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What is ArmorWall?

ArmorWall interior/exterior wall sheathing is a UL Classified and tested, high strength, fire resistant exterior insulated wall sheathing product, commonly referred to as an SIS (structural insulated sheathing) panel. Combining the best traits of Magnesium Oxide (MgO), PermaBase® Board, and polyurethane insulation, MaxLife’s technology fuses a structural element to the exterior face of our fused insulation layer modernizing the installation of commercial and residential wall assemblies. This innovation allows the designer to reimplement legacy design or frees them to wider creativity while maintaining wall construction speed, efficiency, and code compliance. Through rigorous testing and using many common finish elements in the industry including stucco, metal wall panels, brick, and the like, MaxLife is able to bridge the gap commonly found in keeping with continuous insulation (ci) compliance.
The current ArmorWall series lineup consists of:
- ArmorWall Non-Coated (NC)
- ArmorWall Vapor Permeable (VP)
- ArmorWall Non Permeable (NP)
- ArmorWall PermaBase® (PB)
- ArmorWall Below Grade (BG)
- ArmorWall Non-Coated Symmetrical Panel (NC-SP)
- ArmorWall Vapor Permeable Symmetrical Panel (VP-SP)
- ArmorWall Non Permeable Symmetrical Panel (NP-SP)
**ArmorWall System Installation Manual**

Brief Introduction to the ArmorWall System Components

| 1 | ARMORSEAL SEALANT (gunnable grade) | Sealant is used throughout the project when detailing seams, fasteners, sills, expansion joints, and gaps. Distributed in 20oz (59ml) sausage tubes. |
| 2 | ARMORSEAL SEALANT (brush grade) | Sealant is used throughout the project when detailing seams, fasteners, sills, expansion joints, and gaps. Distributed in 2gal (7.5L) buckets. |
| 3 | ARMORSEAL VP | This vapor permeable air/water resistive barrier, when not factory-applied to ArmorWall VP, is often used for on-site touchups or as part of material transition flashing with embedded reinforcement mesh. |
| 4 | ARMORSEAL NP | This vapor non-permeable air/water resistive barrier, when not factory-applied to ArmorWall NP, if often used for on-site touchups or as part of material transition flashing with embedded reinforcement mesh. |
| 5 | ARMORWALL BOARD | The uncoated sheathing element in full size panel commonly used when creating custom sized returns. |
| 6 | ARMORWALL RETURN | Uncoated returns come in standard depths of 5 5/8", 6 3/8", 7 3/8", 8", 8 3/4", and 9 3/4". Returns are cut down on site to be used for punched openings and complex penetrations. |
| 7 | ARMORWALL VP BOARD | The factory ArmorSeal VP coated sheathing element in full size panel commonly used when creating custom sized returns in ArmorWall VP wall assemblies. |
| 8 | ARMORWALL VP RETURN | Factory ArmorSeal VP coated returns come in standard depths of 5 5/8", 6 3/8", 7 3/8", 8", 8 3/4", and 9 3/4". Returns are cut down on site to be used for punched openings and complex penetrations. |
| 9 | ARMORWALL NP BOARD | The factory ArmorSeal NP coated sheathing element in full size panel commonly used when creating custom sized returns in ArmorWall VP wall assemblies. |
| 10 | ARMORWALL NP RETURN | Factory ArmorSeal NP coated returns come in standard depths of 5 5/8", 6 3/8", 7 3/8", 8", 8 3/4", and 9 3/4". Returns are cut down on site to be used for punched openings and complex penetrations. |
| 11 | ARMORWALL PB BOARD | The PermaBase sheathing element in full size panel commonly used when creating custom sized returns in ArmorWall PB wall assemblies. |
| 12 | ARMORWALL PB RETURN | ArmorWall PB Returns come in standard depths of 2", 2 3/4", and 3 3/4". Returns are cut down on site to be used for punched openings and complex penetrations. |
| 13 | BACKER ROD | Used at expansion joints and gaps exceeding 1/8". |
| 14 | REINFORCEMENT MESH | Non-woven polyester fabric reinforcement is embedded in ArmorSeal VP & NP as part of material transition flashing. |
| 15 | BELOW GRADE TROWEL REINFORCEMENT MESH | Woven polyester reinforcement used in below grade three course seaming. |
The DPI screw is primarily used when affixing ArmorWall to the structure whether light gauge metal, wood, or concrete/CMU.

