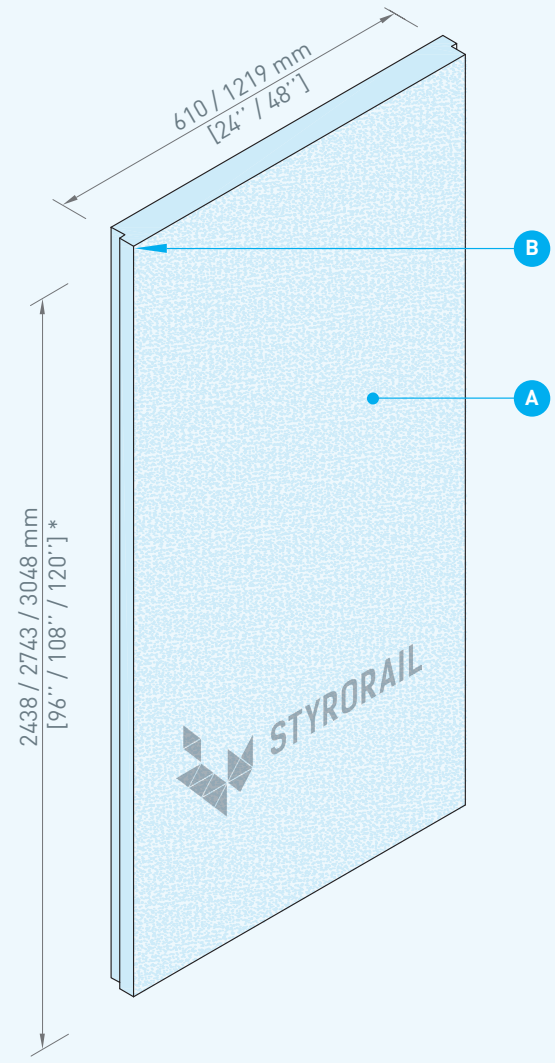
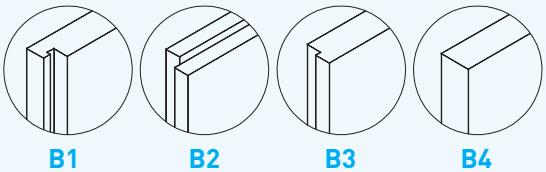
SR.P™

TYPE 1, TYPE 2 AND TYPE 3 EXPANDED POLYSTYRENE RIGID INSULATION

The SR.P™ boards manufactured by Styro Rail™ are composed of Type 1 [100 series], Type 2 [200 series] or Type 3 [300, 350, 400 and 600 series] expanded polystyrene [EPS] rigid insulation.





RECOMMENDED USE

SR.P™ boards are versatile and can be used in many applications, from the foundation to the roof as well as in landscape and parking areas. Refer to the *Products Selection Guide*, available on our web site.

PANEL COMPOSITION

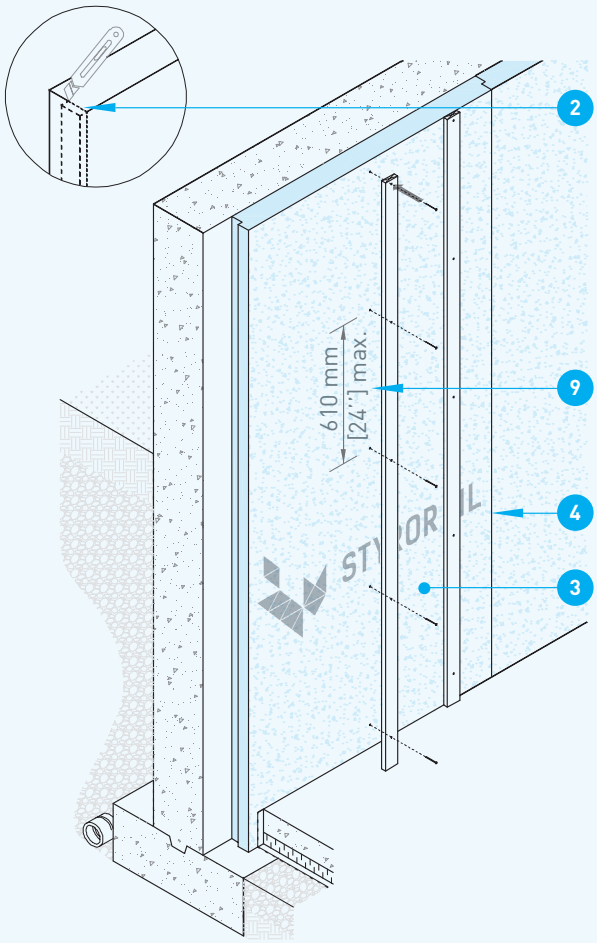
- **A** Type 1, Type 2 or Type 3 Expanded Polystyrene Rigid Panel Insulation [EPS] manufactured by Styrorail™
- **B** Ship lap [verify the ship lap availability in the Technical Data Sheet of the product]
- **B1** G-Lock™
- **B2** 4 sided ship lap
- **B3** 2 sided ship lap
- **B4** Square

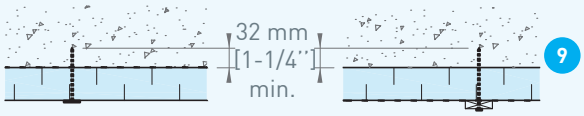
* Refer to the Technical Data Sheet of the product.

