barriers and Section 07250 Water Resistive Barriers.
- B. Setting System: Provide setting system complete including manufacturer's accessories including primers, transition and sealing tapes required. System shall Conform to requirements specified in BIA TN 28C and the thin brick manufacturer's recommendation:
  - 1. Metal Lath and Scratch (Thick Set) System.
  - 2. Masonry Veneer Installation System (MVIS) over cementitious substrate (Thin Set System)
  - 3. Tabs Wall System, LLC proprietary system
  - 4. Best Panel System, LLC proprietary system
  - 5. Speedy Mason, Inc proprietary system
- C. Expansion Joints:
  - 1. Pre-molded Foam: ASTM D 1056, Type 2, Class A, Grade 1.
  - 2. Neoprene: ASTM D 1056, Type 2, Class A, Grade 1, or ASTM D 2240 Shore A Hardness of 50 to 70 with cold weather flexibility and minimum ultimate elongation of 300 percent.
- D. Sealants and Backer Rods: as specified in Section 07900 - Joint Fillers.

- E. Cleaners: Compatible with substrate and acceptable to masonry manufacturer.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until backup structure and substrates have been properly prepared.
- B. If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Protect adjacent materials from damage due to masonry work
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions and BIA TN 28C - Technical Notes on Brick Construction, Thin Brick Veneer.
- B. Coordinate with Work specified in Section 07279 Air Barriers and Section 07250 Water Resistive Barriers.

- C. Install products from a single manufacturer as specified above based on adjacent construction and substrates.
- D. Coursing and Bond Patterns:
1. Establish lines, levels, coursing and bond patterns indicated. Protect from displacement.
  2. Maintain masonry courses to uniform dimensions. Form vertical and horizontal joints of uniform thickness.
  3. Refer to the Drawings for special details and treatments at corners, openings, and transitions. Maintain architectural alignments as indicated.
- E. Mortar Mixing:
1. Mix mortar only in quantities needed for immediate use.
  2. Measure materials by volume or equivalent weight, using the same measurement for each material and batch. Do not measure by shovel.
  3. If mortar color is to be used, add in accordance with manufacturers recommendations. Ensure uniformity of mix and coloration.
  4. Clean mixing boards and mechanical mixing machine between batches.
- F. Mortar Joints: 3/8 inch (9.5 mm) thick unless otherwise indicated on the Drawings.
- G. Mortar Joint Tooling:
1. Provide slightly concave tool joints when the mortar is thumbprint hard using non-rusting round jointer tools slightly larger than the joint width to smooth and compress mortar tightly against both sides of the joint.
  2. Tool joints in a manner to ensure the durability of the building envelope and not retain water or dirt.
  3. Head joints shall match bed joint profile.
  4. Tool all exterior joints below grade.

5. Flush cut all joints that are not tooled only where permitted by the Architect.
6. After tooling, cut off mortar tailings with a trowel and brush mortar burrs and dust from the face of the brick.

H. Sealant Recesses:

1. Leave joints around outside perimeters of exterior doors, window frames, and other wall openings a uniform depth of 3/4 inch (19 mm) and 1/4 to 3/8 inch (6 to 10 mm) wide.

### 3.4 CLEANING

- A. Leave work areas clean at the end of each day.
- B. Cut out defective mortar joints and holes in exposed masonry and re-point with mortar.
- C. Clean new masonry to remove excess mortar from the face of the brick as the Work progresses.
  1. Clean shortly after laying, the same day if possible, by wiping off the excess mortar using a bristle brush.
  2. Wash down with water and a brush the same or next day,
  3. Use chemical cleaners only as a last resort. Before use test an inconspicuous area at least 20 square feet (2 square meters), allow to dry 3 to 7 days. Inspect to ensure the mortar is not softened, brick or mortar are not discolored, and cleaner does not bring salts to the surface of the brick. If approved clean brick as follows:
    - a. Follow brick manufacturers recommendations and BIA Technical Note 20.
    - b. Wet surface of masonry prior to cleaning.
    - c. Scrub with acceptable cleaning agent, avoiding mortar joints.
    - d. Follow wait time suggested by manufacturer before rinsing with clear water.

- e. Do only small sections at a time.
- f. Work from top to bottom, insuring that lower portion of wall is thoroughly wetted when cleaning the upper portion.
- g. Protect all sash, glass, metal lintels and other corrodible parts when masonry is cleaned with acid or caustic solution.
- h. Upon completion, rinse thoroughly to remove surplus materials.

### 3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION