

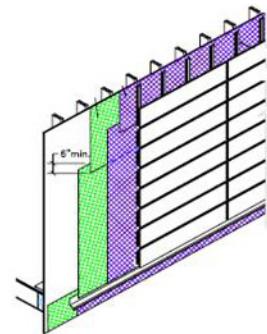
## OVERVIEW

WallShield is a mechanically attached high performance **Water Resistive Barrier (WRB)** designed for above grade use in drainage cavity walls. WallShield is recommended for applications requiring a high level of both vapor and air permeability while maintaining outstanding liquid water holdout capabilities. WallShield is not intended to perform air retarding or air barrier functions.

\*Note: VaproShield requires a cavity drainage system to be incorporated in all WallShield WRB Installations.

## BEST PRACTICES

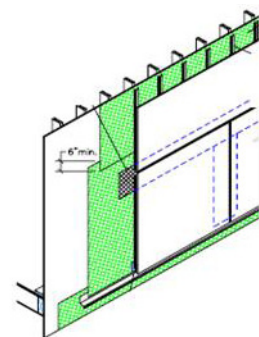
- WallShield is installed with approved fasteners in a Horizontal, Shingle Fashion.
- Building layout should be planned prior to installation to minimize waste and ensure all interfaces and penetrations are identified and detailed correctly to protect against water infiltration.
- Horizontal overlaps are to be 6" minimum and vertical seams are to be 12" minimum. Vertical seams are to be staggered a minimum of 24". (See additional requirements below for open-joint cladding installations)
- Inside and outside corners can be continuous, or if a vertical joint occurs within 24" horizontally, an overlap of a minimum of 12" in both directions providing a double layer at the corner is required.
- Cladding attachment components are to be factored into the overall attachment requirements.
- WallShield must be correctly shingled with all openings and penetrations to deflect liquid water to the main drainage plain and ultimately to the exterior of the building.
- Always install WallShield in a *"weatherboard or shingle fashion"* with the upper courses lapped over the lower courses.
- Install exterior cladding within 6 months after installation of the WallShield WRB.



**Typical Open Joint - Narrow Panel  
(2" layer of Black WallShield)**

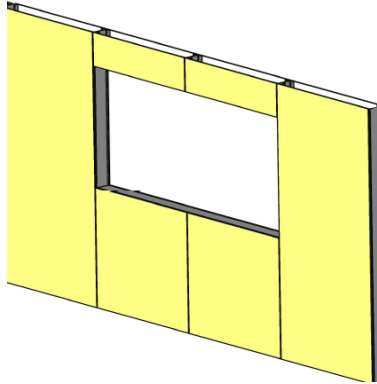
## IMPORTANT: OPEN JOINT CLADDING INSTALLATION REQUIREMENTS Mandatory for Open Joint Systems

- Narrow panel open joint cladding systems: Install WallShield BLACK with a minimum 50% overlap horizontally, or install a layer of WallShield Green and a second layer of WallShield BLACK with standard overlaps as noted in section above.
- Wide panel open joint cladding systems: Install with a top layer of VaproFlashing BLACK or UV VaproTape Single-Sided BLACK at open joint locations.
- Maximum open joint size is 3/8".
- Maximum % of open area allowed is 10% of total wall area.
- Install open joint cladding systems within 1 month after installing the WallShield WRB.
- Ensure minimum 1/2" inch deep rain screen drainage cavity system is incorporated in all WallShield WRB Installations.

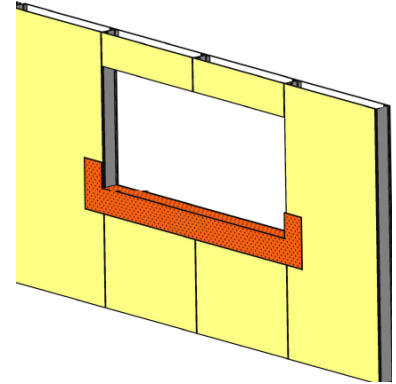


**Typical Open Joint -Wide Panel  
(Vaproflashing  
black at open joint)**

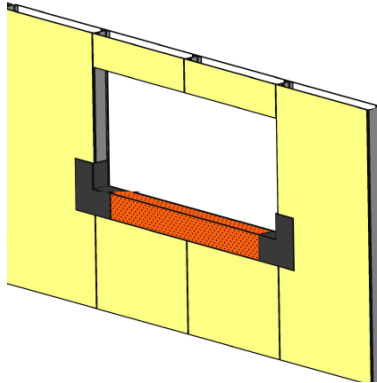
**1** Begin with installing VaproFlashing at all window and door penetrations.



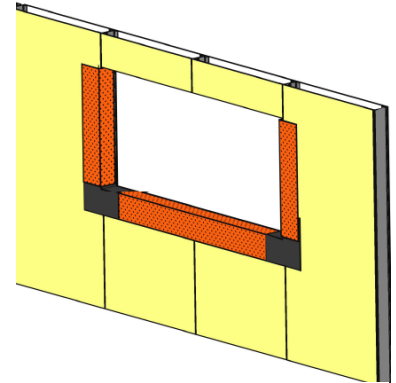
**2** Install VaproFlashing at sill, extending 9" at bottom and on each side of window. Cut at jambs and fold into rough opening as shown.



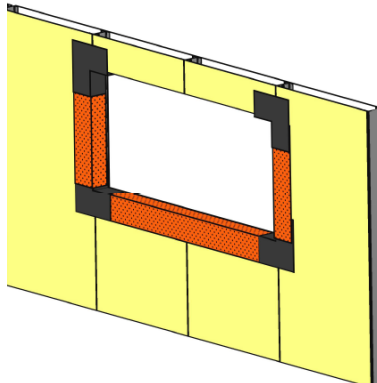
**3** Install VaproFlashing Factory Formed Corners at the bottom rough opening corners, using SS Staples into wood framing or VaproAdhesive spray on metal framing.



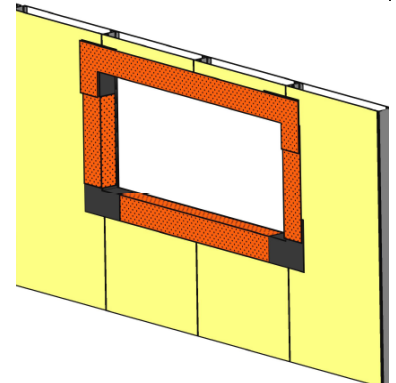
**4** Install VaproFlashing at jambs as shown, leaving 9" on face of wall.



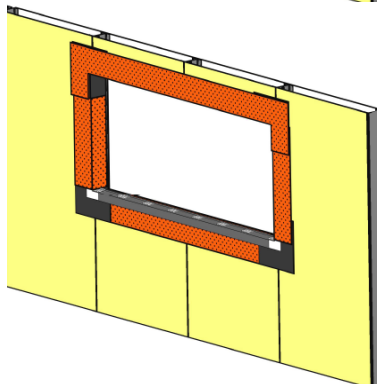
**5** Install VaproFlashing Factory Formed corners at the top left and right corners as shown.



**6** Install VaproFlashing at window head, extending 9" above and on each side of window. Cut at jambs and fold into rough opening as shown.

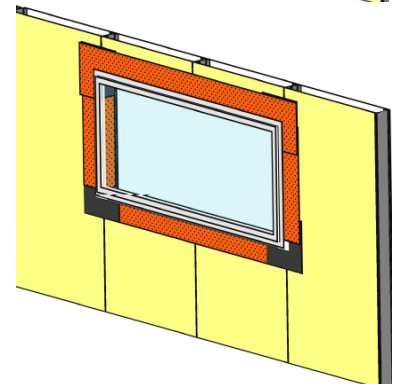


**7** Install VaproSillSaver pan in a continuous bead of sealant.



\*VaproSillSaver pan is shown for **Nail Flange Windows** only.

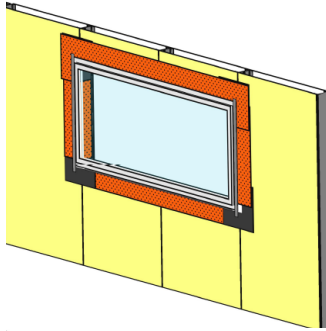
**8** Install Window (by others) per Window manufacturer's instructions.



Do not caulk behind the flange at the sill when using VaproSillSaver Pan.

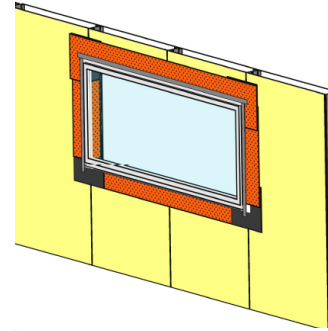
**9** Install 3" VaproTape at the jambs to seal the window flange to the VaproFlashing:

Roll VaproTape aggressively with weighted roller to activate.

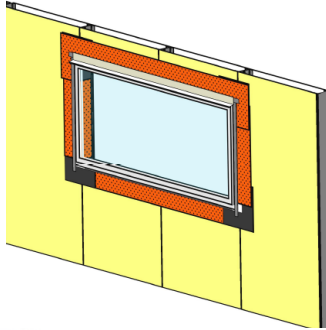


**10** Install 3" VaproTape at the head to seal window flange to the VaproFlashing:

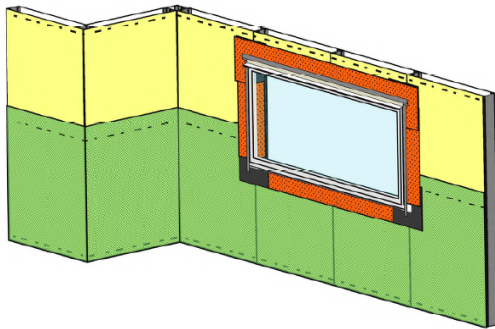
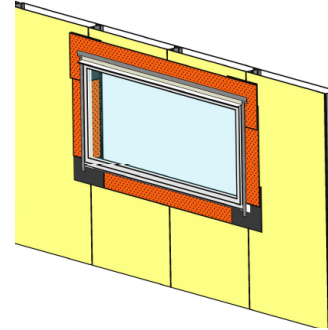
Roll VaproTape aggressively with weighted roller.



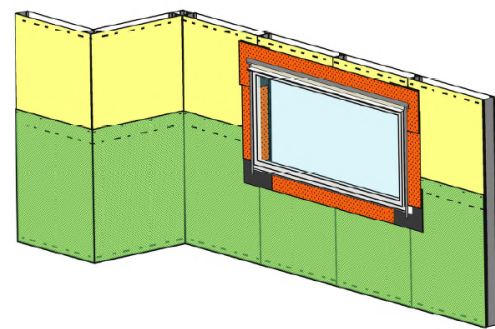
**11** Install Head Flashing (by others) extending past each side of window 3/8" with end dams and drip edge to deflect water away from window.



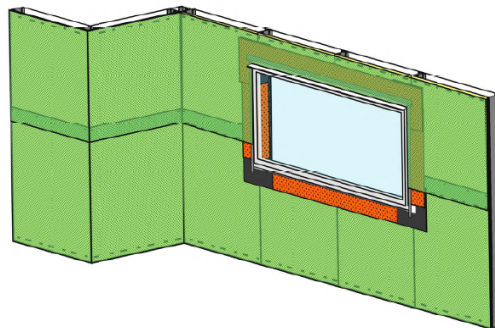
**12** Install 3" VaproTape over upturned leg of head flashing to seal head flashing to the VaproFlashing.



