



**** IMPORTANT ****

PLEASE READ BEFORE INSTALLATION AND USE

0321-00094 – Installation Guide – Hybrid Cold Room – Rev December 24

TABLE OF CONTENTS

Before Beginning	4
Receipt, storage, and inspection of panels	4
Detailed drawings first and foremost.....	4
Recommendations	4
General preparation	5
Identifying the panels.....	5
Verifying that the slab is level	5
Marking the position of the walls on the floor.....	6
Installation of screeds on the floor	7
Installation of wall panels	8
Determining the installation sequence	8
Assembling the starting corner	8
Installing Norex panels.....	9
Openings with door headers.....	10
Openings cut at the site	10
Installation of ceilings	11
Creating a thermal break	12
Finishing steps	15
Disc suspensions	15
Installing moldings & silicone.....	17
Electricity.....	19
Penetrations.....	20
Installing a pressure relief valve.....	21

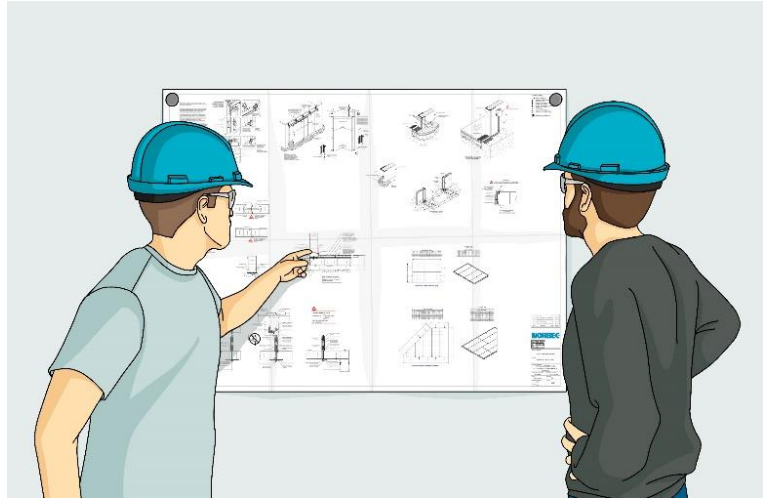
BEFORE BEGINNING

Receipt, storage, and inspection of panels

On receipt, be sure to inspect the goods based on the packing slip, in accordance with the “**Your responsibility when receiving freight**” procedure included in the panel delivery.

Detailed drawings first and foremost

This guide is a document to be used in conjunction with the **FINAL INSTALLATION DRAWING**. The details of these drawings take precedence over the information provided here. These drawings also contain information on the fasteners (type and spacing) and other components to be used during installation.



Recommendations

The handling, cutting and installation of panels and other components must be carried out by qualified personnel. As the panels are composed of sharp metal edges, appropriate personal protective equipment (gloves, goggles, steel-toe shoes) must be worn:



Safety gloves



Safety goggles



Steel-toe shoes

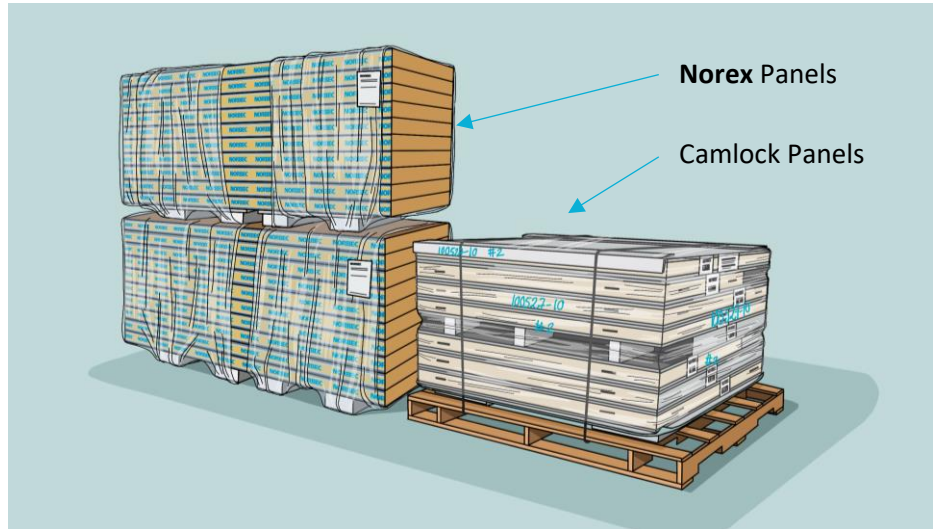
*All electrical connections must be carried out by a qualified professional in accordance with current standards.

GENERAL PREPARATION

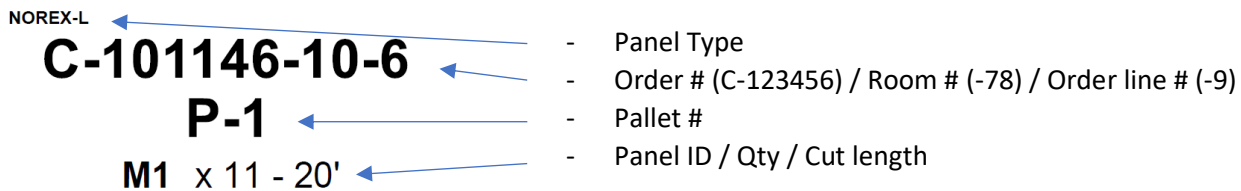
Identifying the panels

Locate the position of each panel by referring to the general assembly included in the final installation drawing. The installation includes two types of panels:

1. Camlock panels are used for floors, corners, and doorways.
2. **Norex** continuous panels are used for ceilings and walls that do not require cutting.



