

INSTALLATION GUIDE



Rev. 1/18

PRODUCT DESCRIPTION

The Best Panel Company (BPC) panels are manufactured brick veneer siding that, when applied, have the exact look and feel of real full size brick.

The panels are fabricated using kiln-fired Severe Weather Brick slabs. 7 1/2" x 2 1/4" x 1/2" thick that meets the minimum requirements of ASTM C-216-50. Thin Brick is adhered using a synthetic rubber based adhesive to a choice of three board applications: 1/2" high density asphalt coated fiberboard, cementitious board that complies with FHA Bulletin UM-34, and Insulated concrete board.

BPC panels are composed of 1/2" thick thin brick facings bounded to 1/2" backerboard which results in a 1" thick veneer. The panels are 16" x 48" x 1" thick boards that are composed of fiberboard and cementitious board with square ends. Backerboard conforms to ASTM D2277-66. MOR. 600lb. Minimum. Insulated boards will vary between 2" - 7" depending on R-value required.

THE BEST PANEL COMPANY PANEL MANUFACTURING PROCESS:

Panels are pre-assembled with Thin Brick factory set and adhered to the backerboard. Thin Brick are set 6 courses per 16" (5 courses for Queen Size) of vertical height and set on a running bond pattern. Thin Brick complies with ASTM C1088, as an exterior grade type TBS (Standard) or TBA.

INSTALLING THIN BRICK – EXTERIOR/INTERIOR

Panels may be applied directly over structurally sound woodlap siding, cement block, tilt-up and poured concrete walls, and steel stud walls.

For exterior panels, a water barrier must be applied between panel and backup.

Panels are to be mechanically fastened using no less than 2 fasteners per square foot.

All fasteners must be in compliance with backup material. For example, concrete walls require tapcon screws, powder or gas activated pins or nails.

All fasteners should not have more than a 3/8" headwidth. Minimum amount of fasteners is 10 per panel.



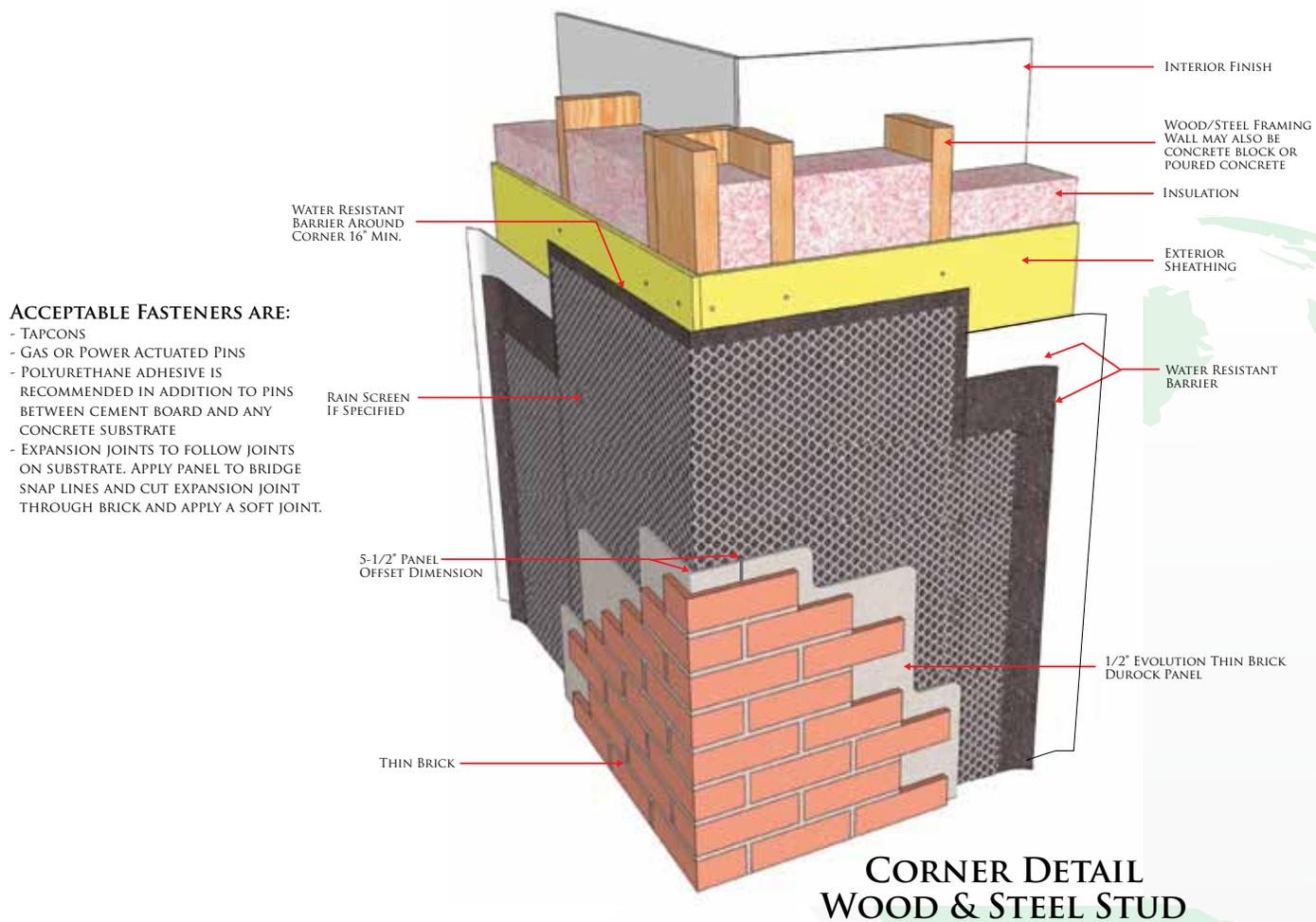
Fasteners must penetrate to support substrate as recommended by fastener manufacturer

