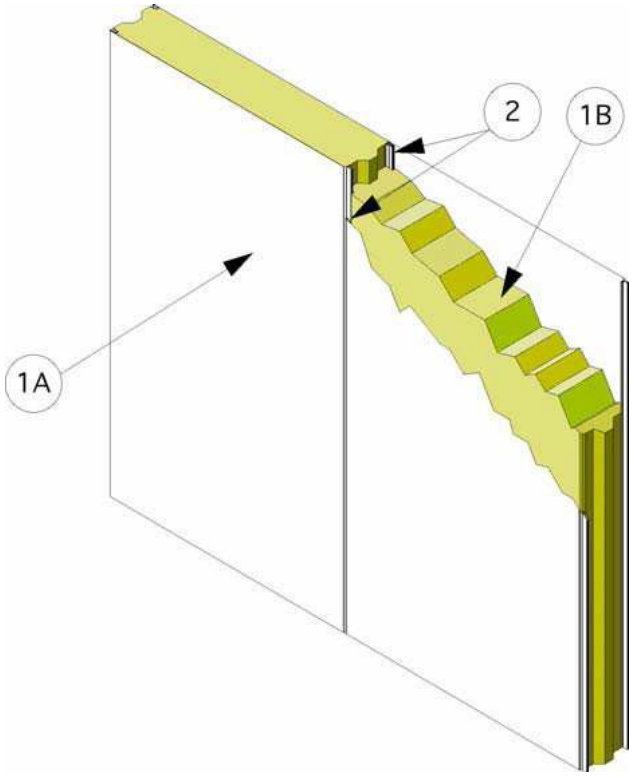
MBCI
Design Number MBC/IMWP 120-01
Insulated Wall Panels
Eco-Ficient® Panels
ASTM E119 (2016), UL 263 (2011), CAN/ULC-S101 (2007)
Rating: 2 Hour



1. CERTIFIED MANUFACTURER: MBCI

CERTIFIED PRODUCT: Insulated Wall Panels

CERTIFIED MODEL: Eco-Ficient® Panels

Steel or stainless steel faced panels, with a core of mineral wool insulation. The panels are nominally 42 in. wide, having a max. length of 50 ft. and a min. thickness of 6 in. The panels are constructed with tongue and groove interfaces on the long dimension edges that mate with adjacent panels. Panels may be installed with the long dimensions placed horizontally or vertically. When constructing a wall, the panel perimeter is secured with panel attachment angles or channel, as described in Item 3.

The wall panels are constructed of the following materials:

A. PANEL FACING – The panel facing is constructed of min. 26 GA galvanized steel with painted or mill finish, or min. 26 GA stainless steel with mill finish. The panels are fashioned with tongue and groove mating edges located on the long dimension panel edges.

B. MINERAL WOOL INSULATION – The panel core consists of nominal 8.5 pcf mineral wool batt that is sandwiched between the panel facing and adhered to the panel facing with a polyurethane adhesive. The long dimension edges of the panel core are constructed with a tongue and groove interface that mates with adjoining panels.

2. **SILICON SEALANT:** (Optional, Not Required for Fire Resistance) Install a nominal 3/16 in. bead of one-component, medium modulus, non-corrosive silicone sealant to the female side of the panel facing (Item 1A) joints prior to joining the panels.

3. **PANEL SUPPORTS:** (Optional, Not Required for Fire Resistance) Panels are attached to side perimeter panel supports when installed horizontally, or top and bottom panel supports when installed vertically. Additionally, horizontally oriented wall panels will be supported on the bottom edge of the bottom panel with min. 18 GA steel channel that is secured to the foundation and engages the tongue and groove configuration of the panel edge. Secure the panel supports to the adjacent construction as required by Code. Any of the following methods of panel attachment is recognized in this Listing:

   A. CHANNEL – Min. 18 GA galvanized steel C-shaped channel or track, having a web width 1/8 in. larger than the wall thickness and min. flange length of 2 in. Secure panels to double supports with min. No. 12, self-drilling or self-tapping steel screws, having sufficient length to extend through the support flange and fully engage the panel face. Space the screws max. 12 in. on center (oc).

   B. SINGLE SUPPORTS: Min. 16 GA steel sheeting angles having min. 2 in. flanges, or equivalent structural member providing equal or greater support. Secure panels to single supports with min. No. 14, self-drilling or self-tapping steel screws, with sufficient length to extend through the panel and completely into the steel support on the opposite side. Space the screws max. 18 in. oc and 3 in. from each joint.

   C. DOUBLE SUPPORTS – Min. 16 GA steel sheeting angles having min. 2 in. flanges, or equivalent structural member providing equal or greater support. Secure panels to double supports with min. No. 12, self-drilling or self-tapping steel screws, having sufficient length to extend through the support flange and fully engage the panel face. Space the screws max. 12 in. oc.

   D. INTERMEDIATE SUPPORTS – (Optional, Not Required for Fire Resistance) Where panel walls require additional support for project specific reasons, intermediate steel supports may be installed, in accordance with manufacturer's instructions, on the panel span between the end panel support connections, using No. 14 self-drilling or self-tapping screws, having sufficient length to extend through the panel and completely into the steel support on the opposite side, or No. 10 FabLok rivets or 9/32 in. Bulb-Tite rivets installed through the support flange and fully engage the panel face. Spacing is determined by project requirements.