Camlock panels are identified by a number (M1, M2, B1, B2, etc.) on the side of each panel
Norex panels are identified by a notice on each package. See below for identification details.



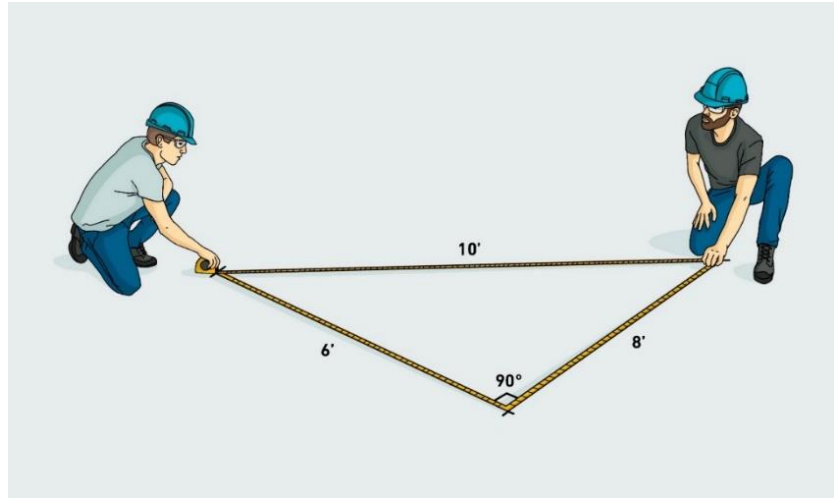
Verifying that the slab is level



Use a laser level to verify that the floor is level. Maximum variations of 1/4" will be accepted. Beyond this limit, adjustments should be made before installing the panels.

Marking the position of the walls on the floor

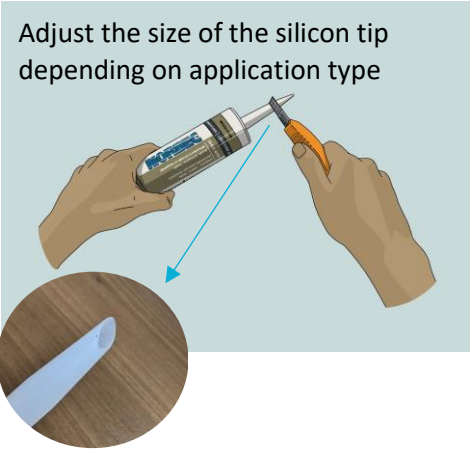
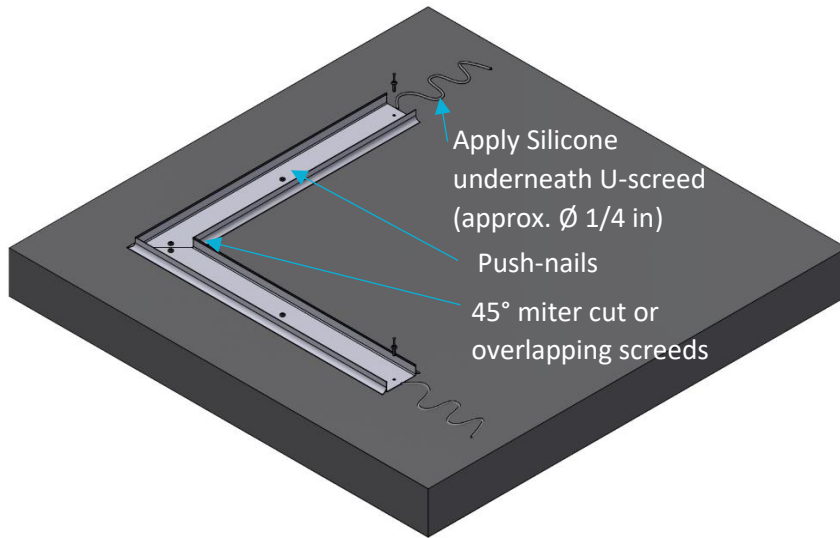
- Before starting the marking, make sure there is a 2" gap between the panels to be installed and the existing walls.
- Mark and check for square using the 3-4-5 triangle method: the larger the verification triangle dimensions, the more precise the square will be. You can apply the method using these dimensions:
 - 6' – 8' – 10'
 - 12' – 16' – 20'
 - 24' – 32' – 40'



- Note the location of door openings on the floor:
 - ⇒ Opening width in panel = finished opening width + 1 ½"

Installation of screeds on the floor

- Apply a bead of silicone to the surface where the screed is to be installed
- Secure with push-nails anchors
- Ensure that the screeds are cut to reflect the width of the opening in the panel (opening width + 1 ½")