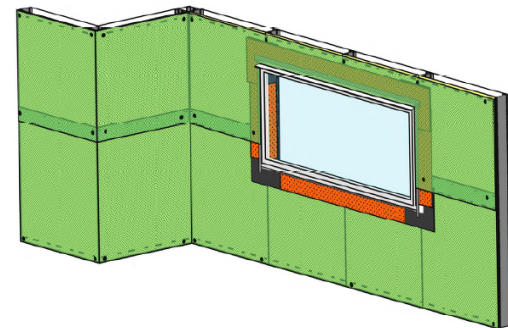
**13** Begin Installation of WallShield field membrane at the base of the wall, and shingle the VaproFlashing over the WallShield at the window



**14** Use SS Staples or Cap Nails across the top 2" of the WallShield, as temporary fasteners, until cladding is installed.



**15** Install second course of WallShield material with a 6" min. overlap, shingling over the VaproFlashing at the Window, temporarily fastening with SS Staples or Cap Nails across the top 2" of WallShield, cutting material around the frame.



**16** Install VaproCaps with screws as needed to temporarily secure WallShield in locations that will not interfere with battens, furring-strips, hat channels, or other cladding attachments.

## SUBSTRATE INFORMATION

- WallShield can be installed over multiple substrates including: Plywood, OSB, Framing Lumber, Gypsum Sheathing, Rigid Insulation, and Semi-Rigid Insulation (Mineral Fiber).
- WallShield can be installed over wet substrates. The high values for vapor and air permeability allow substrates to dry quickly while limiting continued wetting cycles during the construction time frame.
- WallShield should not be installed until the roof of the building is dried in.

## FASTENING GUIDELINES

- WallShield WRB is mechanically fastened to the substrate. Stainless Steel staples and cap nails may be used as temporary fasteners during installation but only in locations that will be covered by shingling of the next layer of WRB material (see sequential stepped sketch).
- Exposed fasteners for the WallShield WRB require VaproCap washers which are designed to accept #6, 7, or #8 size corrosion protected Bugle headed screws of the appropriate thread design and length for the underlying substrate and framing material.
- VaproCap washers have been tested for both water and air leakage and substitutions are not recommended.
- Cladding attachments that penetrate the WRB should be factored into the overall fastening quantity and placement.
- The quantity and placement of fasteners will vary depending on the following variables:
  - o Length of time that the installed WallShield WRB will be exposed prior to installation of cladding attachments, such as: furring strips, battens, hat channels, masonry ties, metal extrusions, etc.
  - o Spacing of cladding attachments (i.e. 16" o.c. 24" o.c. etc.)
  - o Type and material chosen for exterior cladding
  - o Local weather conditions
- Plywood and OSB sheathing applications: Use coarse threaded bugle head design wood screws in the above mentioned sizes installed with VaproCaps in the sheathing only without contacting the underlying framing members.
- Gypsum Sheathing and Metal Framing: Use self drilling fine threaded screws in the above mentioned sizes and shape with VaproCaps installed into the underlying metal framing or strapping.
- Fasteners for VaproBattens, furring strips, cladding clips, hat channels, etc. should be evaluated for liquid water holdout properties before selection or installation. Gasketed fasteners are recommended whenever possible. Call VaproShield Technical Department for further clarification 1.866.731.7663.

## BEST PRACTICE WALLSHIELD WRB INSTALLATION SEQUENCE:

- Install VaproFlashing and VaproFlashing Factory Formed Corners at all window and door openings prior to installing main field material.
- Install VaproFlashing at all electrical and plumbing penetrations, allowing for main field membrane to be integrated in a shingle fashion.
- Install main field membrane beginning at the bottom of the wall and progressing upward, integrating all pre-flashed windows, doors and penetrations in a horizontal, weatherboard shingle fashion.

