

Part 1 - General

1.01 Description

- Provide all labor and materials necessary to install the **BrickFast™** Panels and accessories, which include moisture barriers, fasteners, adhesive, brick mortar, and sealants.
- Related work specified elsewhere:
 - Light gauge metals – Section 05400
 - Sheathing – Section 06100
 - Unit Masonry – Section 04200
 - Concrete – Section 03300
 - Sealants – Section 07900
- Terms and Definitions:
 - The **BrickFast™** Panel provides for a mechanical attachment for thin bricks manufactured with dovetail backs. Special tabs provide for proper alignment of horizontal joint spacing.
 - The **BrickFast™** Panel provides for a mechanical attachment of brick mortar to tabs designed to fall within the mortar joint.
 - Fasteners must be galvanized or zinc-coated. The substrate and type of framing will determine what type of fastener to use. Fastening pattern must be 1 per square foot and determined by stud spacing.
 - Adhesive: Recommended by manufacturer to be Polyurethane Premium Construction Adhesive by OSI, Surebond Power Sealer -2 and Heavy Duty Liquid Nail Urethane. Substitutes may be used if product is polyurethane base and recommended for brick and metal bonding.
 - Starter corner pieces: 5½" x 48" x 5½"
 - Starter or drip angle to be made of aluminum or hot-dipped galvanized steel to promote moisture drainage out of the wall.
 - Flashing: Aluminum or galvanized steel, for roofs, windows, and doors, to promote moisture drainage out of the wall.
 - Mortar: Recommend A.W. Cook Thin Brick Mortar specifically designed for thin brick applications. Meets ASTM C-109, ASTM C-882, and ASTM C-78. Also recommend Brick Set by United Products in Fremont, NE. Other mortar mixes may be used when modified with an acrylic latex.
 - Moisture barrier: FortiFiber Weathertex moisture barrier/drainage mat, Tyvek, or grade D building paper. We recommend 2 layers to promote moisture drainage out of the wall. Check local building codes for requirements.
 - Sealants: Recommend Urethane or Silicone. Use proper backer rod and sealant at all abutments to dissimilar materials and through the wall expansion joints. See B.I.A. for recommendations

BrickFast™ Galvanized Steel Panels: Quality light gauge steel panels for thin brick installations
Specification sections 04235 and 07240, division 4 and 7

1.02 Quality Assurance

- Contractor should be recommended by the local distributor and follow manufacturer's details and application instructions.

1.03 Submittals

- The contractor shall submit evidence with the bid that he has received **BrickFast™** installation instructions from the local distributor.
- Samples: The contractor shall, before the project commences, provide the owner or the architect, sample of suitable size of each color and texture of the thin brick as specified for the project for the purpose of obtaining approvals. An approved sample of colored mortar must be included in fieldpanel. An approved sample shall be available and maintained at the job site.

1.04 Product, Delivery, Storage, and Handling

- All materials provided by **BrickFast™** as well as accessories shall be properly marked and labeled along with MSDS for each project.
- Store all products supplied by BrickFast™ Panels and accessories in a cool dry place, above the ground and protected from weather and other damage.

1.05 Job Site Conditions

- The **BrickFast™** Panels must be clean and free of any foreign matter before installing thin brick.
- Mortar must not be applied when temperatures drop below 32 degrees Fahrenheit before initial cure.
- Coordination and scheduling is required with related sections and trades.

Part 2 – Products

2.01 Manufacturers

- All products shall be obtained from or approved by the local distributor. Any substitutions must be approved in writing by the manufacturer.

- **2.02 Materials**

- **Moisture Barrier**: Should be used in most exterior applications. Grade D Building Paper, 15 lb. Felt, Tyvek, & Styrofoam Weathermate Plus Housewrap products are recommended to promote moisture drainage out of the wall. See Manufacturer's installation instructions.
- **Starter angle and flashing**: Must be galvanized steel or aluminum, and shall be continuous for starter course to promote moisture drainage out of the wall. All doors and window heads must be properly flashed, promoting moisture drainage. Consult local codes for proper roof flashing requirement
- **Support Panel**: Support and spacer panel to be 28-gauge or 26-gauge architectural-grade steel, hot-dipped galvanized to G-60 or G-90.
 - Corner pieces provide a support ledge for corner pieces and spacing of joints that easily line up with standard 2'x4' and 4'x4' panels.
 - Panels must be clean and free of dirt, oil, or any other surface contaminants.
- **Adhesive**: Adhesive to be Polyurethane base, sub flooring compatible with bonding brick to metal. Adhesives to comply with local building codes and must be ASTM-tested.
- **Mortar**: Provide factory-blended mortar by A.W. Cook Cement Products and Brick Set by United Products. Mortar can be gray, white, or factory colored. Field mix mortar must be latex-modified. Add 1 quart per 80 lb. bag of type S mortar. Call manufacturer for recommendations.
 - Fill any voids in joints with newly struck mortar in order to provide uniform color.
- **Fasteners**: All fasteners must be rust-resistant, galvanized, or zinc-coated.
 - Self-tapping screws or Versapin fastening system by Aerosmith or similar may be used to fasten panels to the substrate and into light gauge steel framing
 - Twist-shank masonry nails or fastening system such as TrakFast Ramset are recommended for fastening panels over concrete or masonry.
 - Galvanized annular ring nails or wood screws are recommended over wood frame construction. Minimum 1" penetration into studs.
 - Fastening pattern must be 1 per square foot minimum. Fasten 16" x 8"
- **Thin Brick**: TBX and TBS-grade brick with flat backs, as provided by various thin brick manufacturers.
- Flat back brick may be used with a ledge support panel only.

Part 3 – Execution

3.01 Examination

- Installer must examine conditions under which brick panels are to be installed; substrate must be smooth, sound, and level, and without projections. Any unsatisfactory conditions of the substrate must be corrected before beginning installation of the thin brick panels.
- Consult with other trades prior to installing panels to avoid potential interference.
- Weather requirements: Do not install mortar when ambient temperature is below 35 °F without protection and supplemental heat.
- Do not apply mortar to frozen surfaces.

3.02 Preparation

- Panel layout: Line-up on wall, establishing bottom of lowest panel course and mark level horizontal line at this point.
 - Lay out brick panels at corners working to the center of the wall.
- Brick Installation: Manufacturer must be notified in writing of the specified brick to be installed. Panels vary from manufacturer to manufacturer.
 - Apply walnut-size dabs of adhesive to back of thin bricks.
 - Run a single course of brick horizontally along the top brick track of the panel beginning at outside corners with corner brick moving inward. Head joint size shall be $\frac{3}{8}$ ".
 - Successive rows of brick can now be applied working from the top of the wall down.

- **Control Joints/Expansion Joints:** Expansion joints must be placed at floor lines for both wood-frame and steel-frame construction. Consult local building codes and BIA for placement for required expansion joints.
 - Vertical control joints are required to be placed in walls at 20' increments. The joint widths should be $\frac{1}{2}$ ' with backer rod and urethane or silicone sealant.
 - Control joints must be installed where substrates change and when abutting to dissimilar materials.
- **Cleaning:** Thin brick shall be cleaned by the appropriate method established by The Brick Institute of America. Safety Klean are recommended.
 - Brush mortar with a stiff-bristle brush using diagonal strokes.
 - Do not apply cleaning solution until waiting 48 hours after grouting.
 - Do NOT use muriatic acid for cleaning the brick – it will void the warranty.