

GENERAL INFORMATION

To help your project go smoothly, please read through the entire Installation Instructions and Supplemental Information provided.

WALL PREPARATION

Remove loose paint, concrete flashing, or other protrusions from interior wall surfaces to provide a flat surface for *InSoFast* panel attachment. The concrete wall should be clean, free of debris, and dry for adhesive to work properly.

ATTACHMENT METHODS

The easiest attachment method for the *InSoFast* panels is construction adhesive.

Apply a 1/4" to 3/8" bead of construction adhesive on each of the three ribbed gluing studs located on the back side of the panel. Also place an additional bead of foam compatible adhesive directly on the foam near the end of the panel.



Press the panel firmly against the concrete wall surface.

Should a panel not seat tightly against the wall with the adhesive, just remove the panel, apply an additional bead of adhesive and reset the panel or install a Tapcon concrete screw. See Supplemental Information.



RECOMMENDED INSTALLATION

Starting in the corner and working in a clockwise direction, install a full *InSoFast* panel with the tongue side up. Immediately start the second course by cutting 16" off the left side of a panel. Using the 32" piece, place the cut end against the corner. This creates a running bond pattern that will continue throughout the entire project.

Remember to add an additional bead of adhesive directly to the foam on the back side of the panel that butts into the corner. This will provide solid backing for drywall.



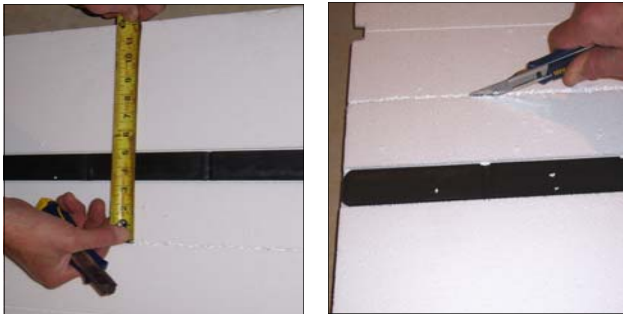
Continue installing *InSoFast* panels for the first and second rows up to the next corner. At the corner, do not use a scrap panel. Cut a full panel 1/4" short of the actual measurement, installing with the cut end in the corner. There will be a 1/4" gap in the corner for drainage. On the adjoining wall, install the remaining portion of the panel with the cut end butting into the previously installed panel.

Install the second row in the same manner. This will maintain the running bond pattern for the next wall and eliminate any waste. Repeat the process for all additional courses and for the rest of the walls of the project.



CUTTING *INSOFAST* PANELS

Cuts made through foam only are made using an extended snap-off blade utility knife or a hand saw. First mark the cut line with the end of a tape measure while holding the required measurement on the edge of the panel.



Cuts made through the plastic studs are easily made with a circular saw or jig saw.

OPENINGS

Apply a generous bead of adhesive around the openings. Cut panels flush with extension jambs. For openings that will have drywall returns, use wood framing for the opening and butt the *InSoFast* to the framing.



INTERSECTING WALLS

When finishing walls that will have interior partition walls, run the *InSoFast* panels through before installing the intersecting partition walls. Secure the partition walls with foam compatible construction adhesive or Tapcon screws.

UTILIZING WIRING CHASES

For ease in installation, locate outlet boxes so that the knockout of the outlet box lines up with a vertical or horizontal wiring chase.



The wiring chases can be used to run romex or flexible conduit from box to box. Use a fish tape to easily pull wiring through the chases.

INSTALLING OUTLET BOXES

Any type of outlet box can be used (fiberglass, plastic, metal) with a standard 2-1/2" deep outlet box when using 1/2" drywall. A 2" deep box combined with a 1/2" mud ring can also be used.



Secure all electrical boxes by mechanical fasteners or use construction adhesive as per standard electrical building codes.

DRYWALL

Building codes require a 15 minute thermal barrier over foam products. Standard 1/2" drywall meets this requirement. For added protection against mold, paperless drywall is recommended on exterior below-grade walls. As with any drywall installation, keep drywall 1/2" up from the floor surface.

Allow proper set time of the adhesive before installing the drywall or install mechanical fasteners.

Attach the drywall to the attachment studs using standard course thread drywall screws for wood.



If there is not an attachment stud in the corner, apply a bead of foam compatible construction adhesive to the face of the panel. This assumes that the backside of the panel was adhered to the concrete wall directly in the corner (See Attachment Methods, page 1). This bonds the drywall to the foam panel which was previously bonded to the concrete wall, thus creating a solid backed corner.

DRYWALL CORNER BEAD

If a drywall corner bead is needed, an additional underlying corner bead is required for backing.

First fasten a stock drywall corner bead to the foam panels using a foam compatible adhesive. This allows the drywall as well as the finished (top) corner bead to be fastened with screws to the underlying corner bead. 1-1/2" x 1-1/2" sheet metal angle (28 ga) can be used as an alternate.

