

ZIP System[®] R-sheathing over Concrete and Masonry Walls

ZIP System[®] R-sheathing panels consist of an oriented strand board panel with an integrated water-resistive barrier laminated to the exterior face and a rigid foam insulation panel bonded on the opposite (interior) face. When properly installed and taped, ZIP System[®] R-sheathing provides a water-resistive barrier, air barrier, and continuous exterior insulation in one product. Occasionally, building designers inquire about the use of ZIP System[®] R-sheathing over concrete masonry units (CMU) or concrete walls. When ZIP System[®] R-sheathing is installed over concrete or masonry walls, the 30-year limited warranty against manufacturing defects is conditional on installation being in accordance with the ZIP System[®] R-sheathing Installation Manual and this document.



Notes and Limitations for ZIP System[®] R-sheathing over CMU and Masonry Walls

- Huber Engineered Woods has no recommendations or requirements pertaining to the fastening of ZIP System[®] R-sheathing to concrete or masonry walls. This shall be determined by and is the liability of the designer of record.
- ZIP System[®] R-sheathing may only be used in buildings defined as Type V construction in accordance with the International Building Code (IBC) or construction permitted under the International Residential Code (IRC).

- The use of ZIP System® R-sheathing in a fire-rated assembly involving CMU/masonry is outside the scope of HEW's currently recognized fire-rated assemblies.
- ZIP System® R-sheathing provides no shear capacity or structural durability in concrete or masonry wall assemblies.
- According to ICC-ES report ESR-3373, the rigid foam insulation portion of ZIP System® R-sheathing is a closed-cell polyisocyanurate, which has a vapor permeability of less than 1 perm and is considered a Class I vapor retarder. Huber Engineered Woods is not liable for any issue related to moisture damage in the building envelope due to improper design or installation of a vapor retarder.
- All code requirements for an exposure 1 rated wood structural panel still apply to the OSB portion of ZIP System® R-sheathing. These requirements include, but are not limited to:
 - Foundation and grade spacing requirements including the limitations on use of a wood structural panel without pressure-treated preservatives within 6" of grade (residential), 8" of grade (commercial), and 2" of above-grade concrete slabs such as a patio deck.
 - Requirement of a ½" gap from concrete or masonry units, such as the corner transition from ZIP System® R-sheathing to a concrete wall.
 - Control joint requirements in areas of transition for dissimilar materials.
 - The OSB portion of ZIP System® R-sheathing shall not come into direct contact with concrete or masonry materials.

Please visit zipsystem.com or contact our technical department at 800-933-9220 Ext 2716 or at techquestions@huber.com with any questions or comments.