

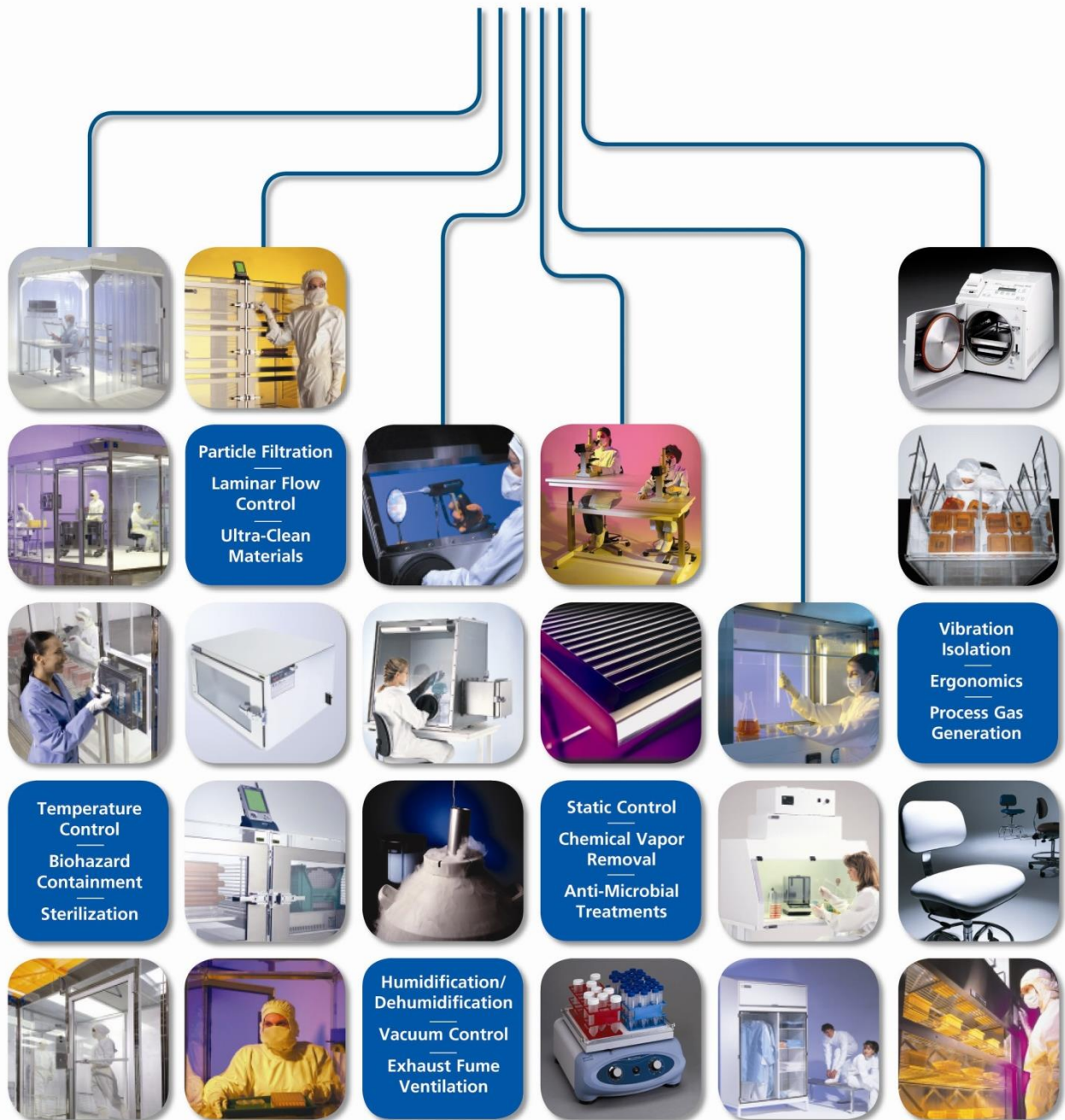


Installation and Operating Guide Document No. 1788-57

BioSafe® Hybrid Cleanroom Installation

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Your Comprehensive
 Equipment Source





*Installation and Operating
Guide*

BioSafe® Hybrid Cleanroom Installation

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Safety Notice

A thorough familiarity with all operating guidelines is essential to safe operation of the product. Failure to observe safety precautions could result in poor performance, damage to the system or other property, or serious bodily injury or death.

The following symbols are intended to call your attention to two levels of hazard involved in operation:

The information presented here is subject to change without notice.



CAUTION

Cautions are used when failure to observe instructions could result in significant damage to equipment.



WARNING

Warnings are used when failure to observe instructions or precautions could result in injury or death.

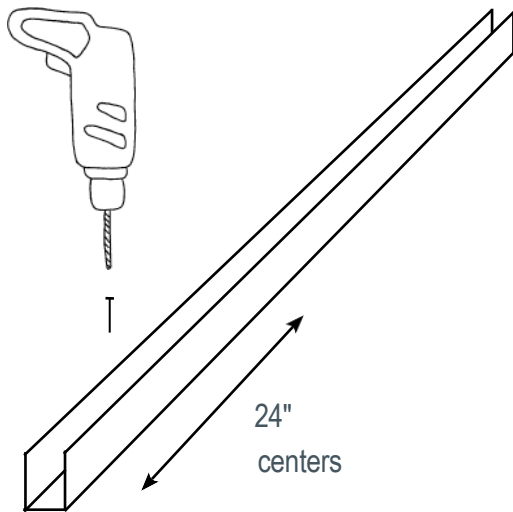
1.0 Introduction

This manual provides information on installing your Terra Universal BioSafe® Hybrid Cleanroom.

