

HB ONE BACKER CI WITH STUCCO FINISH INSTALLATION GUIDE

HydroBlok One Backer CI is a lightweight composite backer board that is compatible with a wide range of claddings and finishes. It increases energy efficiency through continuous insulation, in addition to providing a secondary air and water-resistive barrier (AWRB). The board is made of a mold and moisture resistant XPS core coated with a fiberglass mesh reinforced polymer-modified cement coating providing durability, installation speed and energy savings.

HydroBlok One Backer CI can be used on the exterior in both new construction and retrofit applications for both commercial and residential Type construction. Backer CI can be installed across a wide range temperatures and can also be panelized to accommodate year-round off-site and near-site construction.

TOOLS NEEDED

Impact drill
Utility knife
Flat trowel
Long straightedge or screed
Tape measure
Laser or traditional level
Mixing Drill & Bucket
Plastering Trowel
Margin Trowel
Tin Snips

STORAGE & HANDLING

- Elevate from Ground: Store the boards on a flat surface or pallet, elevating them at least 4 inches off the ground. Avoid placing directly on soil.
- Stack boards flat and secure them to prevent warping or bending.
- If storing outdoors, cover the boards with a tarp or protective sheeting to shield them from prolonged direct sunlight.
- Secure covers on top of the stack while leaving sides and bottom open to allow proper air circulation.
- In areas with wind, securely attach tarps to the ground on all sides.
- Store the boards away from harsh chemicals, solvents, or other materials that could damage the surface or integrity of the sheathing.

BOARD SIZES

HydroBlok One Backer CI boards are available in 4x8 Sheets and in the following thicknesses.

1/2" (12 mm) 1" (25 mm) 1 1/2" (38 mm) 2" (50 mm)

Custom sizes available in volume quantities.

APPROVED PRODUCTS

WRB AND DRAINAGE PLANE

Tyvek Stucco Wrap
Tyvek House Wrap

FASTENERS

#8 exterior grade code-approved fasteners
HYDROBLOK Tabbed Washers

MESH

HYDROBLOK 4" AR Seaming Mesh
(or equivalent)
Code compliant ASTM 2098 EIFS mesh

POLYURETHANE FOAM SEALANTS & ADHESIVES

HydroBlok Joint Sealant
Great Stuff Pro Construction Adhesive
Sika Boom Window and Door
Loctite® PL Premium® Polyurethane
Construction

FINISHES

Master Wall Acrylic Finishes
Senergy Acrylic Finishes
Dryvit Acrylic Finishes
Sto Acrylic Finishes

FLASHING TAPE

DuPont™ Flex Wrap® NF
3M™ All Weather Flashing
Tape 8067
Blueskin® Butyl Flash

*For direct applied stucco applications:
SIGA Fentrim® or Protect Wrap Stucco/EIFS tape

BASE COAT

HydroBlok Base Coat
Master Wall Base
STO BTS Plus Base
Dryvit Genesis DM

NOTES & LIMITATIONS

- **R-value of 1/2" (12 mm) HydroBlok One = R 2.5**
- **R-value of 1" (25 mm) HydroBlok One = R 5**
- **R-value of 1 1/2" (38 mm) HydroBlok One = R 7.5**
- **R-value of 2" (50 mm) HydroBlok One = R 10**
- At ground level, the exposed bottom edges of boards must be finished with metal caps, bug guards, or drainage systems for effective water management.
- HydroBlok One Backer CI may be installed over existing sheathing if it is structurally sound and clean.
- Approved for installation over OSB (PS-2) plywood (PS-1) or gypsum (C1177) Sheathing.
- Light efflorescence, a white residue, may appear after boards get wet. This is normal and does not impact performance and can be removed prior to base or stucco applications.
- All boards must be covered with finish within 180 days.
- Base coat should cure for a minimum of 24 hours (or longer in cold/humid conditions) before the finish coat is applied. Follow stucco manufacturer's guidelines for recommended cure times.
- Finish should not be applied directly to exposed foam; an approved base coat or approved felt tape must be applied first to prepare the surface.
- The HYDROBLOK Backer CI system is designed to manage incidental moisture. Proper integration of WRB, flashing and drainage components is required to ensure performance.
- Use of non-approved materials may affect performance and void warranty. Check with a HYDROBLOK technical representative for approval of non-standard components.
- Multiple options exist for accessory materials included in the assembly. Use of non-approved materials may affect performance and void warranty. Consult with a HYDROBLOK technical representative for approval of non-standard components.
- Certain primers may contain solvents which can affect product performance. Check with a HYDROBLOK technical representative before applying primers directly to HYDROBLOK Backer CI panels.

