R-CONTROL SIPs

SIP No. 2063

Subject: Low Slope Roofing Installation

Date: November 2007

R-Control SIPs are commonly used as a structural roof decking component due to the fact that they provide both insulation and structure in a single component. Although R-Control SIPs are manufactured with Exposure I rated Oriented Strand Board (OSB), the panel should be covered as soon a possible with temporary weather protection after installation. R-Control SIPs are a key load bearing structural element of the roof assembly and the OSB must be protected from weather and damage for the intended life of the structure.

R-Control SIPs can be covered with traditional roof coverings, including shingles, tile, metal, as well as low slope roofing systems. This bulletin describes the steps for proper installation of low slope roofing systems over R-Control SIP roof decks.

When installed in low slope roof designed buildings, R-Control SIPs are typically covered with single ply, modified bitumen, or built up roofing materials. These various roofing covering systems all offer excellent protection for the R-Control SIP roof deck from weather. These roofing materials may include 10, 20, 30 year, or longer periods of warranty protection offered by the Low Slope Roofing System Manufacturer. Inevitably, all roof covering systems age and wear out and need to be replaced. When the roof covering system is removed for re-roof replacement, the OSB top facing of the SIP must be protected to ensure it maintains its integrity.

Mechanically Attached Systems

Mechanically attached low slope roof systems shall be installed in accordance with the Low Slope Roofing Manufacturer's recommendations for application to a 7/16" OSB deck.

Fully Adhered Systems

If the roof covering system is adhered directly to the OSB top facing, the removal of the roof covering system in the future would likely lead to damage of the R-Control SIP OSB facing and possible structural compromise of the R-Control SIP roof deck.

Therefore, R-Control requires that a Dens-Deck (1/4" thickness or greater) or wood fiber board (1/2" or greater), or similar coverboard, in the type and style approved by the Low Slope Roofing System Manufacturer, be attached on top of the R-Control SIP roof deck prior to the installation of fully adhered low slope roof covering systems. Mechanical attachment of the coverboard shall be installed in accordance with the Low Slope Roofing Manufacturer's recommendations for application to a 7/16" OSB deck.

In addition to the foregoing, R-Control requires that low slope roofing systems which approve the use of adhesives for the attachment of their system to approved coverboards, use a water based adhesive approved by the Low Slope Roofing System Manufacturer. The use of solvent based adhesives could lead to damage of the expanded polystyrene (EPS) foam core of the R-Control SIP (see Technical Bulletin sip no. 2065).

Note: The use of water based adhesives, sealants, coatings, cleaning solutions, etc. help to meet the ever growing need to eliminate solvent based VOC emitting materials used in construction. Water based materials also further Green building practices to improve air quality performance in buildings. R-Control supports these important initiatives.

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R-Control SIPs are made exclusively with Foam-Control EPS. R-Control SIPs and Foam-Control EPS are manufactured by AFM Corporation licensees.