STARTING THE PANELS WITH A FIELD APPLIED CORNER:

Where the end of the panel must start 5 1/4" - 5 1/2" from the corner, depending on thickness of the thin brick chosen. Backerboard must be applied to the exposed wall with corner pieces adhered to the backerboard with an exterior no sag adhesive. Level panels horizontally and vertically starting at either the top or the bottom. Make sure all panels are pushed together tightly. **Soft joint required at all dis-similar materials.**

A flashing is required above all openings.

Cutting of the panels can be made with a circular saw containing a high RPM diamond blade.

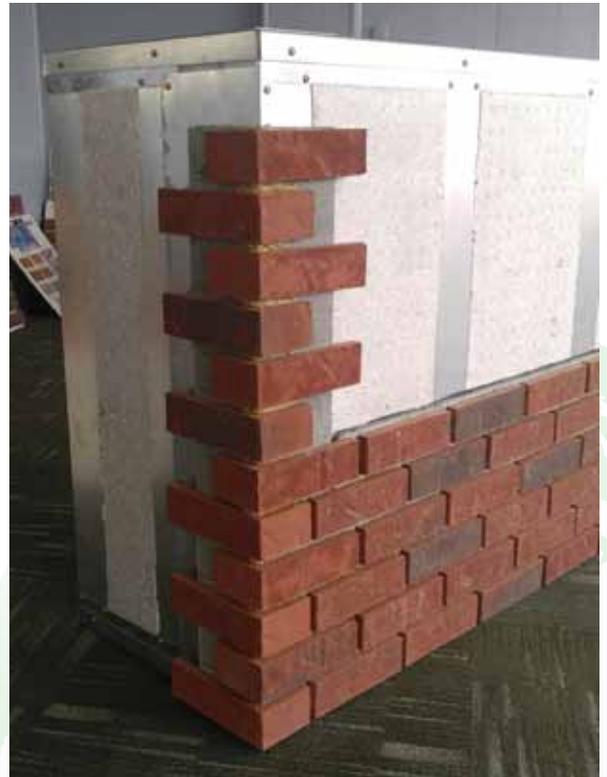


HEIGHT LIMITATIONS:

