

# SR.SILVERCLAD™

GRAPHITE EXPANDED POLYSTYRENE RIGID INSULATION  
COMBINED TO A PERFORATED REFLECTIVE MEMBRANE

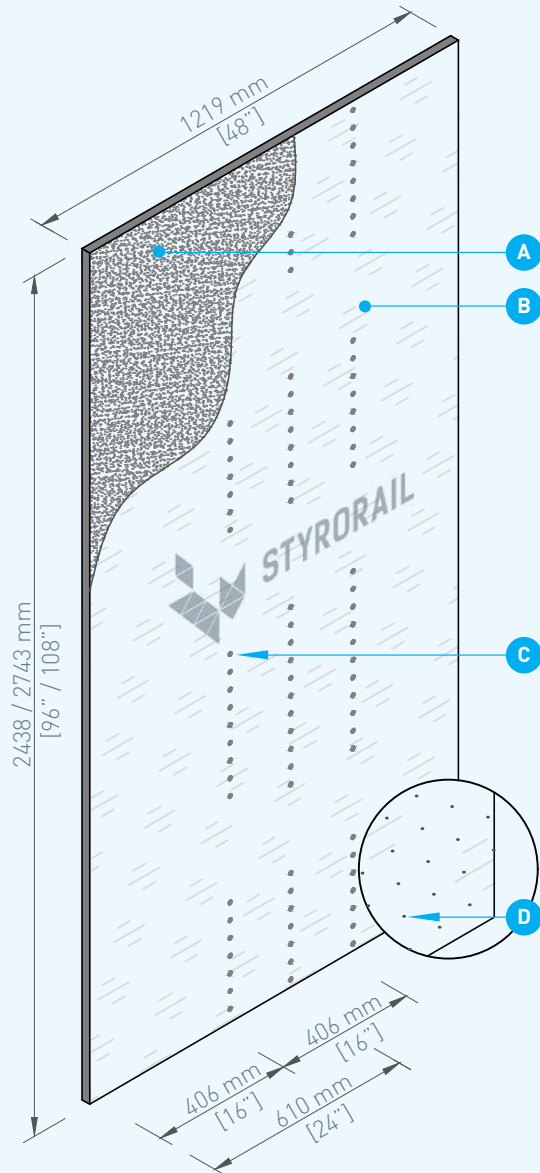
The SR.Silverclad™ panels manufactured by Styro Rail Inc. are composed of type 1 Graphite expanded polystyrene rigid insulation [EPS] laminated to a perforated reflective membrane with a reflectivity rate of 83% on both sides.

