

# Installation Guide for SRP AirOutshield<sup>™</sup> UV UV Resistant, Vapor Permeable Air Barrier Underlayment for Open Joint Wall Systems

## **GENERAL**

The following is a general installation guide for AirOutshield UV to be installed as a sheathing membrane and/or air barrier.

- Install in a "shingle style" in all walls, at penetrations and intersections to facilitate drainage to the exterior.
- Comply with project specifications, local codes and industry best practices.
- Refer to the SRP Standard Details at SRPAirOutshield.com
- For high rise applications over 60 ft or situations not clearly described here contact SRP AirOutshield at 1 866 533 0233.

#### TOOLS

- ✓ Box Cutter
- ✓ Tape Measure
- ✓ Hammer
- ✓ Screwdriver
- ✓ Tape Roller

### **AUXILIARY MATERIALS**

Surface Seam Tape: SRP 60 UV Seam Seal Tape, black single sided seam tape.

Use to seal vertical and horizontal seams between layers of AirOutshield UV and to seal to window flanges and other penetrations.

Detail Tape: SRP 60 UV or SRP 100 UV Tape, black single sided tape.

Use to wrap openings and/or to seal SRP AirOutshield UV to itself and to other surfaces and substrates.

Sealants and liquid flashing materials: BASF Masterseal NP-1 or other low VOC sealant as approved by SRP.

Through Wall Flashing: Use products compliant with local building codes.

Ventilation Mat: (Optional) [6mm] or [10mm] thick nonwoven polypropylene or nylon with maximum 20% contact area.

Fasteners: Minimum No. 12 gage [0.109" shank-diameter (2.77mm)] corrosion-resistant steel or stainless-steel nails having a minimum 3/8" diameter (9.5 mm) head, or minimum No. 14 gage [0.083" shank diameter (2.11 mm)] corrosion-resistant steel or stainless steel screws or nails installed with a " diameter (25.4 mm) cap, plate or washer. Ensure compatibility with cladding system.

Important: Mechanical fasteners that penetrate the AirOutshield UV must be set flush and fastened securely into solid backing. When fastening into gypsum board and other non-structural boards, ensure the fastener penetrates a stud or other solid backing.

## SURFACE PREPARATION

- Surfaces must be clean and dry, free of frost, loose nails, dirt, debris or other contaminants that would adversely affect the installation of the AirOutshield UV.
- Protect rolls of membrane from physical abuse, flame and other high heat sources, as well as chemicals including surfactants (soaps) and solvents.



Ensure the following are installed prior to installing AirOutshield UV

- ✓ Any penetrations including vents, conduits, pipes...
- ✓ All through wall flashings
- ✓ Cavity wall insulation if required

#### **DETAILING PENETRATIONS**

## Pipes and Conduit

- 1. Cut a piece of SRP AirOutshield UV membrane 12" larger than the penetration to act as a skirt.
- 2. Make four cuts to form a star shape and place over penetration snugly.
- 3. Extend "ears" of material along vertical penetration and seal with SRP 60 UV Tape or SRP 100 UV Seam Seal Tape.
- 4. Tape top edge of "skirt" to wall using SRP 60 UV Tape or SRP 100 UV Seam Seal Tape. Do not tape bottom edge at this time.

### Windows and Doors Already Installed

- 1. Ensure that the window installers have wrapped the opening with membrane (SRP 100 UV Tape or similar) and have installed an apron piece of membrane (AirOutshield UV) at the bottom of the window prior to installing the window.
- 2. Place a piece of AirOutshield UV below the window and apply the apron piece over it in shingle style.
- 3. Install AirOutshield UV over the wall and window in shingle style.
- 4. Cut the AirOutshield UV around the window being careful not to cut the window flange or membrane around the opening.
- 5. Tape the AirOutshield UV to the window using SRP 60 UV Seam Seal Tape.

## Openings for Windows and Doors to be installed after the AirOutshield UV is installed

- 1. Install AirOutshield UV over the entire wall and openings in shingle style.
- 2. Cut the AirOutshield UV horizontally along the head of the opening.
- 3. At the top corners of the opening place a diagonal cut approx. 6" long to create a flap. Fold this flap upwards and use tape to keep it out of the way.
- 4. Cut the AirOutshield UV down the middle of the opening approx 2/3 the way down and tie this cut into each of the lower corners on a diagonal.
- 5. Fold the AirOutshield UV into the opening, fasten and trim off excess.
- 6. Install SRP 100 UV Tape as a flashing over the base of the opening, up the vertical sides at least 2" and over the AirOutshield UV. If more than one width is needed ensure they are installed in shingle style.
- 7. Install the window or door in accordance with the manufacturer's instructions.
- 8. Starting with the sides, seal AirOutshield UV to window flange using SRP 60 UV Seam Seal Tape or SRP 100 UV Tape. Overlap the sill flashing by at least 2".
- 9. At the top of the window apply a head flashing using SRP 100 UV Tape. This is to be applied directly over the sheathing and onto the frame of the window to ensure drainage to the exterior. Cover this with the flap of AirOutshield UV installed previously.
- 10. Tape all seams around the opening using SRP 60 UV Seam Seal Tape or SRP 100 UV Tape.