Similarly to the DPI, the DPS is used for affixing ArmorWall to the structure however it is meant for higher gauge steel studs and up to 1/4" thick steel members.

The Adusto-Tie adjustable veneer anchor from Hohmann & Barnard combines both a tested and approved ArmorWall fastener and a reliable brick tie.

The #10-9 pancake head low profile head fasteners have been successfully tested to attach exterior cladding to the face of the ArmorWall panel.

The #10-9 ultra low profile head fasteners are best used when not attaching steel clips or anchors. This includes wood furring strips or similar compression material.

Note: When using Adusto-Tie adjustable veneer anchors, shear values cannot apply.
### ArmorWall Cladding Attachment: Screw Use Table

<table>
<thead>
<tr>
<th>Cladding Material Connection Type</th>
<th>Concealer ULp</th>
<th>Concealer Pancake Head</th>
<th>Stainless Drywall Screw</th>
</tr>
</thead>
<tbody>
<tr>
<td>RainScreen Clips (metal)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RainScreen Clips (composite)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metal Stand-off Channels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood Furring Strips</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IGBrick Panels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DW-10 Brick Anchors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Window/Door Returns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ArmorWall Board</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Do NOT use impact drivers to install cladding attachments to ArmorWall panels. Use torque control variable speed driver. Most common setting control is (11) for torque.*

### ArmorWall Sheathing Attachment to Substrate: Screw Use Table

<table>
<thead>
<tr>
<th>ArmorWall</th>
<th>Concealer DP-1 3&quot;</th>
<th>Concealer DP-1 4&quot;</th>
<th>Concealer DP-1 5&quot;</th>
<th>Concealer DP-1 6&quot;</th>
<th>Concealer DP-3 3&quot;</th>
<th>Concealer DP-3 4&quot;</th>
<th>Concealer DP-3 5&quot;</th>
<th>Concealer DP-3 6&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 3/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 3/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 3/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 3/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 3/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 3/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Use a 3/16" bit when pre-drilling holes for concrete structure applications.*

### Structure Key

- Concrete
- Wood / Light Steel / Concrete
- Heavy Steel / Studs (16 gauge to 1/4" Steel)
- Wood / Light Steel Studs
Delivery

ArmorWall products are delivered in wrapped, protected 48"x96"x60" pallets via dry van or flatbed. ArmorWall panels vary in weight; an approximate pallet weight of 3,000 pounds can be used for load calculations.

Delivery locations with dock access will receive dry vans that can be unloaded with a drive-in forklift. Dry vans contain pallets loaded lengthwise or widthwise and require forkl extensions to unload.

Delivery locations without dock access, such as project sites, will receive fully tared flat beds on a specialty basis.

<table>
<thead>
<tr>
<th>Contractors Tip:</th>
<th>ArmorWall Thickness</th>
<th>Panels per Truck</th>
<th>Coverage in Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2&quot; ArmorWall (R10)</td>
<td>360</td>
<td>11,520</td>
</tr>
<tr>
<td></td>
<td>2 3/4&quot; ArmorWall (R15)</td>
<td>274</td>
<td>8,418</td>
</tr>
<tr>
<td></td>
<td>3 3/4&quot; ArmorWall (R21)</td>
<td>192</td>
<td>6,144</td>
</tr>
</tbody>
</table>

Storage

ArmorWall should be stored off the ground and in original shipment condition until ready for installation. Do not double stack pallets. Pallets should be covered by a breathable tarp while at the project site. Avoid ground contact or continuous exposure to moisture and direct sunlight.

