The use of structural insulated panels (SIPs) in residential construction applications is recognized in Section R610, STRUCTURAL INSULATED PANEL WALL CONSTRUCTION, of the 2015 and 2018 International Residential Code® (Section R613 of the 2009 and 2012 IRC). When SIPs are used within the restrictions of the IRC for wall applications, project drawings, typical details and specifications are not required to bear the seal of the architect or engineer responsible for design, unless otherwise required by the state law of the jurisdiction having authority.

The IRC addresses construction of exterior structural insulated panel (SIP) walls and interior load-bearing SIP walls for buildings not greater than 60 feet (18,288 mm) in length perpendicular to the joist or truss span and not greater than 40 feet (10,973 mm) in width parallel to the joist span or truss. The IRC provisions restrict the use of SIPs to wall applications for buildings not greater than two stories in height with each story not greater than 10 feet (3048 mm) high.

All exterior SIP walls installed in accordance with the provisions of the IRC are considered as load-bearing walls. SIP walls constructed in accordance with the IRC are limited to sites subjected to maximum design wind speed of 130 miles per hour, Exposure A, B or C, maximum ground snow load of 70 pounds per foot (3.35 kN/m²), and Seismic Zones A, B, and C.

The scope of the IRC provision was established based upon a test program conducted by APA, The Engineered Wood Association. SIPs in compliance with the IRC shall be identified by grade mark or certificate of inspection issued by an approved agency in accordance with ANSI/APA PRS 610.1, Standard for Performance-Rated Structural Insulated Panels in Wall Applications.