

TERMITE INSTALLATION OVERVIEW

NOTE: READ FULL INSTALLATION INSTRUCTIONS BEFORE BEGINNING.

BUILDSHIELD TERMITE COMPONENTS

- 16 BuildShield Extrusion Tracks (64 linear feet)
- 1 Stainless Steel Barrier Roll (64 linear feet)

RECOMMENDED TOOLS FOR INSTALLATION

- Gloves (Stainless Steel is extremely sharp)
- Miter Saw or Miter Box
- Box Knife
- Tin Snips
- Tape Measure
- Straight Edge
- Clean rags to wipe extrusion
- BuildShield Corner Template

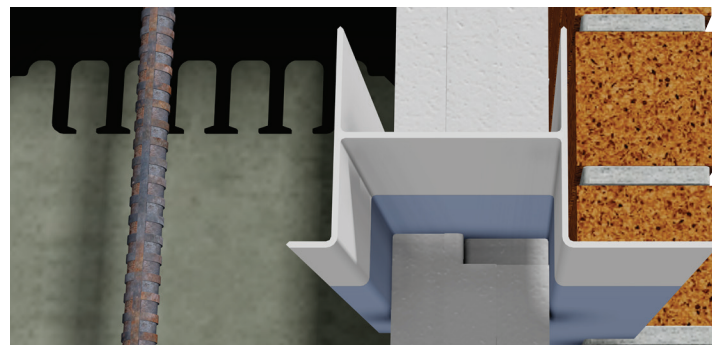


Figure 1. The BuildShield Extrusion and Stainless Steel Barrier installs between the ICF block courses at the desired height. The wide flange extends to the exterior face of the ICF block into exterior finish and the narrow flange extends into the concrete core.

BUILDSHIELD TERMITE INSTALLATION

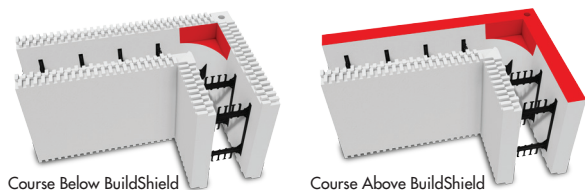


Figure 2. Corner form modified to remove foam radius in corner for BuildShield installation. Note radius is only removed to a depth of 3". Corner form modified to remove interlock fingers and foam radius removed in corner for BuildShield installation. Note this form is placed with the modifications toward the BuildShield Extrusion Track.

1. Begin all BuildShield installations at the corners.



2. The corner forms immediately above and below the BuildShield installation must be prepared by cutting the internal foam radius in the corner forms to provide adequate clearance for the BuildShield extrusions. The cuts should be made 3" deep, and should maintain the panel thickness of 2-1/2" into the corner. See figure 2 above.



3. Make all cuts away from the stacked forms, to avoid filling the cores with foam pieces or beads. Ensure that the wide flange is always to the outside of the block away from the concrete core.
4. Miter cut 1 BuildShield extrusion into both edges of the corner assembly, for placement into the corner block using a miter saw, or miter table.
5. Miter joints should overlap the stainless steel barrier bond completely in each direction including the flange wherever the barriers overlap. The stainless steel barrier should be extended 2.5" past the foam panel in each direction to provide suitable material for the overlap of the flange.
6. Corner sections should be assembled before the straight runs. By cutting a single extrusion we can create a 2ft by 2ft corner section. Very short return walls will be trimmed to fit, and corners may be assembled as pairs.
7. **PUT ON SAFETY GLOVES BEFORE PROCEEDING. THE STAINLESS STEEL BARRIER IS EXTREMELY SHARP.**
8. To begin, cut the adhesive stainless steel barrier into two 2ft sections. Using the template provided cut stainless steel barrier ends, using opposite sides of template for each side of the corner. Fold the edges of the stainless steel, along the crease lines, toward the stainless steel face.



9. Align the creased edge lines in the stainless steel barrier with the edges of the ICF form panel. Note: leave the wider portion of the barrier from the score lines to the outside face of block. The thinner portion of the barrier from the score lines to the inside core of the block. Fold the stainless steel barrier over the foam panel keeping it aligned with the creases in the stainless steel barrier and the paper backing facing up.

