The primary considerations for the installation of recessed lighting in R-Control SIPs include potential excessive cutting of the structural facing and excessive heat (refer to Technical Bulletin sip. no. 2064).

Since the R-Control SIP facing is a key structural component, excessive cutting of the facing along with the foam core will lead to a reduction in the structural capacity of the R-Control SIP.

Heat buildup with recessed lights is the result of being installed in a fully insulated cavity. Although some recessed lights are designated for insulated cavities, these lights are not designed for the superior performance of the solid core of Foam-Control EPS (Expanded Polystyrene) within the R-Control SIP.

R-Control recommends the installation of surface mount or track lighting for R-Control SIP ceiling applications. If a flush appearance is required, a cavity or soffit application is recommended. A cavity or soffit is created through the installation of framing material attached to the surface of the R-Control SIP before the installation of gypsum board. This creates a cavity or soffit in which lighting can be installed without cutting the face of the R-Control SIP (see SIP-143 & SIP-143a).

**The use of recessed lighting is not recommended for application within R-Control SIPs.**

However, if recessed lights are desired to be installed in an R-Control SIP, the engineer of record for the project should be consulted with regard to the number and location of planned cuts in the R-Control SIP. The engineer must review these cuts to ensure the structural integrity of the R-Control SIP. In addition, since the core of the R-Control SIP is EPS, the opening into the R-Control SIP will expose EPS. A minimum of 2X dimensional lumber blocking or 1/2" gypsum board must be installed over the exposed EPS prior to the installation of the fixture.