## RECOMMENDED USE

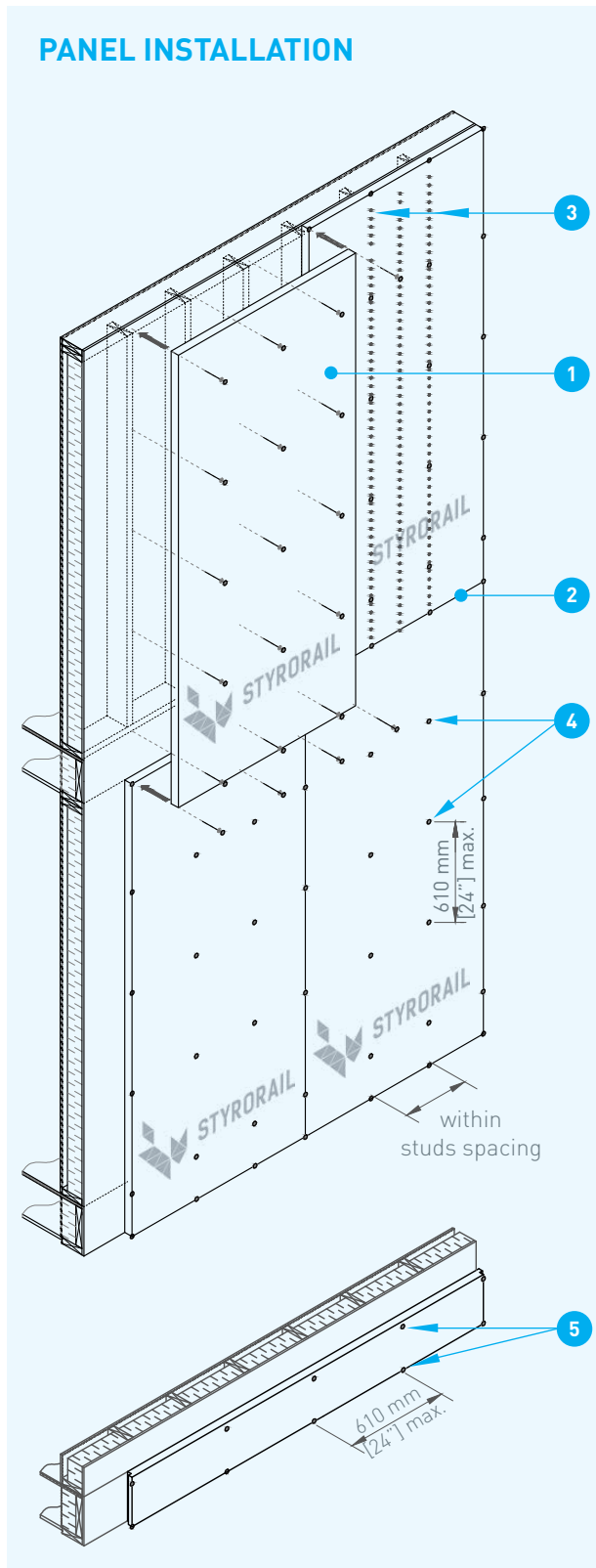
Install SR.Silverclad™ panels on the exterior surface of framed walls in order to obtain a continuous thermal envelope, a barrier against potential water infiltration beneath the exterior siding and to reduce the risk of mould within walls by letting them breathe through the microperforations of the membrane.

## PANEL COMPOSITION

- A** Type 1 Graphite Expanded Polystyrene Rigid Panel Insulation [EPS] manufactured by Styro Rail™
- B** Perforated reflective membrane with a reflectivity rate of 83% on both sides
- C** Dotted lines printed at 16" and 24", that facilitate the location of the studs behind the panels
- D** Microperforations

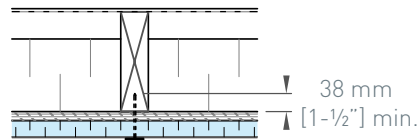


PANEL INSTALLATION



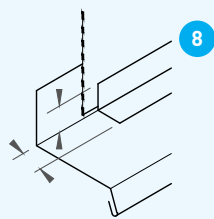
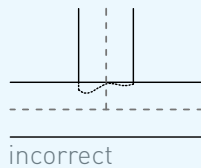
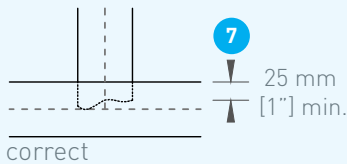
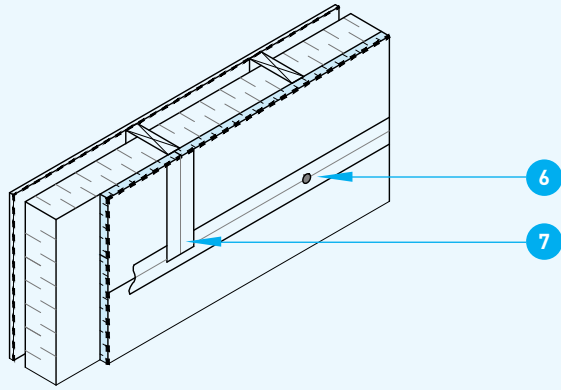
GENERAL FASTENING

- 1 Install panels continuously and uniformly; leaving no gaps. Butt ends between panels.
- 2 Panels can be installed vertically or horizontally.
- 3 **A)** If panels are installed without sheathing (over stud wall assembly); install panels vertically. If panels are installed vertically, coincide dotted lines with studs located behind them in order to facilitate locating the studs after installation.  
**B)** If installation of **SR.Silverclad™** panels is over sheathing, the sheathing provides sufficient backing for fasteners; no need to nail into studs.
- 4 Nail panels with a spacing of 610 mm [24"] o.c. along ends of panels, supported panel ends and along the intermediate studs. Use plastic ring shape nails with a minimum of 25 mm [1"] diameter head. Use nails ensuring a penetration in the studs of 38 mm [1-1/2"] min.