VaproShield products are manufactured using a sun bonded, triple-layer, high-density polypropylene fabric.		
LIMITED PRODUCT WARRANTY AND DISCLAIMER**		
<p><b>A) PRODUCTS TO WHICH WARRANTY APPLIES:</b></p> <ol style="list-style-type: none"> <li>1) WALLSHIELD</li> <li>2) VAPROSHIELD</li> <li>3) VAPROSHIELD S.A.B. SELF-ADHERED</li> <li>4) VAPROSHIELD HS #</li> <li>5) REVEALSHIELD™</li> <li>6) REVEALSHIELD™</li> <li>7) SCORPIONSHIELD</li> <li>8) SCORPIONSHIELD S.A.B. SELF-ADHERED</li> <li>9) VAPROFLASHING™</li> <li>10) FACTORY FORMED CORNERS™</li> </ol> <p><b>B) LIMITED WARRANTY:</b> The WallShield, VaproShield, VaproShield S.A., VaproShield HS, RevealShield, RevealShield, ScorpionShield and ScorpionShield SA products are warranted for their intended use as an underlayment, weather resistant barrier, or as an air barrier. VaproShield will warrant its products for a period of twenty (20) years from the date of purchase. VaproShield will replace any faulty product, provided the product used is installed per the published installation instructions and details. VaproShield installation instructions are provided with the product and are available at <a href="http://www.vaproshield.com">www.vaproshield.com</a> or by calling VaproShield toll free at 1.866.731.7663.</p> <p>This warranty is transferable upon sale of the product, but as to no event does it extend beyond 20 years from the date of original purchase (if applicable). Any and all claims must be made in writing within 20 business days after the owner discovers or obtains knowledge of any defect in the product(s). VaproShield must be given reasonable opportunity to inspect the allegedly defective product and all damage prior to alteration or removal of the product or any surrounding building components.</p> <p><b>All claims must be made in accordance</b></p>	<p>with the claims and inspection procedure noted herein.</p> <p>This warranty shall not apply to, and VaproShield shall not be liable for, any damages arising in whole or in part from any one or more of the following:</p> <ol style="list-style-type: none"> <li>1) WallShield, VaproShield, VaproShield S.A., VaproShield HS, RevealShield, RevealShield, ScorpionShield, or ScorpionShield SA that is not stored or installed in accordance with the published installation instructions.</li> <li>2) Improper building practices or designs not in accordance with the applicable building code by a duly licensed/authorized contractor or other approved subcontractor.</li> <li>3) Damage to the product(s) (VaproShield, VaproShield S.A., VaproShield HS, RevealShield, RevealShield, ScorpionShield, or ScorpionShield SA) resulting from causes other than normal weather conditions, including impact of falling objects, Acts of God, earthquakes, hurricanes, flood, fire, hailstorms, high winds, cascading roof floor water, ponding water, immersion in water, or improper installation of any building component.</li> <li>4) Defects in the structure or a component of the structure (e.g., window, door, or wall system), premature deterioration of the building materials, or non-standard use of the VaproShield products.</li> <li>5) Contamination of membrane with building site chemicals including, but not limited to, surfactants or substances that adversely affects its water resistance.</li> </ol>	<p><b>OPEN JOINT APPLICATIONS:</b> VaproShield will submit material for any open jointed cladding systems when VaproShield details and Best Practices are followed.</p> <p><b>VAPROTAPE:</b> When applicable, according to installation instructions, VaproTape or approved sealants must be utilized with mechanically attached membrane products for warranty to apply.</p> <p><b>C) DISCLAIMER:</b> This warranty is limited to product replacement. This warranty is the sole warranty and is being provided in lieu of any other warranties, whether express or implied. Neither VaproShield LLC nor any of its affiliated companies, including product manufacturers and suppliers, shall be liable for labor costs, consequential damages such as personal injuries or damage to property of any kind, loss of profits, loss of use, or any other damage or injury, whether known or unknown, that is caused or alleged to have been caused in whole or in part by any VaproShield product.</p> <p>This Warranty is not valid unless and until VaproShield product has been paid for in full.</p>