#### Tears and Rips

- 1. Insert a full height piece of underlayment extending 12" horizontally beyond the damage and extend up and under the underlayment above.
- 2. Mechanically attach underlayment to substrate top and bottom.



3. Tape all seams using SRP 60 UV Seam Seal Tape or SRP 100 UV Tape.

#### SHEATHING MEMBRANE INSTALLATION

In this section SRP AirOutshield UV is installed as a secondary drainage plane or sheathing membrane under the primary water shedding cladding system.

- 1. Install with coated side out, in shingle style to form a continuous membrane over the entire area, allowing water to drain to the exterior.
- 2. Avoid blockages that would otherwise obstruct the water flow.
- 3. Starting at base of wall, unroll SRP AirOutshield UV horizontally across wall. Overlap by a minimum of 6" and extend a minimum of 6" over starting corner.
- 4. Fasten at top and bottom of roll within 2" of edge, 12" on centre and at a maximum of 24" on centre in field.
- 5. Shingle next layers of SRP AirOutshield UV ensuring minimum 6" horizontal and minimum 12" vertical laps.
- 6. If installed vertically, overlap vertical seams a minimum of 6 inches and apply SRP 60 UV Seam Seal Tape to all vertical seams.
- 7. Where penetrations are encountered refer to "Penetrations" section of this document. Ensure SRP AirOutshield UV is slipped under bottom edge of penetration "skirt" for positive drainage to the exterior.
- 8. Do not place vertical laps within 24" of a window or door opening.
- 9. Apply SRP 60 UV Seam tape to ALL vertical seams.
- 10. If the installation of the primary cladding is delayed use adequate fasteners to resist the potential wind conditions. Temporary battens, roofing nails or screws with washers can be used.

## **AIR BARRIER INSTALLATION**

In addition to the above "Sheathing Membrane Installation", observe the following when installing AirOutshield UV as the deemed Air Barrier.

- 1. Form a continuous air barrier at all details using the SRP tapes.
- 2. Tie into membranes installed by others including at the roof, base of wall.
- 3. Install fasteners at a maximum spacing of 12" on centre vertically and 24" on centre horizontally.
- 4. Mechanical fasteners that penetrate the AirOutshield UV must be set flush and fastened securely into solid backing. When fastening into gypsum board and other non-structural boards, ensure the fastener penetrates a stud or other solid backing.
- 5. Tape all laps and seams (vertical and horizontal) using SRP 60 UV Seam Seal Tape.
- 6. In wood frame construction, install AirOutshield UV between sill plate and foundation gasket and seal to foundation wall with a bead of compatible sealant or SRP tape.
- 7. Where shelf angles exist, seal AirOutshield UV to the shelf angle using compatible sealant or SRP tape.
- 8. Do not install fasteners within 2" of sills, jambs, window heads or other flashed penetrations.

## **CLADDING INSTALLATION**

- 1. Ensure AirOutshield UV is installed in compliance with Sheathing Membrane or Air Barrier section of this Installation Guide and the project specifications and that all details are complete.
- 2. Mechanical fasteners that penetrate the AirOutshield UV must be set flush and fastened securely into solid backing. When fastening into gypsum board and other non-structural boards, ensure the fastener penetrates a stud or other solid backing.
- 3. Seal any holes resulting from misdriven fasteners using a compatible sealant.



- 4. Provide a space between the outer face of the AirOutshield UV and the back of the cladding panels to facilitate drying and drainage. The width of this space is to be a minimum 6mm or as required by the manufacturer of the cladding panels, project specifications and or building codes.
- 5. Install cladding system as soon as possible and in accordance with the system manufacturers written instructions and the project specifications.
- 6. Ensure membrane remains intact and continuous after installation of cladding attachment systems.

### **PRECAUTIONS**

- Observe all health and safety precautions.
- Install primary cladding within 4 months of installation of the AirOutshield UV.
- Protect installed AirOutshield UV from physical abuse, flame and other high heat sources, and chemicals including surfactants (soaps) and solvents.
- Remove mud and other substances using water only. If chemicals have been spilled on underlayment, remove and replace as stated above.
- Do not install in roofing systems.

### STORAGE AND HANDLING

Store materials in a dry location and protect from physical damage, high heat, and chemicals.

### Warranty

The information, and in particular, the recommendations relating to the application and end-use of SRP AirOutshield products, are given in good faith based on SRP AirOutshield's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request or can be accessed on the Internet under <a href="SRPAirOutshield.com">SRPAirOutshield.com</a>