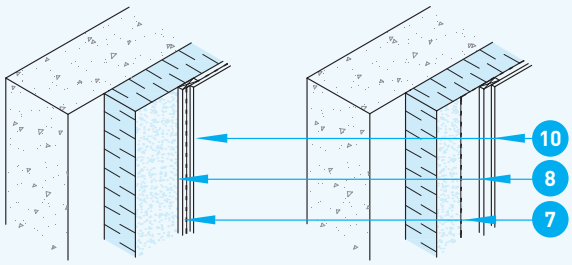
STYRORAIL

SR.P™ | **TYPE 1, TYPE 2 AND TYPE 3 EXPANDED POLYSTYRENE RIGID INSULATION**

PANEL INSTALLATION







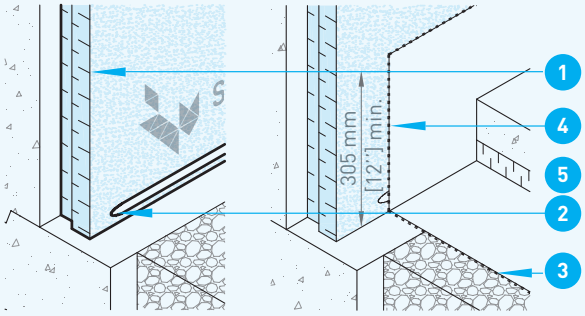
FOUNDATION WALL
[INTERIOR INSTALLATION]

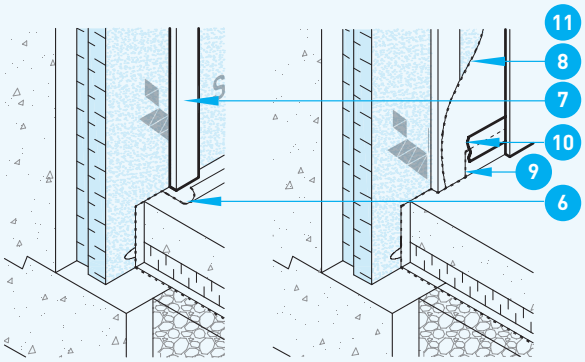
1. Scratch the concrete wall surface using the flat surface of a hammer in order to remove the concrete bumps.
2. Using a knife with a retractable blade, cut ship lap of the first panel.
3. Install panels on the interior surface of the foundation wall, from the inner corner, from left to right, print side visible.
4. Install vertically on the full height of the wall. Install panels continuously and uniformly. Butt ends between insulating panels.
5. Temporarily secure with a compatible adhesive†††. Press firmly on the glued area in order to limit adhesive accumulations that would prevent complete contact of the panel on the wall.
6. Nails could also be used to temporarily secure the panel.
7. Install and seal a vapor barrier. The vapor barrier could be installed above or underneath the furring strips.
8. Fix the 19 mm x 64 mm [1'' x 3''] furring strips to the insulating panels. Allow a maximum spacing of 610 mm [24''] between the furring strips.
9. Use nails ensuring a penetration in the foundation wall of 32 mm [1-1/4''] min. Allow a maximum spacing of 610 mm [24''] between the nails.
10. Install a protective barrier such as gypsum boards.

Note: New construction installation shown.

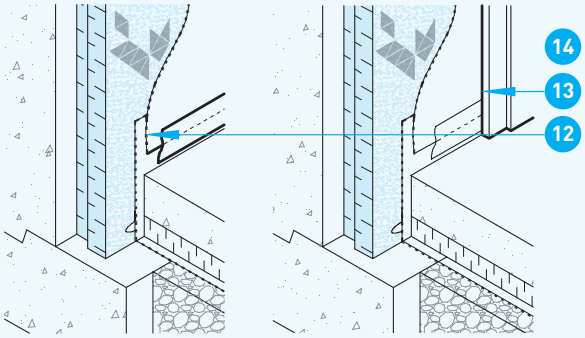
SR.P™ | **TYPE 1, TYPE 2 AND TYPE 3 EXPANDED POLYSTYRENE RIGID INSULATION**

JUNCTION DETAILS





Vapor barrier above the furring strips



Vapor barrier underneath the furring strips

FOUNDATION WALL
[INTERIOR INSTALLATION]

NEW CONSTRUCTION

1 Install panels directly above the footings; before the pouring of the concrete slab.

2 Apply an acoustic sealant† bead at the bottom of the panel.

3 Install and seal a vapor barrier on the ground and above the footing.

4 Leave a minimum 305 mm [12"] strip at the bottom of the wall. Fold back the strip on the wall. Temporarily secure with an adhesive tape.

5 Install expanded polystyrene insulating panels on the ground, above the vapor barrier. Pour the concrete slab.

6 Fold forward the vapor barrier on the concrete slab.

Vapor Barrier Installation above the Furring Strips

7 Fix 19 mm x 64 mm [1" x 3"] furring strips on the insulating panels. Allow a maximum spacing of 610 mm [24"] between the furring strips. Use nails ensuring a penetration in the foundation wall of 32 mm [1-1/4"] min.