Handling

ArmorWall can be cut and installed using standard job site hand tools. When being cut to size, avoid breathing dust and minimize contact with eyes. Some skinning and direct coloration of the insulation edges is normal if exposed to UV light prior to installation; however, this does not affect the performance of the panel. Some cupping of the panel is expected during shipment and can be rectified during installation by beginning installation from the center of the panel and working outward per the fastener standard of the designed application.
Documentation
Always read necessary project documentation, product installation manuals, data sheets, and safety data sheets prior to commencement of work. You can find all current MaxLife Industries product information on the website www.MaxLifeIndustries.com.

Recommended Personal Protective Equipment
1. CONSTRUCTION SAFETY HELMET (HARD HAT)
2. SAFETY GLASSES/GOGGLES
3. DUST MASK
4. HIGH VISIBILITY SAFETY APPAREL
5. PROTECTIVE GLOVES
ArmorWall does not require specialized tools not commonly found on construction projects.

<table>
<thead>
<tr>
<th>No.</th>
<th>Tool Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RECIPROCATING SAW</td>
</tr>
<tr>
<td></td>
<td>May be used when cutting penetration or punched openings with an affixed panel.</td>
</tr>
<tr>
<td>2</td>
<td>CIRCULAR SAW</td>
</tr>
<tr>
<td></td>
<td>May be used when performing cuts to panels for punched holes or when cutting panel to size.</td>
</tr>
<tr>
<td>3</td>
<td>HAMMER DRILL</td>
</tr>
<tr>
<td></td>
<td>May be used when pre-drilling concrete/CMU walls.</td>
</tr>
<tr>
<td>4</td>
<td>SPEED SQUARE TOOL</td>
</tr>
<tr>
<td></td>
<td>Recommended when marking panels and components for necessary cuts to maintain accuracy.</td>
</tr>
<tr>
<td>5</td>
<td>SCREW GUN</td>
</tr>
<tr>
<td></td>
<td>Installation of both the ArmorWall panels and cladding to the panels throughout the project using a 2,000 RPM screw-gun with torque control. Do not use impact tools.</td>
</tr>
<tr>
<td>6</td>
<td>SAUSAGE GUN</td>
</tr>
<tr>
<td></td>
<td>May be used as an applicator of gunnable grade ArmorSeal Sealant at seams and fasteners.</td>
</tr>
<tr>
<td>7</td>
<td>ROTZIP</td>
</tr>
<tr>
<td></td>
<td>May be used when preparing panels for outside corner joints or otherwise notching the foam components within ArmorWall panels.</td>
</tr>
<tr>
<td>8</td>
<td>JIGSAW</td>
</tr>
<tr>
<td></td>
<td>May be used when preparing panels for penetrations or otherwise notching the panel for regular and irregular shapes.</td>
</tr>
<tr>
<td>9</td>
<td>LEVEL</td>
</tr>
<tr>
<td></td>
<td>Recommended to check levels throughout the projects and useful when marking long straight lines.</td>
</tr>
<tr>
<td>10</td>
<td>ANGLE GRINDER</td>
</tr>
<tr>
<td></td>
<td>May be used when preparing panels for penetrations or otherwise notching the panel for regular and irregular shapes.</td>
</tr>
<tr>
<td>11</td>
<td>CHALK LINE TOOL</td>
</tr>
<tr>
<td></td>
<td>Recommended throughout the project for preparing long precision cuts to the panels.</td>
</tr>
<tr>
<td>12</td>
<td>TAPE MEASURE</td>
</tr>
<tr>
<td></td>
<td>Recommended throughout the project for accuracy in preparation for panel layout and panel cuts.</td>
</tr>
<tr>
<td>13</td>
<td>TROWEL / PUTTY KNIFE</td>
</tr>
<tr>
<td></td>
<td>May be used to easily spread sealant when detailing the wall assembly</td>
</tr>
<tr>
<td>14</td>
<td>INSULATION KNIFE</td>
</tr>
<tr>
<td></td>
<td>Allows for easy cutting of the foam insulation element of ArmorWall and may be used when dealing with outside corner weaved joints.</td>
</tr>
<tr>
<td>15</td>
<td>ROLLER BRUSH</td>
</tr>
<tr>
<td></td>
<td>1/4&quot; nap roller brush may be used as an applicator of brush grade ArmorSeal Sealant at punched opening sills.</td>
</tr>
<tr>
<td>16</td>
<td>MARKER</td>
</tr>
<tr>
<td></td>
<td>Best used for marking guides on the foam insulation for necessary modifications.</td>
</tr>
</tbody>
</table>
Inspecting the Structure

Examination: Verify that the surfaces and conditions are ready to accept ArmorWall. This includes located built-in items and penetrations and ensuring all punched openings are in the correct locations. Any major structural deficiencies should be reported and remedied prior to installation.