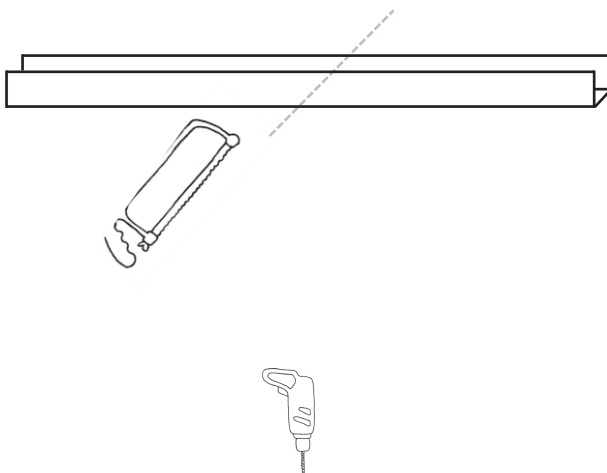
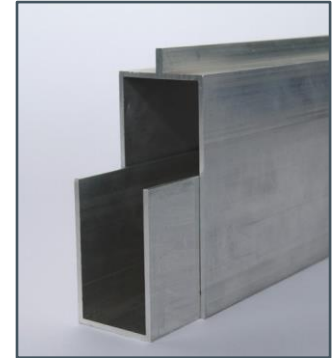


2.0 Base & Window Installation

2.1 Recess Base Installation



- Lay out base channel according to cleanroom plan
- Drill $\frac{1}{4}$ " diameter holes for fixing at 24" centers
- Fix with hammer fixing or similar to suit floor substrate



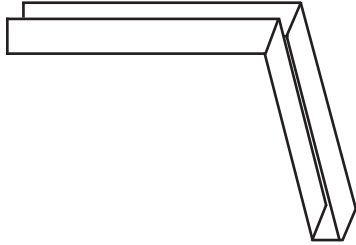
- Corners should be mitered and fixed
- Channel should be laid up to location of door structural opening



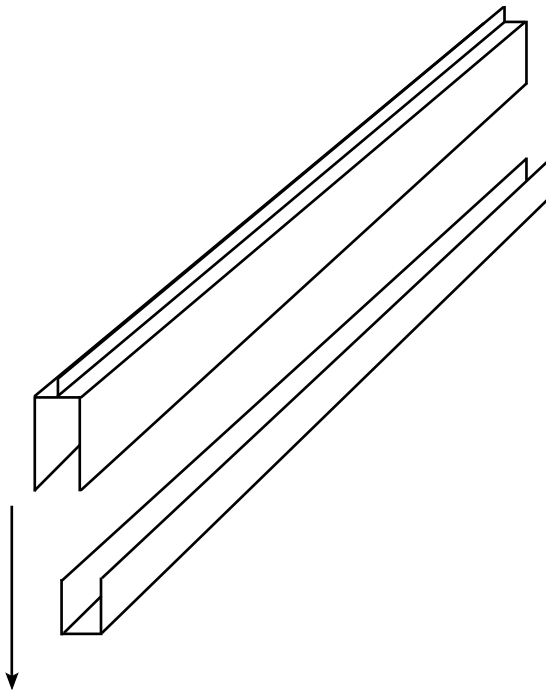
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- Once recess channel base is complete, ensure it is square by measuring diagonals to avoid issues with wall panel construction



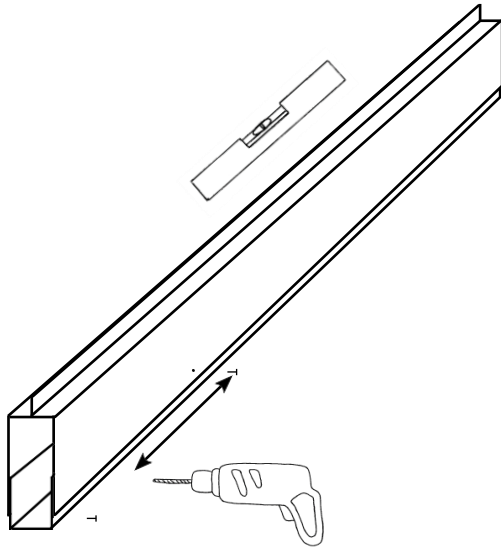
- Place the top section of the recess base onto the bottom channel section



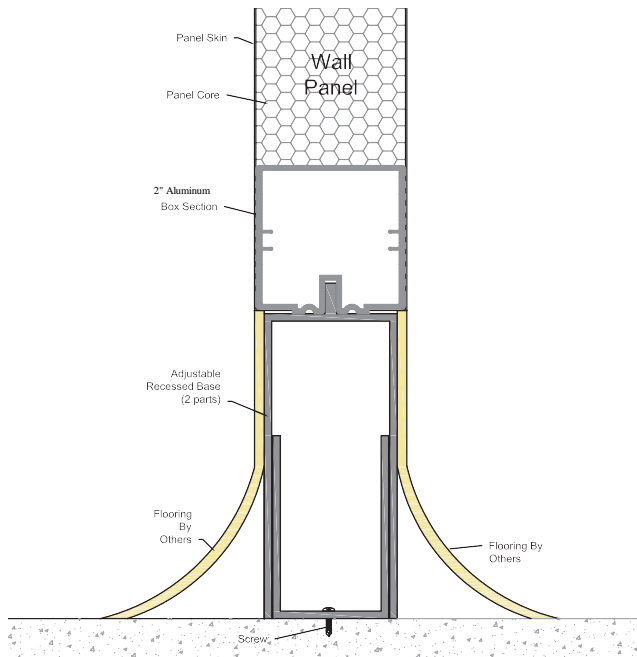
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- Fix one end of the top section to the bottom section at the desired height using $.3/4" \times 1/8"$ self-drilling, self-tapping screws
- Level the top of the recess base and fix at 16" centers as you go to provide a level base for panels to be fitted to