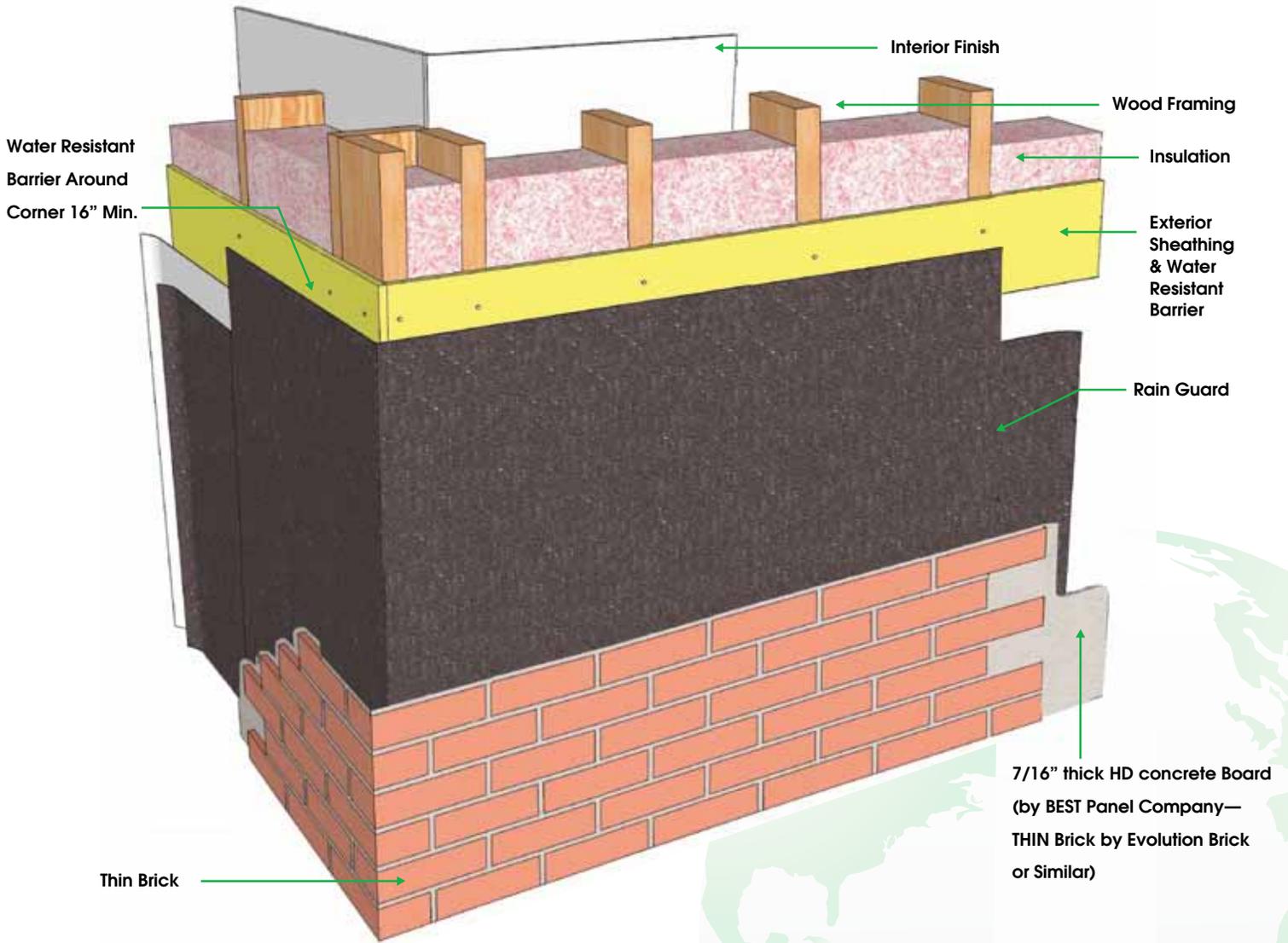
Panels certified up to up to 750'.

PRE-FABRICATED CORNERS:

Best Panel can also pre-fabricate corners for regular concrete board or Blackboard. See picture below.



