



SIP No. 2048

Subject: Joint Detailing

Date: November 2007 (Revised January 2015)

R-Control SIPs are a high performance building material. In order to provide maximum comfort, energy savings, and durability, R-Control SIPs must be installed in compliance with R-Control SIP details. A key component of a R-Control building envelope is the proper use and application of R-Control Low VOC Do-All-Ply, SIP Tape and foam sealants.

R-Control Low VOC Do-All-Ply

R-Control Low VOC Do-All-Ply was specifically designed for application to R-Control SIPs.

R-Control Low VOC Do-All-Ply is the only recommended sealant product for installation between the R-Control SIP core, splines, wood plating, and internal wood members.

Other adhesive or sealants have been shown to cause damage to the EPS core or become brittle over time. R-Control Low VOC Do-All-Ply is EPS foam compatible and will retain flexibility. In addition, some products cannot be applied under damp or cold conditions. Again, R-Control Low VOC Do-All-Ply was developed to meet these needs. R-Control Low VOC Do-All-Ply can be applied under damp conditions, is water washout resistant, and can be applied at low temperatures.

Of key importance, R-Control Low VOC Do-All-Ply prevents the passage of water vapor due to its low water vapor permeability (see Technical Bulletin sip no. 2047).

R-Control Low VOC Do-All-Ply must always be installed in a continuous unbroken pattern and applied in sufficient amounts to ensure that contact is maintained with the core, splines, wood plating, and internal members.

Failure to apply the R-Control Low VOC Do-All-Ply in a continuous pattern or maintain contact with adjacent materials will provide paths for moisture vapor to pass through panel

joints causing eventual moisture problems.

SIP Tape

R-Control SIP Tape was specifically designed for application to R-Control SIPs.

R-Control SIP Tape is the only recommended Tape product for installation on the surface of R-Control SIPs.

Other tapes are often manufactured with asphalt adhesives which are not suitable for use in interior environments.

Expanding Foam Sealants

R-Control does not recommend the use of expanding foam sealants in the critical area of joint detailing between the R-Control SIP core, splines, wood plating, and internal wood members.

The field installation of expanding foam sealants can be difficult under typical construction site environments such as cold or damp weather conditions. In addition, the long term volume stability and flexibility of foam sealants cannot be guaranteed. Field inspection of past foam sealant panel applications has shown that problems with foam sealant performance are common.

However, the use of low expanding foam sealants in the application of filling voids around electrical boxes and window and door openings is recommended (see R-Control SIP details SIP-116, SIP-117, SIP-123, SIP129a). These applications take place in the controlled environment on the inside of a standing SIP structure.



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

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