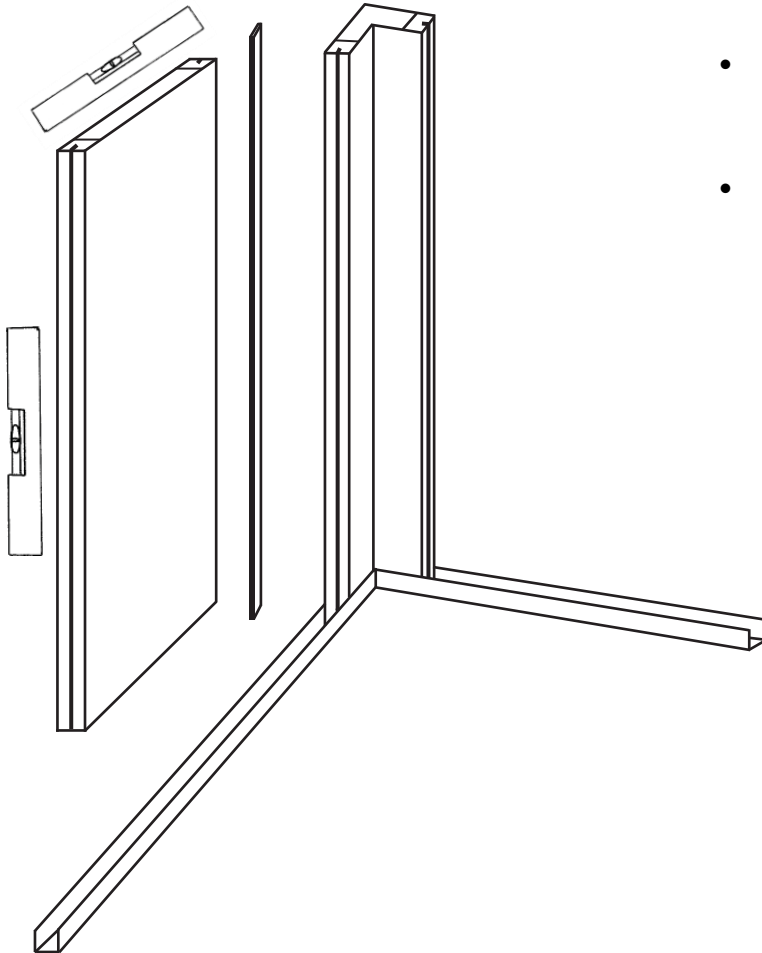
- The panels are located onto base section using the inbuilt bottom edge box section in the panels. Once located, the panels can be sealed to the base section if required by the specification.



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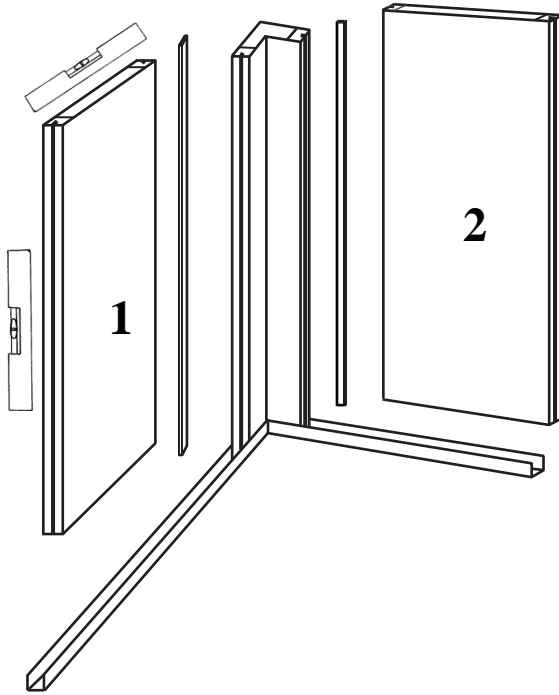


- Fit the aluminum tongue into the pre-formed corner, sealing the joint to customer specification (see below for detail of joint sealing options)
- Slot the first wall panel into place and ensure it is plumb and level with the pre-formed corner once slotted into place



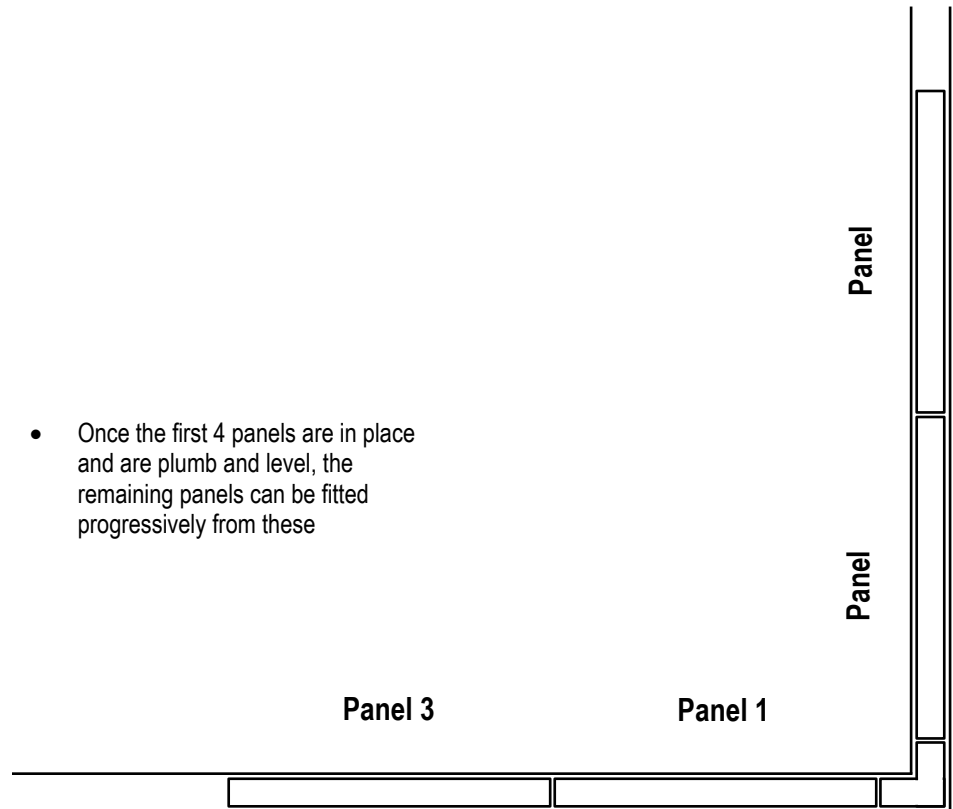
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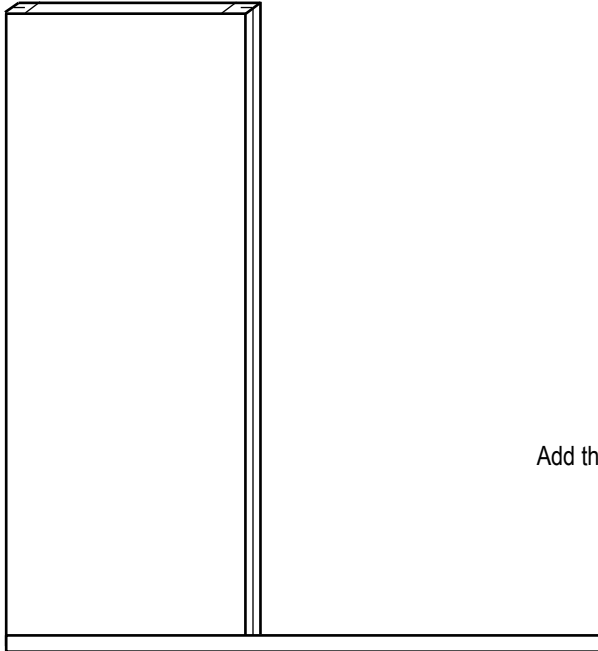
- Wall panels should be constructed progressively, fitted alternatively on adjacent walls either side of the pre-formed corner
- After each of the first 4 panels have been fitted, ensure that are plumb and level. Shims can be used under or inside the base channel if panels need to be levelled.