8 Install and seal a vapor barrier on the wall.

9 Fold back the vapor barrier of the concrete slab on the wall vapor barrier.

10 Seal the vapor barrier junctions.

11 Install a protective barrier such as gypsum boards.

Vapor Barrier Installation underneath the Furring Strips

12 Install and seal a vapor barrier on the wall.

13 Fix 19 mm x 64 mm [1" x 3"] furring strips on insulating panels. Allow a maximum spacing of 610 mm [24"] between the furring strips. Use nails ensuring a penetration in the foundation wall of 32 mm [1-1/4"] min.

14 Install a protective barrier such as gypsum boards.

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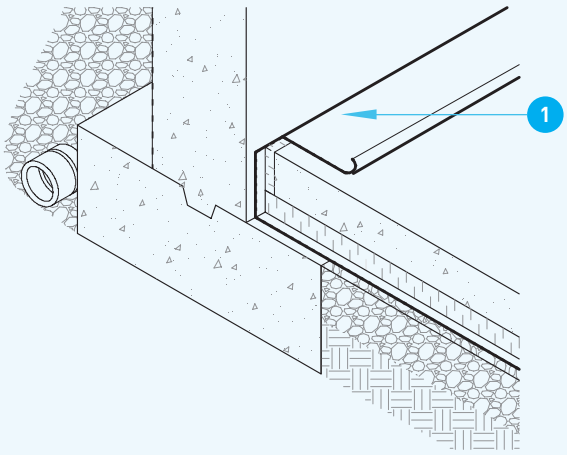
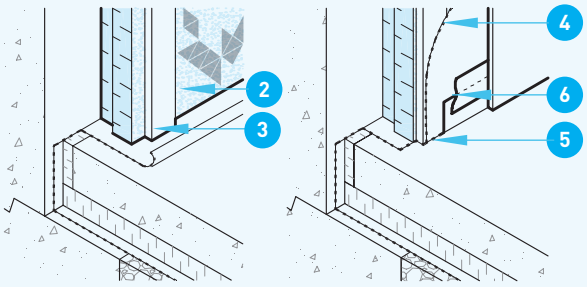
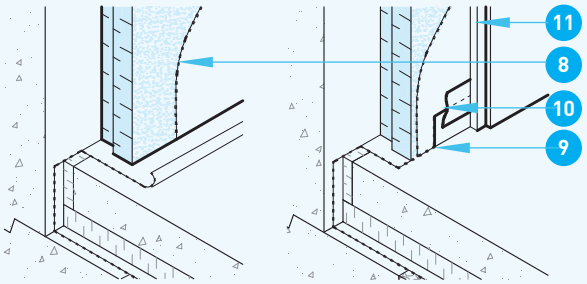
JUNCTION DETAILS





Vapor barrier above the furring strips



Vapor barrier underneath the furring strips

FOUNDATION WALL
[INTERIOR INSTALLATION]

EXISTING CONCRETE SLAB WITH VAPOR BARRIER

1. If a vapor barrier strip exceeds at the bottom of the foundation wall, fold forward over the concrete slab before the panel installation.
2. Install panels on the concrete slab, above the vapor barrier.

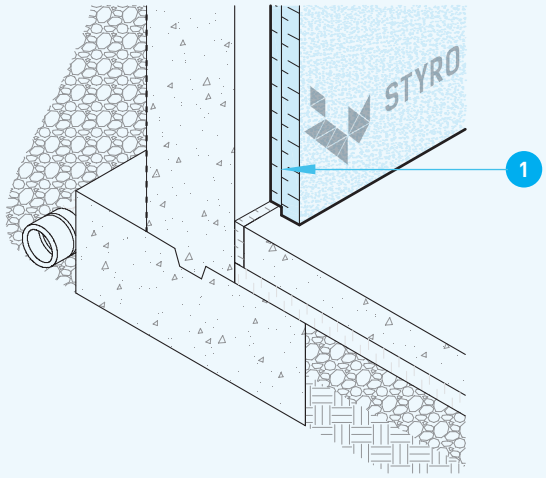
Vapor Barrier Installation above the Furring Strips

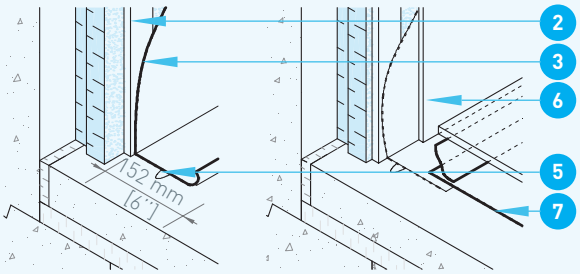
3. Fix 19 mm x 64 mm [1'' x 3''] furring strips on insulating panels. Allow a maximum spacing of 610 mm [24''] between the furring strips. Use nails ensuring a penetration in the foundation wall of 32 mm [1-1/4''] min.
4. Install and seal a vapor barrier on the wall.
5. Fold back the vapor barrier of the concrete slab on the wall vapor barrier.
6. Seal the vapor barrier junctions.
7. Install a protective barrier such as gypsum boards.

