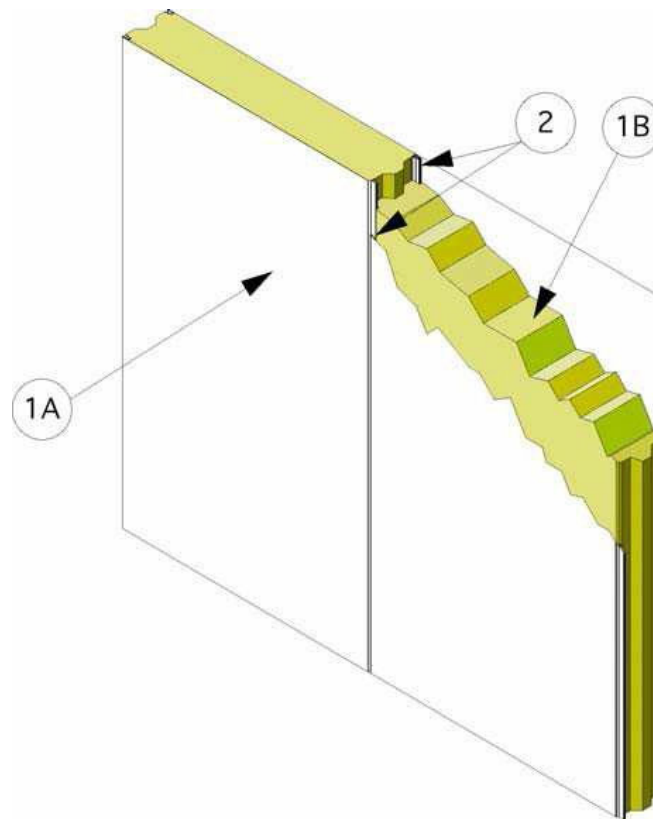

Metl-Span, A Nucor Company
Design No. MSN/IMWP 180-01
Insulated Wall Panels
ThermalSafe® Panels
ASTM E119, UL 263, CAN/ULC-S101
Fire Resistance Rating: 3 Hr



- 1. COMPONENT NAME:** Insulated metal wall panels.

CERTIFIED PRODUCT: ThermalSafe® mineral fiber panels.

Steel or stainless steel faced panels, with a core of mineral wool insulation. The panels are nominally 42 in. or 43 in. wide, having a max. length of 50 ft and a min. thickness of 8 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 4.

- 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. **SILICONE SEALANT:** (Optional, not required for fire resistance rating). 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 JOINT FASTENERS:** (Not Shown) Use min. 1/8 in. diameter steel or stainless-steel rivets, or min. No. 6-20, min. 3/8 in. long TEKS screws with a min. 1/4 in. diameter head, installed through the tongue and groove joints of the insulated metal wall panels on both the interior and exterior sides of the wall assembly. When using rivets, ensure rivets are of sufficient length to penetrate through the male/female interface of the tongue and groove joint on each side of the insulated metal wall panels. Install fasteners 1/4 in. from the panel edge and spaced max. 36 in. on center (oc) along the length of the panel joints.

As an alternative installation, the fasteners may be installed on one side of the wall assembly only. When this installation method is used, the max. 3-hour fire resistance rating shall apply only to the side with the fasteners (i.e., fastened side exposed to the fire). The fire resistance rating for the opposite (non-fastened) side shall be a max. of 2 hours.

4. **PANEL SUPPORTS:** (Not shown). Panels are attached to side perimeter panel supports when installed horizontally, or top and bottom panel

supports when installed vertically. As an option, horizontally oriented wall panels may be supported on the bottom edge of the bottom panel with min. 16 GA steel channel clip 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. 16 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 flanges with min. No. 12, self-drilling, or self-tapping steel screws, having sufficient length to extend through the channel flange and fully engage the panel face. Space the screws max. 12 in. 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 panel face. Space the screws max. 12 in. oc.

D. **INTERMEDIATE SUPPORTS** – (Optional, not required for fire resistance rating). 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 interior panel face. Spacing is determined by project requirements.

Consult the listing report on the Directory of Building Products (<https://bpdirectory.intertek.com>) for the edition of the standard(s) evaluated.

Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.