- 5 For a new construction, nail a **SR.Silverclad™** strip along the joist header with a spacing of 610 mm [24"] o.c. on the lower and upper edges.

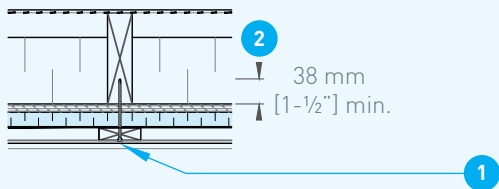
PANEL INSTALLATION



GENERAL FASTENING [CONTINUED]

- 6 Seal all horizontal and vertical joints between panels and around the openings with compatible and code approved sealing tape<sup>†</sup> (60 mm [2-3/8"] minimum width). Tape must cover fasteners at the board edges. Fasteners in center of board do not need to be taped.
- 7 Where two sealing tapes meet, overlap tapes on at least 25 mm [1"].
- 8 When sealing a angled edge, overlap tape equally on each sides of the angle line.
- 9 Use a rubber tape roller to remove air gaps and wrinkles in the tape.

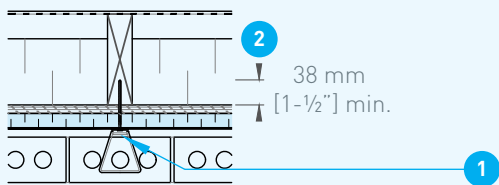
LIGHTWEIGHT CLADDING INSTALLATION



LIGHTWEIGHT CLADDING

- 1 Fix furring strips on the exterior side of the panels, through panels and on studs located behind the panels. Space and screw furring strips as recommended by the lightweight cladding manufacturer and according to plans and specifications.
- 2 Use screws ensuring a penetration in the studs of 38 mm [1-1/2"] min.

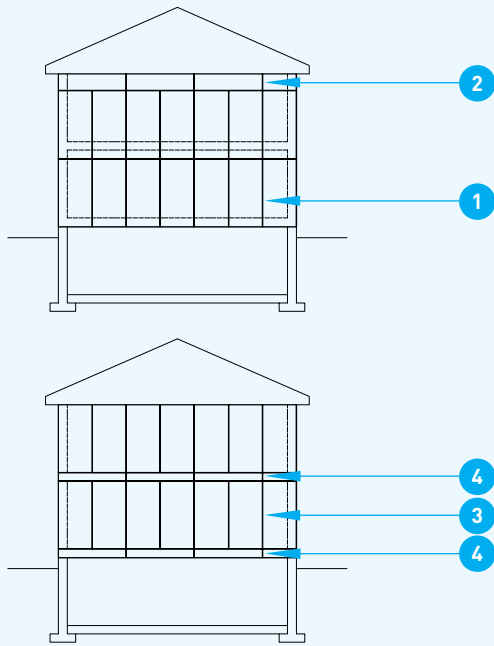
MASONRY INSTALLATION



MASONRY

- 3 Fix metal ties on the exterior side of panels, through panels and on studs located behind the panels. Fix and space ties according to ties manufacturer's instructions and according to plans and specifications.
- 4 Use ties ensuring a penetration in the studs of 38 mm [1-1/2"] min.