WALL DETAIL



MORTARING:

When all applied panels are secured in place with caulking and flashing complete, fill in all bed and head joints with mortar. Either a grout bag or electric quick pointer can be used to fill joints. Use Type-N mortar. If your building will have very much movement we would suggest using a latex modifier in your mortar for more elasticity.

When mortar is thumb print hard, joints must be tooled either flush or concave.

Absolutely no raked joints. Brick is 1/2" thick so you will want as much mortar as possible in contact with brick and panel.

Clean all brick surfaces by using a mild solution with a stiff brush to remove all loose mortar, stains, dirt, and any foreign matter. Typical cleaners manufactured by Sure-Kleen and Prosobo are acceptable, follow manufacturer's instructions for use of cleaners.

INSTALLING THIN BRICK SINGLE PIECES AND CORNERS - INTERIOR:

Thin Brick is easy to mount on any structurally sound, clean, dry surface. Just follow the step-by-step instructions below:

COVERAGE:

Measure the area to be bricked to determine the quantities needed. One gallon of adhesive will cover 16-20 square feet if troweled over the entire surface: or will apply 50 square feet of Thin Brick.



PREPARATION:

Gather your tools and materials. You'll need carbide-tipped offset tile nippers or a chisel hammer; a wooden paint stirrer or a long-handled plastic spoon; enough Thin Brick and adhesive to cover the area and masking tape.

Remove all dirt, grease, or loose material from surface to be bricked. Score painted or varnished surfaces to make sure you get a proper bond. DO NOT apply Thin Brick over a glazed surface such as tile, Formica, wallpaper, unless surface has been properly prepared.

Remove cover plates from all electrical outlets and cover the outlets with masking tape. To work around these outlets, place the Thin Brick even with the outlet box opening. When your installation is complete, bring the outlet boxes forward until they are flush with the new Thin Brick wall surface. Replace cover plates after the Thin Brick adhesive is completely dry.

Decide on a pattern for your Thin Brick installation. However, you can place Thin Brick in any pattern you like. If covering an area requiring more than one box of Thin Brick, mix the Thin Brick from several boxes to obtain proper color mix.

If your installation will cover an entire wall without corners, start at the lower left-hand corner of the wall. Work from left to right, row after row. If you are working with a long wall surface, tack a piece of string across the wall at four-row levels to give you a line for keeping the rows even. On small areas just use a level to check each row. See sketch if installation includes windows or doors.

NOTE: WHATEVER SPACING YOU CHOOSE, KEEP IT THE SAME THROUGHOUT YOUR INSTALLATION

If you're using corners, work outside corners first. Corners are available which makes it easy for you to produce professional-looking corners. (NOTE: inside corners are made by using regular Brickettes and staggering them)

The adhesive should be applied when the temperature is between 50 degrees-100 degrees F. The area to be decorated should be within these temperatures for 12 hours prior to and 48 hours after installation. Working time for installing Thin Brick, once the adhesive is applied, is about 30 minutes. The adhesive will be completely dry in 24 hours, depending upon the heat and humidity.

Place adhesive on the back of Brickette surface in 3 spots $\frac{3}{4}$ " diameter and $\frac{1}{2}$ " high. Always twist and press Brickettes with the mastic on them against the wall firmly.

To trim full-sized Thin Brick into halves (or smaller sizes), use carbide-tipped offset tile nippers and tap lightly with a chisel hammer, or tap lightly with the end of another Thin Brick.

CLEAN UP:

Suitable adhesive should wash off easily with water, if removed from tools and working areas before it hardens. If allowed to set, mineral spirits can be used.

INSTALLING THIN BRICK SINGLE PIECES AND CORNERS - EXTERIOR:

STEP 1:

When installing Thin Brick pieces on an exterior project, a moisture barrier such as felt paper or TYVEC® must be applied to the building surface. Building codes vary regarding moisture barrier requirements depending on the state. Please check your local building codes.

STEP 2 (scratch coat):

Directly over the moisture barrier, cover the entire area with diamond wire lath. Hang lath horizontally with at least a 6" overlap on all seams.

Roofing nails may be used to fasten the lath to the studs.

Make sure the lath is tightly folded around the corner.

Never have a seam on a corner.

Place nails on lathing on both side corners.