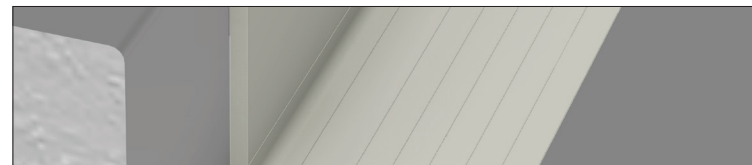


10. The stainless steel barriers should be fully bonded together by removing the paper backing from the bottom stainless steel barrier in the corner before bonding. Take care to avoid any bubbles or wrinkles. Completely bond each direction. Cut additional material to patch if necessary to ensure complete coverage. Ensure all top and end laps are bonded steel to steel, with no paper between.



11. Place the mitered extrusions down over the adhesive stainless steel barrier, and align the miters at the corner.
12. Place both corner miters prior to wrapping the adhesive stainless steel barrier around the extrusion flanges.
13. Wipe the extrusion flanges clean to prepare for adhesive before proceeding to the next step.

14. The BuildShield extrusion wide flange is scored for multiple finish options. The flange should be trimmed using a box knife or other sharp knife to the correct width for your finish application. Bend the flange at this cut line and snap off the excess material. Ensure that the BuildShield wide flange extends to or past the exterior finish of the wall.
15. For brick BuildShield should extend into the mortar joint between 2 courses. The holes must be grouted full on the course above and below the BuildShield installation.
16. For stucco or EIFS, the exterior flange should be shortened to extend flush or slightly beyond thickness of the finish. Siding and other finishes may benefit from the full width of the flange to ensure easy inspections for termite mud tubes.



Score lines in the BuildShield Extrusion provide options for different wall finishes.

17. Caution: Wearing protective gloves is required for the next step. Serious injury will result. The stainless steel edges are very sharp and will easily cut through your hands.
18. Using a sharp razor knife, lightly score the paper at the bottom of the extrusion, and peel it back from the stainless steel, exposing the adhesive. **DO NOT PUNCTURE OR CUT STAINLESS STEEL BARRIER.** If it is cut, place a patch over the cut, extending 2" either side of cut, and bond fully to the stainless steel.



19. Begin working the adhesive against the extrusion taking special care to remove any gaps or bubbles. It helps to slide one's hands against the steel to bond the adhesive and to help bend the stainless steel barrier. Hold the extrusion down as the stainless steel is being folded under and around the flange. This is especially critical at the edges of the flanges, as the stainless steel must be formed tightly around the edge of each flange.



20. Continue to work the stainless steel barrier onto the top of the flanges, sealing it fully in place. Carefully fold the stainless steel barrier around the extrusion flanges to ensure a tight seal around the flange radius flattening all creases and bubbles.



The stainless steel barrier wraps around the interior and exterior flange. Form a tight seal around the flange radius.

21. If BuildShield is used for a concrete floor system, ensure that the stainless steel is set so that it is fully embedded into the concrete slab. Leave at least 3/4" coverage of concrete minimum over and under the flanges.
22. Remove the BuildShield corner assembly from the forms and inspect the bottom side for gaps or holes. Patch these as required. Lay the straight runs of stainless steel barrier, allowing a 2 inch overlap to the corner assembly, and trim the backing paper to expose the adhesive. Reinstall the corner, ensuring full contact with the exposed adhesive, and caulk the top and bottom of the mitered joint using 100% silicone.
23. Install the remaining straight sections of BuildShield, onto the stainless steel, beginning at the corner assembly.

24. Corner forms, in the course immediately above the BuildShield installation must be prepared as noted for the lower course (Item #2) prior to installing. Once the corners are stacked, begin placing the next course of straight forms.
25. When laying additional courses of blocks remove interlock fingers on the ICF form in the course above BuildShield that fits into the extrusion. If extrusions are used on both sides, you do not have to remove the fingers, but this will affect coursing height. In order to maintain coursing height, removal of the fingers is required on either the top or bottom of the block. If BuildShield is placed only on one side of the form, rasp the thickness of the BuildShield extrusion from the course with the interlocks removed to keep the wall plumb.
26. For brick BuildShield should extend into the mortar joint between 2 courses. The holes must be grouted full on the course above and below the BuildShield installation.
27. For stucco or EIFS, the exterior flange should be shortened to extend flush or slightly beyond thickness of the finish. Siding and other finishes may benefit from the full width of the flange to ensure easy inspections for termite mud tubes.

