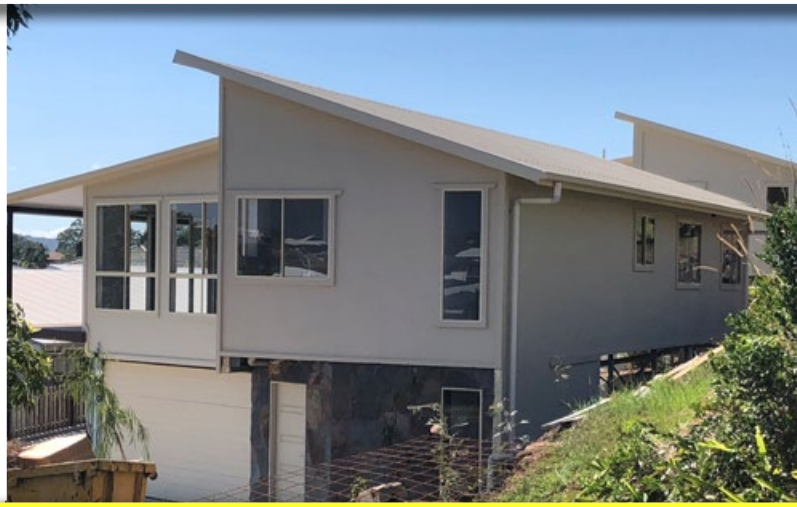
DELTA PANELS™

HANDLING & INSTALLATION MANUAL

DELTA PANELS™ WALLING SYSTEMS



CONTENTS

1. LIST OF DRAWINGS

2 . INTRODUCTION

This manual should be used as a general guide only and is intended to be used in conjunction with the project's installation drawings. The installation drawings should identify the applicable site conditions, specify the components to be used and the required arrangements of the components. Specific building design and construction conditions may require variations from the information in this guide.

Delta Panels does not guarantee and is not liable for the quality of the installation. Delta Panels is not responsible for anything that may be attributable to improper installation, the negligence of other parties or from materials supplied by a third party.

'Owner' as used throughout this manual refers to the projects owner and/or his representatives, such as the project's architect, design engineer and general contractor.

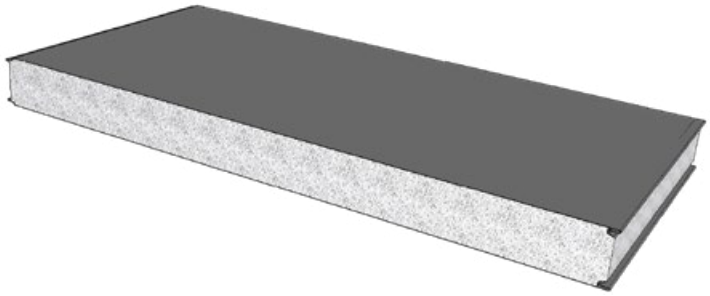
These parties are responsible for determining the following.

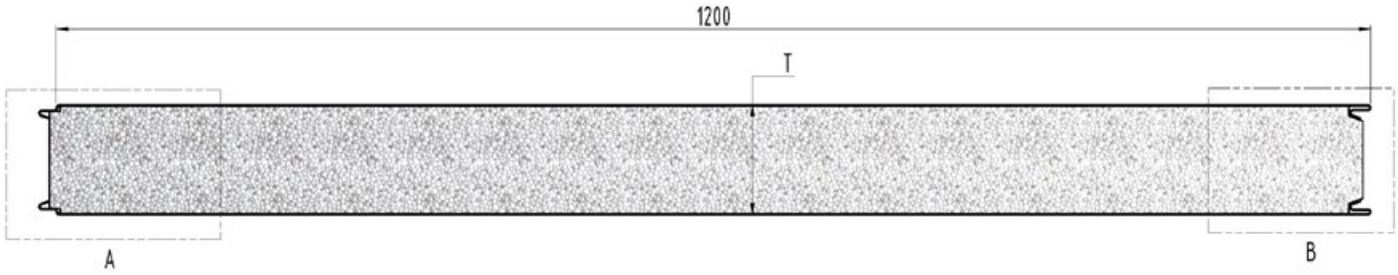
- Selection of a competent Installer who is qualified and experienced in the proper installation of insulated building panels and their related flashing requirements.
- That the Installer has reviewed and understands the project's installation drawings and this guide prior to installation.
- The Panels and related components are installed in accordance with the project's installation drawings and the applicable sections of this guide.
- The Panels are suitable for the purposes intended.
- The Project's structural framing is properly designed and in satisfactory condition to accept the installation and design loads imposed by the panels.
- That the Panels and associated components are installed in compliance with the applicable building codes, engineering certifications, service conditions and good engineering and construction practices.

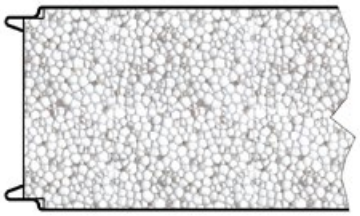
3. DELTA PANELS PROFILES

This Handling & Installation Guide covers the following Delta Panels™ Insulated Panel products.

