



Division 04 Masonry

SECTION 04 20 00

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Fasteners for the building envelope including the following:
 - 1. Brick cavity wall anchors.
 - 2. Masonry veneer anchors.

1.2 RELATED SECTIONS

- A. Section 04 20 00 - Unit Masonry.

1.3 REFERENCES

- A. The International Organization for Standardization (ISO):
 - 1. ISO 9001 - Quality Management Systems.
- B. ASTM International (ASTM):
 - 1. ASTM C1063 - Standard Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster.
 - 2. ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
 - 3. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.
 - 4. ASTM E2357 - Standard Test Method for Determining Air Leakage Rate of Air Barrier Assemblies.
- C. National Fire Protection Association (NFPA):
 - 1. NFPA 285 - Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data:
 - 1. Manufacturer's data sheets on each product to be used.
 - 2. Preparation instructions and recommendations.
 - 3. Storage and handling requirements and recommendations.
 - 4. Typical installation methods with requirements to accommodate specific site conditions.
- C. Shop Drawings: Indicate details of materials including but not limited to relationship with adjacent construction.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum ten years documented experience.
 - 1. Certification: ISO 9001 - Quality Management Systems.
- B. Source Limitations: Each product type sourced from single manufacturer for uniformity.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in manufacturer's original packaging and unopened containers with identification labels intact.
- B. Store and handle products in strict compliance with manufacturer's written instructions and recommendations.
- C. Protect from damage due to weather, excessive temperature, and construction operations.

1.7 PROJECT CONDITIONS

- A. 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 recommended limits.

1.8 WARRANTY

- A. Manufacturer's Warranty: Provide manufacturer's standard limited warranty against defects in materials or manufacturing.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: TruFast Walls, which is located at: 130 Graham St. SW, Grand Rapids, MI 49503; Tel: 616-454-3100; Email: request info (wallsales@trufast.com); Web: <http://trufastwalls.com>
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 FASTENING AND ANCHORING SYSTEMS FOR BRICK CAVITY WALL AND MASONRY VENEER APPLICATIONS

- A. Fastening Systems for Brick Cavity Wall and Masonry Veneer Applications: General.
 - 1. Compliance: Performance requirements.
 - a. Fire Propagation: NFPA 285.
 - b. Air Leakage: ASTM E2357.
 - c. Water Leakage: ASTM E331.
 - d. Structural and Wind Load Resistance: ASTM E330.
 - 2. Quantities, Dimensions, Locations and Configurations: As required and recommended by manufacturer for complete installation.

- B. Anchors:
1. Basis of Design: Thermal-Grip MVA Masonry Veneer Anchor as manufactured by TruFast Walls.
 2. Application: Attaches rigid insulation and anchors brick veneer to the supporting structure in masonry cavity wall construction.
 - a. Anchors brick veneer through continuous insulation to steel, wood, or masonry structure while maintaining air barrier performance when used with Thermal-Grip brick tie washer.
 - b. Transfers compression and tension loads to the structure ensuring long term air barrier performance.
 3. Description: Barrel style brick tie anchors brick and stone through continuous insulation and exterior gypsum sheathing to substrate.
 - a. Polycarbonate tube minimizes thermal transfer of heat energy by eliminating steel-on-steel contact of the wire-tie and structural screw.
 - b. Wedge seal feature of the polycarbonate tube is designed to seal the blind penetration of the air barrier / water resistive barrier behind the layer of continuous insulation.
 - c. Lengths available for sheathing/insulation assembly thicknesses ranging from 1 to 4 inches (25 to 102 mm), plus air gaps ranging from 1 to 2 inches (25 to 51 mm).
- C. Wire Ties:
1. Basis of Design: T-shaped Wire Ties as manufactured by TruFast Walls.
 - a. Application: Connects with Thermal-Grip MVA Masonry Veneer Anchor
 - b. Description: Hot dip galvanized.
 - c. Description: Stainless steel.
- D. Washers:
1. Basis of Design: Thermal-Grip Brick Tie Washers as manufactured by TruFast Walls.
 2. Application: For use with barrel style brick ties to attach rigid insulation.
 - a. Compatible with Thermal-Grip MVA Masonry Veneer Anchor, Pos-I-Tie, Sure-Tie veneer anchors.
 3. Description:
 - a. Solid Plastic Cap: 2-inch (51 mm) diameter solid plastic cap and flexible perimeter seal penetration of screw.
 - b. Prongs to enable pre-spotting into insulation for on-the-wall screw assembly.
 - c. Flexible perimeter flattens without tearing insulation facer for air-barrier performance.
 - d. Carbon Black UV Inhibitor for exposure protection during course of construction.

END OF SECTION