

# BRICKFAST STEEL PANELS    Quality light gauge steel panels for thin brick installations

Specification sections 04235 and 07240, division 4 and 7

## Part 1- General

### 1.01 Description

- Provide all labor and materials necessary to install the BrickFast Panels and accessories which includes a moisture barrier, 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 dove tail 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 Loctite Power Grab. Substitutes may be used if product is polyurethane base and recommended for brick and metal bonding.
  - Starter corner pieces: 5 ½" 48" x 5 ½"
  - Starter or drip angle to be made of aluminum or hot dipped galvanized steel.
  - Flashing: Aluminum or galvanized steel, for roof window and doors.
  - 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 Freemont, NE. A Other mortar mixes may be used when modified with a acrylic latex.
  - Moisture barrier: 15 lb. Felt building paper, Tyvek, moisture wraps by Dow Chemical Owens Corning Fiberglass, or grade D building paper.
  - 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.

## **1.02 Quality Assurance**

- Contractor must be approved by the local distributor and follow manufacturers' 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, a 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 field panel. 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. See manufacturers' installation instructions.
- Starter angle and flashing: Must be galvanized steel or aluminum, and shall be continuous for starter course. All doors and window heads must be properly flashed. Consult local codes for proper roof flashing requirements.
- Support Panel: Mechanical support and spacer panel to be 28 gauge architectural grade steel, hot dipped galvanized to G-60. Punched tabs provide a mechanical lock of thin brick with a dove tail back. Another row of punched tabs fall within the mortar joint that lock mortar to the panel

Corner pieces provide a support ledge for corner pieces and spacing of joints that easily line up with standard 2' 4' and 4' x 4' panels.

Panels must be clean and free of dirt, oil or any other surface contaminates.

- Adhesive: Adhesive to be Polyurethane base, sub flooring compatible with bonding brick tile 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 manufacture 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, cadmium plated 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 cadmium plated, or fastening system such as TrakFast by Ramset are recommended for fastening panels over concrete or masonry.

Galvanized annular ring nails or wood screws are recommended over wood frame construction.

Fastening pattern must be 1 per square foot minimum.

- Thin Brick: TBX grade brick with dove tail backs as manufactured by Endicott Clay Products Company and Metro Brick are the only products recommended with the patent pending design of the BrickFast panel. Sizes: ½" - 1" x 2 ¼" x 7 5/8", and ½" - 1" x 3 5/8" x 7 5/8".
- TBS grade with smooth back 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 installing 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 degrees 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 Endicott to Metrobrick.

Apply dime size dab of adhesive on each tab that dove tail back bricks locks onto. When installing Endicott thin brick, smooth side edge is on top and break edge is on the bottom. Metrobrick dove tail back is at the top edge. There is no bottom dove tail.

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 3/8".

Successive rows of bricks 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 wood frame and steel frame construction. Consult local building codes and BIA for placement fo required expansion joints.

Vertical control joints are required to be placed in walls at 20' increments. The joint widths should be ½' 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. Sure Klean 600 and Sure Klean Vana Trol are recommended.

Brush mortar with a stiff bristle brush using diagonal strokes.

Do not apply cleaning solution until waiting 48 hours after grouting.