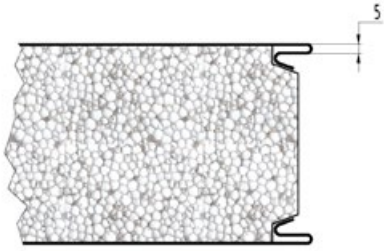
DeltaCool™



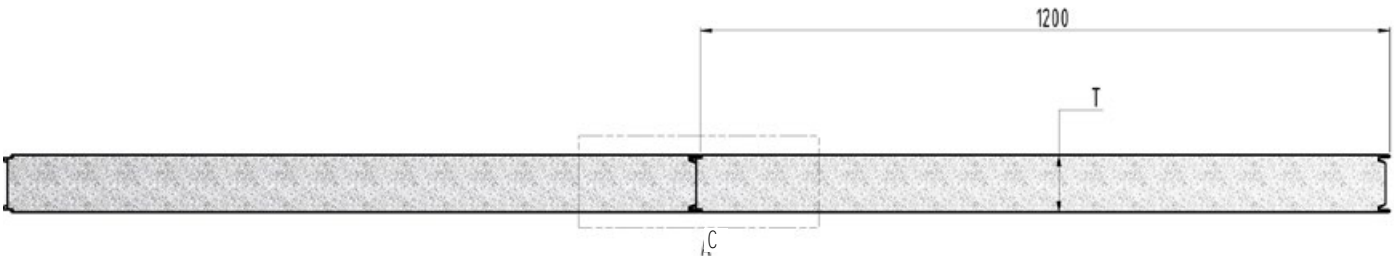


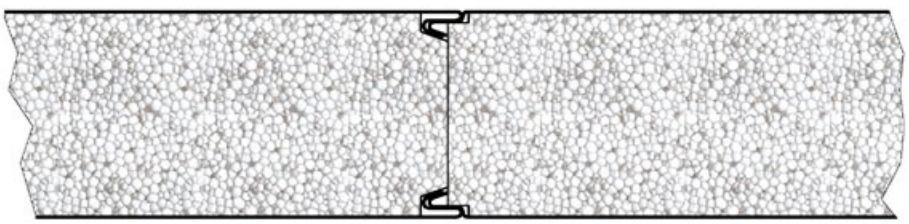


Detail A



Detail B

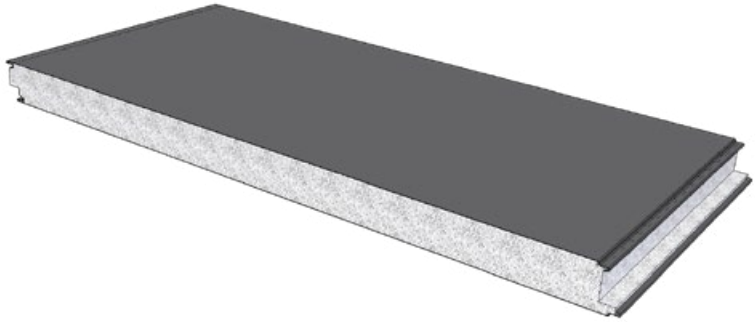


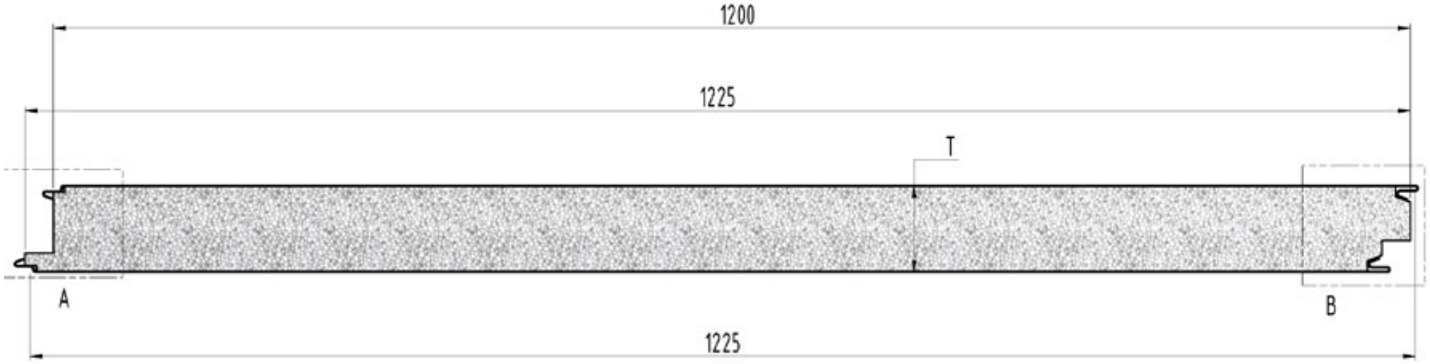


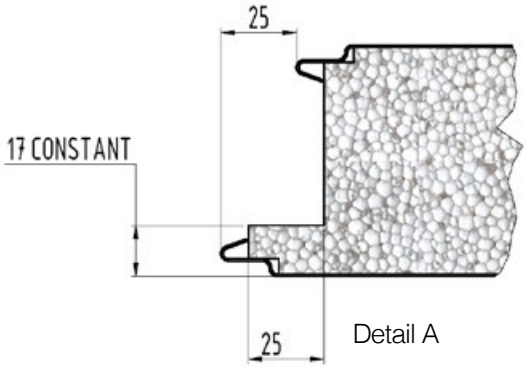
Detail C

3. DELTA PANELS PROFILES

DeltaSecretFix™







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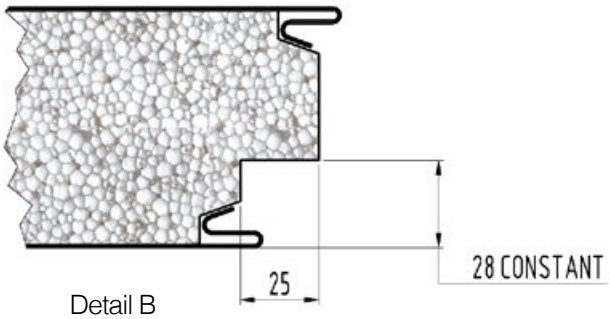

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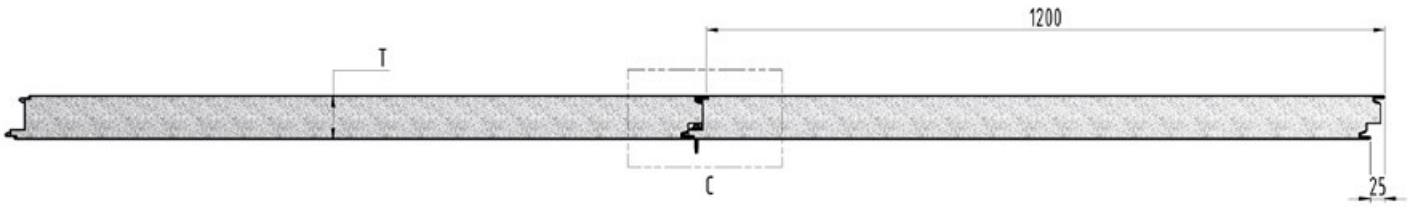
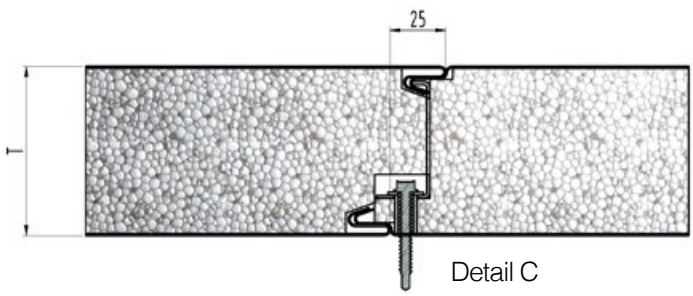
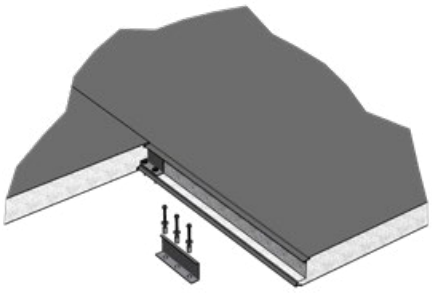




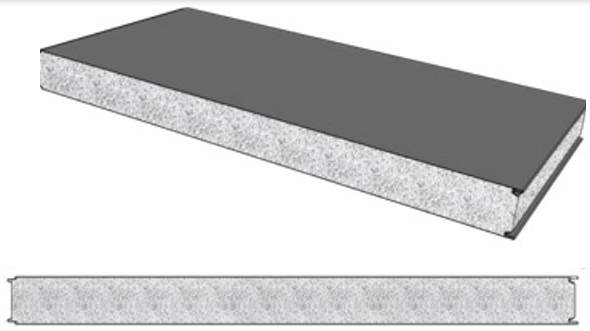
Detail C



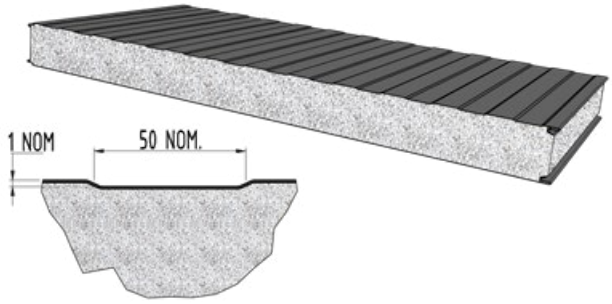
4. DELTA FACER PROFILES

All the Delta Panels™ Wall Panel range are available not only in an extensive range of contemporary colours but also with a variety of facer profiles. These facer profiles allow the panels to be utilised in a wide array of applications.