STEP 3 (scratch coat):

A scratch coat is needed to cover the lathing material by using an exterior thin set.

Apply Thin Bricks using a Type N or Type S Masonry mortar.

After Thin Brick has dried, grout all head and bed joints by using a mortar bed or quick point.

Optional STEP 2:

Install 3/8" or 1/2" concrete fiber cement board. Use concrete board compatible screws.

Optional STEP 3:

Over concrete board use Laticrete®, Specmix® or Brixment® Stone - Hold® pre formulated thin-set. These products can be applied directly to concrete board without wire lath.

THIN BRICK STATISTICS

Size-Modular	
Panel	16" x 48" x 1"
Thin Brick Brick	7 5/8" x 2 1/4" x 1/2" thick
Thin Brick Corners	7 5/8" x 2 1/4" x 3 1/2" x 1/2" thick
Size-Queen/Engineer	
Panel	16" x 48" x 1"
Thin Brick Brick	7 5/8" x 2 3/4" x 1/2" thick
Thin Brick Corners	7 5/8" x 2 3/4" x 3 1/2" x 1/2" thick

Coverage	
Panels	5.33 square feet per panel Approximately 19 panels per square One square covers 100 sq. ft.
Thin Brick	7.0 pieces per sq. ft. (modular) 6.0 pieces per sq. ft. (queen/engineer)
Thin Brick Corners	4.6 pieces per linear ft. (modular) 4.0 pieces per linear ft. (queen)

Weight	
Panels w/ Thin Brick	36 lbs. per black board panel 45 lbs. per cement board panel
Thin Brick	.7 lbs. per piece
Thin Brick Corners	1 lb. per piece