CRAWLSPACE NOTES

BuildShield may also be used under a crawlspace to allow inspection for mud tubes and other signs of termite activity. Ensure at least 4" clear space between BuildShield and floor system for visual inspection. BuildBlock recommends inspecting at least twice per year for crawlspace installations, spring and fall.

ADDITIONAL INSTALLATION NOTES

ICF blocks may need to be cut to a particular wall height to allow for proper placement of the BuildShield flange within the wall system. Typically BuildShield is installed 6-12" above grade and below windows to allow for inspection and preventing termites from entering through backfill.

When using a foam ICF buck on doors the BuildShield extrusion should extend to the inside of the foam buck on each side.

The stainless steel barrier provides a gapless seal along the length of the extrusions. Seams in the stainless steel barrier should be overlapped 2 inches. The extrusion shapes the stainless, embeds the wrapped flanges into the concrete core and the exterior wall finishes, or interior floor slab. The extrusion ensures that the barrier is properly positioned throughout the entire construction process.

When pouring walls, it is necessary to fully vibrate this area, especially corners, to ensure that concrete is properly consolidated around the flange. Additionally, slightly higher slump concrete (thinner) may be used to help ensure complete consolidation around the flanges. Do not exceed a 6" to 7" slump.

For additional information, please contact BuildBlock Technical Support at 866-222-2575 or email technical@buildblock.com.

VISIT BUILDBLOCK.COM TO DOWNLOAD THE BUILDSHIELD ICF TERMITE & FIRESTOP PRODUCT & INSTALLATION MANUAL

LIMITED WARRANTY AND DISCLAIMER:

The BuildShield barrier is intended to create a barrier to prevent termite travel vertically in an ICF wall. For a period of 5 years from installation of the BuildShield barrier, BuildBlock guarantees that termites cannot vertically pass through the BuildShield barrier when the BuildShield is properly installed by an approved contractor in accordance with prescribed installation guidelines. This limited warranty is non-transferable. In the event of a breach of this guarantee, BuildBlock agrees to repair or replace the defective BuildShield barrier. THIS STATES BUILDBLOCK'S ENTIRE LIABILITY FOR A BREACH OF THIS GUARANTEE. UNDER NO CIRCUMSTANCES SHALL BUILDBLOCK BE LIABLE FOR ANY INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING DAMAGES CAUSED BY TERMITES OR OTHER PESTS, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, AND THE LIKE) OF THE PURCHASER OR ANY OTHER THIRD PARTY, EVEN IF A PARTY HAD PREVIOUSLY BEEN ADVISED OF, OR OTHERWISE SHOULD HAVE BEEN AWARE OF, THE POSSIBILITY OF SUCH DAMAGES, AND REGARDLESS OF THE LEGAL THEORY OR BASIS FOR SUCH CLAIM. BUILDBLOCK EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OF THE BUILDSHIELD BARRIER PRODUCT OR FITNESS FOR A PARTICULAR PURPOSE, AND PROVIDES NO OTHER WARRANTIES OR GUARANTIES, EXPRESSED OR IMPLIED.

CAUTION SHARP!

The adhesive stainless steel barrier of the BuildShield barrier product is very thin and sharp, and will easily cut through skin and clothing if mishandled. It is imperative that installers wear proper protective clothing and gloves when installing the BuildShield barrier product. **DO NOT SLIDE HANDS ALONG THE EDGE OF THE ADHESIVE STAINLESS STEEL BARRIER OF THE BUILDSHIELD BARRIER PRODUCT.** Failure to give proper attention to these warnings or to observe these safety precautions will result in injuries. Treat all edges of the BuildShield barrier product (including scrap and cut ends) as razor-sharp, and wear proper protective clothing and gloves when handling. Extra caution must be taken when peeling the paper backing from the steel, as it is difficult to start when wearing gloves. Ensure all ends and seams are fully pressed down against the track or layers below to prevent injury when stacking the next course of ICF. All ends should be terminated at or on the vertical sides of the track, and well away from the exterior finish extension, leaving a smooth, rolled surface for other trades to encounter.