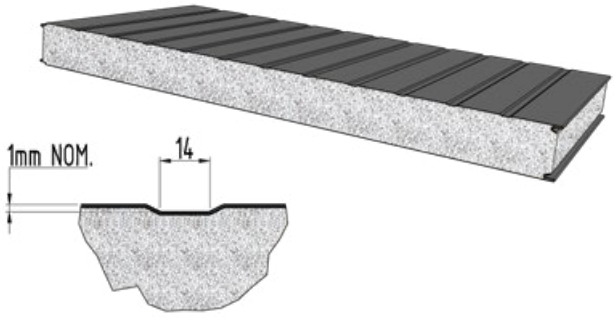
Smooth - Facer Profile



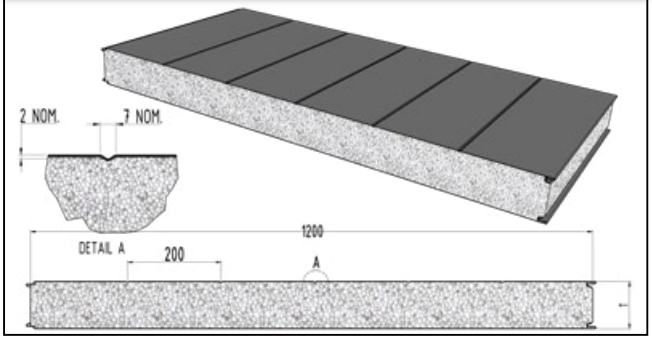
Mesa - Facer Profile



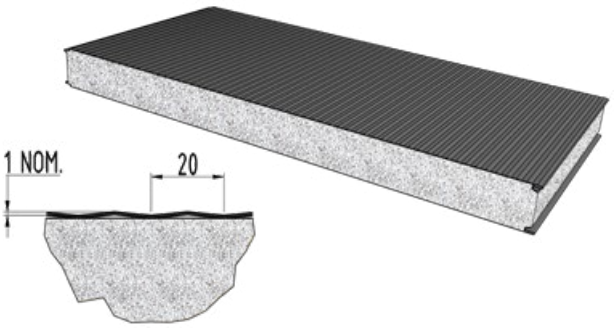
Ribbed - Facer Profile



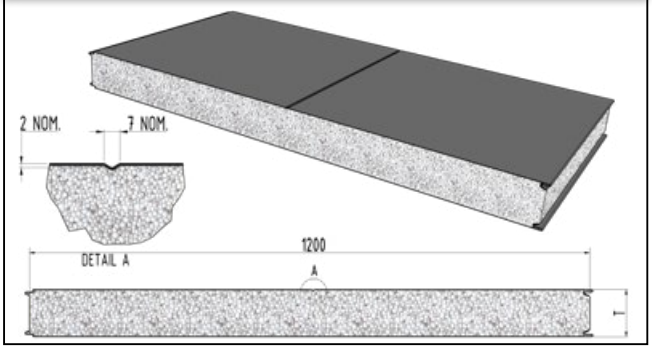
5V - Facer Profile



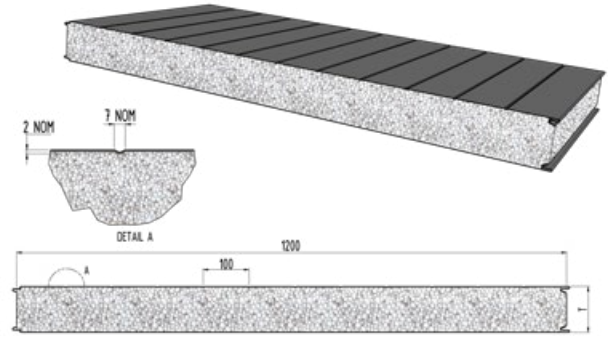
SatinLine - Facer Profile



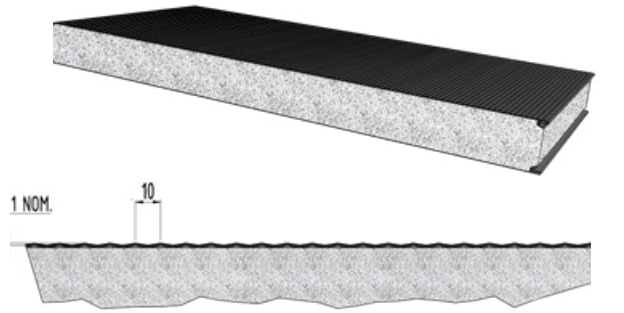
SingleV - Facer Profile



Elegance- Facer Profile



MicroRibbed - Facer Profile



5. SAFETY

Safety

The installation of panels on any building structure requires careful planning to ensure all work can be carried out in a safe manner.

The establishment of a detailed Safe Work Method Statement (SWMS) as well as all onsite safety procedures are the responsibility of the panel installation contractor. The detailed Safe Work Method Statement (SWMS) must include the roles and responsibilities of all persons involved in the project. It must clearly outline what safety equipment is required, how it is to be utilized for each stage of the project and must comply with all aspects of the current Workplace Health and Safety Act. If the installer determines that they cannot install the panels in accordance with the installation drawings contained in this guide in conjunction with the Safe Work Method Statement (SWMS) requirements, it is their responsibility to determine appropriate alternative procedures.

Safety Data Sheets (MSDS)

Prior to the commencement of any installation , the panel installation contractor must read and familiarize themselves with the Safety Data Sheets (MSDS) applicable to the panel type being used. Current versions of Delta Panels' Data Safety Sheet EPS-FR Panels, Data Safety Sheet PIR Panels, Data Safety Sheet TPC Panels & Data Safety Sheet MW Panels are available upon request or online at *www.deltapanels.com*

General Safety Reminder.

- Hooks, wire cables and hardware used as tie-offs should be covered so that they do not scratch panel and trim surfaces.
- Use an approved and safe walking platform in high traffic areas to prevent damage to panels.
- Do not use panels as working platforms. Unsecured panels can slide or collapse under the weight of workers and equipment.
- Do not stand on the end of unsupported cantilevered panels, as this may result in panel collapse.
- Avoid point loads (concentrated loads in small areas). Heavy equipment, ladders, platform feet etc. may cause panel damage that could result in collapse.
- Do not install panels in high winds or other unsafe working conditions.
- Secure all loose panels with banding or tie-downs.
- Use clamps as necessary to hold panels in place until fastening is complete.
- Avoid panel and lifting equipment contact with electrical power lines, equipment and services.
- Verify that the building structure is complete and properly aligned, with all connections and bracing in place and secured.

6. TOOLS & EQUIPMENT

List of Equipment which may be required

- All suitable Personal Protective Equipment (PPE) , including suitable Protective Gloves, Footwear, Headwear and Eye Protection
- Installation of temporary Safety Mesh (if deemed necessary under the SWM)
- Fall Restraints as defined by AS/NZS 1891.4:3.1.4 (if deemed necessary under the SWM)
- Sufficient Sun Protection (Hat, Sunscreen)*
- Electric Leads with Earth Leakage Device.
- Turn-Up / Turn-Down Tool or Wide Mouth Vice-grip Pliers
- Drill or Screw Gun, Drill Bits, Hex Head Driver Bits
- Electric Saw with appropriate Cold Cutting Metal Blade or Nibblers
- Tin Snips
- Pop Rivet Tool
- Tape Measure
- Sharp Thin-bladed Knife or Box Cutter
- Adjustable Carpenter's Square
- String / Chalk Line
- Marking Pen
- Spirit Level
- Old Blankets or Equivalent
- Stable, fit-for-purpose Working Platform
- Plastic Paint Scraper
- Safety Harness
- Hard Hats
- Appropriate Footwear
- Scissor Lifts, Scaffold and/or Ladders

** sunscreen can cause paint deterioration if it comes into contact with the surface of the panel*

7. DELIVERY RECEIVALS & STORAGE

Receiving Panel Packs

- The panels are carefully packed to protect them during transport.
- They are a ready-to-install, finished product and special care should be taken when unloading and handling them to avoid permanent damage to the panels. Particularly the underside ceiling.
- Ensure that adequate lifting equipment (ie crane or forklift) is available prior to the delivery truck arriving
- Ensure that a suitable level location is available to store the off-loaded panels in.
- When unloading the truck, the packs of panels will have attached stickers indicating the correct lifting points.

- For packs of panels under 8 meters a forklift may be used.
- For longer packs a forklift with spreader lifting lugs is recommended.

7. DELIVERY RECEIVALS & STORAGE

- For longer packs the panel packs will need to be craned off the delivery vehicle
- If the panels exceed 8 meters a spreader bar is required to ensure that the slings do not cause any damage to the packs.
- The packs of panels should be stored correctly on the site in an area that will eliminate any chance of damage occurring to the packs
- The Delivery Docket will clearly state the quantity, description and type of panels delivered along with any associated components. It is the owners responsibility to cross check the delivery docket with the actual goods received at the time the goods are received.

Onsite Storage

- The panels should not be unpacked until it is time to install them, in the meantime they should be stored in an area away from traffic to eliminate the possibility of damage.
- Panels exposed to direct sunlight can result in Thermal Bowing which can prevent proper engagement during installation. Store the panels in a shaded area or leave the panels fully packaged until required for installation.
- All protective packaging when removed should be disposed of correctly
- Be aware that there is protective film on the steel surfaces of the panels if this film is left exposed to sunlight for a period of time it may become difficult to remove. It is advised to keep the original packaging shroud over the top of the panel packs to eliminate sun exposure
- Keep panels a safe distance from other on site trades that are welding, cutting or painting.

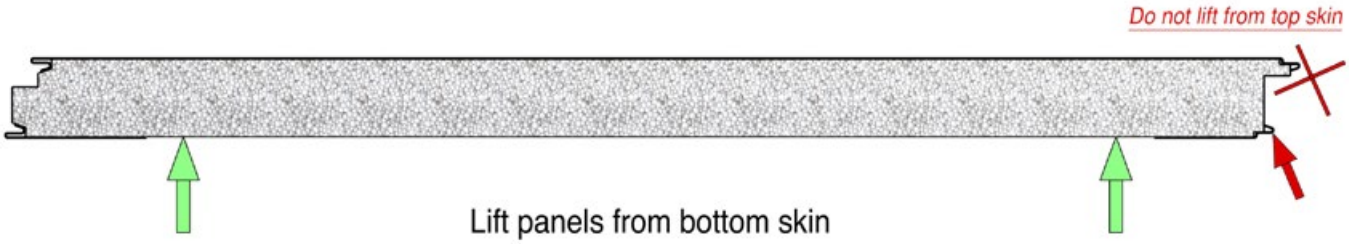
8. HANDLING OF THE PANELS

Insulated panels are used in a wide variety of different construction applications, varying from household patios enclosures, small & large industrial cold-rooms through to major industrial cladding projects. Depending upon the actual application and the working condition of the construction site, panels can be moved into their installation position by various means.

For larger commercial and industrial projects panel installation time is typically reduced when using lifting equipment. However the equipment must be designed to cater for the panel lengths, weights and profiles to be lifted. It is therefore important to verify the requirements of your specific project with the company supplying the lifting equipment.

Manual Lifting

- The use of safety gloves along with wrist protection is advisable when handling metal panels
- When lifting the panels off the pack always lift the panels vertically.
- Do not slide them across each other or twist sideways.
- Always lift from the underside, never lift using the top sheet.