PANEL INSTALLATION



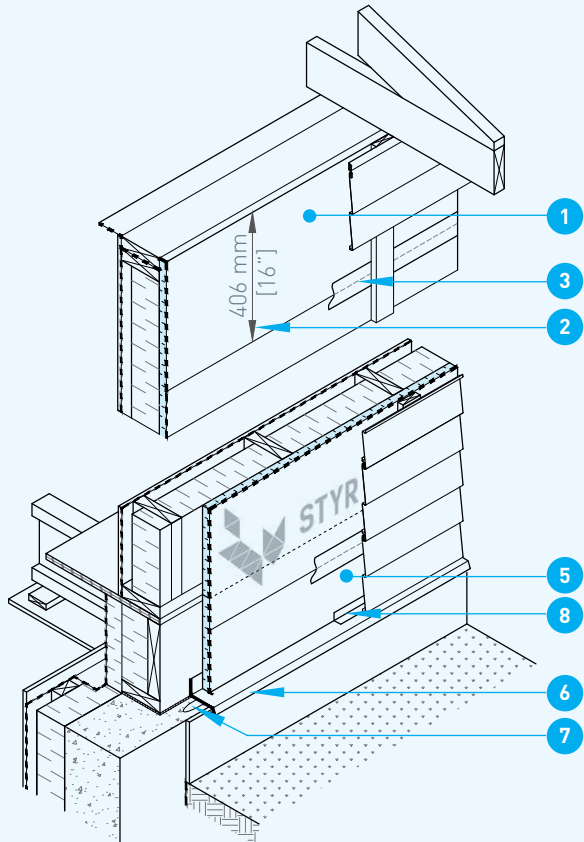
INSTALLATION  
[RENOVATION]

- 1 Install panels on framework, from the bottom up.
- 2 If covered height does not allow full-size panels installation, cut strips of panels accordingly to necessary dimensions to fill the upper space of the wall. Fix strips as per the installation method described in this guide.

INSTALLATION  
[NEW CONSTRUCTION]

- 3 Install panels on framework, prior to erecting the walls.
- 4 Cut panel strips accordingly to the dimensions to fill the space towards the joist header. Fix strips as per the installation method described in this guide.

JUNCTION DETAILS



WALL/ROOF

- 1 Install a strip of air barrier above the wall.
- 2 Leave 406 mm [16"] of the strip on the exterior side of the wall. Overlap the strip over the **SR.Silverclad™** panels.
- 3 Seal all horizontal and vertical joints between air barrier strip and panels with compatible and code approved sealing tape<sup>†</sup> (60 mm [2-3/8"] minimum width).