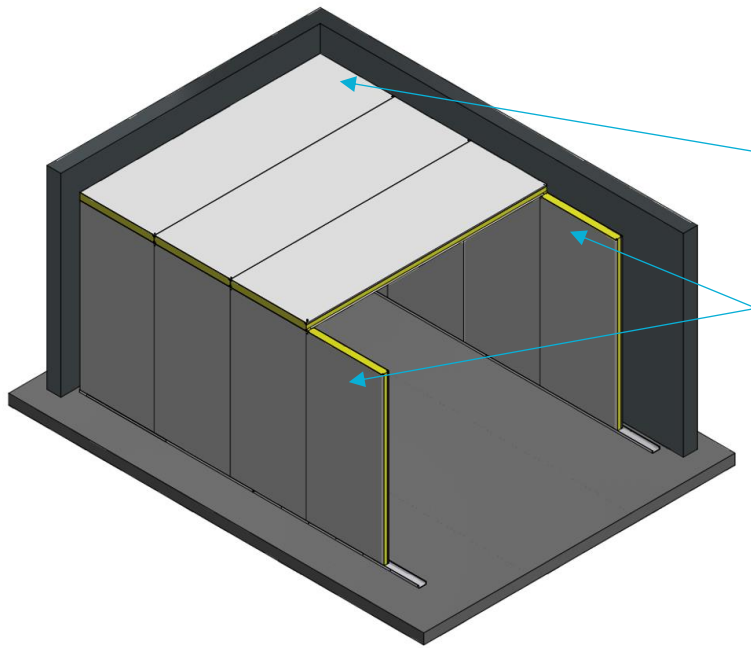


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INSTALLATION OF WALL PANELS

Determining the installation sequence

Ideally, the installation should be completed with the 3 wall sections forming a U-shape that can support the ceilings. The last section of wall installed should be the most accessible for handling the ceiling panels.



- 1 Start from the least accessible corner.
- 2 Install wall sections forming a U-shape to offer supports for each ceiling panels.
- 3 Last wall section to install is usually the most accessible.

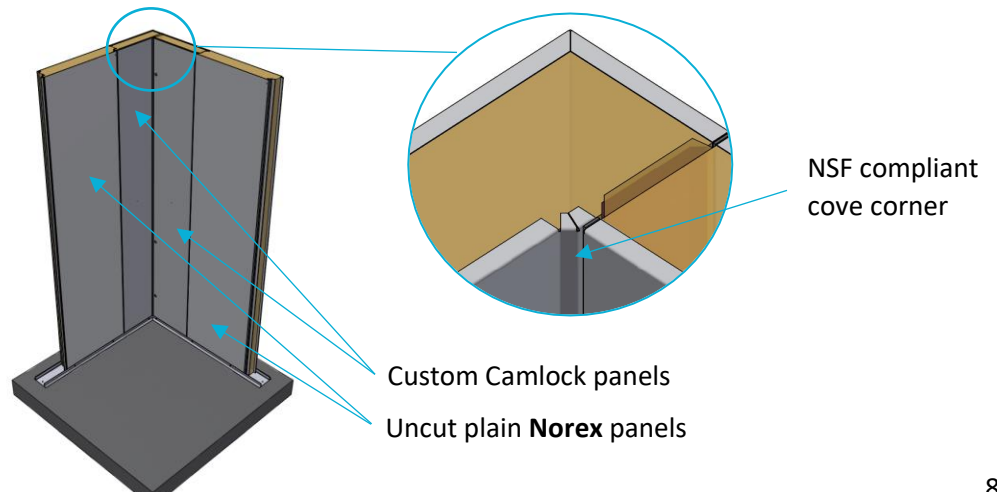
Assembling the starting corner



TIP

For efficient installation, unpack the pallets and prepare +/- 75% of the panels (those that do not require cutting) by removing the inner and outer protective films before proceeding with the installation.

- Identify the Camlock panels that form the starting corner and wall section.
- Lock the Camlock panels together using the hexagonal key supplied by **Norbec**.

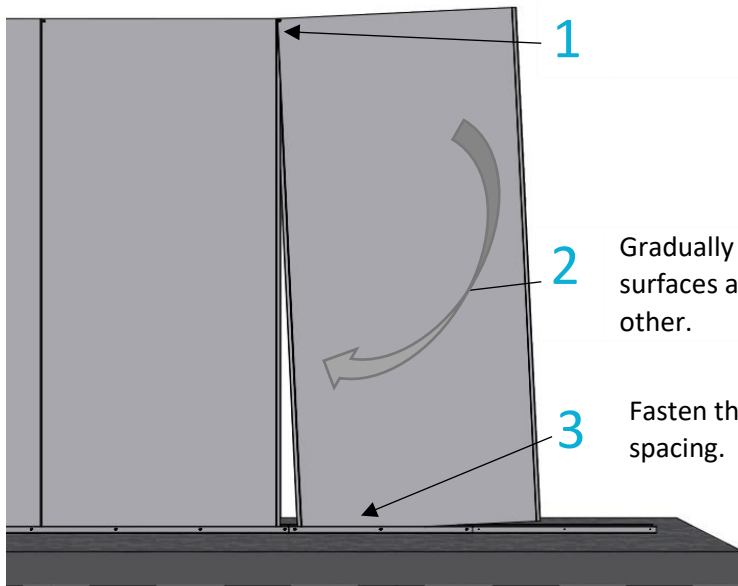


Installing Norex panels

- Secure the **Norex** wall panels with a #8-3/4 painted screw in the top joint (this will later be hidden by the 2" x 2" moldings).
- As you work, screw the bottom of the walls through the screeds using the pre-determined markings.
- Continue with the installation of the walls until all three wall sections are completed.



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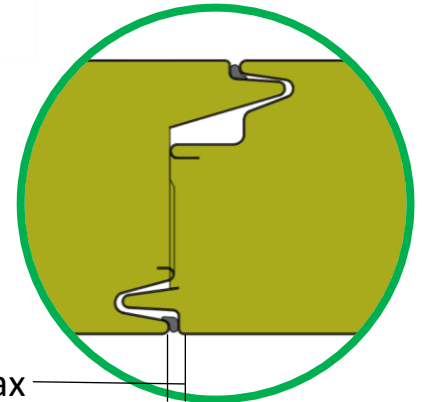
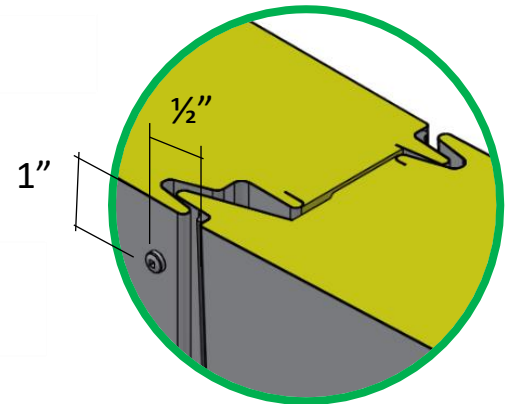
1

2

3

Gradually press both surfaces against each other.