ON-SITE QUALITY CONTROL

- Verify substrate is structurally sound, properly fastened, and free of debris, moisture, or contaminants prior to panel installation.
- Inspect panel alignment and joint spacing during installation to ensure tight, consistent seams and proper staggering.
- Verify all fasteners are installed to the correct spacing and embedment depth; washers must sit flush without overdriving or damaging the panel surface.
- Confirm all joints, corners, and transitions are properly treated with approved base coat, sealing tape, or mesh reinforcement.
- Inspect flashing at all terminations, openings, and penetrations to ensure proper integration with the drainage plane and WRB.

ON-SITE QUALITY CONTROL (Cont.)

- Ensure base flashing, bug screens, or drainage components are installed at the base of walls to allow proper drainage.
 - Verify that all penetrations (mechanical, electrical, structural) are properly sealed and flashed prior to application of base coat.
 - Confirm base coat application thickness, mesh embedment, and surface uniformity meet manufacturer requirements before proceeding to finish coat.
 - Inspect for damage to panels (cracks, delamination, exposed foam) prior to coating; damaged areas must be repaired before proceeding.
 - Ensure environmental conditions (temperature, humidity, weather exposure) are within acceptable limits for installation and curing of base and finish coats.
 - Multiple options exist for accessory materials in the assembly. Verify all materials used (base coat, mesh, sealants, finishes) are approved and compatible with the Hydroblok system.
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HEALTH & SAFETY

- Use caution when cutting panels. Power tools may generate dust; use dust collection systems where possible and work in well-ventilated areas.
- Always wear appropriate personal protective equipment (PPE), including safety glasses, gloves, dust masks (when cutting), and protective clothing as required.
- Avoid prolonged inhalation of dust generated during cutting or surface preparation. Refer to the Hydroblok Safety Data Sheet (SDS) for additional guidance.
- Use proper lifting techniques when handling panels. Although lightweight, improper handling may result in injury.
- Ensure scaffolding, ladders, and work platforms are properly installed and compliant with safety regulations.
- Keep work areas clean and free of debris to reduce trip hazards and maintain safe working conditions.
- Do not install panels in unsafe weather conditions, including high winds, heavy rain, or freezing temperatures that may impact worker safety or material performance.
- Follow all component manufacturer safety instructions for associated materials, including base coats, sealants, and finishes.

STUCCO INSTALLATION INSTRUCTIONS

• STEP 1

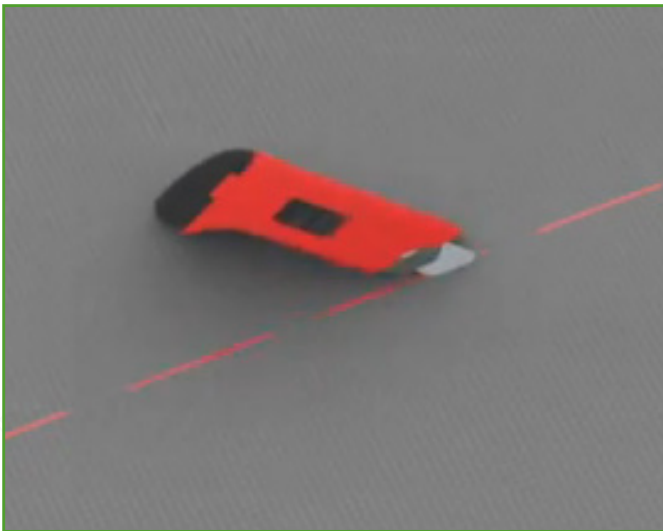
Install a WRB/Drainage product such as stucco wrap or equivalent over the sheathing in accordance with the manufacturer's instructions. If additional drainage is required for coastal climatic zones refer to local/regional codes.