Vapor Barrier Installation underneath the Furring Strips

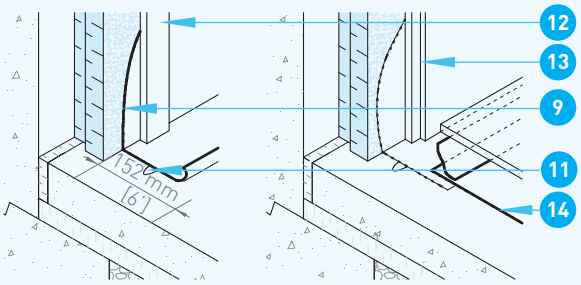
8. Install and seal a vapor barrier on the wall.
9. Fold back the vapor barrier of the concrete slab on the wall vapor barrier.
10. Seal the vapor barrier junctions.
11. Fix 19 mm x 64 mm [1'' x 3''] furring strips on insulating panels. Allow a maximum spacing of 610 mm [24''] between the furring strips. Use nails ensuring a penetration in the foundation wall of 32 mm [1-1/4''] min.
12. Install a protective barrier such as gypsum boards.

JUNCTION DETAILS





Vapor barrier above the furring strips



Vapor barrier underneath the furring strips

FOUNDATION WALL
[INTERIOR INSTALLATION]

EXISTING CONCRETE SLAB WITHOUT VAPOR BARRIER

1 Install panels directly on the concrete slab.

Vapor Barrier Installation above the Furring Strips

2 Fix 19 mm x 64 mm [1'' x 3''] furring strips on insulating panels. Allow a maximum spacing of 610 mm [24''] between the furring strips. Use nails ensuring a penetration in the foundation wall of 32 mm [1-1/4''] min.

3 Install and seal a vapor barrier on the wall.

4 Leave a minimum 152 mm [6''] strip at the bottom of the wall and above the concrete slab.

5 Apply an acoustic sealant† bead between concrete slab and vapor barrier.

6 Install a protective barrier such as gypsum boards.

7 During the floor installation, install a vapor barrier underneath according to the manufacturer's instructions.

8 Seal the vapor barrier joints.

Vapor Barrier Installation underneath the Furring Strips

9 Install and seal a vapor barrier on the wall.

10 Leave a minimum 152 mm [6''] strip at the bottom of the wall and above the concrete slab.

11 Apply an acoustic sealant† bead between concrete slab and vapor barrier.

12 Fix 19 mm x 64 mm [1'' x 3''] furring strips on insulating panels. Allow a maximum spacing of 610 mm [24''] between the furring strips. Use nails ensuring a penetration in the foundation wall of 32 mm [1-1/4''] min.

13 Install a protective barrier such as gypsum boards.

14 During the floor installation, install a vapor barrier underneath according to the manufacturer's instructions.

15 Seal the vapor barrier joints.

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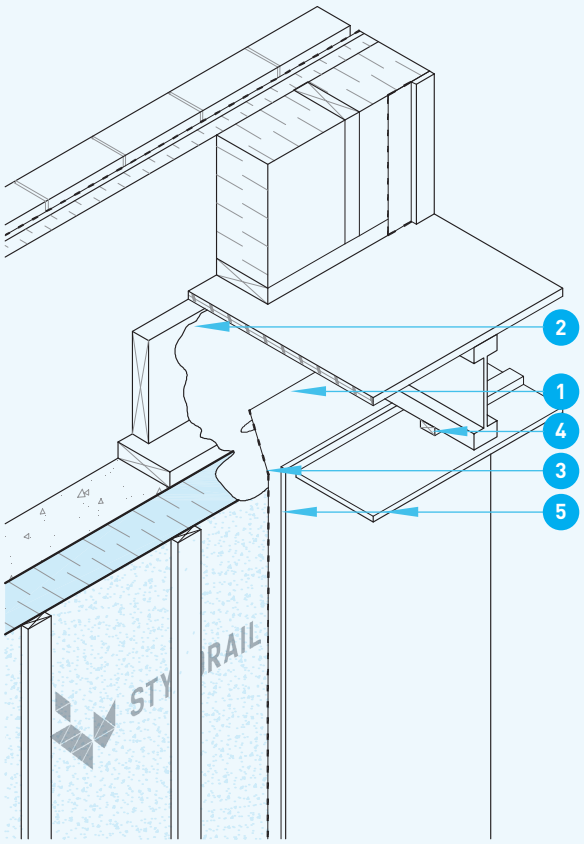
JUNCTION DETAILS



FLOOR JOIST

1. During the vapor barrier installation, leave a minimum 305 mm [12''] strip above the wall.
2. Fill the cavity towards the joist header with a vapor barrier sprayed urethane.
3. Fold back the vapor barrier over the sprayed urethane. Fix the vapor barrier by applying an acoustic sealant bead†.
4. Install furring strips underneath the floor joists.
5. Install a protective barrier on wall and ceiling such as gypsum boards.

