



Detailed Installation Instructions

Important Guidelines for Preparation:

Choosing Fasteners:

- Must be non-corrosive, self-tapping type with a flat head design
- Wood, masonry, or metal stud fasteners can be used, depending on the substrate.
- Contact distributor or manufacturer if in doubt of proper placement
- Place fasteners beside punch-out-rows that fall within the mortar joint

Choosing Brick:

- For best results, choose a thin brick with a cut-back or dove-tailed back. Contact the manufacturer for brick recommendations. Suggested manufacturers include Endicott and MetroBrick (dove-tailed), as well as Continental and McNear (cut-back).
 - ❖ Flat-back thin brick products may be used, but will *not* take advantage of patented design for attachment of thin brick
- Brick colors vary from run to run. Choose a sample board from actual run for color & texture selections
- Blend thin brick from various pallets to achieve best results
- Keep thin brick protected from water & ice—Thin brick must be dry before applying to BrickFast™ Panel
- Use a wet saw to achieve precision cuts.

Preparing the Wall:

- Be sure that the wall is structurally sound and free from defects—Notify building owner or general contractor of any defects *before* applying panel.
- Wall must be plumb within ¼" per 10 lineal feet. Walls can be shimmed with foam or asphalt shingles if wall is not plumb. The BrickFast™ Panel will follow the contour of the substrate.
 - ❖ Substrate will have a deflection design of no greater than L/240.
 - ❖ Steel frame, wood stud, concrete, and masonry are approved substrates.
- Sheathing must be of approved type and installed in accordance with manufacturers' instructions.
- Moisture/water barrier must be installed over sheathing in wood and steel frame construction, and seams must be taped. Areas that are ripped or torn must be repaired prior to installing the BrickFast™ Panel.
- Starter angles, flashing, and trim must be installed in accordance with manufacturer's recommendations and/or BIA Technical Note 7A on flashing brick walls.
 - ❖ All flashing must be installed over window and door heads, proper roof terminations, and in accordance with manufacturer's recommendations.
 - ❖ Starter angles or drip beads must be installed to allow for moisture to weep at all terminations.
- Control or expansion joints must be located at all abutments of dissimilar materials and floor levels. Control joints should be placed at a minimum of 25 lineal feet. Expansion joints shall be placed where substrates change, or where expansion joints are designed by architect or engineer.
 - ❖ Typically the lowest common corner of the building is your starting point. Snap chalk lines from corner to corner to get started.
- At dissimilar materials & abutments, stop panel & brick veneer ⅜" – ½" from edge to allow for caulk joints.

Step 1: Install BrickFast™ Panels

- Panels are available in 2'x4' and 4'x4' sheets. 90° corner pieces can be purchased in 5½" x 4' x 5½"
 - ❖ Panels must be stored above ground and protected from the weather
 - ❖ Panels must be clean, dry, and free from any residue that interferes with adhesion
- Measure 5⅜" from starting corner edge and install the BrickFast™ Panel in an upright position using a level. It is best to fasten the center of the panel, make sure it's level, then fasten from the middle toward the edges (this minimizes oil canning).
 - ❖ Cut panels with tin snips or electric shears
 - ❖ Panel edges should begin or end on stud or girt. Edges should be spaced approximately ⅞" horizontally and ⅞" – 1" vertically.
 - ❖ Must be 1 fastener per square foot. Fasteners should fall within the mortar joint
 - ❖ Space studs 16" OC, apply fasteners every 8-12" vertically and 16" horizontally
 - ❖ Panel joints should be staggered whenever possible.

Step 2: Set Your Corner Panels

- Line up with your starting chalk line and set your corner panels.
- Line up to connecting panel (the easiest way is to line up with corner and connecting panel with a straight brick). Bottom of corner piece should line up to the bottom of the BrickFast™ Panel.
- Fasten the corner pieces.
- *Continue in this manner until the substrate has been covered with the BrickFast™ Panel.*

Step 3: Apply Adhesive

- Use PL Polyurethane Premium Construction Adhesive or equal. Must meet or exceed ASTM C-557 and ASTM D3498.
 - ❖ For best results, store adhesive at room temperature and apply at temperatures above 32° F.
- Apply nickel-size dabs on panel tabs that lock into dove-tail-back thin bricks. Also apply same-size dab of adhesive to middle lower portion of the thin brick. Do *not* apply continuous bead of adhesive to panel.
 - ❖ Thin brick tiles may be repositioned up to 30 minutes without losing adhesive strength.
 - ❖ Most applications will develop full bonding strength within 24 hours.

Step 4: Install Thin Brick with Dove-Tail Back

- Install corner pieces and alternate short and long legs for a running bond pattern.
 - ❖ Pull your bricks from different stacks to ensure against the bunching of light or dark-colored bricks
- Run one row of brick the length of the wall to next outside or inside corner, under or over window or door head, using a ⅜" spacing for vertical brick joints.
 - ❖ For brick walls *not* using outside corner pieces, begin with a full brick for the first row, and use a half brick for the second row.
 - ❖ When installing Endicott thin brick with dovetail back, install with smooth edge on top and cut edge on the bottom.
 - ❖ A ¼" - ⅜" joint must be provided around all wall penetrations and abutments to dissimilar materials
 - ❖ Expansions joints must be installed at floor lines and within 25 running feet.

- Apply a small bead of adhesive to tabs that are designed to lock dovetail bricks to the BrickFast™ Panel. Slide the dove-tail brick over the appropriate tabs and adjust accordingly. Also apply small dab toward bottom center of each brick.

Step 5: Grout with Mortar or Grout Mix

- Using a grout bag or grout gun, over-fill your joints starting with your bed joints. When mortar becomes the consistency of wet beach sand, strike your joints starting with your head joints.
 - ❖ Mortar mix must meet or exceed ASTM C-109 for Compressive Strength, ASTM C-882 for Shear Bond Strength, and ASTM C-78 for Flexural Strength.
 - ❖ Field mix mortar must be latex modified
- Brush wall with a stiff bristle brush horizontally, making sure to remove excess mortar from joints and the face of the brick.
- Install a minimum ¼" weep hole every 24" at the base of the wall and above all openings, unless proper flashing is installed.

Recommended Products:

- Adhesive: Use PL Polyurethane Premium Construction Adhesive or equal. We also recommend Surebond Powerseal-2 Urethane Adhesive Sealant and Heavy-Duty Liquid Nail Urethane. Adhesive used *must* meet or exceed ASTM C-557 and ASTM D3498 standards.
- Mortar: We recommend Cook Cement Products Co. latex-modified gray and colored pre-mix brick mortar, which is specially blended for high compressive strength and workability using a grout bag applicator. We also recommend Brick-Set mortar by United Products.
- Cleaning: If cleaning the brick is necessary, we recommend Safety Klean, a non-acid wash by Prosooco of Lawrence, KS. (785) 865-4200. **Do NOT use muriatic acid for cleaning the brick—it will void the warranty.**



AsTech Associates

(804) 323-7088

info@brickfastpanel.com