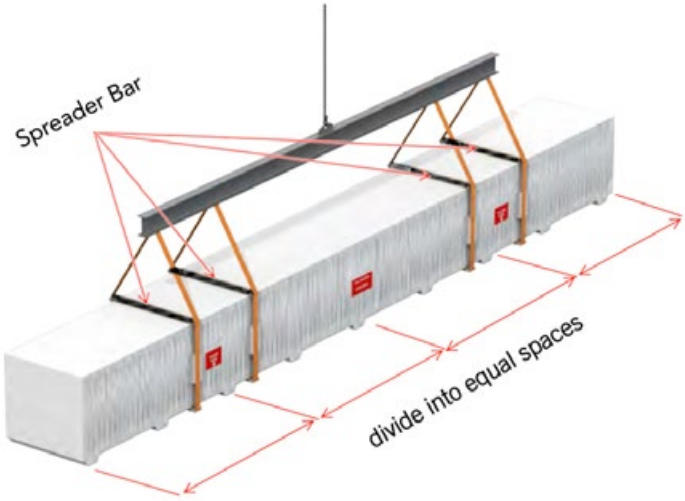
- Care must be taken to avoid damage to the corners and overlaps.
- When relocating long panels always carry them on their edge,with one worker at either end, plus an additional worker at 3.5 metre intervals.
- When placing panels down, always place them down vertically & onto a non-abrasive, flat & stable support.
- **Never** drag panels, always lift and carry them to protect the panel surfaces from scratching.

8. HANDLING OF THE PANELS

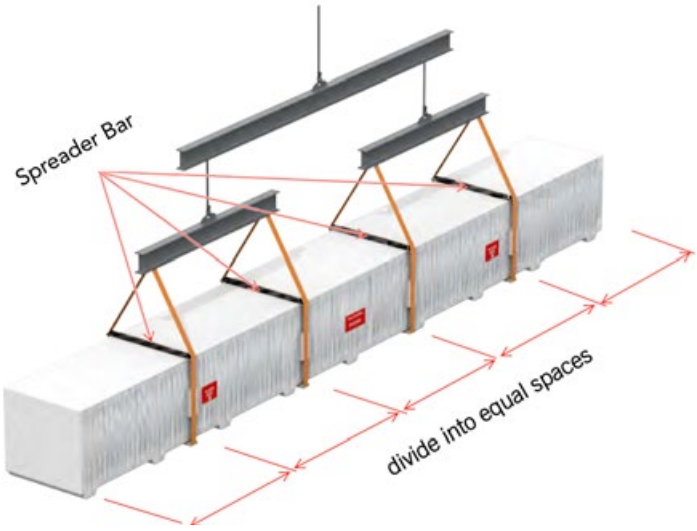
Crane and Sling

- A crane can be used to lift panels into their final fixing position
- Care must be taken to correctly align the sling to the marked lifting points (as per attached tables)
- Set the packs onto the site in the proper orientation for the erection sequence
- A spreader bar must be used to ensure that the load is evenly disturbed
- A spreader bar must be used to ensure that the lifting straps do not squeeze in on the panels causing any deformation to the panel's edges and delamination of the skins.
- Protective blocks are to be used under the slings to ensure that the steel skins are not deformed or crushed during the lifting process.

Packs over 1800 kgs and less than 10 meters may be lifted as shown in figure



Packs over 1800 kgs and/or over 10 metres may be lifted as shown in figure



8. HANDLING OF THE PANELS

Vacuum Lifting

Individual panels can be lifted using a vacuum lifter (clad-boy) with outriggers. An alternative method is the use of slings.

The vacuum lifting equipment must be designed to cater for the panels lengths, weights and the profile of the top sheet.

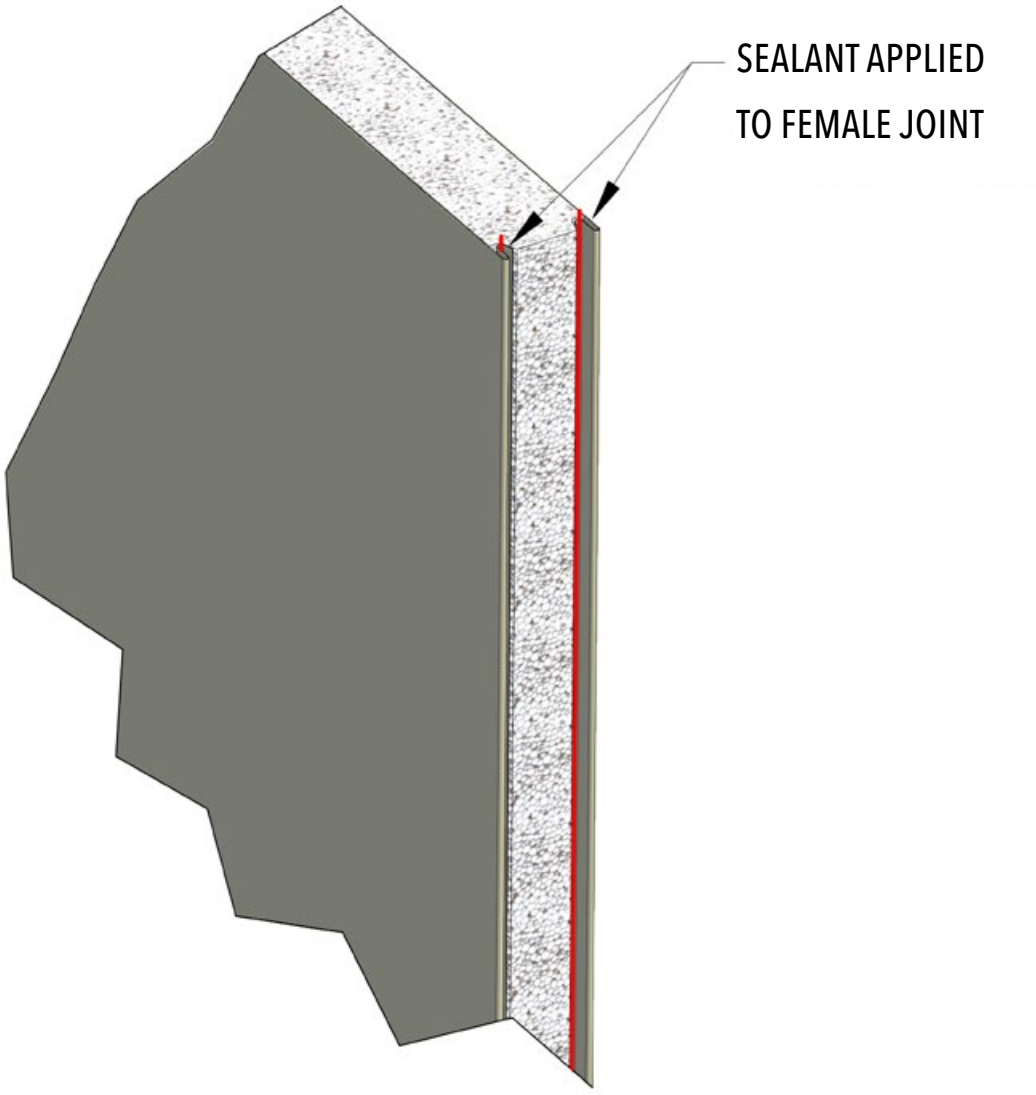
9. FRAMING ALIGNMENT

It is important that any dimensional differences between the actual building framework and the drawings is resolved prior to the installation of the panels. Improper framing alignment can cause difficulty with panel engagement resulting in rippling or buckling of the panel faces.

- Framing alignment should be checked before panels are installed.
- Compare structural and panel installation drawings to ensure roof supports are in correct location.
- Carry out an on-site measurement of the support spacing and overall building dimensions.
- All supports not in alignment must be corrected by the responsible party before panel installation begins.