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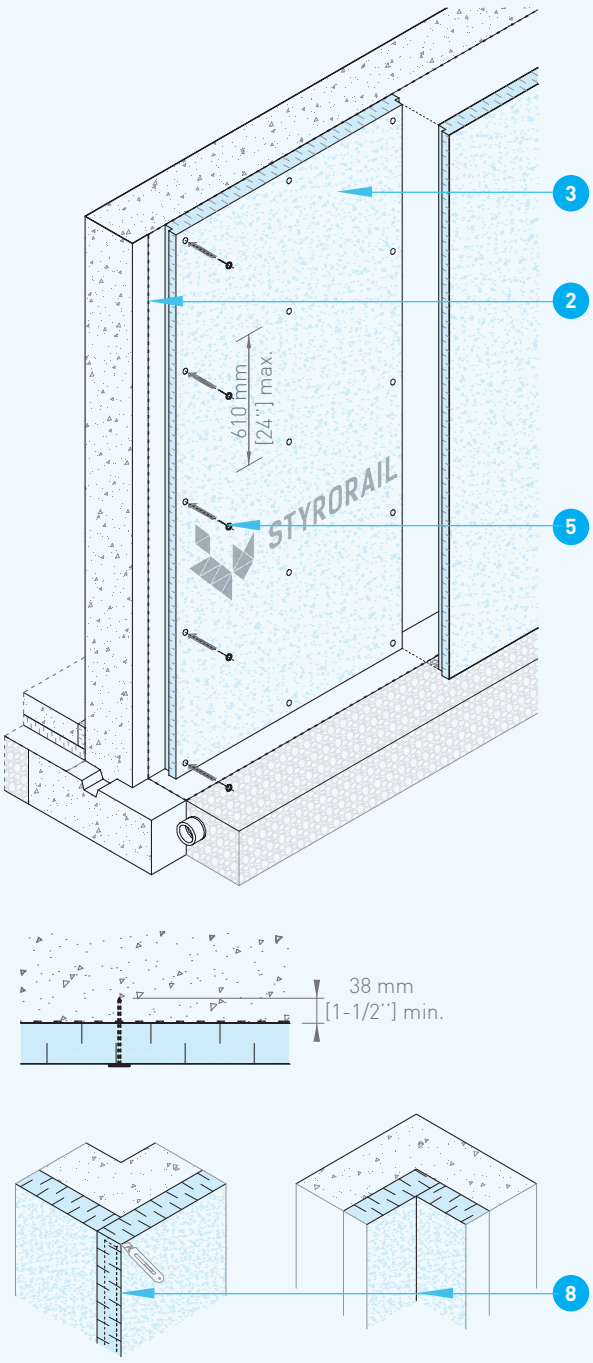
PANEL INSTALLATION



FOUNDATION WALL
[EXTERIOR INSTALLATION]

1. Scratch the concrete wall surface using the flat surface of a hammer in order to remove the concrete bumps.
2. Install a waterproofing membrane on the concrete wall and above the footings. Install according to the manufacturer's instructions.
3. Install **SR.P**™ panels verticaly on the exterior surface of the foundation wall, print side visible. Install from left to right.
4. Install panels continuously and uniformly. Butt ends between insulating panels.
5. Fix panels using corrosion-resistant concrete screws or insulation nails‡‡ ensuring a penetration in the foundation wall of 38 mm [1-1/2''] min. Use plastic ring shape screws or insulation nails‡‡ with a minimum of 25 mm [1''] diameter head.
6. Fix panel with a spacing of maximum 610 mm [24''] between the screws.
7. As necessary, pre-drill the foundation wall with an impact drill.
8. At the inside and outside corners, cut off the ship lap to ensure a continuous joint between panels.

