

STORAGE GUIDE

Short, Long, & Extended Term Storage of Metal Panels & Sealants

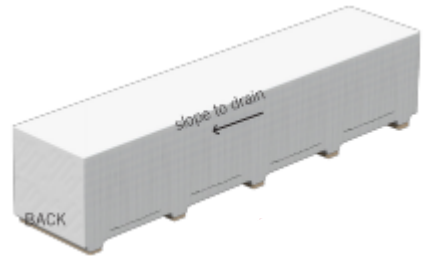
Improper storage of insulated metal panels (IMPs) could cause permanent damage to the panels finish and insulating material as well as contamination of factory applied sealants.

The contents of this document provide guidance for short-term, long-term, and extended storage of insulated metal panels with foam and mineral fiber core insulation. Short-term storage is defined as panels being installed within two months after delivery. Long-term storage is defined as panels being stored two to four months after delivery and extended is defined as panels being stored longer than four months after delivery.

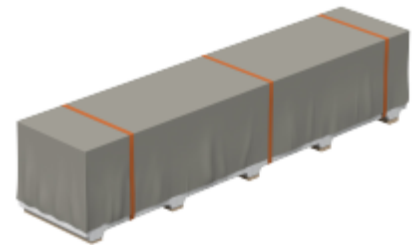
Required Storage Practices

- ***Short-Term Storage (< 2 Months)***

- ***All Panel Types*** – Panels should be stored in a secure location on level ground that is well drained and free from standing water. Elevate one end of each bundle to provide drainage. Slit the plastic stretch-wrap along the bottom of both sides of the bundles and both ends to allow air flow and drainage. Opened bundles should be covered and secured to prevent weather damage. All panels should be stored away from areas where torching, welding, cutting, or painting are being done.



- ***ThermalSafe® Panels*** – In addition to the above stated storage requirements, water collection within the mineral fiber core must be prevented. If the bundle's plastic stretch-wrap is damaged during shipping or handling it should be patched, tarped, or stored indoors.



- ***Long-Term Storage (2 – 4 Months)***

In addition to the short-term storage requirements, the following precautionary steps should take place to prevent potential risk factors listed in this guide.

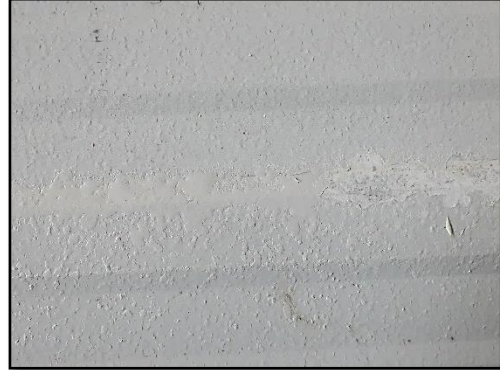
- ***All Panel Types***
 - **OPTION 1** - relocate bundles to an indoor facility with a controlled environment.
 - **OPTION 2** - relocate bundles to an indoor facility and remove plastic stretch-wrap to help prevent moisture buildup within the bundles.
- ***Sealants*** – Should be stored within the manufacture's temperature specified range for each type of sealant used.

Long-Term Storage Risk Factors

- ***Wet Storage Damage***
 - ***All panel types*** – Wet storage is corrosion that occurs when metals are in prolonged contact with water. This is possible when rain and/or condensation gets trapped between the stacked panel faces during transportation and/or outdoor storage. Coil applied coatings are relatively thin and are designed to protect the galvanized or Galvalume[®] coated steel from normal atmospheric conditions. These coatings are vapor permeable and are not designed for continuous contact with standing water. The most common early signs of wet storage stains are a white chalky powder or raised texture in the paint. As the stain becomes more acute, the paint will delaminate from the panel surface and the final stage will be red rust.
 - ***Trim/Flashing*** – The potential for wet storage damage is possible if trim/flashing pieces are stacked wet with higher probability if strippable film is omitted or has been removed.

- ***Freeze Thaw Damage and Contamination***
 - ***Packaged Sealants*** – Should be stored within the manufacture’s specified temperature range for each type of sealant used.
 - ***Factory Applied Sealants*** - Sealant can become contaminated with dirt and debris if the plastic stretch-wrap is removed or damaged.

- ***Strippable Protective Film***
 - ***Panels and Trim/Flashing*** – Strippable protective film should not be left on panels or trim/flashings that will be stored for the long-term as the protective film can become difficult to remove.



Extended Storage (> 4 Months)

Before installing IMPs stored 4 months or more:

1. Inspect panels for contaminated sealant. All contaminated factory or field applied sealant(s) will need to be removed from the joinery, joints cleaned of dirt and debris, and re-caulked with manufacture’s specified sealant(s). The following link is a video on how to remove non-curing butyl sealant from an insulated metal panel joint. https://youtu.be/1-d_zmStnLE
2. Factory installed non-skinning butyl sealant that is not contaminated should be tested by taking a four-inch-long piece of sheet metal and pushing it into the seam sealant and removing. There should be residue and stringing of the sealant when removed. If there is no bond, or there are concerns, remove and replace the sealant.
3. All tubes of sealant should have a manufactured date stamped on the case. The shelf life will depend on the type and brand of sealant as well as compliance with the required storage temperature range. Refer to the product data sheet(s) for the specific sealant(s) provided for your project. Do not use expired sealant(s) or sealant(s) that have not been properly stored.
4. Prior to installing the IMPs, inspect the interior and exterior metal surfaces for wet storage damage.