- Once the first 4 panels are in place and are plumb and level, the remaining panels can be fitted progressively from these



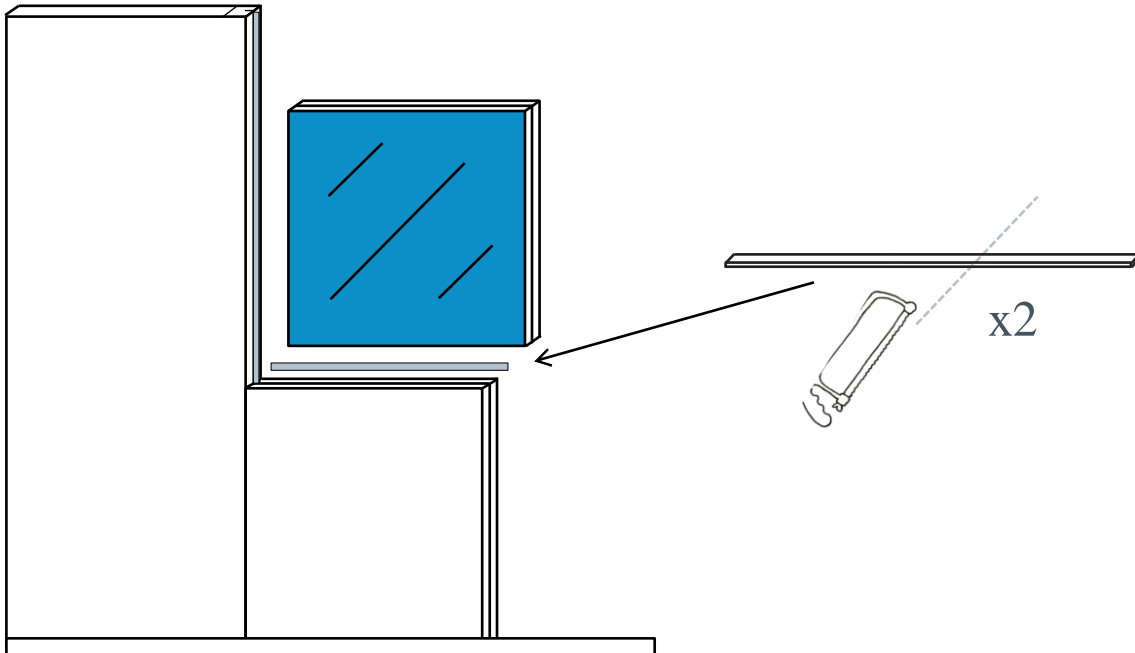


2.2 Flush Window Installation



- Fit aluminum tongue as standard panel installation
- Ensure adjacent panel is plumb and level

Add the panel with the window already built in



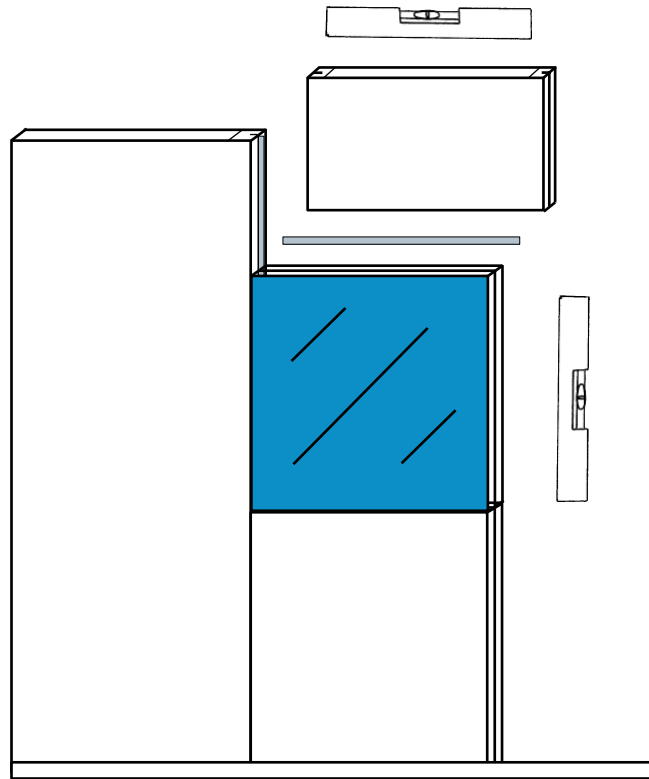
- Fit the window base panel (which is always 4-sided) adjacent to the wall panel in the channel base
- Cut 2 lengths of aluminum tongue to fill in the top channel of the base panel, and the top channel of the window
- Fit one of the aluminum tongue sections into the top of the base channel, sealing as required (as per wall panels)
- Fit the window panel onto the vertical and horizontal tongues