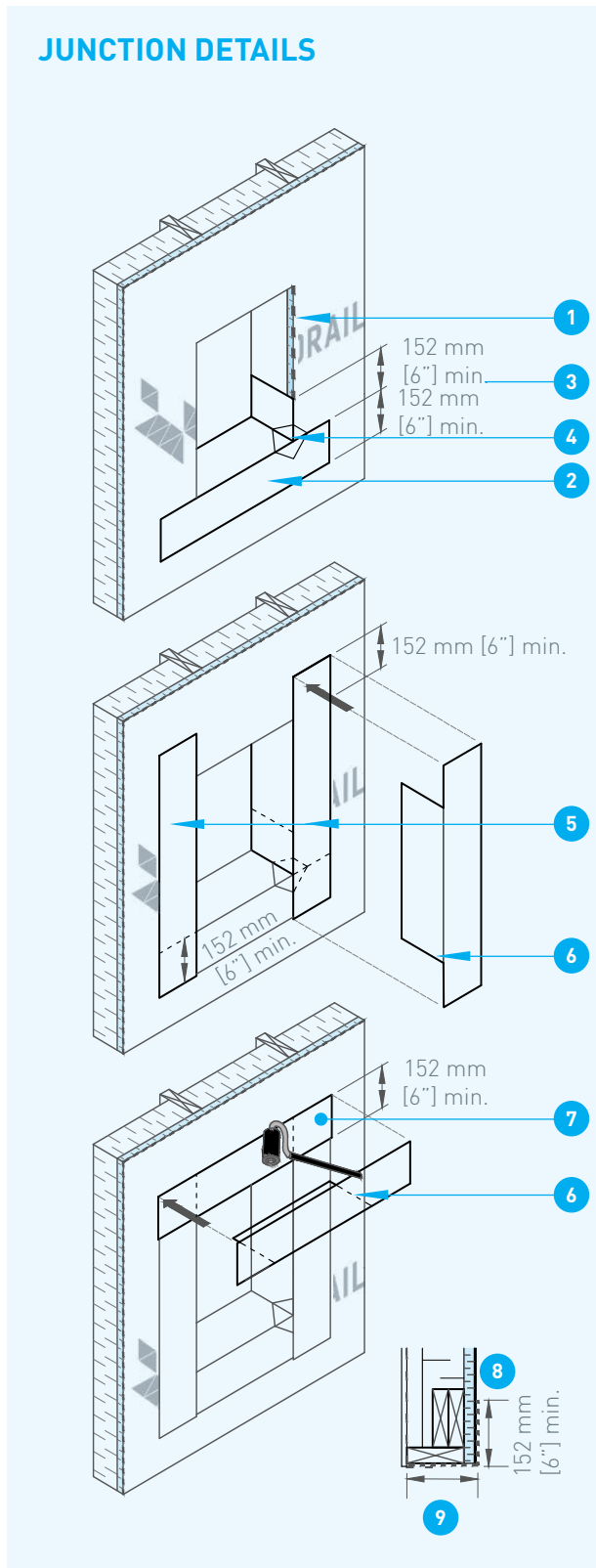
INTERMEDIATE PANEL

- 4 Seal all horizontal and vertical joints between panels with compatible and code approved sealing tape<sup>†</sup> (60 mm [2-3/8"] minimum width).

WALL/FOUNDATION

- 5 Cover the joist header and the bottom plate with **SR.Silverclad™** panels or strips of **SR.Silverclad™** panels.
- 6 Install a flashing, the vertical part of the flashing behind panel.
- 7 Apply a compatible acoustic sealant bead<sup>††</sup> between flashing and foundation wall.
- 8 Seal all the joints between panels and flashing with a compatible flexible membrane<sup>††</sup> or with a compatible sealing tape with the flashing<sup>†</sup>.

