SUBJECT: POINT LOADING WALLS

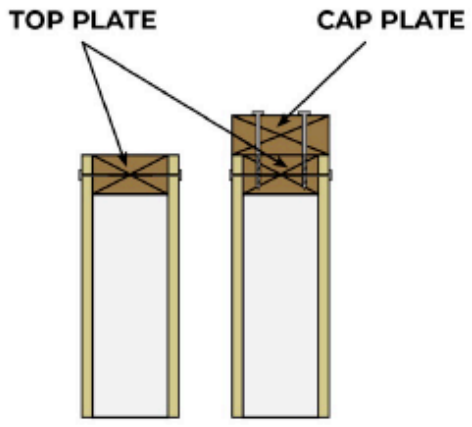
Extreme SIP walls are used in combination with various types of roof and floor designs. For roof systems, these include rafter and ridge beams to carry the roof SIPs, roof trusses, girder trusses, and girder truss beams. For floor systems, collection beams and girder trusses are often used in larger open rooms. Roof and floor systems using the load collection methods described above often result in the need to transfer a point load from the roof or floor system uniformly onto the wall.

Extreme Panel has evaluated the point load capacity of SIPs as shown in the Extreme Panel Load Chart #2A (See below). The total load should never exceed the lesser of the point load capacity or the SIPs axial and transverse capacity shown on the Extreme Panel Wall-Point Load Chart. If the design load exceeds these point loads, Extreme SIPs can be fabricated to accept a variety of posting methods, as determined by the engineer of record (EOR).

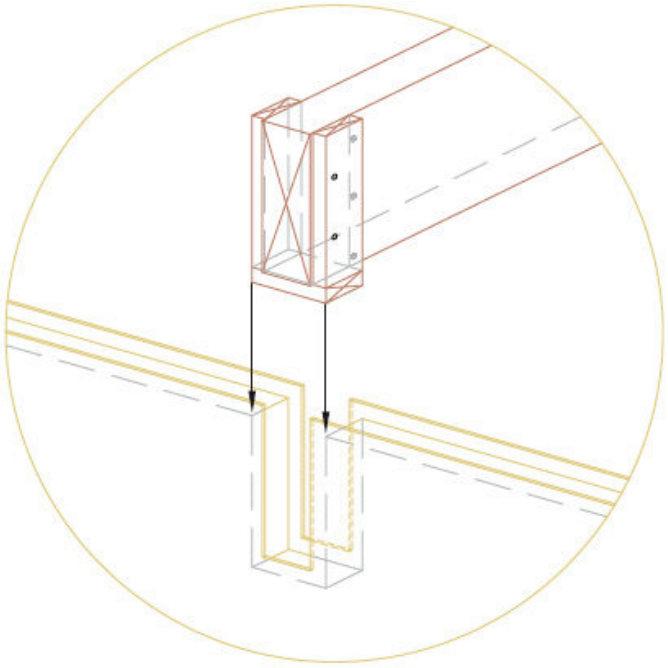
LOAD CHART #2A
Axial Point Loads - LBS [1-2]
Type S Spline

Top Plate Configuration	1-1/2" BEARING WIDTH	3" BEARING WIDTH
Single 2x No. 2 or better Hem-Fir Plate	2040	2450
Single 2x No. 2 or better Hem-Fir Plate with 2x No. 2 or Better Cap Plate Ripped to Total Width of SIP.	4030	4678

[1] Permanent loads, such as dead load, shall not exceed 0.50 times the tabulated load.
[2] Tabulated values are based on the strong-axis of the facing material oriented parallel to the span direction.



Beams may also be pocketed into the SIP wall assembly per detail EPT-415. This detail provides an aesthetically pleasing interface between the wall and the support mechanism for roofs and floors.



When this detail is used with Extreme SIPs, the following recommendations should be followed:

1. Loads for detail EPT-415 shown above are limited to the point loads established above Load Chart #2A. This generally calls for a maximum design load of 2450 pounds for a standard 2x plate used in the SIP under the beam. The use of an abbreviated cap plate placed above the base of the beam pocket and extending over the OSB facings does not allow for increased loads in this application. When loads exceed 2450 pounds, posting is required under the beam per detail EPT-414.

2. This detail provides for a thermal short circuit in the wall panel system. Great care should be taken to seal this joint. After sealants are placed in the pocket, all interior interfaces must be further sealed with SIP Tape.

3. Maximum design loads can be compromised if the beam pocket is overcut at the corner of the pocket. Good craftsmanship is required to ensure that the pocket is not overcut in the corners.