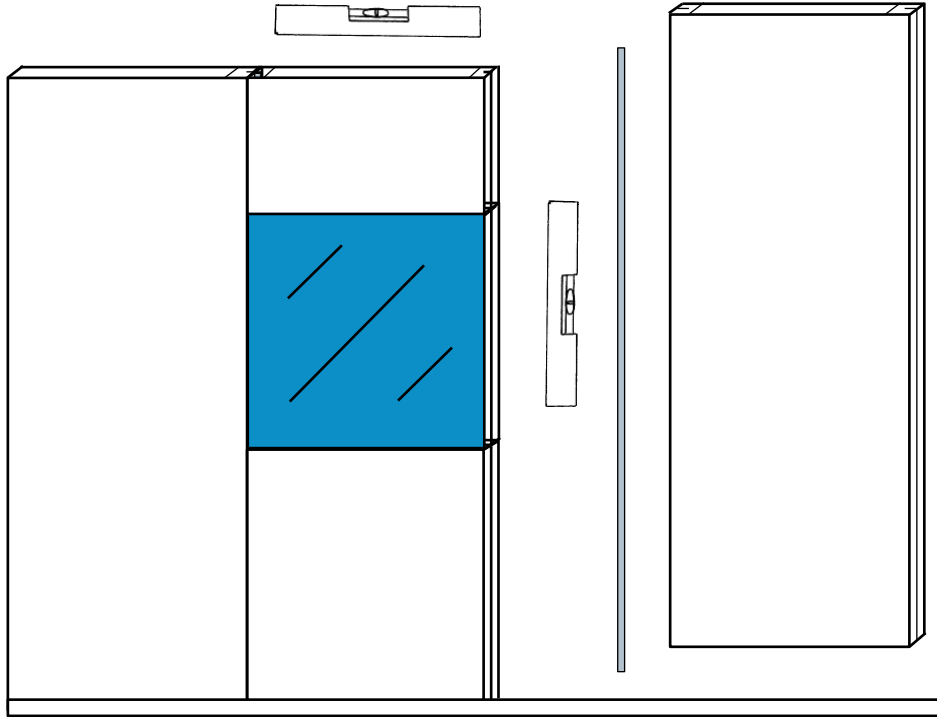
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- Fit second cut aluminum tongue on top of window panel
- Fit window header panel (which may be 3 or 4-sided depending on specification) on top of window panel and ensure all panels are plumb and level

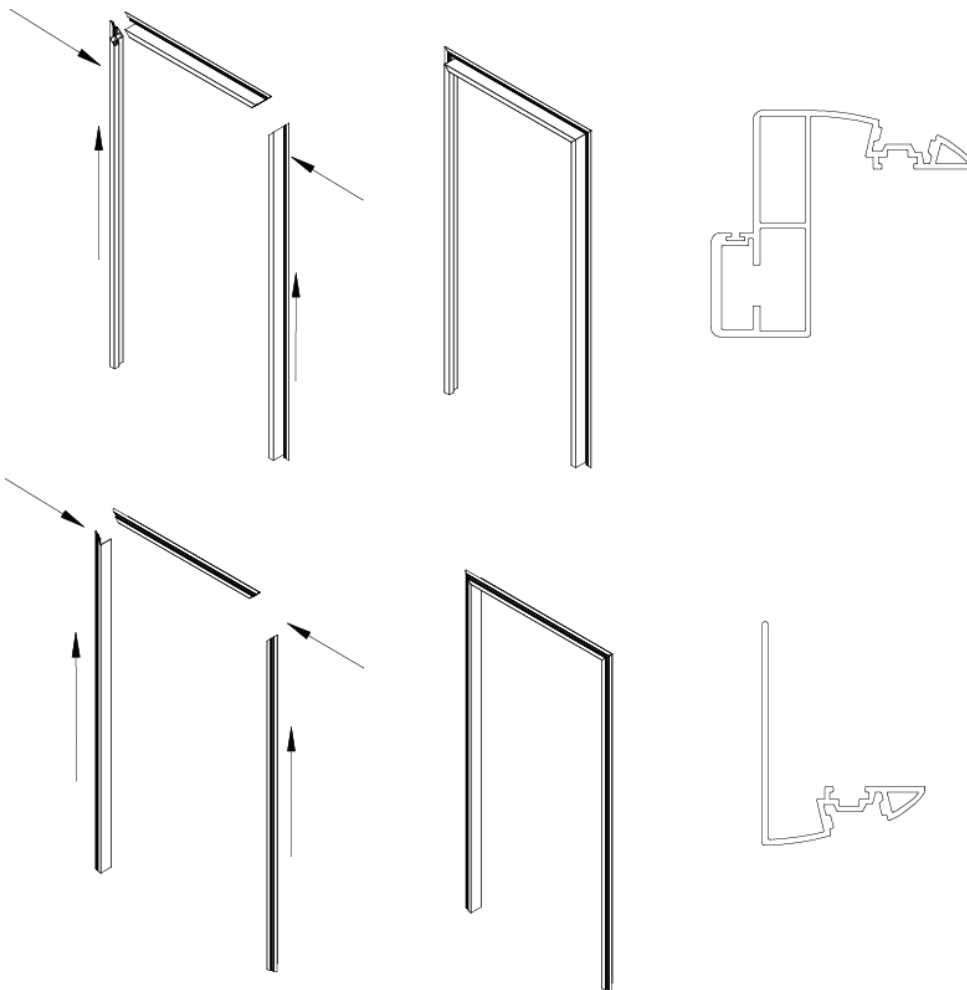


- Once window panels are plumb and level, standard wall panel construction can be resumed



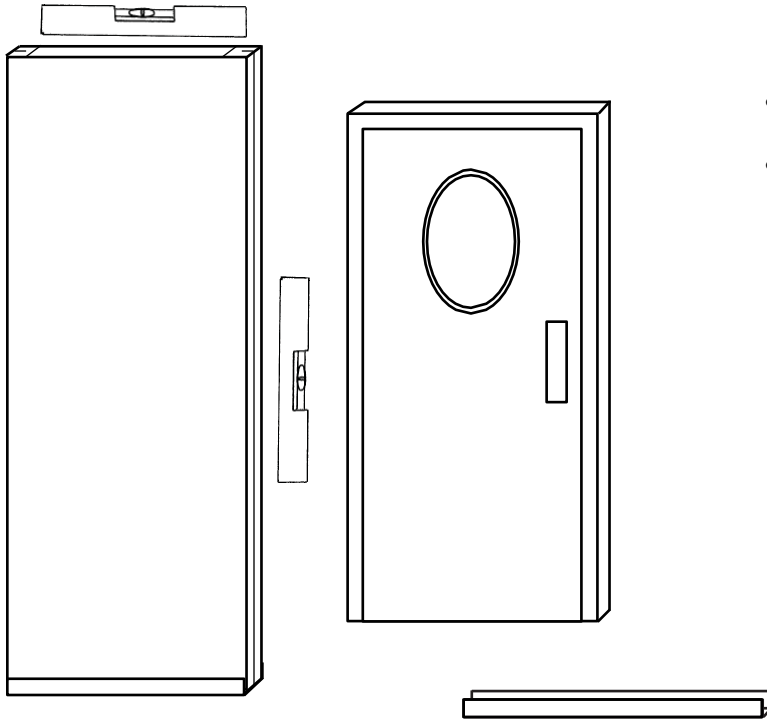
3.0 Door Frame Installation

- For the door, form the “U” shape frame using the back profile, meet form the “U” using the front profile