TOOL LIST

Basic Tools:

- Foam Compatible Adhesive
- Chalk Line
- Sharpie Marker
- Hand Saw
- Snap-Off Utility Knife with long blade
- Tape Measure
- Quart Caulk Gun
- Tin Snip - if using metal corner bead

Optional Tools:

- Duct Tape or Shims if floor is unlevel
- Circular Saw or Jig Saw
- Rasp for inside corners
- Tapcon Screws
- Drill and Drill Bits
- Hammer Drill
- Portable Table Saw
- Power Caulk Gun

TOOL NOTES

If the panels start to bind when cutting on a table saw, spray WD40 on the blade.

Most blades work for cutting foam. Course ripping blades do not work as well as combination blades.

Do not use powder actuated or pneumatic nails to fasten the panels to the concrete wall. If concrete is green, hand-driven concrete nails will work.

InSoFast™ Installation

Supplemental Information



Patent Pending

ELIMINATING WASTE - 7' & 9'

When the wall height is 7' or less, or 9' or less, etc. use the following method (when there would be more than 12" of waste horizontally of the panel).

On one half of the project, stack up full panels. Cut the top row of panels as needed to fit. On the other half of the project, start the first row with the top halves of the cut panels with the cut side against the floor, continuing up with full panels to the ceiling.



CABINETS & SHELVING

If installing a heavy cabinet, use a standard masonry or Tapcon screw to secure to concrete wall. Attach anywhere.

EXISTING PLUMBING

Cut out the panel to accommodate pipe or conduit. Use spray foam to seal around the pipes.

Route out the back side of the *InSoFast* panel.

UN-LEVEL FLOOR

When the floor is severely out of level, measure down from the ceiling to determine a level starting point for the top of the first course. Snap a line at the mark. Cut panels to fit.

When the floor is slightly out of level, snap a line at about 24-1/2" from the highest point on the floor. Glue the panels to the wall, using shims along the floor if necessary.

CONCRETE FLASHING

If a panel does not seat tightly, push up panels and press to locate protrusions. Take down and drag the teeth of a saw blade sideways across the foam to accommodate the area of the protrusion.

WALL NOT PLUMB

If the wall is not plumb vertically, shims may be cut and placed behind each of the attachment studs. The shims should be glued and/or fastened to the concrete wall before installing the *InSoFast* panels.

InSoFast panels are not recommended for rubble, stone walls or other uneven surfaces.

NEW CONSTRUCTION

For best results, install the *InSoFast* panels before the concrete floor is poured. This allows moisture to travel directly into the drain tile system. Allow for moisture movement from the top of the footing to the drain tile system with gravel or weep hose.

CUTTING *INSOFAST*

When making horizontal cuts, it may be beneficial to cut the panels in the garage or outside. When cutting with a table saw, it is possible to produce fumes.



PERIMETER DRAINAGE SYSTEMS

If installing *InSoFast* on a wall with a perimeter drainage system, seal the panels to the concrete floor with foam compatible adhesive.

WET BASEMENTS

While *InSoFast* panels are designed to handle large amounts of water, they are not a substitute for or classified as a water proofing material. As when finishing any wall, address all water issues before covering.

InSoFast™ Installation

Supplemental Information



Patent Pending

VAPOR RETARDERS

InSoFast is a Class III Vapor Retarder. Recent building science recommends using Class III Vapor Retarders in below-grade applications.

A Class III Vapor Retarder is not affected by moisture and provides added safety by allowing the wall system to dry either to the exterior or the interior. Use of additional vapor retarder on the interior of the wall system is generally not required (check with the local code agency).

LAYOUT CONSIDERATIONS

To aid in the electrical installation, start the layout so that the vertical wiring chases do not hit the bottom of the floor trusses.

MECHANICAL FASTENERS

Mechanical attachment may be the primary method for securing the *InSoFast* panels to the wall surface if the concrete conditions do not allow adhesive usage. Use 2-3/4" Tapcon® screws in the top and bottom recessed attachment points on each stud, for a total of six screws per panel.



If a panel does not seat tightly with construction adhesive, use a 2-3/4"

Tapcon® screw where necessary to secure the panel to the wall. Use any of the nine recessed attachment points located on the face of the attachment studs.

ALTERNATE OUTLET BOX LOCATION

Another option is to locate the top of the outlet boxes about 2" below a horizontal seam. When cutting out the box hole, cut up into the horizontal wiring chase. This position allows the wiring to freely run from box to box along the horizontal

ALTERNATE WIRING METHOD

chase, dropping in the top of the outlet boxes. Use expanding foam adhesive to fill in the opening.

To change the wiring direction from horizontal to vertical, cut a temporary access hole at the intersection of the horizontal and vertical chases using a hole saw or a straight knife.



To get wiring around an inside corner, use a key-hole saw or utility knife to access the chases in each panel adjoining the corner.

Save the cut out plug of foam from each hole so that it can be replaced after the necessary electrical inspections are completed.



If locating an outlet box away from a wiring chase, cut in an additional wiring chase with a knife, router, or hot knife. Foam in chase with expanding foam adhesive after wiring has been run.