• STEP 2

Check building for any out of plane framing more than 1/4" (6 mm) over 10'. Use weather resistant shims as desired to proactively correct any out of plane sections. (Smaller deflections under 1/4" (6 mm) can be managed with a level coat after panel installation. See details in Step 12.

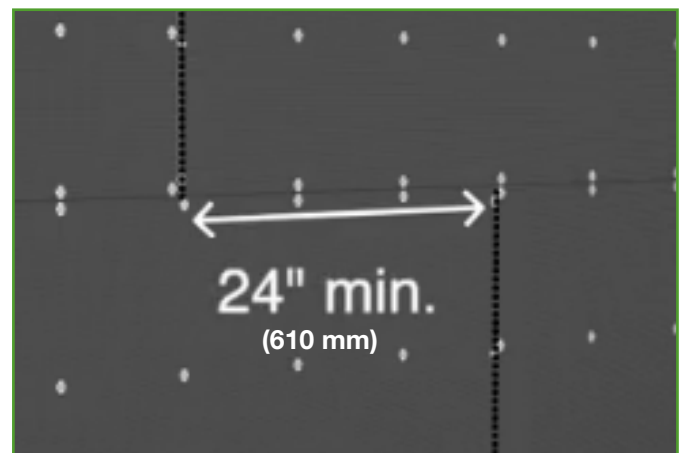
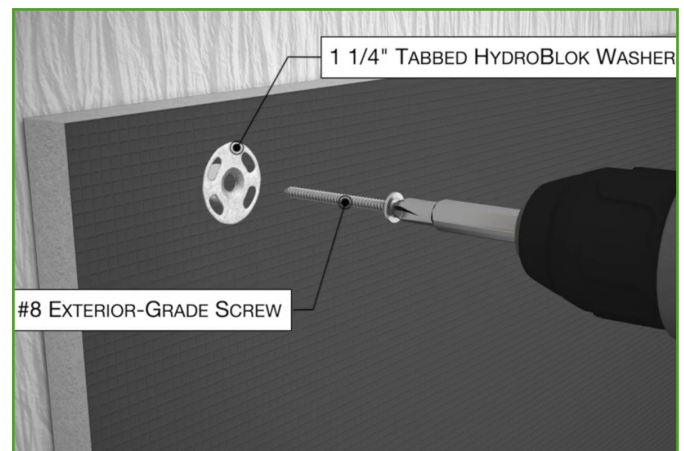
• STEP 3

To cut panels, score the surface with a utility knife and snap the panel along the score line, then cut through the mesh on the opposite side. For mor complex cut and for cuts on thicker panels (>0.5"/12 mm), use a circular saw, jig saw or oscillating multi-tool with a carbide or masonry blade.



• STEP 4

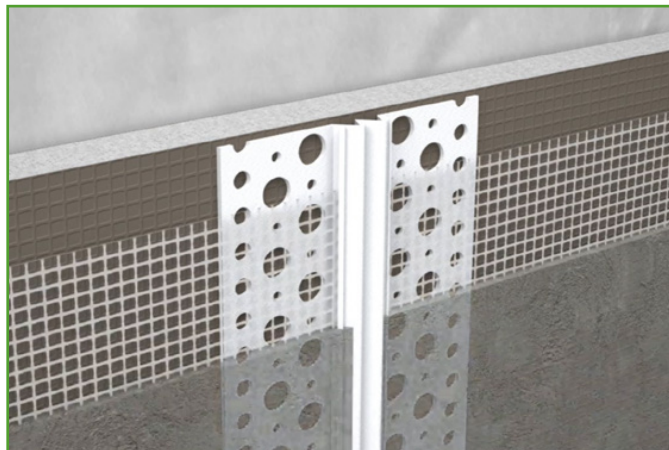
Backer CI panels must be fastened through the sheathing and into the framing a minimum of 1" (25 mm) with #8 exterior grade screws, using 1 1/4" (32 mm) diameter galvanized tabbed washers. Screws and washers shall be spaced 16" (406 mm) on-center on the edges and 16" (406 mm) on-center in the field. Do not overdrive screws; washers should sit flush with the surface. Stagger panel seams a minimum of 24" (610 mm).



