

OVERVIEW - Figure 1

- Stonewood Exterior is ideal to be used as rain screen cladding in a ventilated façade system.
- This installation guideline only specifies minimum requirements in general terms how Stonewood should be attached / fastened to the sub-structure.
- This guideline does not address the selection, design, and mounting of the substructure itself and the attachment to the structural wall.
- Fibersin recommends the framework and fastening system promoted by North Clad Inc. (www.northclad.com). Stonewood is also compatible with many existing extrusion framework and fastening systems available for similar products.
- To meet the local building code, building professionals should be consulted for the final layout of the fastening/attachment plan of Stonewood to the substructures.

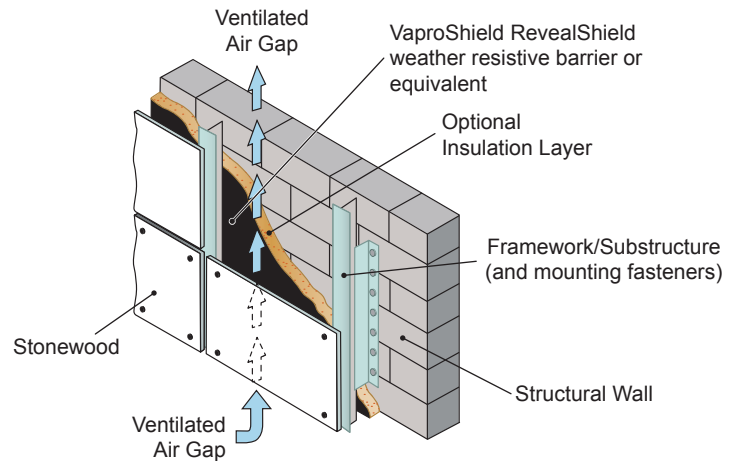


Figure 1 -Stonewood used as rain screen cladding in ventilated facade system

VENTILATION - Figure 2

- The distance between Stonewood and the wall (or insulation) is minimum 1".
- The head ventilation - the distance between the top edge of the cladding and the eaves, is minimum $\frac{3}{4}$ ".
- The base ventilation - the distance between the bottom edge of the cladding and the flashing bottom, is minimum $\frac{3}{4}$ ".

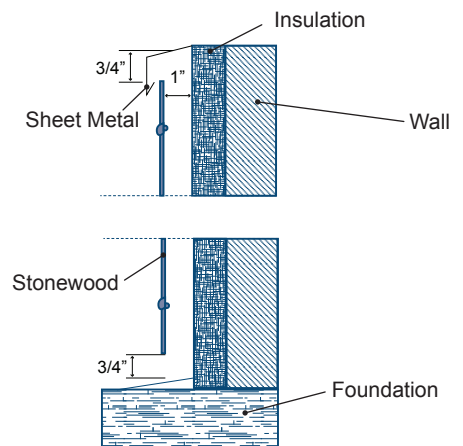


Figure 2 – Ventilation Space

SPACE BETWEEN PANEL EDGES - Figure 3

- A minimum distance of $\frac{1}{4}$ " must be maintained on all sides between the panels, to accommodate hygro-thermal movement of the panel.

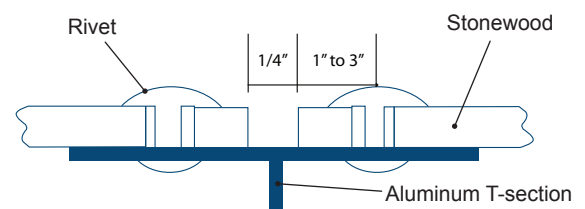


Figure 3 – Edge fastening and minimum $\frac{1}{4}$ " distance between the panel.

FIXING SYSTEMS

- Two types of attachments – screws and rivets (4.8 mm diameter recommended) are acceptable.
- Two types of attachment methods – exposed (Figure 3) and concealed (Figure 4).
- Exposed method works for all panel thicknesses, but concealed method is recommended for only $\frac{1}{2}$ " or thicker panels.
- North Clad (www.northclad.com) only provides exposed fasteners.