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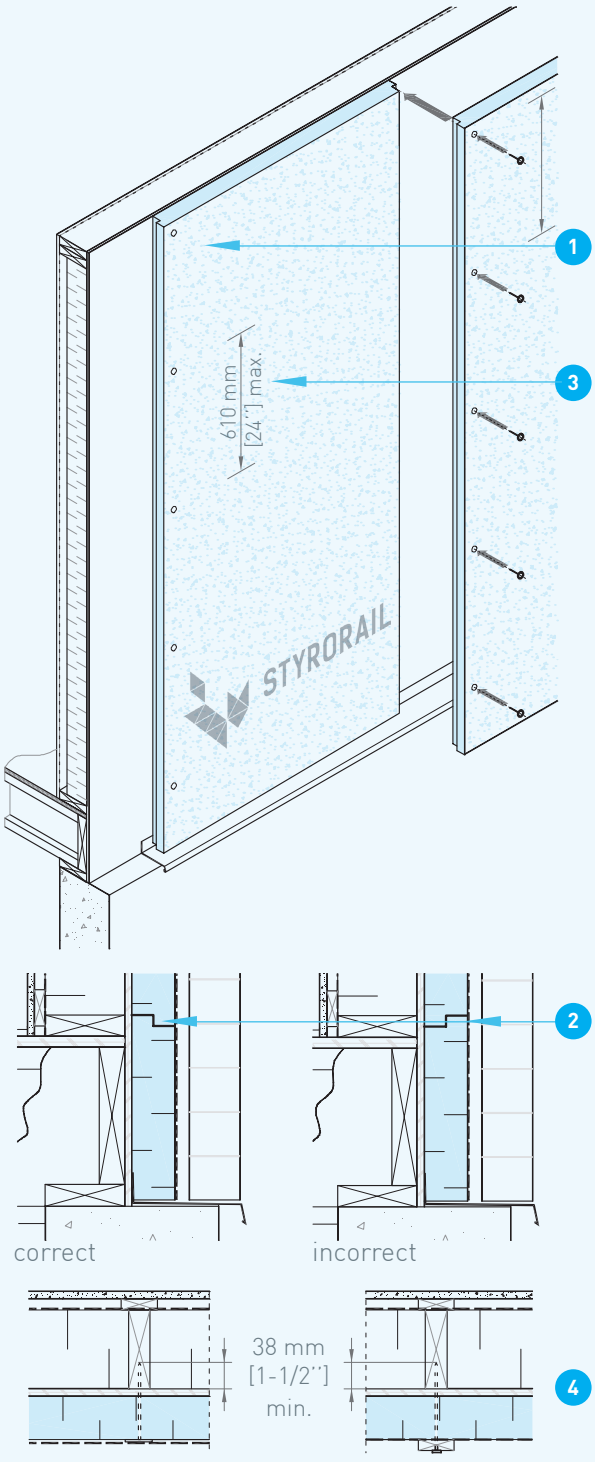
PANEL INSTALLATION



FRAMED WALL
[EXTERIOR INSTALLATION]

1. Install panels on the intermediate sheathing, from the bottom up, print side visible. Install panels continuously and uniformly. Butt ends between insulating panels.
2. The panels can be installed vertically or horizontally. If panels are horizontally installed and comprise of ship lap joints; install panels as shown in order to ensure outward water drainage in case of unforeseen water infiltration.
3. Fix panels with a spacing of maximum 610 mm [24''] along ends of panels, supported panel ends and along the intermediate studs.
4. Use plastic ring shape nails with a minimum of 25 mm [1''] diameter head and ensuring a penetration in the studs of 38 mm [1-1/2''] min.
5. Use screws or nails with regular head when installing furring strips.

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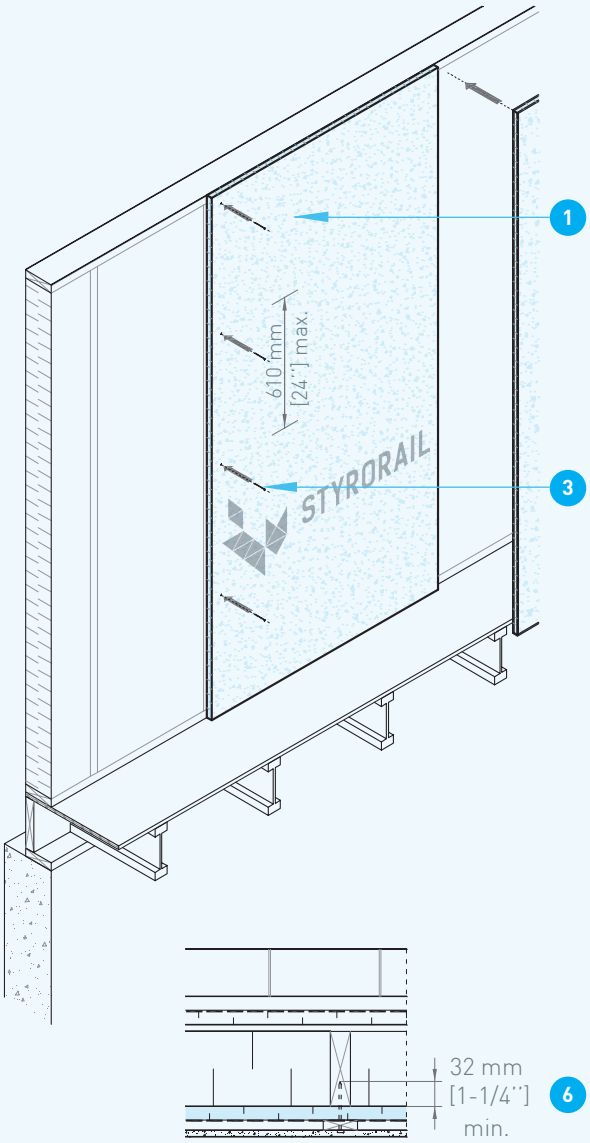
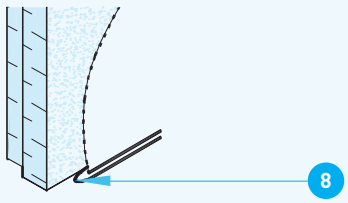
PANEL INSTALLATION





FRAMED WALL
[INTERIOR INSTALLATION]

1. Install the panels on the framed wall, print side visible.
2. Install panels continuously and uniformly. Butt ends between insulating panels.
3. Temporarily secure the panel.
4. Install and seal a vapor barrier on the wall.
5. Install 19 mm x 64 mm [1'' x 3''] furring strips vertically or horizontally. Allow a maximum spacing of 610 mm [24''] at each stud.
6. Use screws ensuring a penetration in the studs of 32 mm [1-1/4''] min.
7. Install a protective barrier such as gypsum boards.

