

Vapour Permeable Air Barrier Membranes for Sloped Roof and Rain Screen Wall Systems

Installation Guide for SRP AirOutshield™ WALL

Breathable Underlayment for Wall Systems

GENERAL

The following is a general installation guide for **SRP AirOutshield™ WALL** 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 at 1 866 533 0233.
- For applications in open jointed systems where the membrane will be exposed to UV after the cladding is installed, use AirOutshield UV.

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 WALL and to seal to window flanges and other penetrations.

Detail Tape: SRP 100 UV Tape, Black single sided tape.

Use to wrap openings and to seal AirOutshield WALL to itself and to other surfaces and substrates.

In Seam Tape: SRP 1” DS (double sided) Seam Tape.

Use to seal vertical and horizontal seams between layers of AirOutshield WALL.

Detail membrane flashing: AirOutshield SA 280 flashing, 200mm wide self adhered membrane.

Sealant/adhesive: Masterseal NP-1 Sealant by Master Builders Solutions Inc or other as approved by SRP.

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

Ventilation Mat: (optional) SRP VM10 Ventilation Mat 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 1” diameter (25.4 mm) cap, plate or washer. Ensure compatibility with cladding system. Staples are NOT recommended.

Important: Mechanical fasteners that penetrate the AirOutshield WALL 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.

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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 breathable underlayment.
- 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 WALL

- ✓ 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 AirOutshield WALL 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 100 UV Tape.
4. Tape top edge of "skirt" to wall using SRP 60 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 AirOutshield WALL at the bottom of the window prior to installing the window.
2. Place a piece of AirOutshield WALL below the window and apply the apron piece over it in shingle style.
3. Install AirOutshield WALL over the wall and window in shingle style.
4. Cut the AirOutshield WALL around the window being careful not to cut the window flange or membrane around the opening.
5. Tape the AirOutshield WALL to the window using SRP 60 UV Seam Seal Tape.

▪ Openings for Windows and Doors to be installed after the AirOutshield WALL is installed

1. Install AirOutshield WALL over the entire wall and openings in shingle style.
2. Cut the AirOutshield WALL 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 WALL 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 WALL 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 WALL. 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 WALL 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 WALL installed previously.
10. Tape all seams around the opening using SRP 60 UV Seam Seal Tape or SRP 100 UV Tape.

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▪ 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 AirOutshield WALL is installed as a secondary drainage plane under the primary water shedding cladding system in accordance with CCMC Sheathing Membrane-Breather Type.

1. Install with printed 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 AirOutshield WALL horizontally across wall. Overlap through wall flashings 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 vertically and at a maximum of 24" on centre horizontally in the field.
5. Mechanical fasteners that penetrate the AirOutshield WALL 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.
6. Shingle next layers of AirOutshield WALL ensuring minimum 6" horizontal and minimum 12" vertical laps.
7. If installed vertically, overlap vertical seams a minimum of 6 inches and apply SRP 60 UV Seam Seal Tape to all vertical seams.
8. Where penetrations are encountered refer to "Penetrations" section of this document. Ensure AirOutshield WALL is slipped under bottom edge of penetration "skirt" for positive drainage to the exterior.
9. Do not place vertical laps within 24" of a window or door opening.
10. Apply SRP 60 UV Seam Seal tape to ALL vertical seams.
11. 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 WALL as an 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 WALL 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 WALL between sill plate and foundation gasket and seal to foundation wall with a bead of compatible sealant or tape.
7. Where shelf angles exist, seal AirOutshield WALL to the shelf angle using SRP tape.
8. Do not install fasteners within 2" of sills, jambs, window heads or other flashed penetrations.

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CLADDING INSTALLATION

1. Ensure AirOutshield WALL is installed in compliance with this specification and all details are complete.
2. Install battens or a ventilation mat over the AirOutshield WALL to provide a drying drainage space a minimum of 10mm wide.
3. Install cladding system as soon as possible and in accordance with the system manufacturers written instructions and the project specifications.
4. 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 WALL.
- Protect installed AirOutshield WALL 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.

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 SRPAirOutshield.com