R-Control SIP joint detailing is commonly accomplished with R-Control Low VOC Do-All-Ply, SIP Tape, or vapor barriers. The proper sealing of joints during the installation of R-Control SIPs is an essential aspect to ensure both energy efficiency and long term durability of the structure.

R-Control has conducted extensive testing on the performance of R-Control Low VOC Do-All-Ply used to seal SIP joints. Testing has shown that the use of R-Control Low VOC Do-All-Ply installed according to the R-Control SIP details will provide long term durable joints.

This bulletin describes using SIP Tape for the sealing joints of R-Control SIPs when used in roof/ceiling panel applications. The method consists of using R-Control SIP tape along with R-Control Low VOC Do-All-Ply sealant.

R-Control SIP Tape is an adhesive tape product developed specifically for use with SIPs. The adhesive is designed specifically for use indoors and does not impact indoor air quality. Many other construction tapes are available, such as asphalt based adhesive, but these products are not suitable for indoor applications.

R-Control SIP details show the placement of R-Control SIP Tape on the interior of the structure. The basis for placement is the building science practice of placing vapor barriers on the warm in winter side of the roof/ceiling. However, in hot/humid climates the R-Control SIP Tape may be placed on the exterior of the structure as the cooling season dominates (the warm side of the roof/ceiling is the exterior).

Advantages of the R-Control SIP Tape installation are that the R-Control SIP Tape eliminates the application of a separate vapor barrier and provides for an external visual inspection.

Testing by R-Control has shown that the performance of the R-Control SIP Tape details along with R-Control Low VOC Do-All-Ply or the use of R-Control Low VOC Do-All-Ply and vapor barriers are both acceptable methods of construction for R-Control SIPs.