Preparation: Protect surrounding areas from any possible damage caused during the installation of the panels. Any examined projections, protruding fasteners, and/or loose foreign matter preventing proper installation should be removed accordingly.

Limitations: Do not install ArmorWall on structure sloped less than 45° (12:12).

Compatible Structures

ArmorWall can be installed to the face of steel studs, wood studs, concrete, and masonry.
ArmorWall System Installation Manual
Recommended Fastening Patterns

Most panels have a factory-applied fastening pattern directly on the board allowing for quicker installation in both horizontal and vertical orientations. Use the corresponding symbols to the preferred orientation. Usage in high wind zones may require alternate fastening or when appropriate panels are used as shear walls. Follow engineered requirements as necessary for the project.

- Vertical Installation Standard Fastener Position Symbol
- Horizontal Installation Standard Fastener Position Symbol
- Vertical and Horizontal Shared Installation Standard Fastener Position Symbol

ArmorWall standard panel length is 8'-0" however it is possible to special order 10'-0" panels.
Install ArmorWall panels from the center working outwards to help alleviate any possible cupping that could have resulted from transport.

Each self-tapping screw must penetrate the steel stud structure with at least three threads showing beyond the metal surface.

Fasten self-tapping screws to be proud of the ArmorWall surface. Where countersinking the screws is preferred, always use a countersink bit. Do not countersink screws in high wind zones.
Install ArmorWall panels from the center working outwards to help alleviate any possible cupping that could have resulted from transport.

Each #14-13 self-tapping screw must penetrate the wood stud structure a minimum of 1”.

Fasten #14-13 self-tapping screws to be proud of the ArmorWall surface. Where countersinking the screws is preferred, always use a countersink bit. Do not countersink screws in high wind zones.
Install ArmorWall panels from the center working outwards to help alleviate any possible cupping that could have resulted from transport.

Pre-drill holes with a 3/16" bit when fastening to concrete. It is recommended that you drill pilot holes through both the panel and concrete. Follow standard fastener manufacturer practices when attaching to concrete surfaces and CMU.

Each #14-13 self-tapping screw thread must penetrate the concrete structure a minimum of 1".

Fasten #14-13 self-tapping screws to be proud of the ArmorWall surface. Where countersinking the screws is preferred, always use a countersink bit. Do not countersink screws in high wind zones.
At the top of a parapet wall, ArmorWall panels are installed to the top of the assembly and are capped by blocking.

Correct assembly requires that the roofing weather resistant membrane is tied in to the panels factory-coated WRB. The roof membrane is wrapped up and over the blocking and extended a minimum of 2" on to face of ArmorWall.

Install desired cladding per the manufacturer installation instructions.
ArmorWall can be installed flush with the foundation. In this case, offset the base of the panel 1/4" from the foundation and install a backer rod and sealant around the entire perimeter as necessary.

ArmorWall can be installed to be in front of the foundation slab. There is an additional step of adding a VP return cap measured the thickness of the panel. When installing above grade always follow exterior finish clearance guidelines and installation procedures.

Likewise, when installing over concrete/sidewalk, always follow exterior finished guidelines and installation procedures.
Apply (2) beads of ArmorSeal Sealant (gunnable grade) along the edge of the panel and adhere the ArmorWall return.

Depending on which panel from the ArmorWall series is on the project, finish the exposed sheathing with the appropriate WRB or use the appropriate return (illustrated).

Alternatively, you can install a metal through-wall flashing to cap off the bottom edge of the panel.
ArmorWall System Installation Manual
Punched Opening Method 1: Affixed Panel

Install ArmorWall panels from the center working outwards to help alleviate any possible cupping that could have resulted from transport.