3.1 Clamp Frame Door Installation



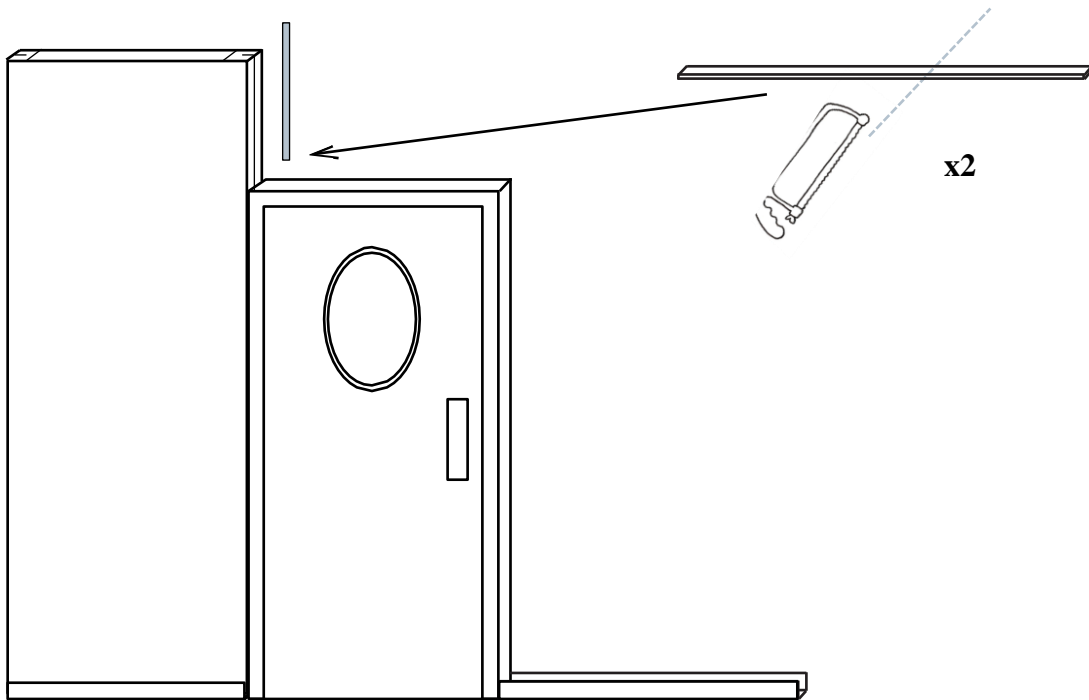
- Ensure the panel adjacent to the door is plumb and level
- Fit cleanroom door adjacent to panel as per manufacturers guidelines



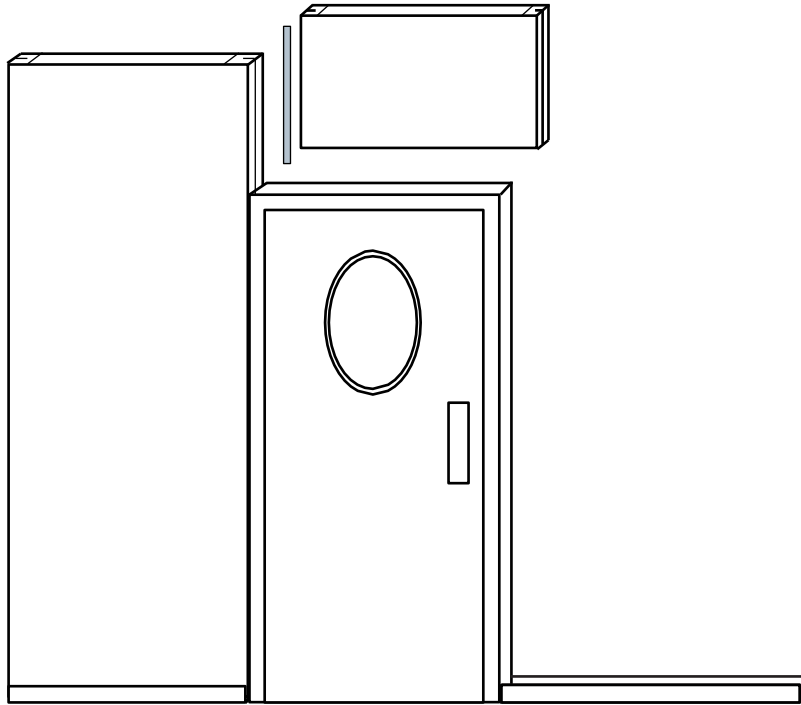
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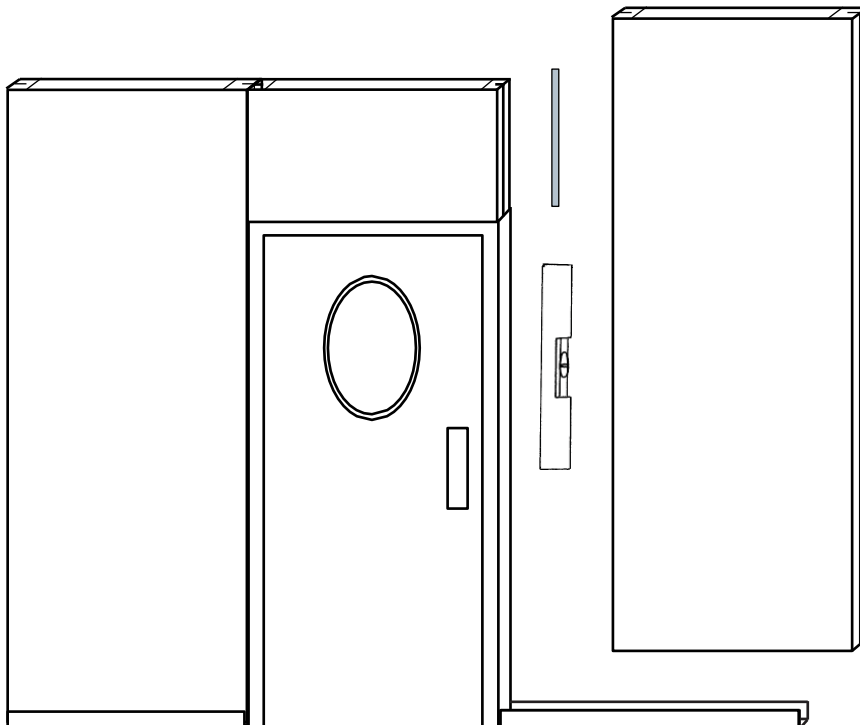
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- Cut 2 lengths of aluminum tongue to fit above the door frame to which the header panel will be fixed



