

ENGINEERED WOODS

Technical Tip

What is ZIP System® R-Sheathing?



ZIP System® R-Sheathing Panels consist of a 7/16" ZIP System sheathing panel and a rigid foam insulation panel bonded on the interior face. When properly installed and taped, ZIP System R Sheathing provides a water-resistive barrier, air barrier and exterior insulation in one product. It is code recognized in ICC-ES ESR-3373 as an alternate to the water-resistive barrier required in Chapter 14 of the IBC and Chapter 7 of the IRC and satisfies the requirements for air barriers as defined in the ICC International Energy Conservation Code. The rigid polyisocyanurate foam plastic complies with the ICC-ES Acceptance Criteria for Foam Plastic Insulation (AC12).

ZIP System R-Sheathing is available with a 1/2" or 1" thick foam insulation panel. The OSB wood structural panel substrate is available in the 7/16" thickness and carries the Exposure 1 bond classification. The 7/16" ZIP System substrate satisfies the provisions of U.S. Department of Commerce Voluntary Product Standard 2 (PS2) *Performance Standard for Wood-Based Structural-Use Panels* as specified in Section 3.0 of the evaluation report. R-sheathing panels may be used as braced wall panels in accordance with Method 3 bracing in the 2006 IRC. It may also be used in the construction of wood-framed shear walls, per 2006 IBC. Refer to Table 1 in ESR-3373 or the installation guide for allowable shear capacities for ZIP System® R-sheathing. The aspect ratio for ZIP System R-sheathing is currently limited to 2:1 for shear wall applications. This aspect ratio limitation only applies to shear walls, not Method 3 prescriptive bracing. Fastener type and spacing do not affect the performance of ZIP



System R-sheathing to function as a water-resistive barrier, air barrier and exterior

insulation. Fasteners must have a minimum 1-1/2" penetration into the wood framing when used as a bracing or shear panel. ZIP System R-Sheathing is not recognized for use on light gauge metal framing.

Approved wall coverings include brick, vinyl, stone, fiber cement, wood, traditional hardcoat stucco and adhered stone on buildings of Type V construction and construction permitted under the IRC. ZIP System R-sheathing is solely applicable in wall applications and is not code-recognized in ESR-3373 for roof applications. Do not use R-sheathing as roof sheathing.

Caulk sealants compatible with ZIP System R-sheathing and tape are polyurethane, butyl, and 100% silicone sealants. Do not use latex caulks or other water-based sealants with ZIP System. ZIP System® Liquid Flash is fully compatible with ZIP System R-sheathing.

For use in fire-rated wall assemblies, ZIP System R-Sheathing is recognized in UL Design No. V302 and V303. See <u>zipsystem.com</u> or <u>ul.com</u> for more information on V302 and V303 fire-rated wall assemblies. It may not be used as a substitute for conventional wood structural panels in fire-rated wall assemblies specifying "wood structural panels".

Please visit <u>zipsystem.com</u> or contact our technical services department at 800-933-9220 Ext 2716 with any questions or comments.