Using the rough opening as a guide, carefully cut the opening using a reciprocating saw.

Cut away the extra panel at the door punched opening, again using the opening as the guide.
Move the marked panel to the local workstation. It is recommended that two workers carry a full panel.

Hold the panel in position while marking the entire interior perimeter of the punched opening onto the foam insulation. Use a permanent marker for best contrast and writability on the foam insulation.

Using a circular saw, cut out the punched opening along the markings. Take proper care when operating power tools and always wear the required personal protective equipment.

It is recommend to finish the inside corners after the circular saw using a jig saw tool.

Install ArmorWall panels from the center working outwards to help alleviate any possible cupping that could have resulted from transport.
Take the necessary measurements required to properly locate the punched opening onto the ArmorWall panel.

Move the marked panel to the local workstation. It is recommended that two workers carry a full panel.

Accurately mark the panel with the necessary dimensions. Using a circular saw, cut out the punched opening along the markings. Take proper care when operating power tools and always wear the required personal protective equipment.

Install ArmorWall panels from the center working outwards to help alleviate any possible cupping that could have resulted from transport.

It is recommend to finish the inside corners after the circular saw using a jig saw tool.
It is not recommended to locate panel edges at the perimeters of punched openings.

Locate panel seams along the interior perimeter of the rough opening.

Stagger the panels by at least one stud spacing on center. Do not seam Armorwall in between studs.

Take care not to overtighten fasteners to prevent any crushing damage to the panel.

Take care not to overtighten fasteners to prevent any unnecessary damage. Corners are more susceptible to break off in this case.
Cupping of the panel may occur from transit. Ensure panel is firmly seated to stud face prior to fastening screw as straight as possible.

ArmorWall offcuts require a minimum of two stud spacing fastening points.

The panel on the left only attaches to a single stud and is incorrectly installed.

The panel on the right correctly spans the minimal two stud requirement.

The ideal installation in this scenario is to use an offcut which correctly spans the entire distance or meets the two stud minimum on each piece.
This corner panel will act as example of the recommended preparation for inside and outside corners. Measure the panel to butt up against an inside corner while extending past the outside corner by the thickness of the panel used on the project. Pocket out the foam element at the extension to receive the adjacent panel. At no time should foam be exposed in the assembly when complete.

Set the depth of your saw to only cut the foam insulation.

Position the router along the sheathing component and set the depth to route out up to the saw cut.

Butt join inside corners to adjacent panels.

Weave Joint
Panel 1 Panel 2

Fasten next panel around the outside corner into the pocketed extension to complete the weave joint.
Continue rounding the next corner using the same outside corner steps having prepared the panel for the weave joint.

Using the same steps as the first row of panels continue to install ArmorWall up the structure.
For easier installation it is recommended that you install the top and bottom returns first followed by the sides. Measure and cut the returns accordingly to achieve this result.

Measure the width and height of the punched opening.

Returns are fastened with standard stainless steel drywall screws of appropriate length and drill type for the application.

Follow the return fastening pattern to install the side returns.

Follow the return fastening pattern to install the top and bottom returns.

Return Fastening Pattern

MAX 2" FROM CORNER

<table>
<thead>
<tr>
<th>ATTACH RETURN TO STRUCTURE</th>
<th>DO NOT ATTACH TO ARMORWALL PANEL BEYOND</th>
<th>+</th>
<th>MAX 2&quot; FROM CORNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ O.C. (MAX 12&quot;)</td>
<td></td>
<td>+</td>
<td>EQ O.C. (MAX 12&quot;)</td>
</tr>
<tr>
<td>EQ O.C. (MAX 12&quot;)</td>
<td></td>
<td>+</td>
<td>EQ O.C. (MAX 12&quot;)</td>
</tr>
<tr>
<td>STAGGER STANDARD DRYWALL SCREWS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Front
Measure the width and height of the punched opening.

Panel depth returns require the ArmorWall panels to be cut 1/2" short of the punched opening allowing the 1/2" thick return to be installed flush to the opening.