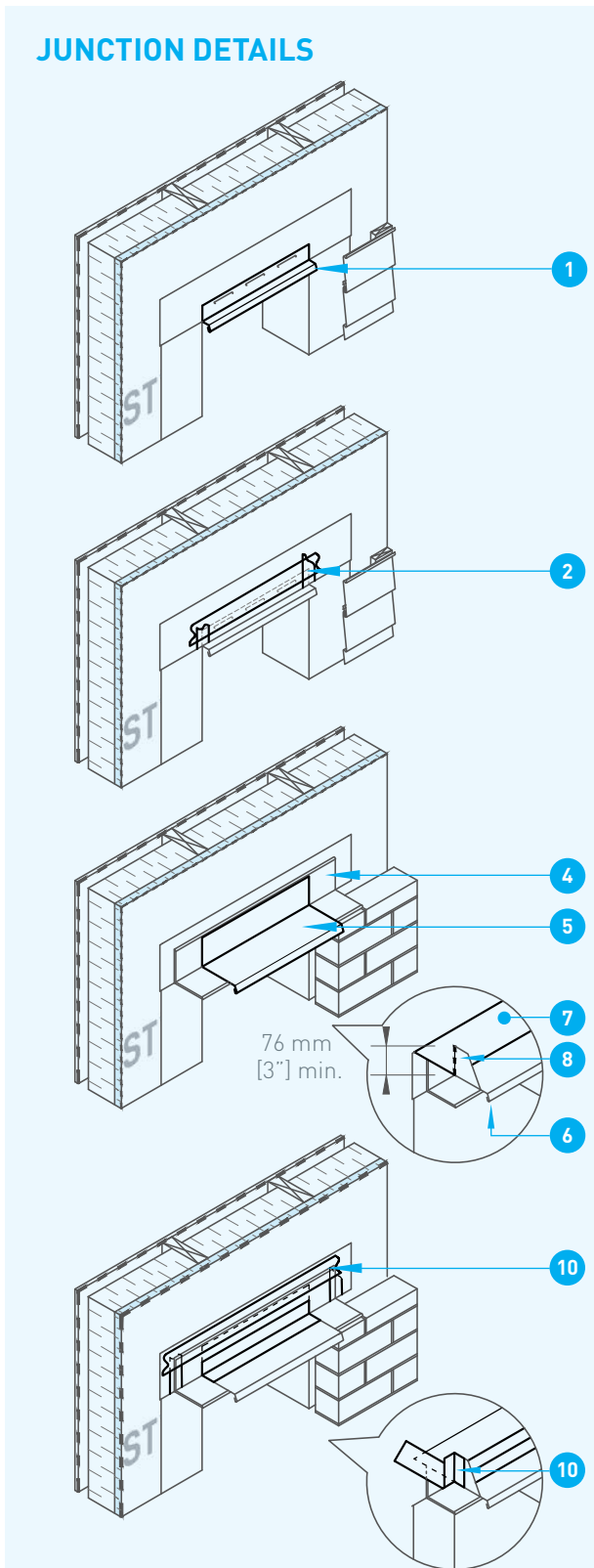
JUNCTION DETAILS



OPENING  
[DOOR AND WINDOW]

- 1 Cut panels to adjust them to doors and windows gross dimensions, before doors and windows installation. Cut panels flush to the gross opening. Make sure the opening is level and plumb.
- 2 Install a compatible self-adhesive flexible membrane<sup>++</sup> over the entire width of the sill.
- 3 Fold back the self-adhesive flexible membrane on the **SR.Silverclad™** panel and along the jambs on 152 mm [6"] min.
- 4 Install a piece of flexible membrane to the bottom corners in order to limit corner air spaces and thus reducing unforeseen water infiltrations.
- 5 Install a compatible self-adhesive flexible membrane<sup>++</sup> along the opening jambs. Overlap every flexible membrane strips on 152 mm [6"] min.
- 6 Cut the flexible membrane as shown.
- 7 Install a compatible self-adhesive flexible membrane<sup>++</sup> on lintel. Use a J-roller to aid the adhesion of the membrane and remove air gaps.
- 8 Fold back the flexible membrane on the vertical part of the lintel on 152 mm [6"] min.
- 9 Fold back the flexible membrane under the lintel, over all lintel width.

JUNCTION DETAILS



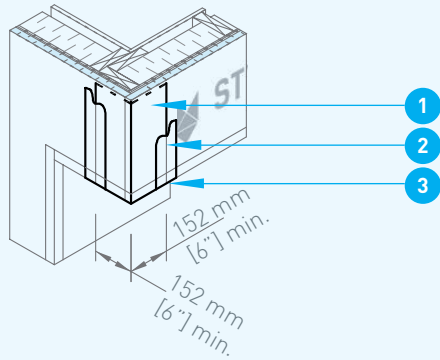
OPENING  
[LIGHTWEIGHT CLADDING]

- 1 Fix a compatible drip cap with the cladding [optional] according to cladding manufacturer's instructions and according to plans and specifications.
- 2 Seal all joints with compatible with compatible and code approved sealing tape<sup>+</sup> (60 mm [2-3/8"] minimum width).
- 3 To ensure continuous air and weather tightness of the envelope, seal the empty space between gross opening and window/door framing with an elastomeric sealant or with low expansion foam filling<sup>+++</sup>.

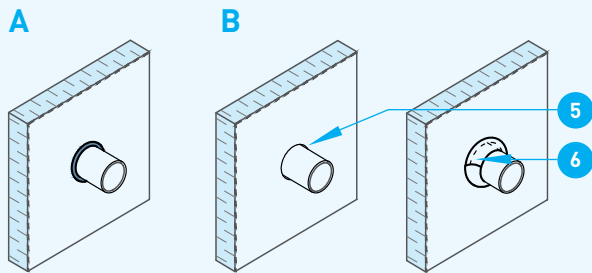
[MASONRY]

- 4 Fix a metal corner as specified by product's manufacturer and according to plans and specifications.
- 5 Fix a metal flashing.
- 6 Extend flashing beyond the corner end.
- 7 Install vertically a compatible self-adhesive and flexible membrane<sup>++</sup>, on lintel and over the flashing.
- 8 If U shaped flashing is used, cut a vertical slot in the flexible membrane to accommodate the vertical edge of the flashing.
- 9 Overlap the vertical flexible membrane on minimum of 76 mm [3"] on the adjacent surfaces, on top and sides.
- 10 Seal all joints with compatible with compatible and code approved sealing tape<sup>+</sup> (60 mm [2-3/8"] minimum width).
- 11 To ensure continuous air and weather tightness of the envelope, seal the empty space between gross opening and window/door framing with an elastomeric sealant or with low expansion foam filling<sup>+++</sup>.

