## **TECHNICAL BULLETIN** NO. 1-4



## SUBJECT: SIP LIFTING BRACKET

The SIP lifting bracket apparatus accessory is available on request as part of your SIP package. The purpose of the lifting bracket is to hoist Structural Insulated Panels (SIPs) on a construction site from the ground to their final position on the building.

The Lifting Bracket meets or exceeds a rated load capacity of 1,850 lbs when using (34) 1/4"x2" SDS wood screws by Simpson. The load capacity values include a safety factor of 3.0. The plate should be secured to a minimum of 7/16" SIP grade OSB facings.

A 12"x12" 3/4" plywood shim is required between the plate and the SIP to enable complete thread engagement between Simpson SDS screws and the OSB facing of the SIPs. Use the four smaller holes in the middle of the bracket to fasten plywood shim to the bracket. The plywood shim will hold screws in place between picks; just back the screws out of the SIP facings, but not all the way out of the 3/4" plywood shim and the plate is ready to be fastened to the next SIP.



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To pick the SIP at the correct roof pitch first determine the center of each SIP. Depending on the pitch of the roof place the center of the lifting plates, 3" from the center of the SIP toward the ridge end for every pitch change after 4:12. For example: On a 7:12 roof, the lifting hole will be 9" from the SIP center. This will allow the SIP to arrive on the ridge at almost the proper pitch, which will help the SIP installation. If the roof SIP has installed lumber, the placement of the lifting bracket may need to be adjusted.

During the install care should be taken to secure the ridge beam during installation to prevent bowing.

As an alternative to lifting brackets, a picking eye can be fashioned from a 4" eye made from 3/4" steel rod. The shaft should be at least 14" long. The nut should be tack welded to a minimum 4" diameter washer made of 1/2" thick steel. Drill through the roof SIP, insert the 3/4" steel rod through the full section of the SIP, apply a 12" square 3/4" Plywood "washer", and thread on the nut welded to the 4" steel washer. After SIPs are secured in place, remove all the lifting hardware, fill the hole in SIP with low expanding foam that is compatible with EPS and finish sealing off the penetration by applying SIP Tape over the SIP penetration per PBS-105.

Note: It is the sole responsibility of the contractor and lift operator to select the appropriate methods and means for picking and placing the SIPs on the structure. Further, the contractor and lift operator are responsible for the proper installation of the SIPs following product label instructions and for using all safety precautions during installation to avoid injury to anyone on the project site. The Premier SIPS manufacturer does not accept any responsibility for improper or defective installation workmanship.