- Insert aluminum tongue into adjacent panel and fit header panel in place, sealing as required

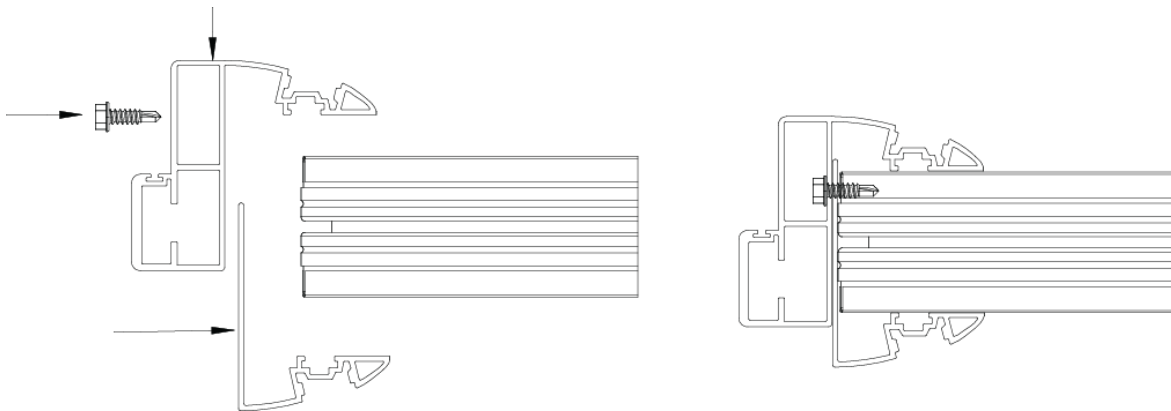


- Ensure header panel and door are plumb and level
- Insert panel and fix next adjoining wall panel as standard wall panel installation
- Fix door clamp frame to side and header panels using suitable fixings

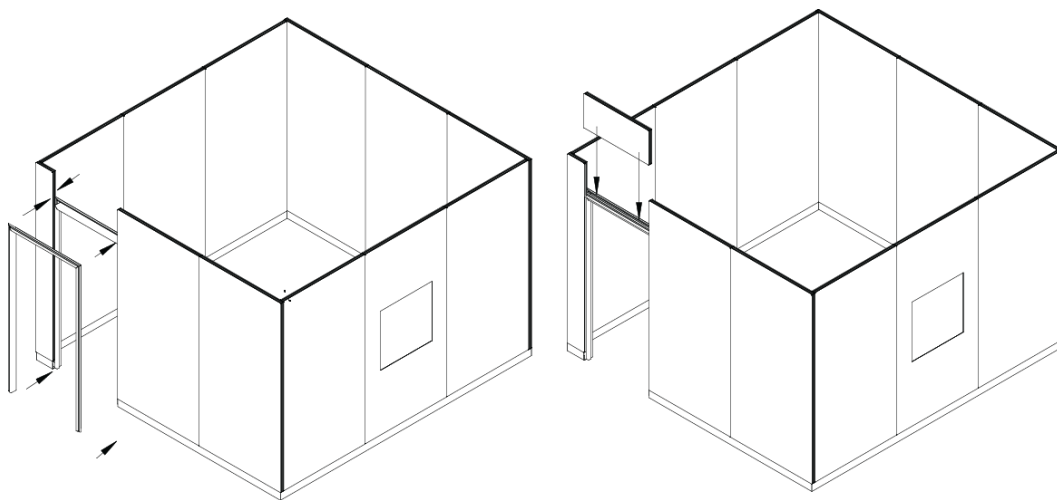


4.0 Wall Panel Installation

- Assemble together the U frame pushing the back profile (inside of the room) to the front profile (outside of the room)
- Keep the wall panel in the middle until the two profiles are flush to the wall
- Fix the profiles using sheet metal screws

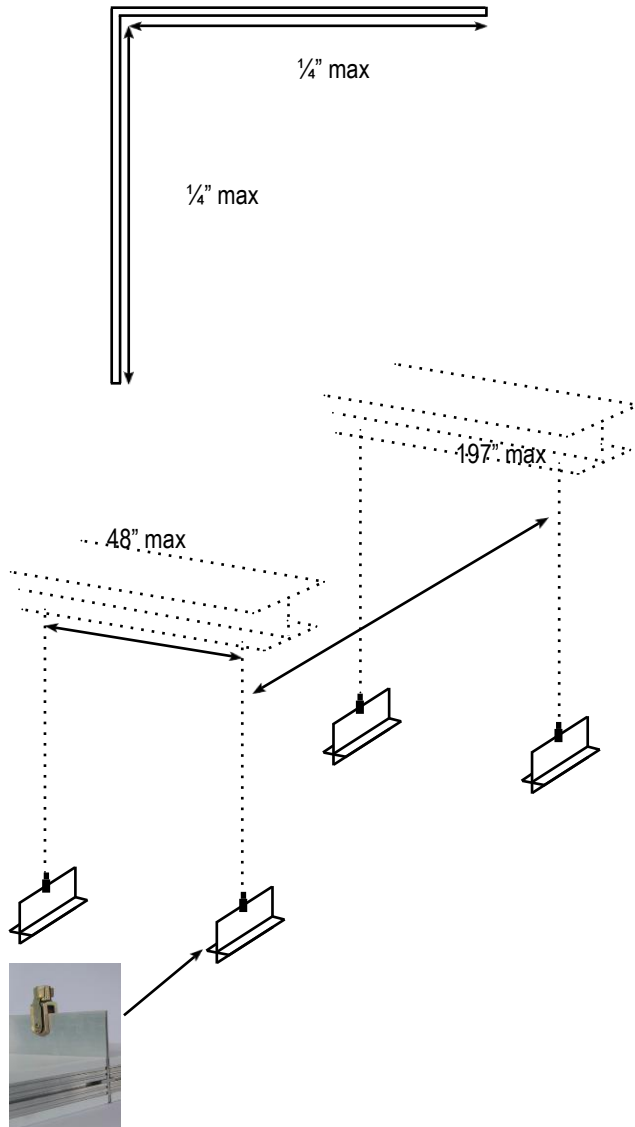


- After fixing the U frame into the wall panels, add the panel union to the wall panels over the U frame, and slide the door header panel to complete