For easier installation it is recommended that you install the top and bottom returns first followed by the sides. Measure and cut the returns accordingly to achieve this result.

Contractors Tip: use painters tape or a dead man to hold head return in place while sealant cures.

Apply two beads of ArmorSeal Sealant around the entire interior perimeter panel surface at the punched opening. Install the pre-cut returns to cover the depth of the panel and ensure each sits flush with the punched opening.
Always remove all dirt and debris from the ArmorWall surface prior to any sealant application.

Using a 20 Oz sausage caulking gun, apply a minimum 1" dollop of ArmorSeal Sealant (gammable grade) to all exposed fastener heads with a sufficient amount to fully be sealed.

Using a putty knife, immediately strike each fastener head to appropriately seal the fastener penetration.

Contractors Tip: when estimating ArmorSeal Sealant, 1.5 tubes per panel is a good typical usage rate, this includes both seams and fasteners.

Fastener should be completely encapsulated by ArmorSeal Sealant forming an airtight seal.
Using a 20 Oz sausage caulk gun, apply ArmorSeal Sealant (gunnable grade) in zig zag pattern across the entire inside corner joint line. Inside and outside corner seam joints are to be a minimum width of 2" with 1" on the face of each panel surface.

Apply pattern to both surfaces which comprise the joint having an overall distance of 2" between the peaks and valleys and 2 1/2" between peaks.

Using a 20 Oz sausage caulk gun, apply ArmorSeal Sealant (gunnable grade) in zig zag pattern across entire horizontal and vertical joint lines. Field seams receive 1" of continuous bead on each panel surface face to create a minimum 2" wide seam joint.

Contractors Tip: when estimating ArmorSeal Sealant, 1.5 tubes per panel is a good typical usage rate, this includes both seams and fasteners.

Using a 6" putty knife, strike the sealant ensuring joint remains continuous and entirely free from voids or holidays.
Using a 20 Oz sausage caulking gun, apply ArmorSeal Sealant (gunnable grade) in zig zag pattern across the entire outside corner joint line. Inside and outside corner seam joints are to be a maximum width of 2” with 1” on the face of each panel surface.

Using a 6” putty knife, strike the sealant ensuring joint remains continuous and entirely free from voids or holidays.

Continue sealing the assembly.
Seal all inside corners of the punched opening.

Seal all outside edges of the punched opening.

Maintain the minimum 2" sealant coverage at seams extending 1" on each face after striking.

Seal all inside corners of the punched opening.

Seal all outside edges of the punched opening.
Using a roller brush, apply a 5" minimum wide coat of ArmorSeal VP centered on each seam. Immediately embed the ArmorSeal Reinforcement Mesh in to wet coating.

Immediately apply second coat of ArmorSeal VP to complete the three-course seam application.

The ArmorSeal Mesh Reinforcement must be fully encapsulated by ArmorSeal VP. The illustration shows the 4" example however the same treatment would apply to the 6" and 9" variations of mesh reinforcement.
Gaps up to 1/8" in width receive the standard 2" wide joint seam spanning 1" on each surface face.
Fill gaps 1/8" or greater with low rise foam (illustrated) or compressible insulation filler followed by a compressed backer rod and ArmorSeal Sealant. Seams and gaps receive the standard 2" wide joint seam spanning 1" on each surface face.
Fill expansion joint with 4 pcf mineral wool insulation a minimum of 2" deep to ensure continuous insulation in the project.

Apply SureSpan EX, a flexible expansion joint seal from Prosoce, across the joint. Suerepe EX should span a minimum of 2" on the surface of each side of the joint.

3/4" or Larger Expansion Joint

Minimum 2"
Using a putty knife or similar tools apply ArmorSeal Sealant (brush grade) to the sill of the opening. Spread the sealant with a roller brush to achieve a 40 wet mil thickness. When complete the underlaying substrate should not be visible.

Sealant should extend 4” from the interior on to the front facing sides and bottom of the panel.

Sealant should extend 6” up the jambs of the punched opening.

The entire width and depth of the sill is coated to complete preparation for next phases of the project.