BUILDSHIELD FIRESTOP

BuildShield is intended to create a barrier to prevent hot gases and flames from travelling vertically in an ICF wall during a fire, propagating the fire from floor to floor and bypassing the designed fire resistance of floor systems. Due to the high melting point of stainless steel, flames and hot gases are blocked at the BuildShield barrier, unable to pass through the properly installed barrier. The continuity of this barrier is greatly dependent on proper installation and visual inspection throughout the installation process. There are multiple opportunities during the installation for mis handling, misapplication, and misuse, that BuildBlock has no control over. Improper installation of the adhesive stainless steel barrier, inadequate embedment of the flanges into the concrete core or incomplete termination at the floor system will enable the barrier to fall out of position, leading to a potential failure. Additionally, BuildBlock is not inspecting the installations and cannot verify proper usage. Installers should inspect the adhesive stainless steel barrier for penetrations, wrinkles or loose ends. Due to the variety of possible interpretations of the installation of this product, and the variety of local conditions, as well as application within the ICF wall system, BuildBlock provides no warranty, expressed or implied beyond the products to be free of defects in material and workmanship. Remediation is limited to replacement of the product.

FIRESTOP INSTALLATION OVERVIEW

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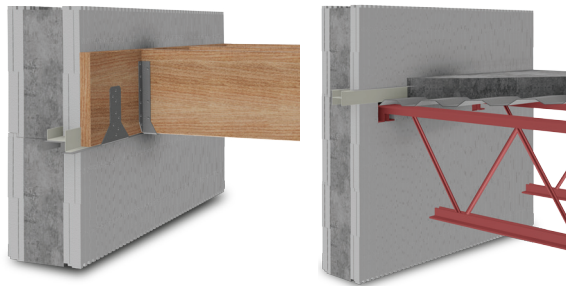


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BUILDSHIELD FIRESTOP INSTALLATION

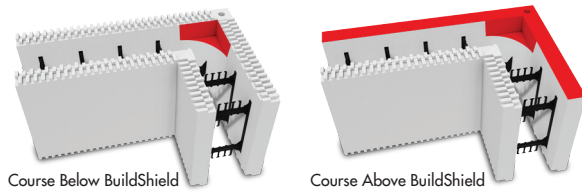


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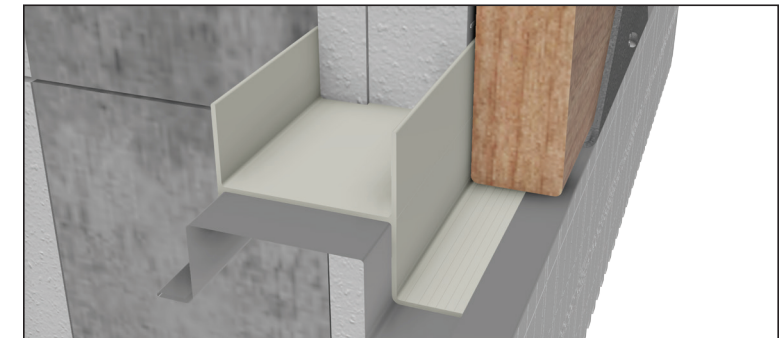
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Mechanical attachments such as pan head screws should be placed through the stainless steel barrier into the wood or steel joists at 12'o.c. This will prevent the barrier from sagging during a fire.



The BuildShield stainless steel barrier wraps around the extrusion track. The stainless steel barrier extends under the edge of the rim joist. Screw from the underside every 12" to ensure stainless steel barrier remains in place during a fire.

BUILDSHIELD FIRESTOP PROTECTION INSTALLATION WITH A WOOD JOIST FLOOR SYSTEM

BuildShield should be installed to extend below the joist or be sandwiched between horizontal members within the floor system. It is important for BuildShield to be mechanically affixed to the rim joists, either with screws (12"o.c. max) or other means, to prevent adhesive release during a fire. BuildShield is designed to prevent the chimney effect at the foam on the inside of the ICF.

1. BuildShield Firestop should be placed so that the flanges align with the top or bottom of a joist type floor system.
2. BuildShield Firestop should not be installed such that the flange is cut flush with the EPS, and aligning in the center of the rim joist.
3. The stainless steel barrier must have no holes, gaps, bubbles or wrinkles. If necessary, cut small pieces of stainless steel barrier to create patches.
4. Overlap should be 2" minimum at all seams and patches.
5. Mechanical attachments such as pan head screws should be placed through the stainless steel barrier into the wood or steel rim joists at 12"o.c. This will prevent the barrier from sagging during a fire.

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