STUCCO INSTALLATION INSTRUCTIONS

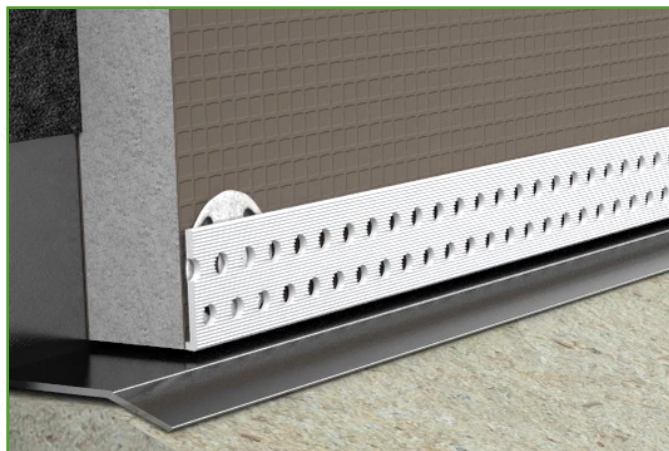
• STEP 5

Layout and install any acrylic expansion joints, control and/or reveal joints per plan and in compliance with local building code. *Control joints can also be cut in after the panels are installed and before the base coat.



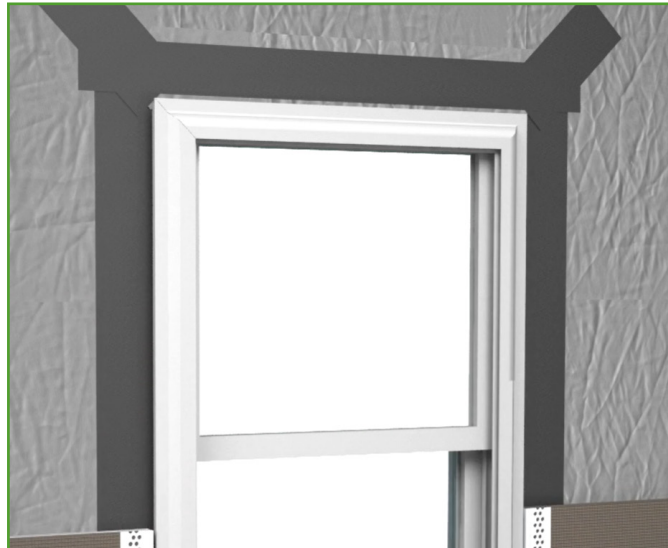
• STEP 6

Install a metal or acrylic bottom flashing along the base of the wall to protect the Backer CI board from insects.*A metal L-flashing can also be applied after the Backer CI is installed. A stucco compatible felt-faced tape must be used to seal the flashing to the face of the board. (See approved tape options)



• STEP 7

For windows and doors prepare the openings in accordance with building codes and WRB manufacturers guidelines. Allow for a 1/4" (6mm) gap between Hydroblok Backer CI and the window frame.



• STEP 8

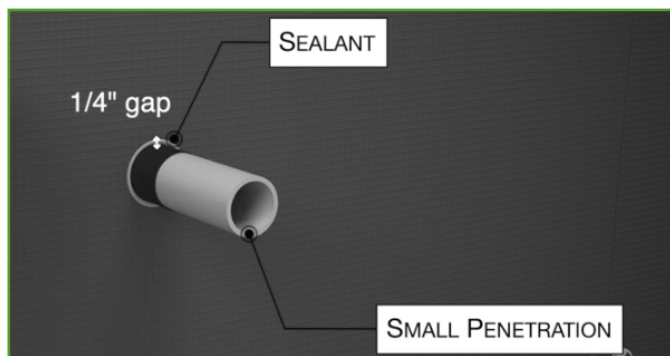
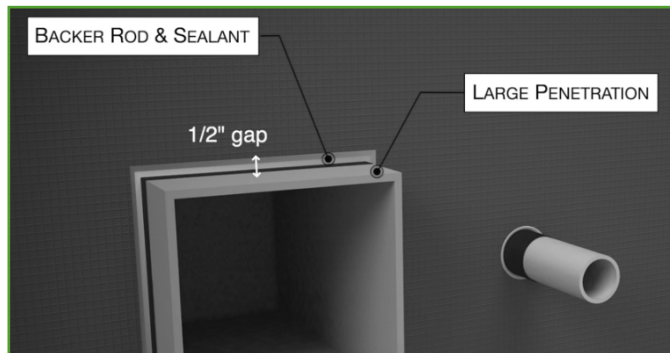
Install L-Bead at True Expansion Joints and around windows as needed. (Stucco Flange windows have build in stucco integration.)