Contractors Tip: one 2 gallon pail of ArmorSeal Sealant (brush grade) should cover approximately 40 square feet per gallon or 80 square feet per pail.
Characteristics of this Return Type:

Return Material: ArmorWall VP Return (Non-Insulated ArmorWall Board) mechanically fastened to structure
Depth of Return: Full depth of assembly
Opening Flashing: ArmorSeal Sealant (brush grade) at sill:
- Full depth of opening
- 6” up the jambs
- Extend 4” on to the face of the panel at bottom and sides adjacent to the jambs
Types of Returns: FRT Blocking Return with Liquid Flashing

**Characteristics of this Return Type:**

- **Return Material:** Fire-Retardant Treated wood blocking mechanically fastened to structure
- **Depth of Return:** Full depth of assembly
- **Opening Flashing:** ArmorSeal Sealant (brush grade) at:
  - Full depth of opening
  - Full width and height of opening
  - Extend 4’ on to the face of the panel around entire perimeter of opening
Types of Returns: Panel Depth Return with Liquid Flashing

**Characteristics of this Return**
- **Return Material:** ArmorWall VP Return (Non-Insulated ArmorWall Board) adhered to panel edge
- **Depth of Return:** Full depth of panel
- **Opening Flashing:** ArmorSeal Sealant (brush grade) at:
  - Full depth of opening
  - Full width and height of opening
  - Extend 4" on the face of the panel around entire perimeter of opening
ArmorWall System Installation Manual
Types of Returns: Panel Depth Return with Self-Adhered Flashing

**Characteristics of this Return**

- **Return Material:** ArmorWall VP Return (Non-Insulated ArmorWall Board) adhered to panel edge
- **Depth of Return:** Full depth of panel
- **Opening Flashing:** Approved self-adhered membrane WRB at:
  - Full depth of opening
  - Full width and height of opening
  - Extend 4" on to the face of the panel around entire perimeter of opening
  - Bead of ArmorSeal Sealant on entire outer perimeter of WRB
  - Follow WRB manufacturer’s installation guidelines
Characteristics of this Return

Return Material: Fire-Retardant Treated wood blocking mechanically fastened to structure
Depth of Return: Full depth of assembly
Opening Flashing: Approved self-adhered membrane WRB at:
  - Full depth of opening
  - Full width and height of opening
  - Extend 4" on to the face of the panel around entire perimeter of opening
  - Bead of ArmorSeal Sealant on entire outer perimeter of WRB
  - Follow WRB manufacturer's installation guidelines
Characteristics of this Return
Return Material: 20 gauge C channel metal return mechanically fastened to structure
Depth of Return: Full depth of assembly
Opening Flashing: ArmorSeal Sealant (brush grade) at:
- Full depth of opening
- Full width and height of opening
- Extend 4" on the face of the panel around entire perimeter of opening

ArmorWall System Installation Manual
Types of Returns: Metal Return with Liquid Flashing
Cut out appropriately sized hole for the typical penetrations into the ArmorWall panel. Do not secure penetrations to the panel. Fill any gaps 1/8" or greater resulting from oversized holes with appropriately sized compressible backer rod. Apply ArmorSeal Sealant to the penetration at the hole and strike as necessary.

Sealant should extend 1" on both the penetration surface and the face of the panel.
Cut out appropriately sized hole for the typical exterior grade weatherproofed electrical box into the ArmorWall panel. Secure box to the structure. Fill any voids with a field-applied closed-cell foam insulation.

**Liquid Option**
Apply ArmorSeal Sealant (brush grade) target patch. Patch to extend at minimum 6" onto the field of the panel or up to a plane change in all directions.

**Self-Adhered Option**
Apply MaxLife approved self-adhered membrane target patch. Patch to extend at minimum 6" onto the field of the panel or up to a plane change in all directions.

Allow full cure duration of the ArmorSeal target patch and apply ArmorSeal Sealant (gumnable grade) to the perimeter in a zig zag pattern. Using a trowel, strike the sealant as before.

Apply ArmorSeal Sealant (gumnable grade) to the perimeter in a zig zag pattern. Using a trowel, strike the sealant as before. Apply a bead of sealant at the perimeter of the box.