Fasten through screed according to spacing.



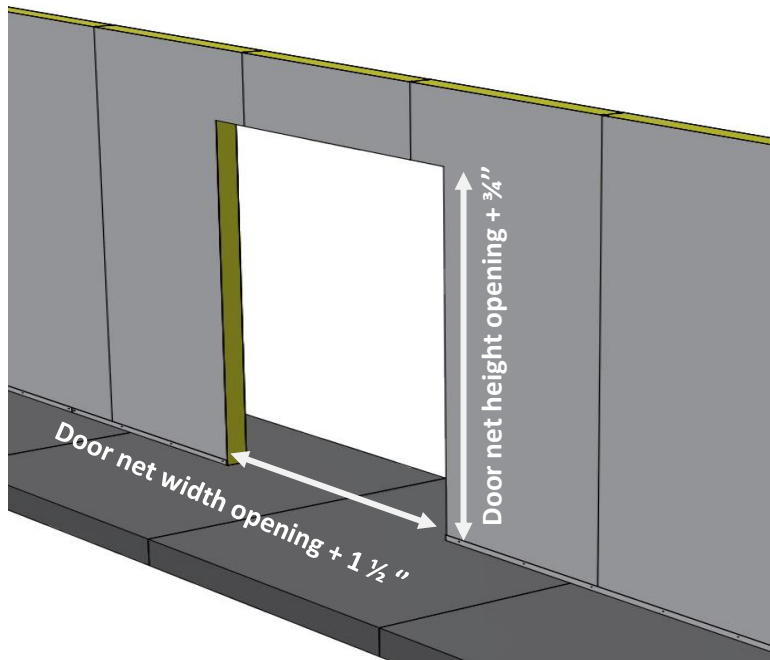
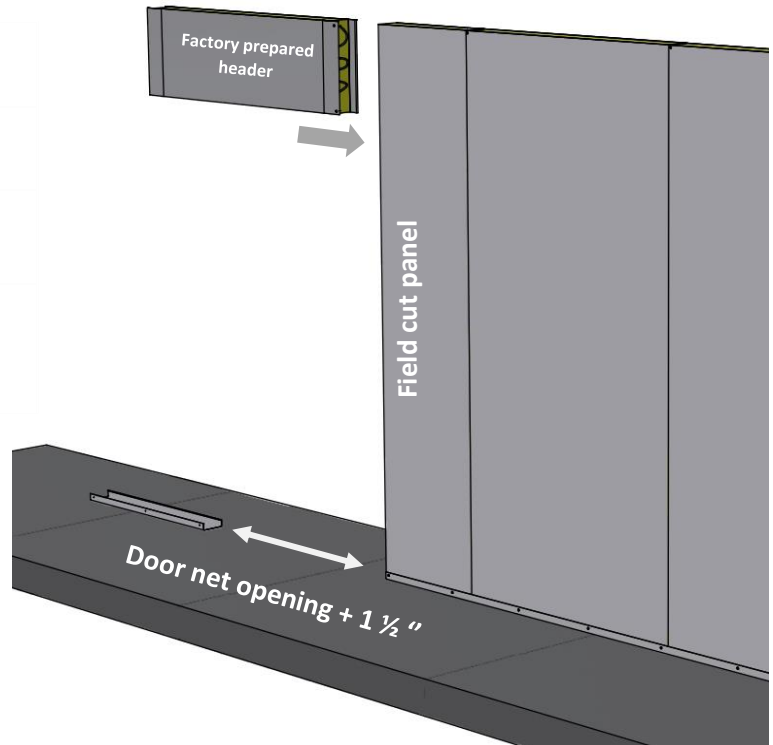
Once installed, the gasket's seam width should not exceed 1/4".

If the joint's reveal exceeds this tolerance the continuity of the insulation may be compromised

1/4" max

Openings with door headers

- 1 Apply urethane on sides.
- 2 Wait 2-3 min. for urethane to expand.
- 3 Press against panel and fasten through trim.
- 4 Repeat the installation of the wall section with the remaining cut panel (if > 4").



Openings cut at the site

- 1 Install the complete wall section panels.
- 2 Cut the opening using a reciprocating saw.
- 3 Remove the U-screed flanges over the width of the door frame .