10. INSTALLATION - PANEL PREPARATION

10.1 FEMALE JOINT SEALANT



DELTA PANELS

Email: info@deltapanels.com

Description: FEMALE JOINT SEALANT			
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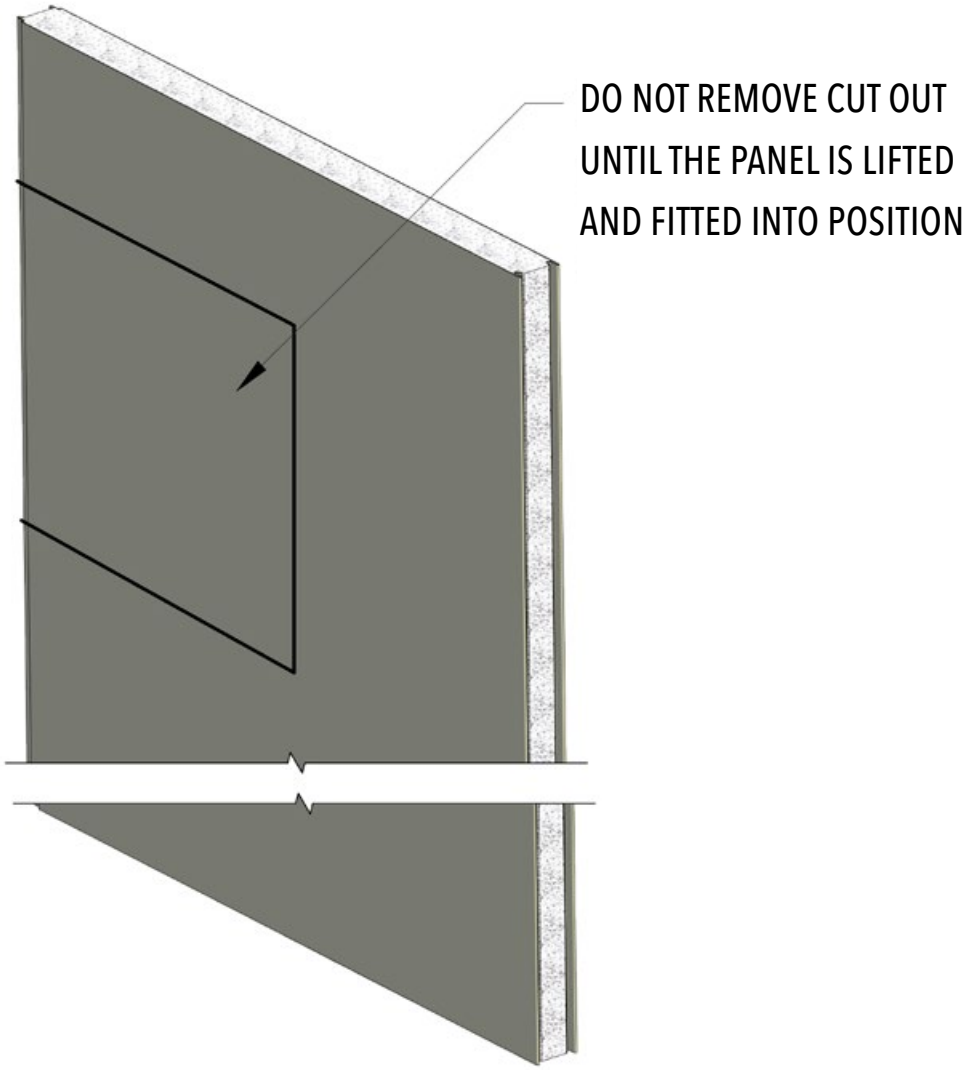
Drawing No.: DELTA PANEL CUT TYPES		Rev: A	Sheet: 1/5

10. INSTALLATION - PANEL PREPARATION

10.2 WINDOW & OTHER PENETRATIONS CUT OUTS



DELTA PANELS

Email: info@deltapanels.com

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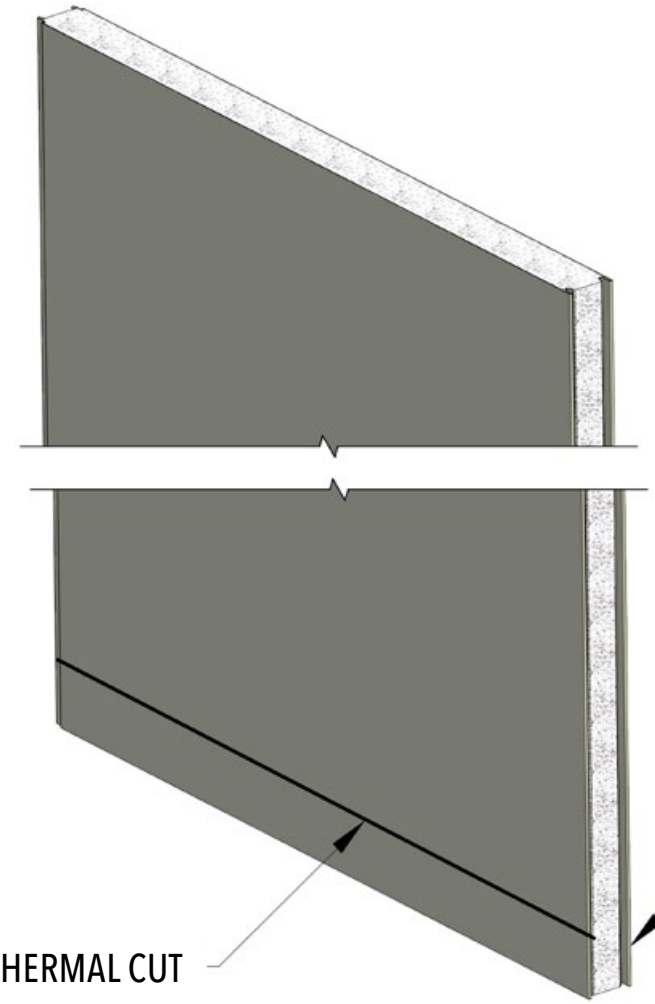
Drawing No.: DELTA PANEL CUT TYPES		Rev: A	Sheet: 2/5

10. INSTALLATION - PANEL PREPARATION

10.3 BASE CUT BACK



DELTA PANELS

Email: info@deltapanels.com

Description: BASE CUT BACK			
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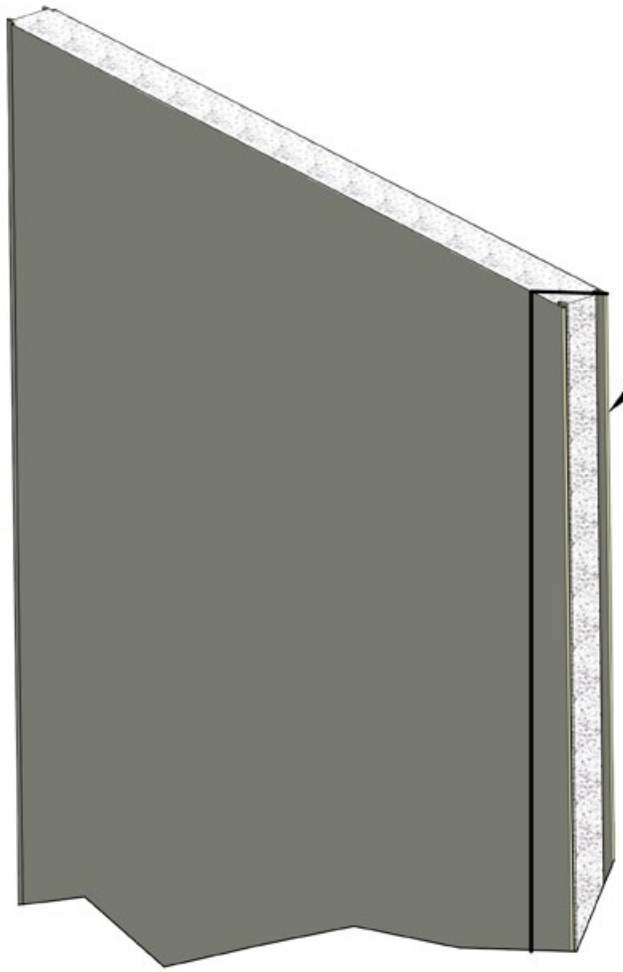
Drawing No.: DELTA PANEL CUT TYPES		Rev: A	Sheet: 3/5

10. INSTALLATION - PANEL PREPARATION

10.4 45° WALL MITRE



A 45° CUT OUT NEEDS TO BE REMOVED TO ENSURE THAT THERE IS NO THERMAL BRIDGING AT THE STRUCTURE'S CORNER JOINTS

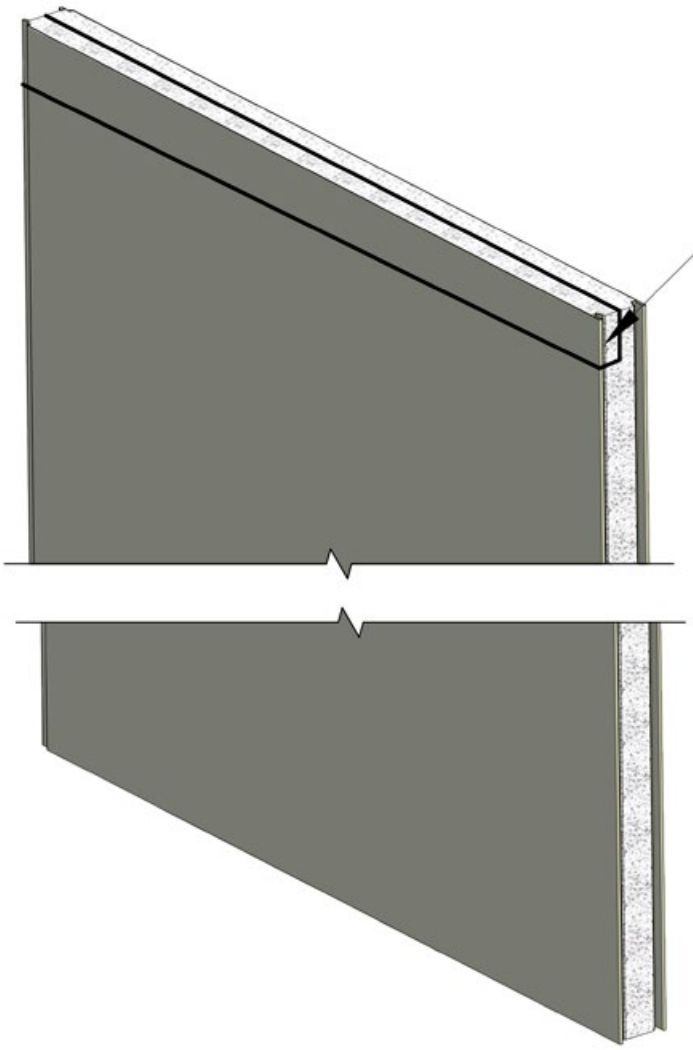
DELTA PANELS

Email: info@deltapanels.com

Description: 45° WALL MITRE			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 17/12/2020	Designed by: DP	
Drawing No.: DELTA PANEL CUT TYPES		Rev: A	Sheet: 4/5