STUCCO INSTALLATION INSTRUCTIONS

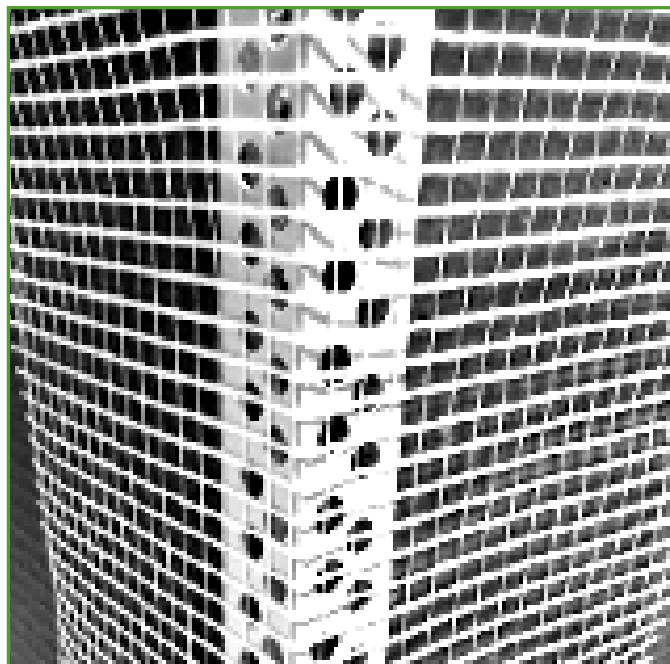
• STEP 9

For large penetrations allow for a 1/2" (12 mm) gap between panel and opening. Finish with backer rod and sealant. For small penetrations allow for a 1/4" (6mm) gap and finish with sealant.



• STEP 11

Install corner trim to all outside corners to cover the exposed foam and protect from damage. Starting from corner edge apply a minimum of 4" (200 mm) approved alkali-resistant mesh tape along vertical edge with approved base coat and trowel flat to fully embed mesh into base coat. Follow step 11 for remainder of base coat.



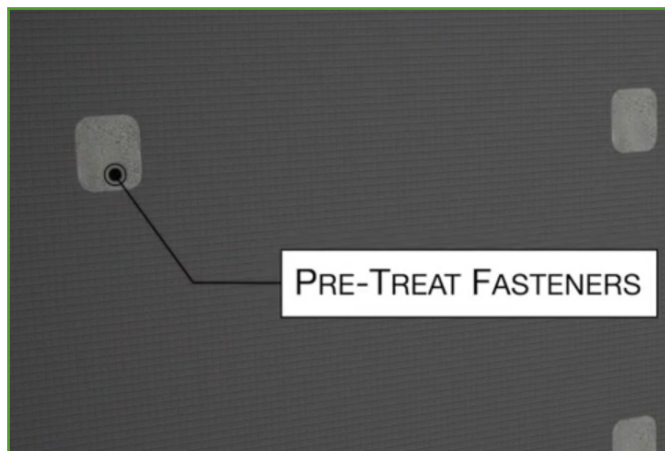
• STEP 10

Apply backer rod and caulk at expansion joints and between L-Bead and window frame.



• STEP 12

Pretreat all fasteners with approved polymer-modified base coat.