INSTALLATION OF CEILINGS

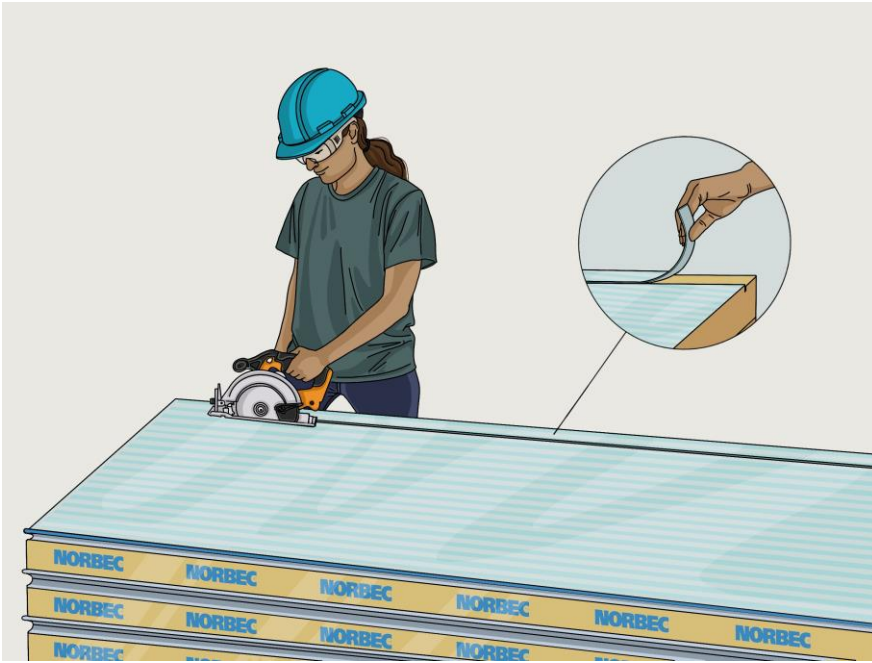
- Ceiling panels require partial cutting of the inner facing where it overlaps a freezer wall to create a thermal break.
- Cut the first panel lengthwise to create a flat joint that will abut the outside of the wall.
- As you work, apply a bead of urethane to the ceilings to fill in any surface irregularities and wall misalignments. Wait 1-2 minutes before affixing the ceiling panel.
- Install the first panel and temporarily secure it from the inside with 2" x 2" sections at each end to maintain the original alignment.
- Repeat these steps (urethane & thermal break if required) to install adjacent panels.
- Secure each panel to the previous one by screwing through the joint.
- Repeat the steps until the second-to-last ceiling panel is installed, then complete the last wall section and finish the installation with the final ceiling panel.



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Creating a thermal break



- 1 Cut the inner facing 2" from the edge of the panel (½" deep).
- 2 Remove the facing strip from the panel.

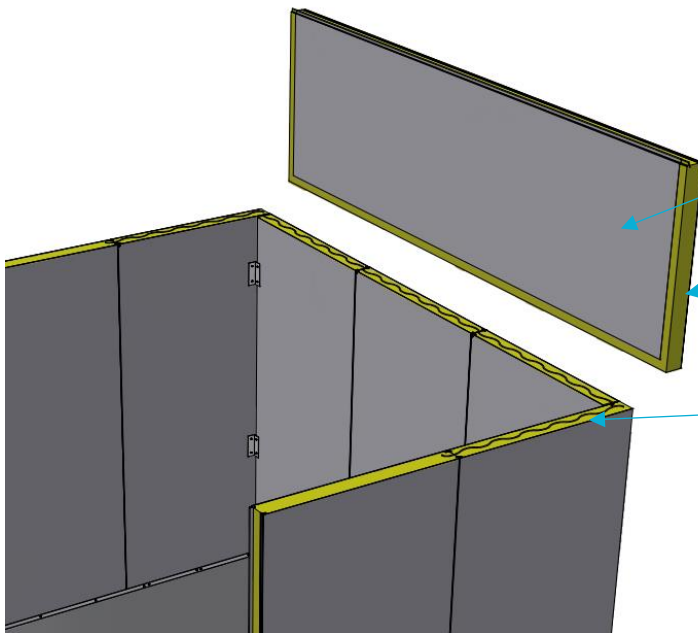


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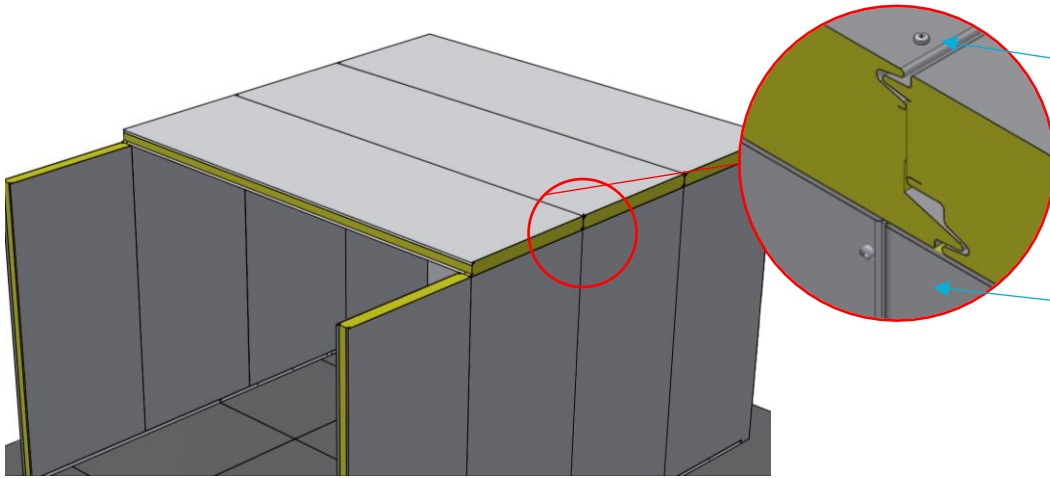
TIP

Tip: The panels can be cut right on the pallet with a circular saw or a reciprocating saw. Cut through half the thickness of the panel, clear the debris, turn the panel over to complete the cut. Keep the protective film on throughout handling.



