

---

**SUBJECT: RECESSED LIGHTING IN PREMIER SIPS**

The use of recessed lighting is not recommended for application within Premier SIPS, however, there are alternative solutions for ceiling lighting.

The SIP's facing is a key structural component. Therefore, excessive cutting of the SIP OSB facers, along with the foam core may lead to a reduction in the structural capacity of the SIPs. Heat buildup with traditional recessed lights is the result of being installed in a fully insulated cavity. Although some recessed lights are designed for insulated cavities, traditional recessed lights are not designed for the superior insulating performance of the rigid insulation solid core within the SIP.

Alternatively, 110V and low voltage LED disk lights, low-heat or thermally protected units can be integrated into your SIP roof without compromising the airtightness or the structural integrity of the SIPs.

LED disk lights generate minimal heat, ensuring they don't interfere with the SIP's insulating performance of the rigid insulation solid core. For LEDs with transformers, using 110V Romex wiring, a 4" ceiling box is all that is required for each box. Special attention should be made during the design process to ensure SIP chase locations work with the planned lighting pattern. For low-voltage LED's you can also utilize the wire chases in the SIPs, or you can create a small void between the SIP & gypsum board to run low-voltage wires to the locations of the planned lighting pattern.

Whether using 110V for simplicity or low voltage for added safety, LED disk lights provide a sleek, durable, and efficient light solution tailored to SIP-built spaces. If traditional recessed lights are desired over this newer technology, a cavity or soffit can be created by installing framing material attached to the surface of the SIP before installing gypsum board. This creates a cavity or soffit in which lighting can be installed without cutting the face of the SIP (See detail PBS-111).

Other lighting fixtures can be utilized like surface-mount fixtures and track lighting that utilize surface mounted electrical boxes designed for these applications.

Please consult with a Premier SIPS representative with any questions.