FLOOR JUNCTION

8. Apply an acoustic sealant† bead at the bottom of the panel. Press firmly on the vapor barrier to seal the floor junction.

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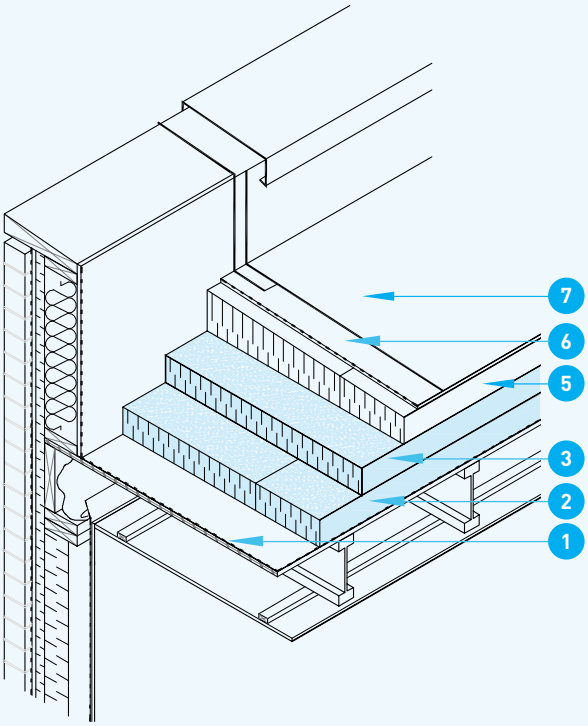
PANEL INSTALLATION



FLAT ROOF

1. Install a vapor barrier membrane on the steel deck and on the side of the parapet.
2. Glue or mechanically fix the first insulating panel layer according to roof installer's instructions.
3. Glue or mechanically fix the second insulating panel layer. Overlap the joints or install the panel at 90^0 in respect to the first layer.
4. Butt ends between insulating panels.
5. Install sloped insulating panels towards drains.
6. Install protection panels protecting the expanded polystyrene from the open flames.
7. Install roof and finishing membranes.

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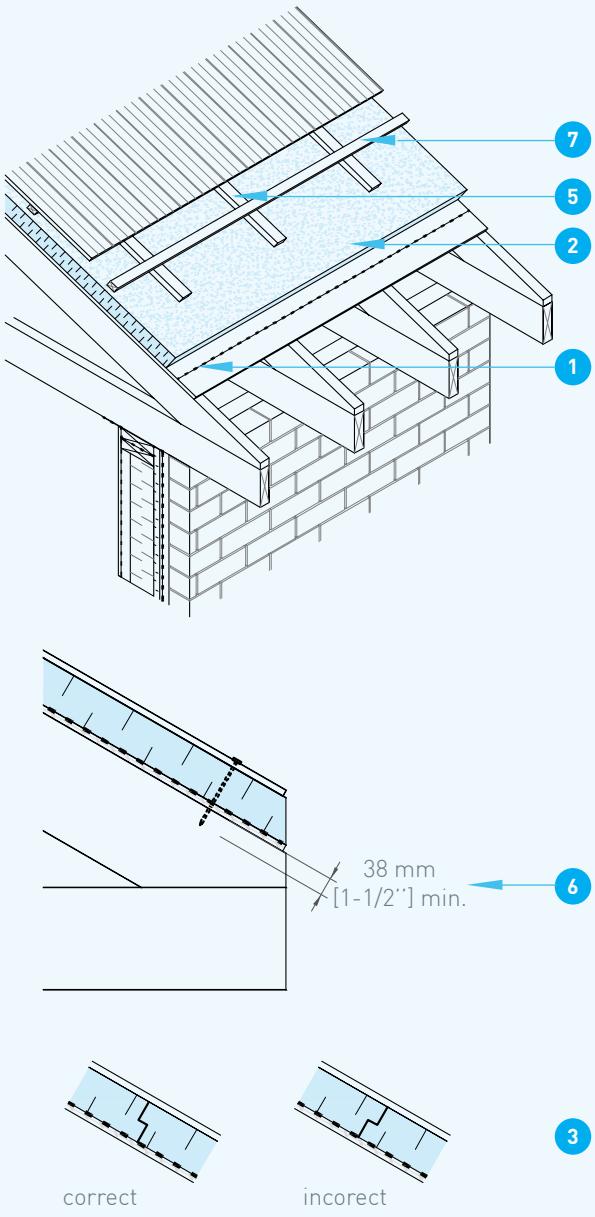
PANEL INSTALLATION



SLOPED ROOF

1. Install and seal a vapor barrier on the intermediate sheathing.
2. Install **SR.P**™ insulating panels.
3. If panels with ship lap joints are used, install the panels as shown to ensure outward water drainage in case of unforeseen water infiltrations.
4. Temporarily secure the panels.
5. Fix the 38 mm x 89 mm [2''x4''] studs or the 19 mm x 64 mm [1''x3''] furring strips down-slope side.
6. Use screws ensuring a penetration in the structure of 38 mm [1-1/2''] min.
7. Install a second row of furring strips according to the roof finish chosen.