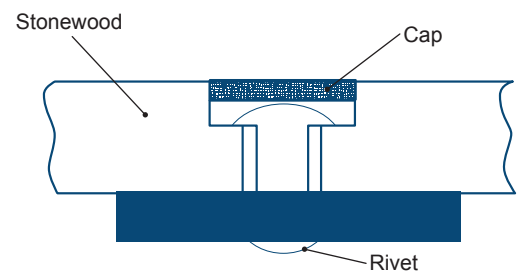


Figure 4 – Concealed fixing

Exterior Panels Installation Guidelines

THREE SUPPORTS SCENARIO

- Stonewood façade panel must be fastened at least three points in each direction to the sub-structure (Figure 5).
- Maximum 24" between fasteners.
- Actual numbers of fastening points, therefore the distance between supports, are to be verified by building professionals for the wind load per local building code.
- The distance between the edge mounting points and the panel edges shall be between 1" and 3" (Figure 3 and 5).

FIXED / FLOATING POINTS - Figure 6

- All the support points are floating, except the one in the middle of the panel or the one as close as possible to the geometric center of the panel.
- The drilled holes of the floating points must be at least 3 mm larger than the screws/rivets. The actual number of fastening points, therefore the distance between fasteners, is based on wind loads, local building codes, and must be verified by a building professional.
- The fixed point has the hole drilled to the specification of the diameter of the screws/rivets.

SAWING AND DRILLING

- Normal woodworking or metal working tools are applicable for sawing/drilling.
- For best results, use carbide-tipped saw blade and router bits with reduced cutting speed.
- A supporting board must be used underneath the Stonewood to drill a clean hole.
- Panels should be cut using a track saw on a guild rail with a blade designed for cutting aluminum / plastic. Fiberesin recommends the Festool TS 55 REQ Plunge Cut Track Saw and Festool 496307 Aluminum/Plastic saw blade for reference.

COLOR MATCHING

- The exposed fasteners should be lacquered to match the Stonewood panel.
- Colored fasteners are available from North Clad (www.northclad.com).

WORKMANSHIP/FIELD FABRICATION GUIDELINES

- Fabrication and installation of Stonewood Exterior Panels should be performed only by experienced professionals. On-site fabrication is permitted, but shop fabrication is recommended.

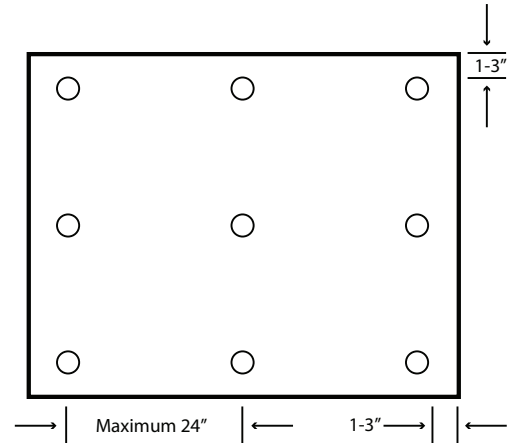


Figure 5 - Three supports scenario

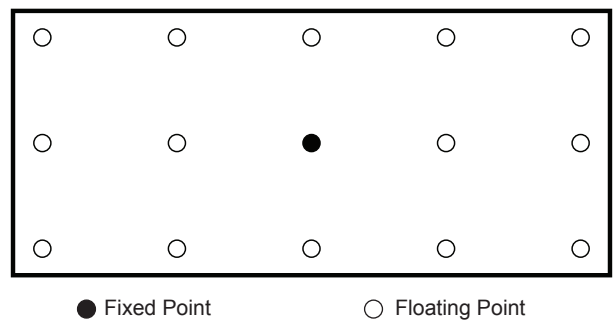


Figure 6 – Fixed points vs. floating points