10. INSTALLATION - PANEL PREPARATION

10.5 HEAD CUT



THE METAL FACER AND/OR SOME OF THE THERMAL CORE MATERIAL SHOULD BE REMOVED TO FORM A FULLY PREPARED ROOF-TO-WALL ASSEMBLY

DELTA PANELS

Email: info@deltapanels.com

Description: HEAD CUT			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 17/12/2020	Designed by: DP	
Drawing No.: DELTA PANEL CUT TYPES		Rev: A	Sheet: 5/5

11. INSTALLATION - FASTENERS, SEALANTS & EXTRUSIONS

Fasteners

Rivets - 4mm Aluminum Rivets

Hammer Drive Anchor

- 0.6mm x 30mm

NOTE: Not to be used in overhead installations

Screws

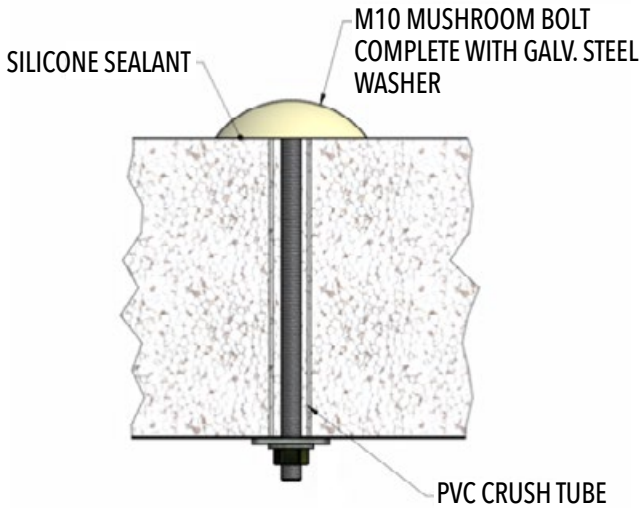
- Steel Screws

Metal Self Drilling Screw (SDS) - Fittings - Fixing
Fixing into Steel Beams up to 12.5mm

- Wood Screws

T17 - Fixing | Fixing into Timber Beams

Mushroom Head Bolt



Sealants

Sealant should be of neutral cure and meet recommendations as outlined in BlueScope TB-9 Sealants for Exterior Finishes.

- Silicone Sealant

- Mastic Sealant

- Fire-Resistant Sealant

Extrusions

Aluminium or Pre-Painted Steel Angles

- 40/40 mm & 70/40mm

Aluminium or Pre-Painted Steel Channels

- 50mm -250mm

Coving

- Round coving

Coving

- Arrowhead coving

11. INSTALLATION - AS ISO 9705 - GROUP 1 INSTALLATION REQUIREMENTS

Fasteners

Rivets

- 4.8 x 12mm 304 grade stainless steel rivets

Steel Angles/Channels

1.2mm Pre-Painted Steel Angles

- 40/40 mm & 70/40mm

1.2mm Pre-Painted Steel Channels

- 50mm -250mm

To Comply with the AS ISO 9705 Group 1 Accreditation the following parameters must be followed

DeltaCool-EPS-FR™ Construction/Installation Parameters

- Insulating sandwich panel, nominal thickness 250mm or less
- Panel core of Class SL (to AS 1366.3) expanded EPS
- Clad both sides with “Colorbond” steel, thickness 0.4mm or greater
- Panel to panel junctions require steel angles fixed to the steel skins at not more than 300mm centre, with steel rivets. Ceiling panel to panels joins require steel (stitch) rivet connecting the metal skins at not more than 1200mm centres.

DeltaCool-TPC™ Construction/Installation Parameters

- The interlocking joints to be filled with a fire-resistant sealant secured with 4.8 x 12mm 304 grade stainless steel rivets at 1200mm centres.
- The internal mitred corners in the walls and the stepped wall to ceiling junctions to be filled with a fire-resistant sealant and covered with 40 x 40 x 1.2mm pre-painted steel angle secured with 4.8 x 12mm 304 grade stainless steel rivets at 200mm centres.
- Panel comprising 0.6mm steel skins with a 100mm thick Phenolic composite (TPC) core.

12. INSTALLATION - PANEL CUTTING

Equipment Recommendations

- Personnel cutting panels should always wear safety glasses, gloves and long sleeve shirts.
- Panel cutting should take place prior to installation when possible.
- Use care when using saws to avoid panel delamination; make sure the blade is sharp and let the saw cut at its own pace - **do not force**.
- Use the following cutting tools to avoid panel damage:
    - Circular Saw with metal cutting blade or panel thumper blade
    - Nibblers
    - Panel saw



- The use of abrasive saws/grinder blades will damage the paint finish and metal facings
- For small penetrations, cut each panel face with a portable router, then cut the foam with a serrated knife. Metal flashings may be cut with power snips, nibblers or hand snips.



Cutting Recommendations

- Place the panel on padded sawhorses.
- Clean any surface grime and debris off panel face to be cut with clean rag.
- Mark cut line with chalk or washable felt tip marker.
- Masking tape may be applied on both sides of cut line to minimise panel scratching.
- Recheck measurements and cut with appropriate tool.
- Remove burrs at cut edges with deburring tool.

13. INSTALLATION - CLEANING

- Metal shavings from cutting and drilling should be removed as panels are erected using a soft bristle brush or clean cotton rag.
- For general cleaning, use a low pressure power wash with plain water. If necessary, use carwash soap or a 5% solution of mild laundry detergent. Use a clean cotton rag, sponge or soft bristle brush as required. Rinse thoroughly.
- Sealants, grease, tar and wax can be removed from panels and trim by using WD-40. Apply to a clean cotton rag, and avoid smearing over a large area. Then follow up with general cleaning instructions as above.
- For rust stains, remove the source (typically metal filings), then clean the affected area using one of the following methods: soap and water, or citrus oil based cleaning fluids.
- Concrete/mortar splatter must be washed off immediately with a high pressure wash and mild detergent.
- Do not use solvents, wire brushes, steel wool, or any other abrasive method to clean the painted surface of panels.