4.1 Concealed Suspended Ceiling Installation



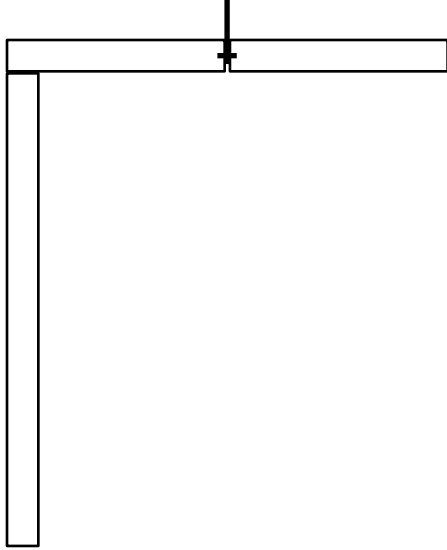
- Ceiling panels should start to be fitted before the wall panels reach a maximum span of 1/4" to provide added structural stability

- Suspended ceiling hanging plates must be attached to the existing ceiling with appropriate fixings
- Fixings must be fitted with a maximum span dependent on ceiling loading as per specification and at a maximum of 48" intervals

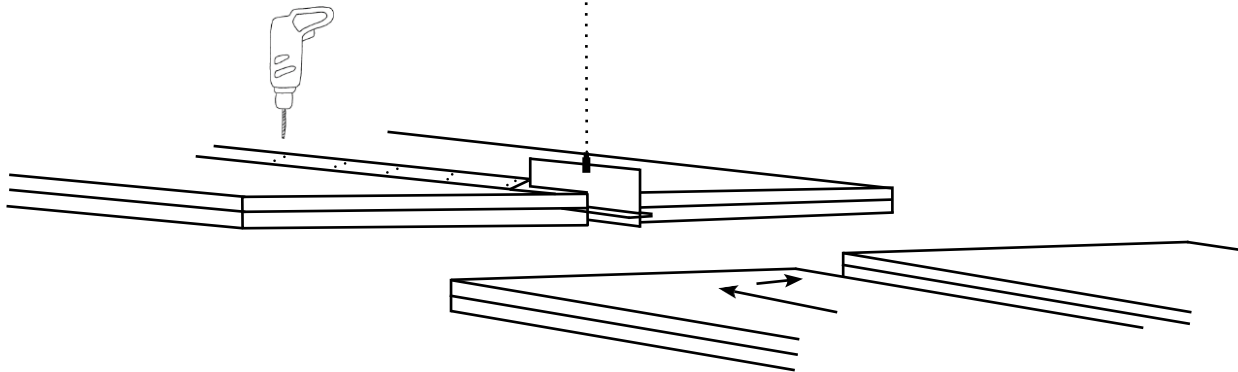


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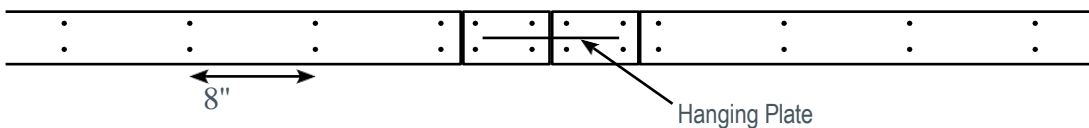
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- Ceiling panels should be placed on top of the wall panels or fitted to wall angles as defined by the specification and fit into the suspended hanging plates at panel intersections, and additional support points as required by the specification

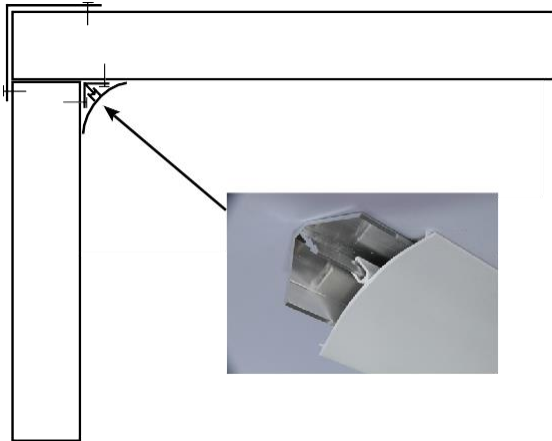


- As ceiling panels are put in place, they must be secured with a hanging plate cover strip and joint cover strip to the back of the ceiling
- Cover strips should be attached with $\frac{3}{4}$ " x $\frac{1}{8}$ " self-drilling, self-tapping screws at 1200 mm intervals

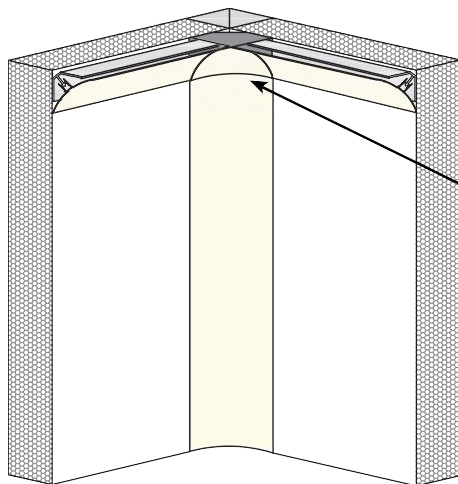




5.0 Coving Installation



- Once the aluminum backer is in place, the coving can be clipped into place on the backer
- If necessary, a rubber hammer can be used to assist this



- For aluminum coving corners the three-way coving interface can be used to create a smooth finish
- These must be fitted prior to the coving facing being applied



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6.0 Specifications

Available Dimensions	10'W x 10'D x 8'H, 12'W x 12'D x 8'H, 8'W x 8'H x 8'D
ISO Class	ISO 5
Materials	Steel substrate walls
	uPVC wall coating

7.0 Warranty

<https://www.terrauniversal.com/warranty>



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