

SECTION 07276: SRP AirOutshield™ SA 280
Self Adhered, Breathable Underlayment for Rain Screen Walls and Sloped Roofing Systems
Guide Specification

This specification is a guide only and may need editing for the specific intended application. It is the responsibility of the design professional to ensure the accuracy and completeness of the specifications issued.

NOTE: This specification describes the use of SRP AirOutshield™ SA 280 in a wall or sloped roof system. Slope in all areas must be a minimum of 2:12.

SECTION 07276 – SRP AirOutshield™ SA 280 self adhered, vapour permeable air barrier membrane

GENERAL

1.1 SUMMARY

- A. Following describes SRP-AirOutshield SA 280 installed in walls or sloped roofs as an air barrier, sheathing membrane, water resistive barrier or underlayment.
- B. Related Sections include the following:

1.2 REFERENCES

- A. CAN/ULC-S741: STANDARD FOR AIR BARRIER MATERIALS - SPECIFICATION
- B. CAN-ULC-S742: STANDARD FOR AIR BARRIER ASSEMBLIES - SPECIFICATION
- C. ASTM E96: Standard Test Methods for Water Vapor Transmission of Materials
- D. CAN/ULC-S102-10: Standard Method of Test for Surface Burning Characteristics of building Materials and Assemblies

1.3 SUBMITTALS

- A. Product Data: Include manufacturer's written instructions, technical data, and tested physical and performance properties of breathable underlayment.
- B. Samples:
 - 1. 8-1/2-x-11-inch square of the membrane.
 - 2. Provide materials and accessories for mock-up
- C. Manufacturer's Instructions: Provide manufacturer's instructions showing the recommended procedures and sequence of installation of the air barrier membrane.

1.4 QUALITY ASSURANCE

- A. Ensure all work of this section and the related sections is performed in accordance with local codes and system manufacturer's instructions.

- B. Obtain all vapour permeable air barrier from a single manufacturer.
- C. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination." Review requirements for underlayment, including surface preparation specified under other Sections, substrate condition and pretreatment, temporary weather protection, forecasted weather conditions, special details and sheet flashings, installation procedures, testing and inspection procedures, and protection and repairs.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project site in original containers with seals unbroken, wrapped in a polythene sleeve, labeled with manufacturer's name, and product brand name.
- B. Store rolls under cover, on a clean, level surface, either flat or upright.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Products: Vapour Permeable air barrier membrane, self adhered for [rain screen systems] [sloped roofing] : triple layer spunbonded polypropylene with a nominal thickness of 0.60mm (24 mils) and water vapour transmission of 1373 ng/Pa.s.m² (24 Perms) as per ASTM E96 method B. Membranes must comply with the CAN/ULC S741-08 and the membrane system must comply with CAN/ULC S742-11 and have an air leakage rate classification of "A1" [at a 1 in 50 hourly wind pressure difference of 650Pa, 12 metres above grade]. **SRP AirOutshield SA280** 1 866 533 0233 www.srpcanada.ca
- B. Colour: Black

2.2 AUXILIARY MATERIALS

- A. Tape/ flashings
 1. SRP 100 UV Tape
 2. SRP 60 UV Tape
 3. SRP AirOutshield SA280 Flashing
- B. Sealants and liquid flashing materials: BASF Masterseal NP-1, or others as approved by SRP.
- C. Eave Protection
 1. Self adhered membrane
 - a. High Temperature resistant underlayment as approved by the consultant.
- D. Fasteners
 1. Fasteners: Minimum No. 12-gage [0.109-inch-shank-diameter (2.77mm)] corrosion-resistant steel or stainless steel nails having a minimum 3/8-inch diameter (9.5 mm) head, or minimum No. 14 gage [0.083-inch-shank-diameter (2.11 mm)] corrosion-resistant steel or stainless steel screws or nails installed with a 1-inch-diameter (25.4 mm) caps, plate or washer.
- E. Ventilation Mat: as approved by the consultant.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance.
- B. Refer to the most recent version of the manufacturers installation guide available at www.srpcanada.ca
- C. Surface and ambient temperature must be (minus) -6C and rising at the time of installation.
- D. SRP AirOutshield SA 280 has been formulated to be installed over properly prepared surfaces without the need for a primer.
- E. To confirm adhesion, conduct a field test. Install a sample of SRP AirOutshield SA 280 in accordance with this installation guide, use a roller to activate the pressure sensitive adhesive and allow it to cure for at least 6 hours at 20C (or longer in cold temperatures) before testing.

3.2 SURFACE PREPARATION

- A. Ensure all surfaces are clean, dry, and free of frost, loose nails, dirt, debris or other contaminants that would adversely affect the installation.
- B. Concrete and CMU (concrete masonry units) surfaces must be surface dry and cured a minimum of 14 days. smooth and free from gaps, voids, spalls and fins, clean and free from release agents, curing compounds or other contaminants that may interfere with adhesion. Metal surfaces must be free of oils.
- C. Ensure the following are installed prior to proceeding;
 - 1. Sheathing panels and all related fasteners.
 - 2. Any penetrations including vents, conduits, pipes.
 - 3. All through wall flashings.
 - 4. Roofing curbs and upstands.
- D. Do not expose the membrane to chemicals including surfactants, soaps and solvents.

