



## DISCLAIMER:

These details are based on industry accepted practices and provide a guideline for proper insulated metal panel and component installation.

The location of vapor barriers and associated sealants shown in these details is based on standard design practices for commercial industrial applications for most U.S. and Canadian climatic zones. The default vapor barrier location is on the warm side in winter (the interior side of the panels).

For projects located in extremely cold climates, exposed to high wind-driven rain or unusual interior conditions (sustained temperatures below 65°F), it may be advisable to modify the vapor barrier (joint sealant) location, or to add optional exterior joint sealants.

It is the sole responsibility of the project architect to verify vapor barrier location, insulation required by code and HVAC equipment/ventilation requirements to allow proper air flow and the prevention of condensation.

It is also the sole responsibility of the project architect to determine project-specific design loads. Metl-Span Technical Services is available to verify allowable panel spans and fastening requirements when provided with this information.

The details contained herein show side joint fastening only. Please contact Metl-Span technical services for project-specific fastening requirements.

All structural supports are shown for clarity only, and are not provided by Metl-Span.



**Butyl caulk:** For commercial/industrial projects the caulk is usually applied to the interior joint female pocket (see DISCLAIMER). Butyl caulk is also used to create "marriage beads" which tie the panel sidejoint vapor seals to panel endjoint vapor seals. Butyl caulk is considered "non-skinning", which means it stays soft, flexible, and does not harden. Butyl caulk is for unexposed areas only, and cannot be used where it will be exposed to weather or sunlight

**Butyl sealant tape:** Applied between flashings and panels to form a weathertight seal. All fasteners penetrating the flashing must be inserted through the sealant tape.

**Urethane caulk:** Used in lieu of butyl sealant where there is exposure to the elements. It is recommended for lapped trims, exposed perimeter seals at framed openings or to seal between different construction materials, such as metal to concrete.

**Panel fasteners:** Insulated metal panel fasteners are generally either self-drilling/self-tapping (also known as TEK screws), or self-tapping (also known as B point screws).

**TEK Fasteners** contain a built-in drill point, and do not require pre-drilling. They are the quickest and easiest way to attach panels to light-medium gauge supports.

**B Point fasteners** require a two-step operation: First holes are pre-drilled into the panel and structural support with an appropriate sized bit, then the fastener is inserted into the hole and tightened. B points are typically used to attach panels to medium-heavy gauge supports that are not penetrable by TEK fasteners. It is important that the pre-drilled holes are sized correctly for the fasteners to achieve proper pullout values.

**Bulb-Tite® Rivets:** Are similar to expansion fasteners, and are used where back fastening of the panels to structural supports is required. Holes must be pre-drilled with a 5/16" diameter. The grip range of the rivets must be matched to the thickness of the structural support to ensure proper fastening.