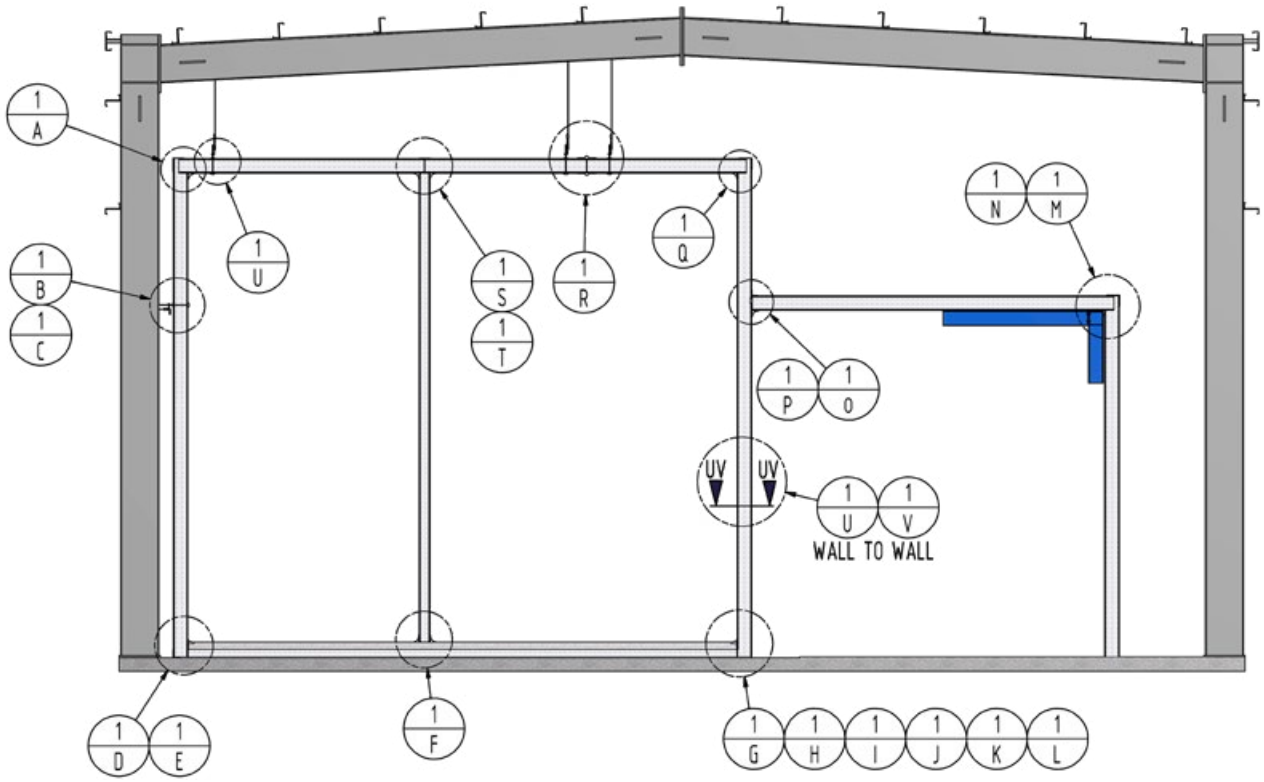
14. TOUCH UP

- Touch-up paint is for minor scratches only.
- Colour coded touch-up pens can also be used for small scratches.

- Test all touch up colours on an offcut piece of panel to ensure that the paint colour is a correct match prior to applying to the finished roof section
- Clean affected area with a clean cloth, and apply touch-up in the scratch using a fine artist brush.
- Allow 30-45 minutes for tack free and 24 hours for complete drying.

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.1 CONNECTION OVERVIEW



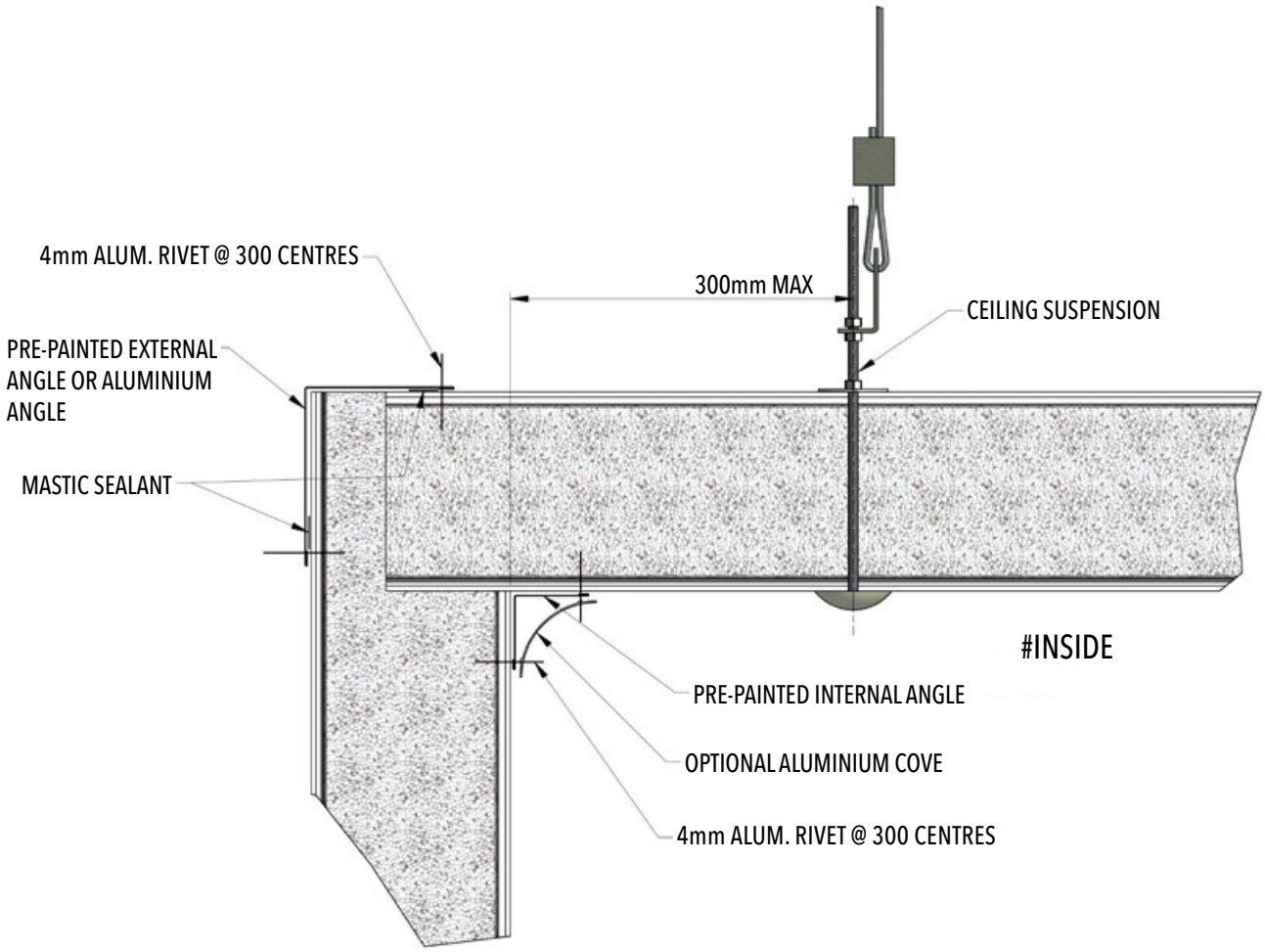
DELTA PANELS

Email: info@deltapanels.com

Description			
CONNECTION OVERVIEW			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE OVERVIEW		Rev: A	Sheet: 1/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.2 WALL TO CEILING JOINT