STUCCO INSTALLATION INSTRUCTIONS

• STEP 13

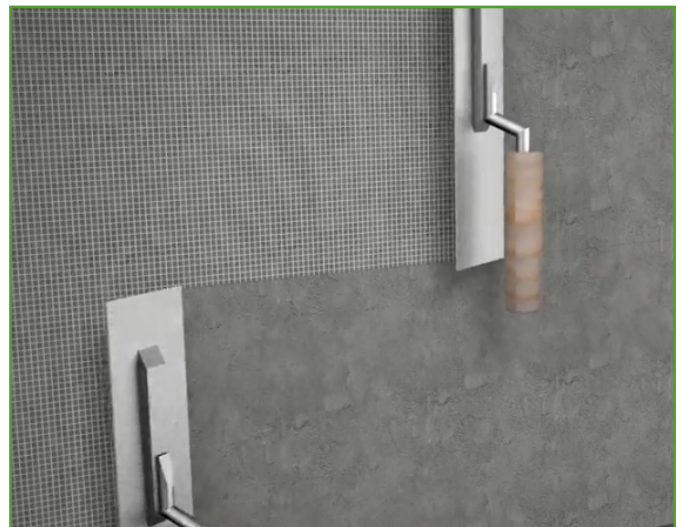
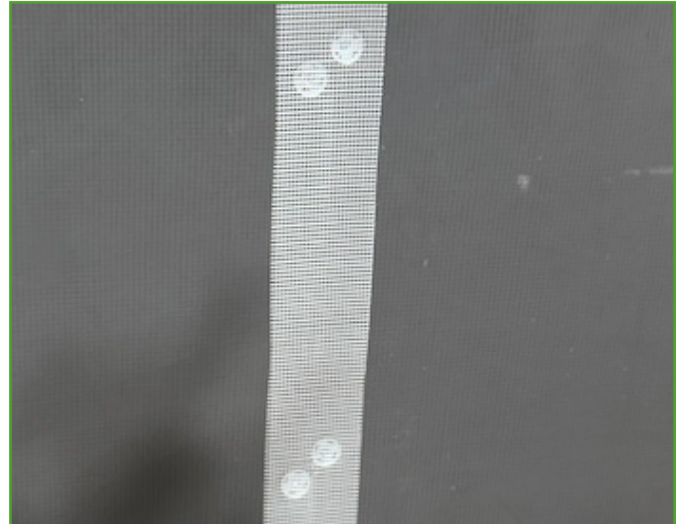
Apply approved 4" wide alkali-resistant mesh tape over seams and embed with approved polymer-modified base. Top off with additional basecoat until the mesh is fully encapsulated and not visible. Trowel on additional base coat over entire surface including screws. Use a screed to float in and level out the surface (see note below). Follow Base coat manufacturer's instructions for thickness recommendations.

Optional Full Mesh for increased impact resistance:

Trowel approved polymer-modified base coat over the Backer CI per manufacturers instructions and immediately embed an ASTM-2098 compliant alkali-resistant fiberglass mesh over the entire panel. Apply additional additional basecoat as required to fully encapsulated the mesh. Use a screed to float in and level out the surface.

Usage	Weight
Standard Impact	4 oz/yd2 (130g/m2)
Medium Impact	11 oz/yd2 (370g/m2)
High Impact	15 oz/yd2 (500g/m2)
Ultra High Impact	20 oz/yd2 (700g/m2)

Assess the flatness of the surface that you plan to install with a laser level or traditional level. Float in additional base coat material to plane out the wall up to 1/4" (6mm) thick. Check for Uniformity. Use a straightedge or long trowel or laser level to verify that the surface is even. Any areas greater that 1/4" (6 mm) may need to be filled in an additional coat after the base coat cures, follow base coat manufacturer's thickness recommendations. Allow Base Coat to Cure before applying additional layers no greater than 1/8" (3 mm).



• STEP 14

Float in additional base coat material to plane out the wall up to 1/4" (6 mm) thick. Any areas greater that 1/4" (6 mm) may need to be filled in an additional coat after the base coat cures, follow base coat manufacturer's thickness recommendations.

• STEP 15

Once basecoat is cured properly, apply acrylic stucco finish per manufacturer instructions.

FOR FURTHER INFORMATION, PLEASE CONTACT:

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