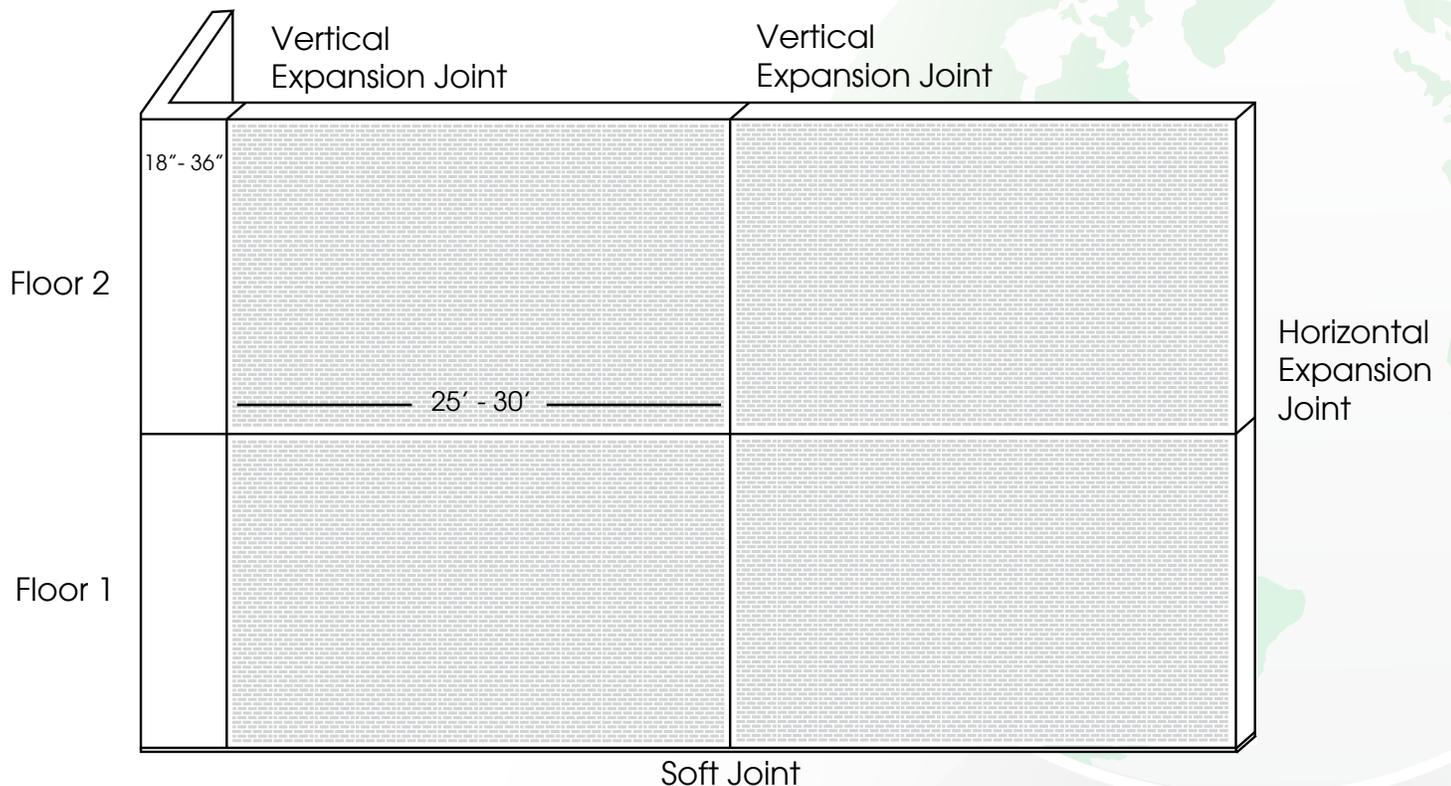
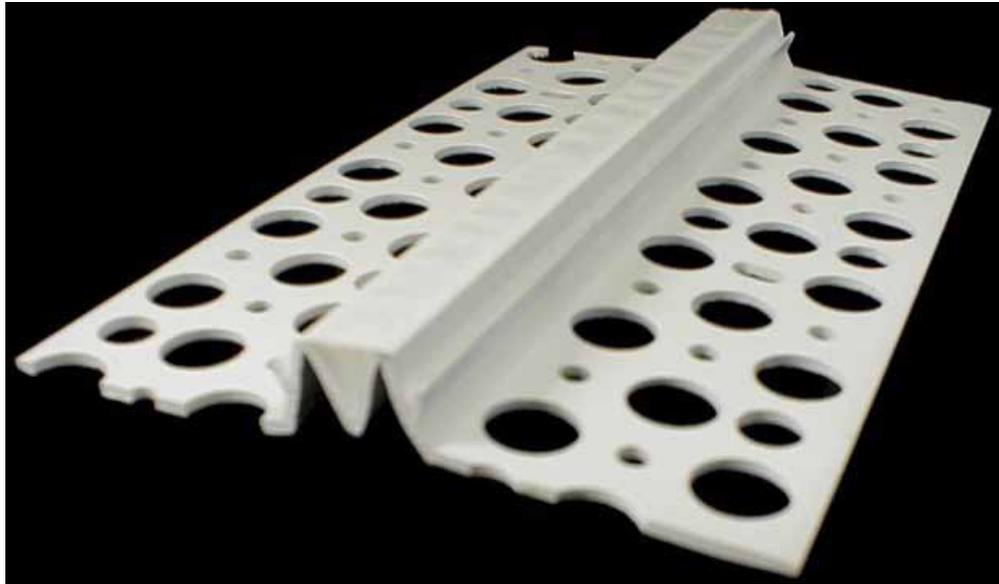


EXPANSION JOINTS

Expansion Joints are Required according to ASTM Requirements.
Please see the following:

- A. Vertical joint every 25 – 30' of horizontal wall. Place according to best aesthetics.
- B. Horizontal joint at every floor.
- C. Vertical joint within 18 -36" of each outside corner. (see diagram below)

Note: Standard type-M expansion joint is all that is required. See diagram below.



THIN BRICK FREQUENTLY ASKED QUESTIONS

Is Panel Brick “real” brick?

Yes, it is kiln-fired just like full sized brick.

What are “Panelized Thin Brick Systems”?

Best Panel Company panelized system consists of two types: 1) Our Thin Brick fixed with a synthetic rubber base adhesive ½” thick applied to high density asphalt coated fiberboard and 2) our Thin Brick adhered in the same manner to exterior fiber cement board. (cement board available in an insulated panel)

How do I determine in my space if I should use Thin Brick or Thin Brick Panels?