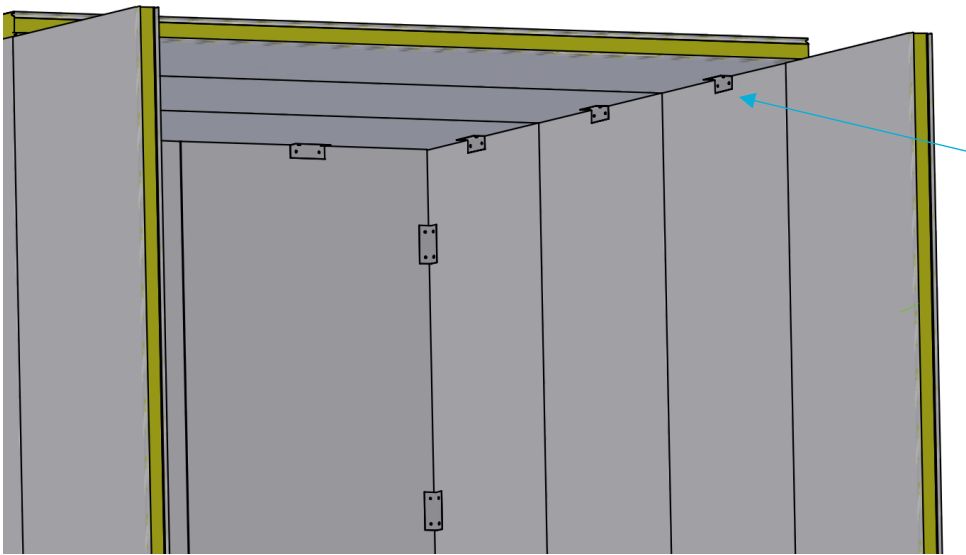
- 1 Cut entire length to create straight edge.
- 2 Cut and delaminate 2" of the steel facing to create a thermal break (Freezer application only).
- 3 Apply urethane and wait 2-3 min. for expansion.

Installation Guide – Hybrid Cold Room

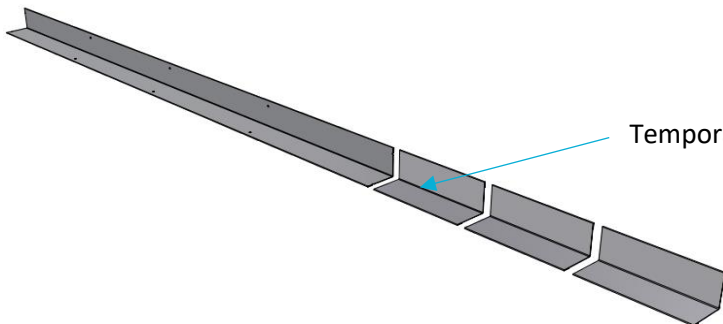


4 Tighten ceiling panels against each other and secure through joint.

5 Make sure ceiling panel does not overhang outside wall.



6 Use temporary 2" x 2" trim piece attachments as you progress to correct later if necessary.



Temporary 2" x 2" cut from full length trim.

FINISHING STEPS

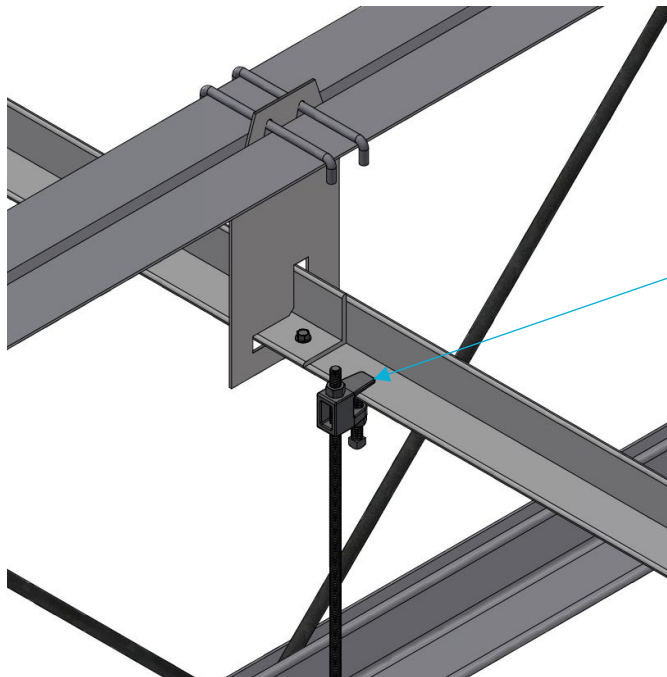
Disc suspensions

⚠ DISCLAIMER

Anchoring to building structure to be verified by a structural engineer. Norbec cannot be held responsible for any damages caused to building due to a faulty attachment design to building structure or any structural capacity miscalculation.