3.3 PENETRATIONS

- A. Identify all areas to be detailed including penetrations, openings, structural connections, expansion joints, and connections with other adjacent components.
- B. Ensure SRP AirOutshield SA 280 is not installed in areas that are exposed to water ponding or in areas with less than 2:12 slope.
- C. Remove release film, apply to the surface and apply pressure using a hard rubber roller to activate the pressure sensitive adhesive.
- D. NOTE: The primers used with some membranes contain solvents that can damage the SRP membrane. Use sparingly and allow all solvents to flash off before proceeding.

Seal all penetrations using SRP AirOutshield™ SA 280 in combination with compatible sealant, SRP tapes and or self adhered membranes.

3.4 Installation

A. WALLS

SRP AirOutshield SA 280 is applied on walls to function as the air barrier, sheathing membrane and secondary plane of protection.

1. Plan the layout of the membrane noting that it can be installed vertically or horizontally.
2. Start at the base of the wall, cut material to desired length and re-roll with release film facing outward.
3. Unroll membrane and place it in its final position.
4. Remove ONLY approx. 150mm of the release film, exposing the sticky adhesive. Adhere this to the substrate and apply pressure.
5. Roll out membrane and carefully cut through it to accommodate existing penetrations.
6. Roll up the membrane, remove the release film slowly and adhere it to the surface ensuring it remains in alignment. Chalk lines may assist with this process.
7. Once the membrane is in its final position, smooth out using a plastic wallpaper trowel or similar. Avoid damaging membrane.
8. Ensure overlaps are a minimum of 75mm in all areas in the field and 150mm in corners.
9. Tie into detail membranes already installed always ensuring a shingle style overlap.
10. In areas where the gap between the membrane and penetration is greater than 13mm, install a new piece of membrane overlapping the existing membrane by a minimum of 75mm on all sides.
11. Using a counter top roller or 'J-roller', apply pressure to all installed membrane, flashings and details to ensure appropriate surface adhesion is achieved.
12. At ALL penetrations, apply compatible sealant to create an air tight seal. The sealant bead must overlap the membrane and penetration by a minimum of 13mm. Be sure to completely fill any gaps between the penetration and sheathing or membrane.
13. Ensure water is not able to penetrate the edges of the membrane. At the end of each day of work, seal the top edge of the membrane where it meets the substrate with a compatible sealant. Apply a bead and trowel it to form a feather edge to seal termination and shed water.

B. SLOPED ROOFS

1. Plan the layout of the membrane noting that it must be installed perpendicular to the slope.
2. Once all detailing has been completed, start at the eave or low point in the roof.
3. Cut material to desired length and re-roll with release film facing outward.
4. Unroll membrane and place it in its final position.
5. Remove ONLY approx. 150mm of the release film, exposing the sticky adhesive. Adhere this to the substrate and apply pressure.
6. Roll up the membrane, remove the release film slowly and adhere it to the surface ensuring it remains in alignment. Chalk lines may assist with this process.
7. Once the membrane is in its final position, smooth out using a plastic wallpaper trowel or similar. Avoid damaging membrane.
8. Ensure overlaps are a minimum of 75mm in all areas in the field and 150mm in corners.
9. Tie into detail membranes already installed always ensuring a shingle style overlap of 150mm minimum.
10. Using a counter top roller or 'J-roller', apply pressure to all installed membrane, flashings and details to ensure appropriate surface adhesion is achieved.
11. Ensure water is not able to penetrate the edges of the membrane. At the end of each day of work, seal the top edge of the membrane where it meets the substrate with compatible

sealant. Apply a bead and trowel it to form a feather edge to seal termination and shed water.

C. Cladding or Roofing Installation

1. Ensure SRP AirOutshield SA 280 is installed in compliance with this installation guide and the project specifications and all details are complete.
2. Mechanical fasteners that penetrate the AirOutshield SA 280 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 compatible sealant.
4. As required by code or specifications, install battens or a ventilation mat over the SRP AirOutshield SA 280 to provide a drying drainage space.
5. In wall applications, install cladding system within 90 days and in accordance with the system manufacturers written instructions and the project specifications.
6. In sloped roofing applications, install the roofing system as soon as possible and protect with tarps in the interim.
7. Ensure membrane is not damaged during the installation of the finished roofing or cladding system.

3.5 FIELD QUALITY CONTROL

- A. **[Owner will engage] [Engage]** an independent inspector to observe substrate, detailing and installation. Before the cladding or roofing system is installed, Inspector shall provide a written, sign-off log, on all installed membrane and detailing. Form of log shall be approved by Architect before contract with inspection service is approved.

3.6 PROTECTING AND CLEANING

- A. Protect installed SRP AirOutshield™ SA 280 from damage due to ultraviolet light, harmful weather exposures, physical abuse, exposure to solvents or soaps.
- B. Remove mud and similar marks with a water scrub; do not use soap or solvents. If chemicals have been spilled on underlayment, remove and replace as stated above.
- C. Store materials in a dry location and protect from physical damage, high heat, and chemicals. See limitations.
- D. Store materials vertically, in original packaging and at temperatures 5°C to 32°C (40°F to 90° F).

END OF SECTION 07276

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