Kurt Building Materials

TechWALL®Pro Exterior Wall Insulation Installation Instructions

1. <u>PRODUCT</u>

   TechWALL®Pro is a nailable exterior wall insulation consisting of standard 7/16" OSB or optional 5/8" or ¾" OSB or plywood bonded to extruded polystyrene (XPS) or polyiso foam. The panels are machined to allow for a tongue and groove foam pattern while the sheathing is rabbeted back for expansion. Panels are a nominal 4' x 8' (actual coverage approx.47-1/4" x 96" when panel is horizontally installed). Edges of sheathing are rabbetted or cut back to allow for expansion. TechWALL®Pro is attached with SIP Fasteners.   For more information on the product and its uses and limitations, please see company literature. CHECK LOCAL BUILDING CODES.

2. <u>STORAGE</u>

   TechWALL®Pro is shipped in units covered with a plastic bag which is intended to temporarily protect the material while in transit only. On the jobsite the units should be covered with a breathable waterproof tarpaulin. The plastic bag should be removed if moisture accumulates inside it.

3. <u>INSTALLATION</u>

   a. TechWALL®Pro is meant to be installed over existing sheathing and stud wall (wood construction), or over concrete walls or metal building walls. See appropriate fastener pattern.

   b. The designer/installer should determine whether a vapor retarder/house wrap is required between the existing wall surface and TechWALL®Pro A vapour retarder should always be specified for high humidity buildings. A dew point calculation is recommended for verification.

   c. Fire safety precautions should be observed when TechWALL®Pro insulation is installed. Protect foam from flame cutting and welding operations, etc. Around any heat source opening such as a chimney or fireplace flue provide sufficient protection.

   c. Install wood nailer that fully covers the bottom of the panel at the base of the wall, making sure support is level. Check that the existing wall structure is smooth and even without bumps or depressions.

d. TechWALL®Pro can be installed either vertically or horizontally. It is recommended that TechWALL®Pro is installed horizontally in stud wall applications. Fill gaps where the panels meet at the stud with spray foam or caulk. The tongue foam edge should face up the slope (groove at bottom). If you need a smaller panel it is usually best to cut off the side or end with the tongue on it. Panels have rabbetted edges to maintain the proper clearance between the sheathing. Field cut panels should be kerf cut to maintain a 1/8" minimum gap between the sheathing on adjacent panels.

e. Nail or screw right though the panel into the sheathing and studs or sheathing alone. It is not necessary to hit all studs, however it is beneficial to fasten through to at least two stud structures per panel installed.   Use SIP fasteners per warranty requirements. Do not over-torque the screws which compresses the insulation.

f. Check the insulation top surface for uneven edges BEFORE covering. Grind off any uneven edges with an electric sander/grinder.

g. Siding should be applied over dry insulation as soon as possible. Follow siding manufacturers' instructions. Note that it is preferable that siding be able to be attached to sheathing only.   Siding can be attached through the sheathing and into the studs per siding manufacturers' recommendations if required.

4.   <u>FASTENERS</u>

a. <u>Wood Walls</u> -. Use Tech SIP Fasteners. Fasteners should fully penetrate sheathing (when fastening to sheathing only) and penetrate studs by 1" when fastening to studs and sheathing. SIP Fasteners should be sized 1½" thicker than the TechWALL®Pro panel. See attached fastener pattern.

b. <u>Metal Walls</u> - Use Tech SIP Fasteners. They should penetrate the steel deck a minimum of 1/2".   See attached fastener pattern.

c. <u>Concrete Deck</u> - Use Tech SIP Fasteners (or Tapcon screws or equal). Pre drill for fastening. A minimum of 1" thread engagement into the concrete is required.   Advance testing of the pull out resistance is recommended. See attached fastener pattern.

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