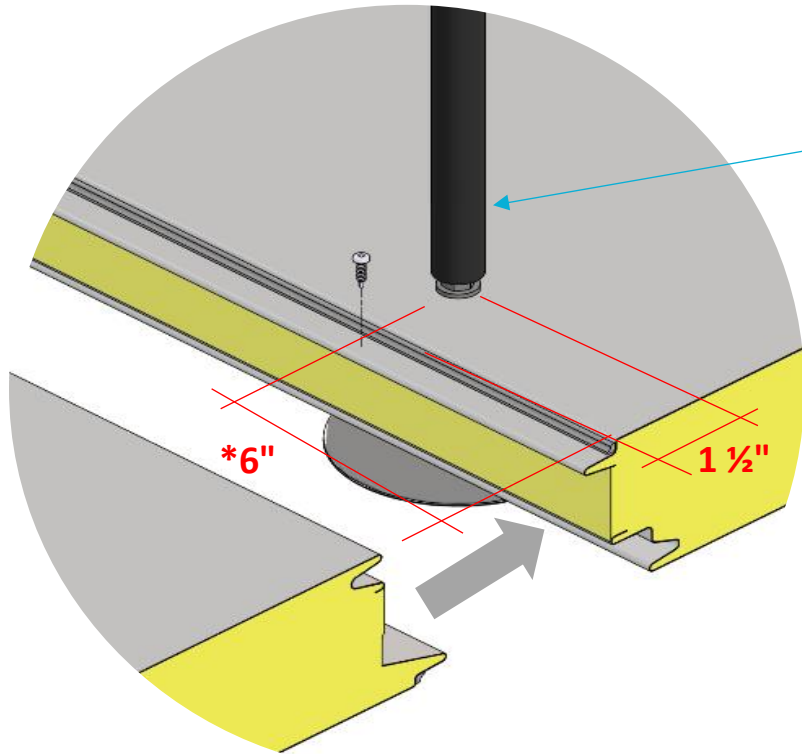
If ceilings require suspension points (when panels exceed 12' in length), suspension points must be added as shown on the drawing.

- Before you begin, drill the ceilings 1 ½" from the joint at the spacing shown on the installation drawings.
- Lower the threaded rods from the top flange of the joists to the panel joint as the ceilings are installed according to the suspension details. Adjust the threaded rods' fasteners so that they are vertical when secured to the panel.
- If the suspended ceilings are butt-jointed panels, then suspension points near the butt joint and a 4" flat molding screwed from the inside to conceal the joint should also be used.



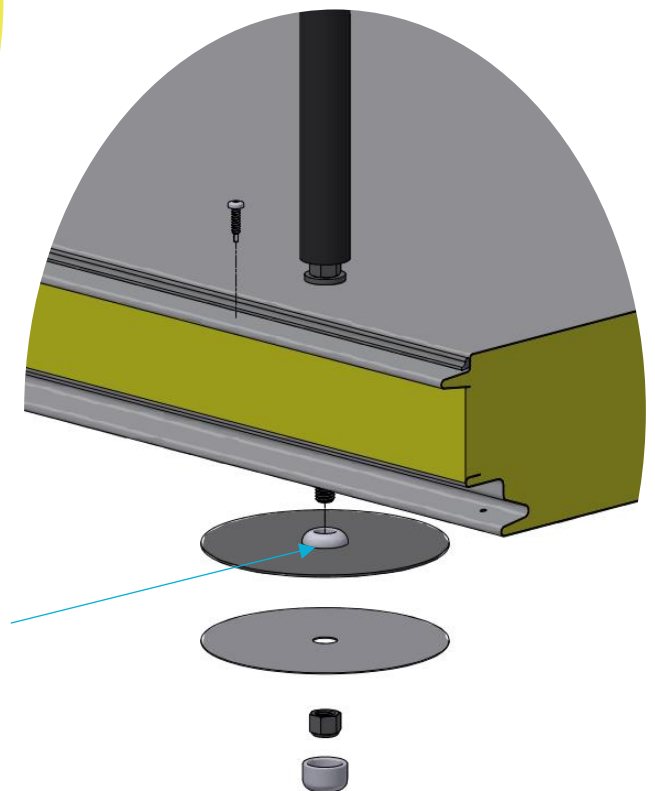
Secure threaded rod to the steel angle with a C-clamp making sure the rod is levelled.

Adjustments can be made to align the rod to its desired position.



1 Drill $\text{Ø}3/8''$ hole at $1\text{-}1/2''$ from joint.

2 Cut threaded rod and feed through panel to exceed $1''$ inside.



3 Apply silicone bead on galvanized disc prior to tightening.

4 Adjust height to level ceiling and secure with nut, discs and cap.

5 Secure adjacent panel with screw through panel joint.

6 Fill neoprene tube with urethane.

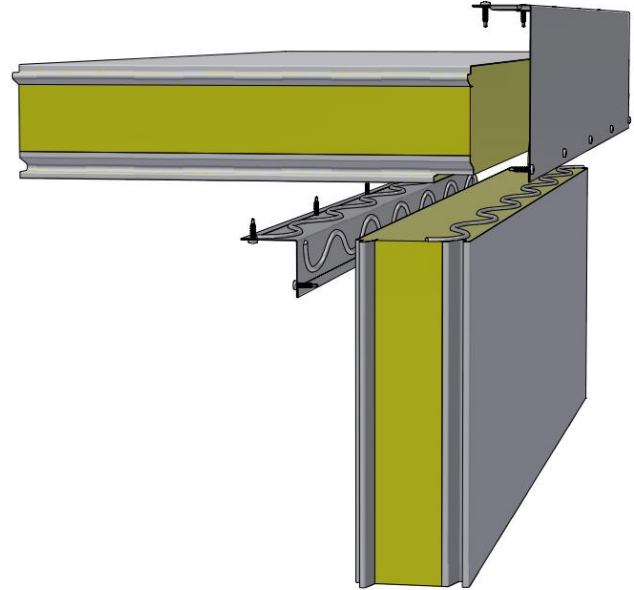
**For butt-joint panels, maintain 6'' minimum from edge.*



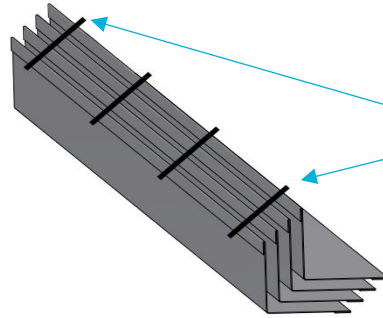
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Installing moldings & silicone

- Wall-to-wall & ceiling-to-ceiling panel joints are sealed with a factory installed gasket.
- In general, **applying a bead of silicone to the back of each molding before screwing them into place** is recommended to ensure a good seal.
- On the inside, replace temporary 2" x 2" L-moldings at the wall and ceiling corners with full-length moldings and 4" flat moldings where applicable at the intersection of two rows of butt-jointed ceiling panels.
- Cover the outside corners of the room with 2" x 6" L-shaped moldings.
- If the ceilings are in two sections, where necessary, fill the center joint by spraying urethane into the spaces and finish by covering with the 4" flat molding on top.
- Seal all accessible interior & exterior panel joints and moldings with a thin bead of silicone. Wall joints will require two passes or a thicker bead to fill the cavity.



