Roofing systems using single ply elastomeric, thermoplastic or polymer modified bitumen membranes can be used over the Insulspan SIP System to construct low slope roofs on either residential or commercial buildings. A minimum roof slope of 2% or ¼" per foot (20 mm per meter) is recommended to provide adequate drainage.

Single ply membranes may be installed loose laid and ballasted, partially or fully adhered or mechanically fastened. When loose laid and ballasted single ply membranes are used over an Insulspan SIP roof deck a slip sheet must be installed over the panels prior to the roof membrane to act as a separation layer. When adhered or mechanically fastened membranes are used a protection board such as gypsum board or wood fiberboard may be used as the separation layer.

The separation layer will minimize damage to the Insulspan SIP should the roof membrane need to be removed in the future. As well, adhesives or solvents used to seal membrane seams should be kept from contact with the PlastiSpan insulation core within the Insulspan SIP. For this reason, the joints between protection boards should be staggered with Insulspan SIP joints. A roof constructed with the Insulspan SIP System requires this type of protection since it must remain intact to provide the structural capacities it was designed to support.

The design of low slope roof systems must comply with the requirements of applicable local building codes. One consideration for commercial roof applications is exterior roof covering classification which is typically required to be a Class A, B or C classification as determined in accordance with CAN/ULC-S107 in Canada or in the United States based on ASTM E108 or UL 790 testing.