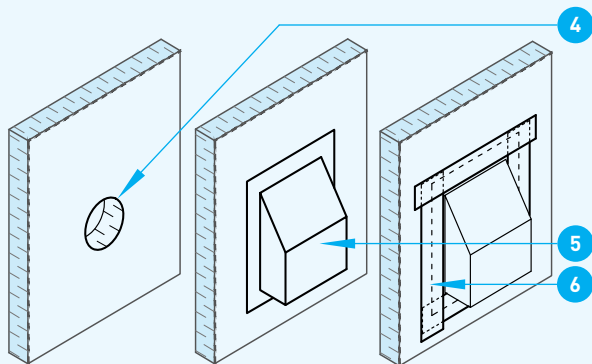
### JUNCTION DETAILS



Object Without Flange



Object With Flange



### WALL CORNER OR CANTILEVERED WALL

- 1 Use a compatible air barrier strip<sup>+</sup> of a minimum width of 300 mm [12"] to join two panels.
- 2 Seal all horizontal and vertical joints between panels with compatible and code approved sealing tape<sup>+</sup> (60 mm [2-3/8"] minimum width).
- 3 Seal external corners by folding downwards the sealing tape, under the cantilevered section. Fold back the tape in order to cover the whole corner.

### PENETRATION [PIPE, DUCT, ETC.]

#### OBJECT WITHOUT FLANGE

Use one of the two following methods:

- A Use a compatible scellant bead<sup>+++</sup> or,
- B Use a compatible and code approved sealing tape<sup>+</sup> (60 mm [2-3/8"] minimum width) as described below.

#### OBJECT WITH FLANGE

- 4 Cut panels to adjust them to gross penetration dimensions.
- 5 Install the object.
- 6 Seal perimeter of the object with compatible and code approved sealing tape<sup>+</sup> (60 mm [2-3/8"] minimum width).



# GENERAL ADVICES

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## RECOMMENDED PRODUCTS

† The sealing tape must be air and moisture proof, but permeable to water vapor. Tape must be compatible with the SR.Silverclad™ reflective membrane. For an optimum adhesion; use *Tuck@Tape* construction sheathing tape *Easy Tear* or equivalent.

†† The self-adhesive flexible membrane must be air and moisture proof, but permeable to water vapor. It must be installed according to the manufacturer's instructions. *The Blueskin@ SA* or *WP* from *Henry Baker* and *Hi-tac* primer from *Henry Baker* are compatible with expanded polystyrene and reflective membrane. Validate the self-adhesive flexible membrane compatibility with other surfaces to be joined and manufacturer's restrictions.

††† Sealants must be compatible with expanded polystyrene. Use *ADFoam* from *ADFast* polyurethane insulating foam or equivalent. Especially validate the sealant compatibility with utilized self-adhesive flexible membrane.

‡ For junctions requiring air barrier strips, use any kind of air barriers strips, available on rolls in various widths.

‡‡ The acoustic sealant must be compatible with expanded polystyrene. Use *Tremco* acoustic sealant or equivalent.

## STORAGE AND COVERING

Store panels in a dry and ventilated location, protected from the outside elements, ultraviolet rays, open flames or other sources of ignition. Stack panels on pallets of minimum 102 mm [4"] above the ground. If provided packaging has been damaged during shipping, cover panel with a weather and ultraviolet tarp. Panels must be dry and in good condition before installation.

Cover the panels within 60 days after installation with an exterior cladding protecting from ultraviolet rays.

## EXEMPTION FROM LIABILITY

The information herein is based on the present state of our best scientific and practical knowledge. They are provided to facilitate Styro Rail™ product's installation and may not apply to all situations. The user is responsible for checking the suitability of products for their intended use. Styro Rail™ installation guides are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice. The drawings and details herein have not been scaled up.