TIP



Mark in advance screws spacing on all trims & screeds when stacked.

Electricity

IMPORTANT

An electrician must be present to make the electrical connections from the building to the cold room.

If lights are not installed, it is essential that you refer to the details for sealing borings. These details can be applied to most borings for conduit (See “Penetrations” section).

If an alarm/temperature control module (IM4) is supplied or must be replaced, please refer to the separate specific documentation. If necessary, you can also find detailed instructions by following the QR code.

Scan the QR code
with your phone
for IM4
documentation

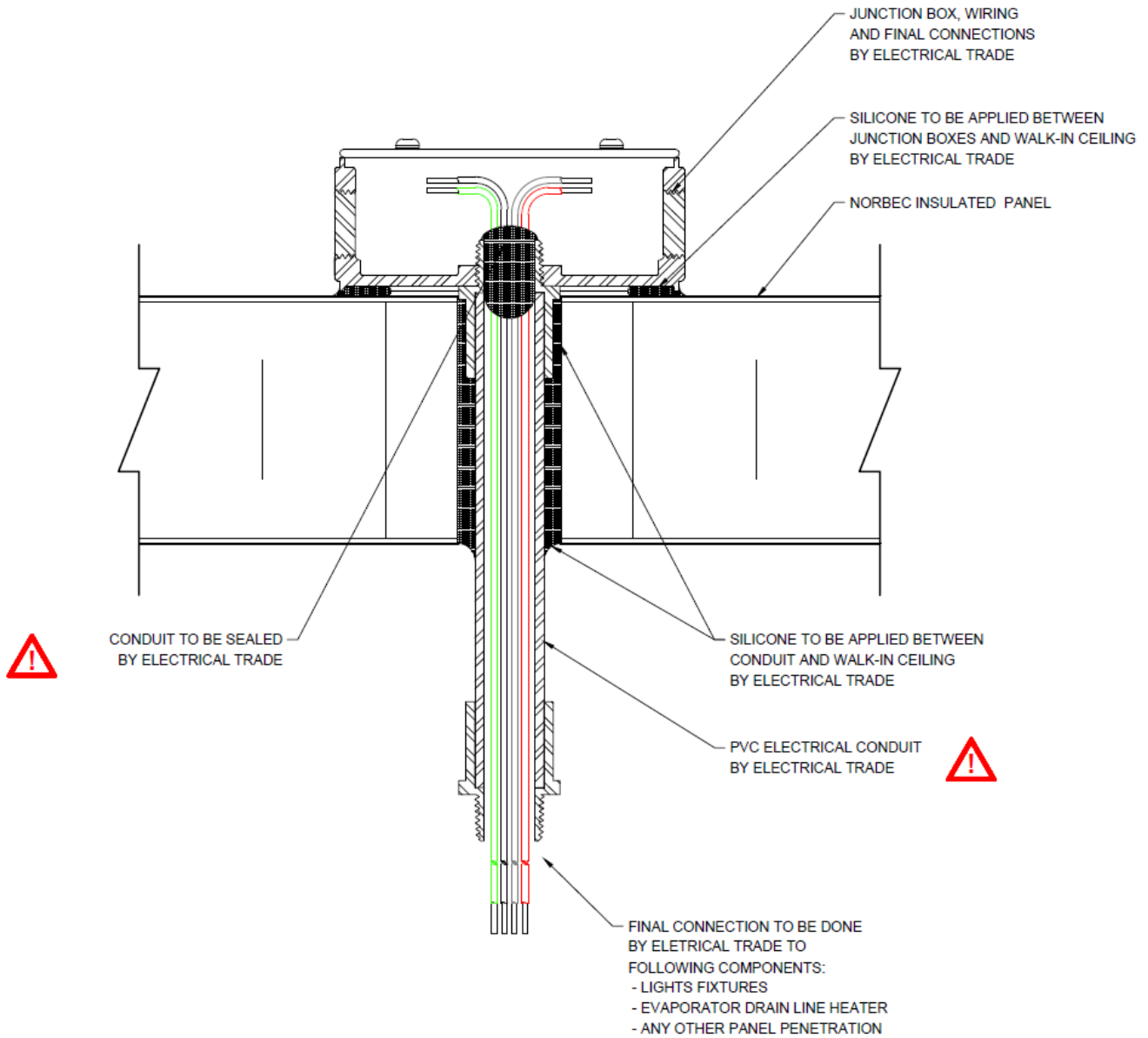


Scan the QR code
with your phone
to access the
complete
Electrical Guide



Penetrations

Make sure you properly seal all conduits that penetrate through walls and ceilings



Installing a pressure relief valve

Information specific to the installation of a pressure relief valve can be found in the valve box. If necessary, you can also find detailed instructions by following the QR code.

Scan the QR code
with your phone
for detailed
instructions!

