# **TECHNICAL BULLETIN** NO. D-13



### SUBJECT: PREMER SIPS JOINT DETAILING

Premier SIPS are a high-performance building envelope system. To provide maximum comfort, energy savings and durability, Premier SIPS must be installed in compliance with Premier SIPS Details. A key component of a Premier SIPS building envelope is the proper use and application of Premier SIPS Sealant, Premier SIPS Tape and expanding foam sealants.

### **PREMIER SIPS SEALANT**

Premier SIPS Sealant was specifically formulated for application in SIPs installation and is the only recommended sealant product for installation for all Premier SIPS Sealant applications including core, splines, wood plating and internal wood members.

Other adhesives or sealants have been shown to cause damage to the rigid insualtion core or become brittle over time. Premier SIPS Sealant is EPS rigid insualtion compatible and will retain its flexibility. In addition, some products cannot be applied under damp or cold conditions. Premier SIPS Sealant can be applied to damp surfaces, is water washout resistant and can be applied at low temperatures.

Of key importance, Premier SIPS Sealant prevents the passage of water vapor due to its low water vapor permeability.

Premier SIPS Sealant must always be installed in a continuous unbroken line pattern and applied in the recommended bead size (3/8" diameter) and location to ensure that contact is maintained with the core, splines, wood plating and internal wood members.

Please refer to the Premier SIPS Sealant Details and Installation video demonstrating the proper application of Premier SIPS Sealant, which can be viewed at www.premiersips.com/sealant.

Failure to apply the sealant 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.

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### **PREMIER SIPS TAPE:**

Premier SIPS Tape was specifically formulated for application to Premier SIPS. Premier SIPS Tape is the only recommended tape product for installation on the surface of Premier SIPS. Other tapes are often manufactured with asphalt adhesives which are not suitable for use in interior environments.

Please refer to the Premier SIPS Tape Details and Installation Video demonstrating the proper application of Premier SIPS Tape, which can be viewed at www.premiersips.com/tape.

#### **EXPANDING FOAM SEALANTS:**

Premier Building Systems does not recommend the use of expanding foam sealants as a vaper retarder in the critical area of joint detailing between the SIP core, splines, wood plating and internal wood members. Expanding foams become brittle as it ages and can crack in tight margin areas such as SIP joints where expansion and contraction can occur.

Additionally, 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 expanding foam sealant performance can occur.

However, the use of low expanding foam sealants in the application of filling voids around electrical boxes and window and door openings is recommended. These applications take place in the controlled environment on the inside of a standing SIPs structure