Panels are used mainly for larger areas. Thin Brick is used in somewhat smaller places usually when there are many openings. Whichever application you feel comfortable with, either product, Thin Brick or Panels will provide the same results. Many jobs will be a combination of Panels and Loose Thin Brick.

What is the manufacturer’s warranty for each product – Thin Brick and Panels?

25 years on manufacturer’s defects.

How do you manage water intrusion with Thin Brick and Panels and what concerns should I consider?

Manage water intrusion with a proper water barrier such as Tyvec®, or felt paper and full mortar head and bed joints. Make sure you flash properly above top of wall and around windows and doors.

How do you estimate the amount of Thin Brick Panels, flats, and corners for a specific job?

There are 5.33 per sq. ft. per panel, 4.6 brick per linear ft. of corners, and 7 brick flats per sq. ft. for modular brick. (Queens are 4 corners per linear foot and 6 brick of flats per sq. ft.)

THIN BRICK QUESTIONS

What is the life expectancy of Thin Brick? Will it last as long as full brick?

Yes, it is warrantied for 25 years but will, with proper maintenance, last the life of the building.

Why would I choose thin brick or panel brick systems over full depth brick?

It is light weight and it is less expensive to install. There is less transportation cost because you can get 5 times as many thin bricks on a truck as full brick. Green product which can be used virtually anywhere. Your home builder can

install any structure without having to change design of structure. Also perfect for renovations.

Can Thin Brick be applied to poured concrete?

Yes, however, with exterior applications use a latex bonding agent in the mortar to form the adhesion. We recommend using a cement backerboard if used as a panel system on concrete, or a roughed up surface is required such as acid etching, green concrete or scratched hardened concrete.

Can I apply Thin Brick over brick?

Yes, but you need a smooth surface, and the use of a bonding agent to your thin set or mortar before you apply the brick. You must also make sure the brick is clean and dry.

Do you make interior corners?

No, we produce exterior corners only. There is no need for interior corners when you butt the slabs and line up the bond joints, you can simply tuck-point the inside corner or caulk on an exterior application.

What type of maintenance is required for my Thin Brick and Panel masonry?

Zero – it is maintenance free. Just make sure any cuts, intrusions and termination points all remain water proof so water can not get behind the panel. Please note that all soft joints will require maintenance over time.

PANEL BRICK QUESTIONS

Where do I start my panel application?

Start 4 ½" from the corner.

Can Panels adhere to concrete?

Yes. Tapcon screws are required along with a cement backerboard. Individual slabs work well too. Or a combination of Tapcons and Foam-O type glue, powder or gas actuated pins such as Hilti, etc.

Can PB be put over wallpaper?

Yes.

Can PB be applied over brick?

Yes, as long as it is a smooth surface.

Can Panels replace vinyl siding?

yes, but you must remove the siding first, check for the proper water barrier and substrate integrity, and then screw into studs and wood sheathing. Panels can

not be installed over vinyl siding.

Can panels be used on metal frame buildings?

Yes, but metal studs must be 16" on the center, and you need an appropriate sheathing with a moisture barrier. Use 3 fasteners per stud and 12 fasteners per panel.

Can Panels be used in exterior gables?

Yes, just screw into stud walls.

Can panels be used on ceilings?

Yes, as long as proper screws can land 16" on center. Panels can be used for overhead arches, but we recommend using loose Thin Brick on overhead conditions.

Exteriorly, how high up can Panels be installed?

With the use of Concealer screws you can go up to 750'.

What do I use to glue my pieces?

Loctite PL Premium or comparable, or Titebond FRP Fast Grab.

How do I cut my panels?

High RPM diamond blade in a circular saw.



Can Panels be used on block foundations?

Yes,

Can I achieve all the features used with full brick with Panel brick, i.e. adding stone, keystones, quoins, soldier course and limestone sills to achieve a complete masonry look?

Yes. The total thickness of our Panels is 1" so stone or other masonry will need to be cut accordingly. We manufacture soldier courses to plan.

