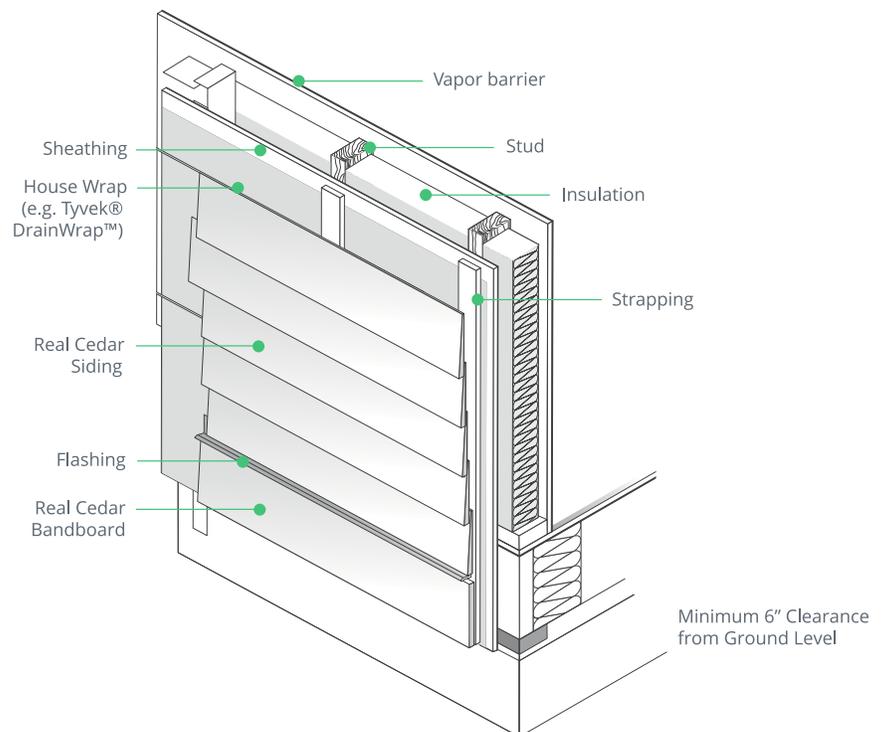


INSTALLING WESTERN RED CEDAR SIDING OVER RIGID FOAM SHEATHING

Recommendations that should be followed to minimize potential problems are:

- » Thick narrow sidings are more stable than thinner, wider sidings and are better able to resist dimensional changes. Siding should not exceed 8" in width.
- » Use kiln dried, siding. This is the most stable cedar siding.
- » Proper prefinishing is essential. Apply stain or primer to all six sides prior to installation.
- » Use light color finish coats to maximize heat reflection and reduce dimensional movement.
- » In all cases it is strongly recommended that breathable house wrap, like Tyvek DrainWrap be applied over foam sheathing.
- » Nail length must be increased when fastening cedar siding directly through rigid foam.
- » 'Furred out' installation methods are recommended over rigid foam.



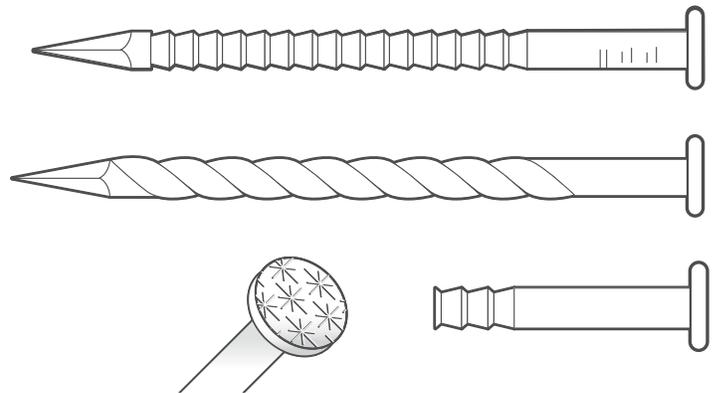
In all cases, high quality, corrosion resistant, ring or spiral shank siding nails **MUST** be used and they **MUST** be long enough so that they **PENETRATE SOLID WOOD** by a **MINIMUM** of 1 ¼”.

There are several options for installing cedar siding over rigid foam. They are:

- » **Horizontal siding:** nail through the siding, the building paper and the foam into the wood sheathing and the studs. **Vertical siding:** nail through the siding, the building paper and the foam into the wood sheathing and horizontal blocking that has been installed behind the wood sheathing. In these cases, the length of the nail length **MUST** be increased by thickness of the foam sheathing (e.g. if a 2” nail would normally be used, a 3” nail must be used if the foam is 1” thick).
- » If using the rainscreen method show in the diagram above, for horizontal siding, nail through the furring strips, the building paper and the foam into the wood sheathing and the studs. For vertical siding nail through the siding, horizontally installed furring strips (installed allowing for drainage), the building paper and the foam into the wood sheathing and horizontal blocking that has been installed behind the wood sheathing. With this method, the length of the nail **MUST** be increased by the thickness of the foam combined with the thickness of the furring strips.
- » A completely ‘furred out’ rainscreen method is a good option and reduces the recommended nail length. Install a nailing frame on the outside of the rigid foam and the building paper. Use solid wood that is a minimum of 1¼” thick spaced at a maximum of 16” on center. For horizontal siding, install the nailing frame vertically. For vertical siding, install the nailing frame horizontally and be sure to allow for drainage. Then nail the cedar siding to the frame using recommended nail lengths show in the table below.
- » There may be systems where there is wood sheathing installed on the outside of rigid foam. In these cases, install a breathable building paper like Tyvek DrainWrap on the outside of the wood sheathing. For horizontal siding, install furring strips vertically with maximum spacing at 16” on center. For vertical siding, install horizontal furring strips with maximum spacing at 16” on center. Be sure to allow for drainage when installing horizontal furring strips. The furring strips must be thick enough that when combined with the thickness of the wood sheathing results in a minimum of 1¼” of solid wood into which to nail the siding. See the table below for recommended nail lengths.

Remember, the three ‘furred out’ nailing options shown above increase overall wall thickness. This will impact the installation of windows, doors and trim boards.

siding type	nominal thickness	spiral/ring shank nail length (inches)
Bevel	1/2	2 (6d)
	5/8	2 (6d)
	3/4	2¼ (7d)
	7/8 to 15/16	3 (10d)
	5/4	3 (10d)
Boards, T&G & Lap	5/8	2 (6d)
	3/4	2 (6d)
	7/8	2¼ (7d)
Battens for board & batten	3/4	3 (10d)



The size of nails to use depends on the type and thickness of siding. Use ring-shank siding nails long enough so that they penetrate solid wood by a minimum of 1¼”.