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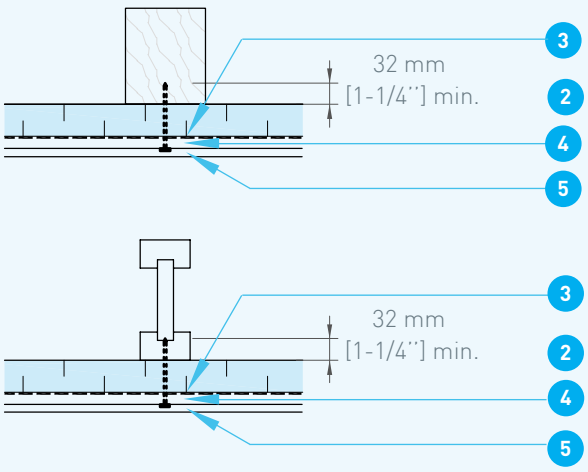
PANEL INSTALLATION



CEILING

1. Fix panels on the structure with a spacing of 406 mm [16''] c/c.
2. Use nails or screws ensuring a penetration in the structure of 32 mm [1-1/4''] min.
3. Install and seal a vapor barrier.
4. Install the 19 mm x 64 mm [1''x3''] furring strips in the opposite direction of the structure elements.
5. Install a protective barrier such as gypsum boards.

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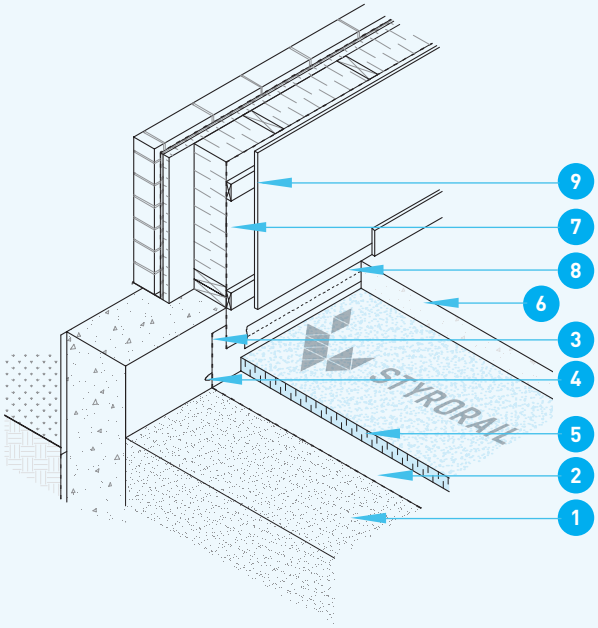
PANEL INSTALLATION



CONCRETE SLAB
[GARAGE]

1. Compact the back fill material.
2. Install and seal a vapor barrier.
3. Leave a minimum 305 mm [12''] strip at the bottom of the wall. Fold back the strip on the wall. Temporarily secure with an adhesive tape.
4. Apply an acoustic sealant† bead underneath the wall vapor barrier. Press firmly.
5. Install the insulating panels on the vapor barrier.
6. Pour the concrete slab.
7. During the wall finish, install and seal a vapor barrier.
8. Seal the vapor barrier of the slab with the wall vapor barrier.
9. Install a protective barrier as gypsum boards.

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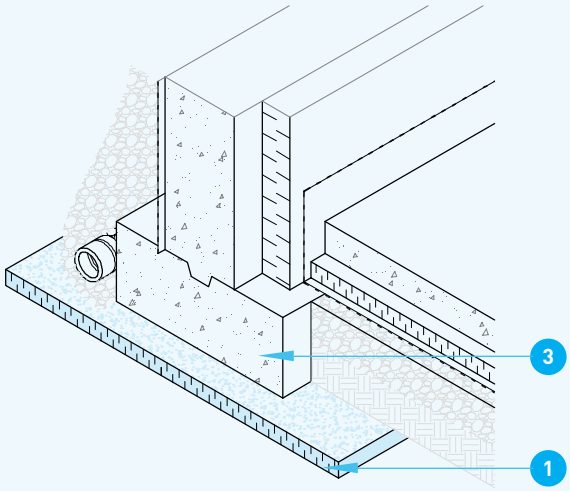
PANEL INSTALLATION



FOOTING

1. Install insulating panels on undisturbed soil.
2. Install the footings formwork.
3. Pour the footing.

GENERAL ADVICES

RECOMMENDED PRODUCTS

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

†† Sealants must be compatible with expanded polystyrene. Use *ADFoam* from *ADFast* polyurethane insulating foam or equivalent.

††† Adhesive must be compatible with expanded polystyrene. It must not be solvent based. Use *PL®300* adhesive from *Lepage* or equivalent.

‡‡ Use nails for insulation fixation *XI-FV* from *Hilti* 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 100 mm [4˝] above the ground. If provided packaging has been damaged during shipping, cover panels 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.