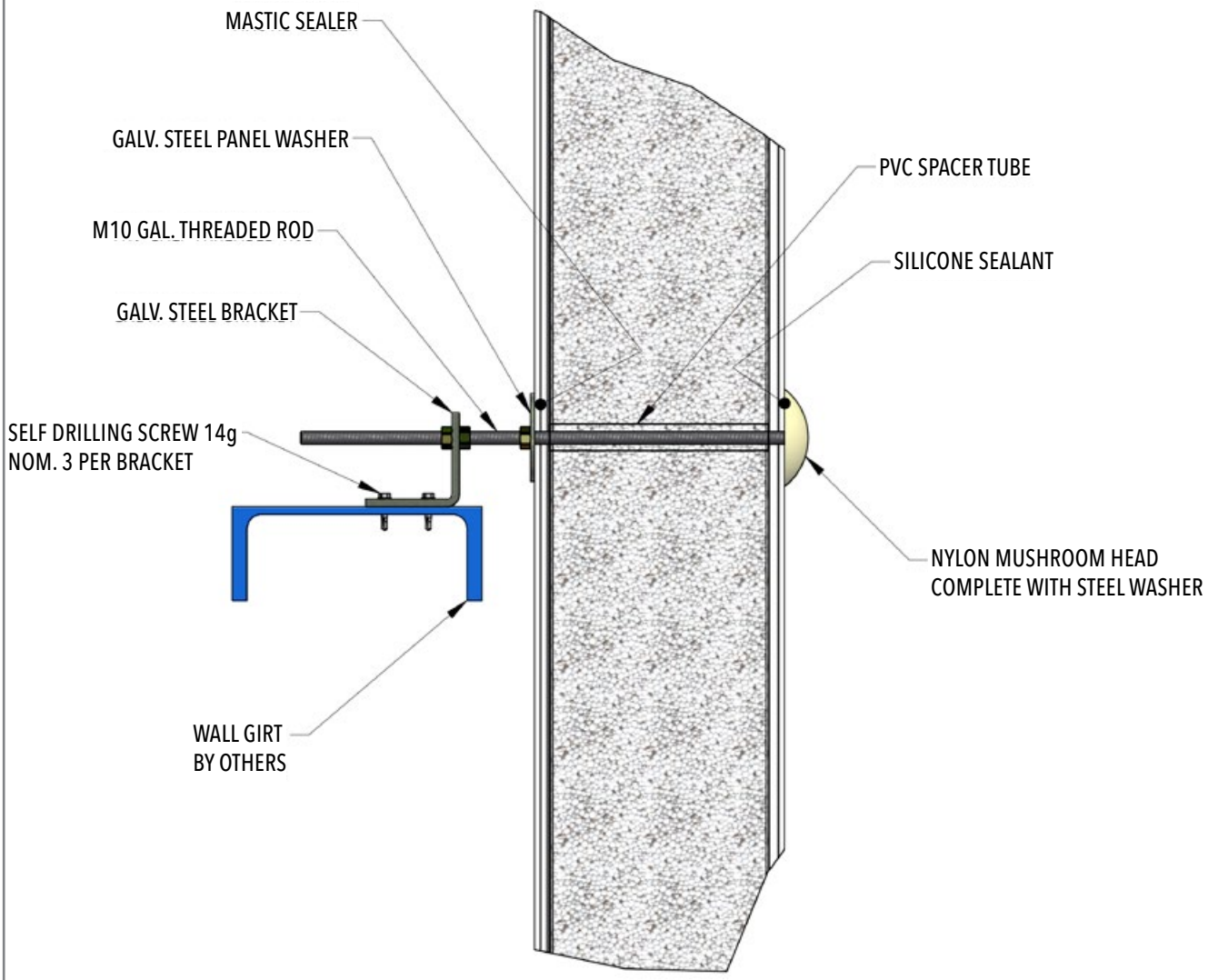
DELTA PANELS

Email: info@deltapanels.com

Description: WALL TO CEILING JOINT			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1A		Rev: A	Sheet: 2/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.3 WALL TO INTERMEDIATE GIRT FIXING



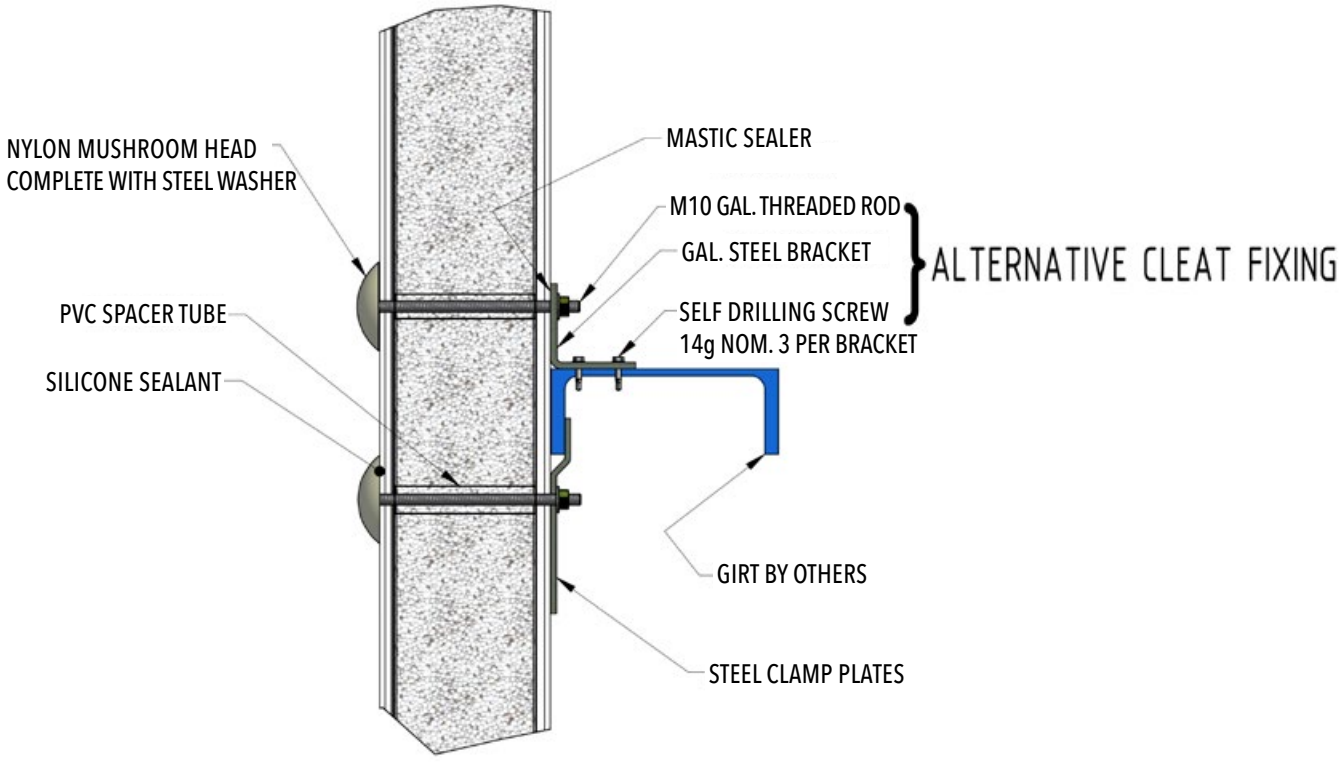
DELTA PANELS

Email: info@deltapanels.com

Description: WALL TO INTERMEDIATE GIRT FIXING			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1B		Rev: A	Sheet: 3/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.4 WALL TO GIRT, CLAMP PLATE FIXING



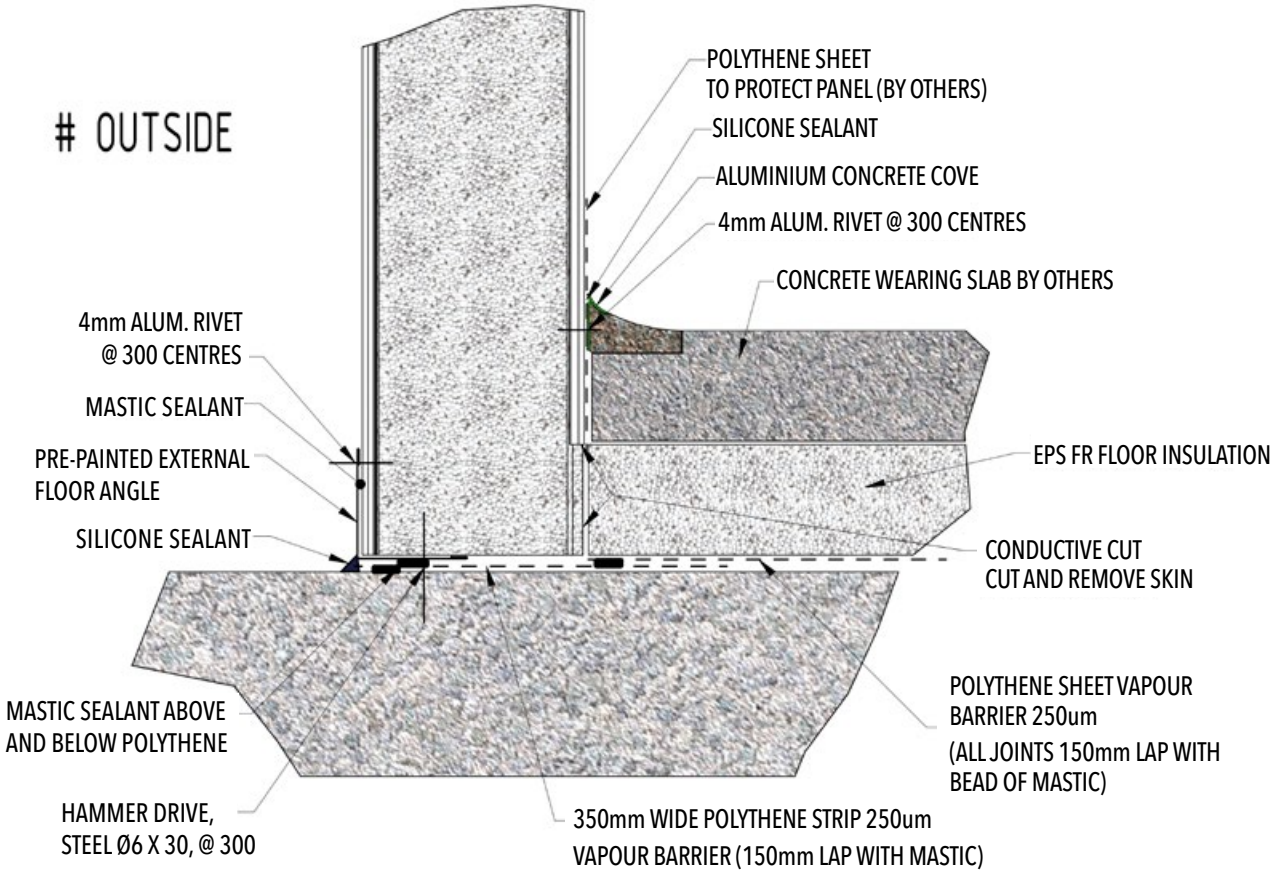
DELTA PANELS

Email: info@deltapanels.com

Description: WALL TO GIRT, CLAMP PLATE FIXING			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1C		Rev: A	Sheet: 4/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.5 WALL TO INSULATED FLOOR



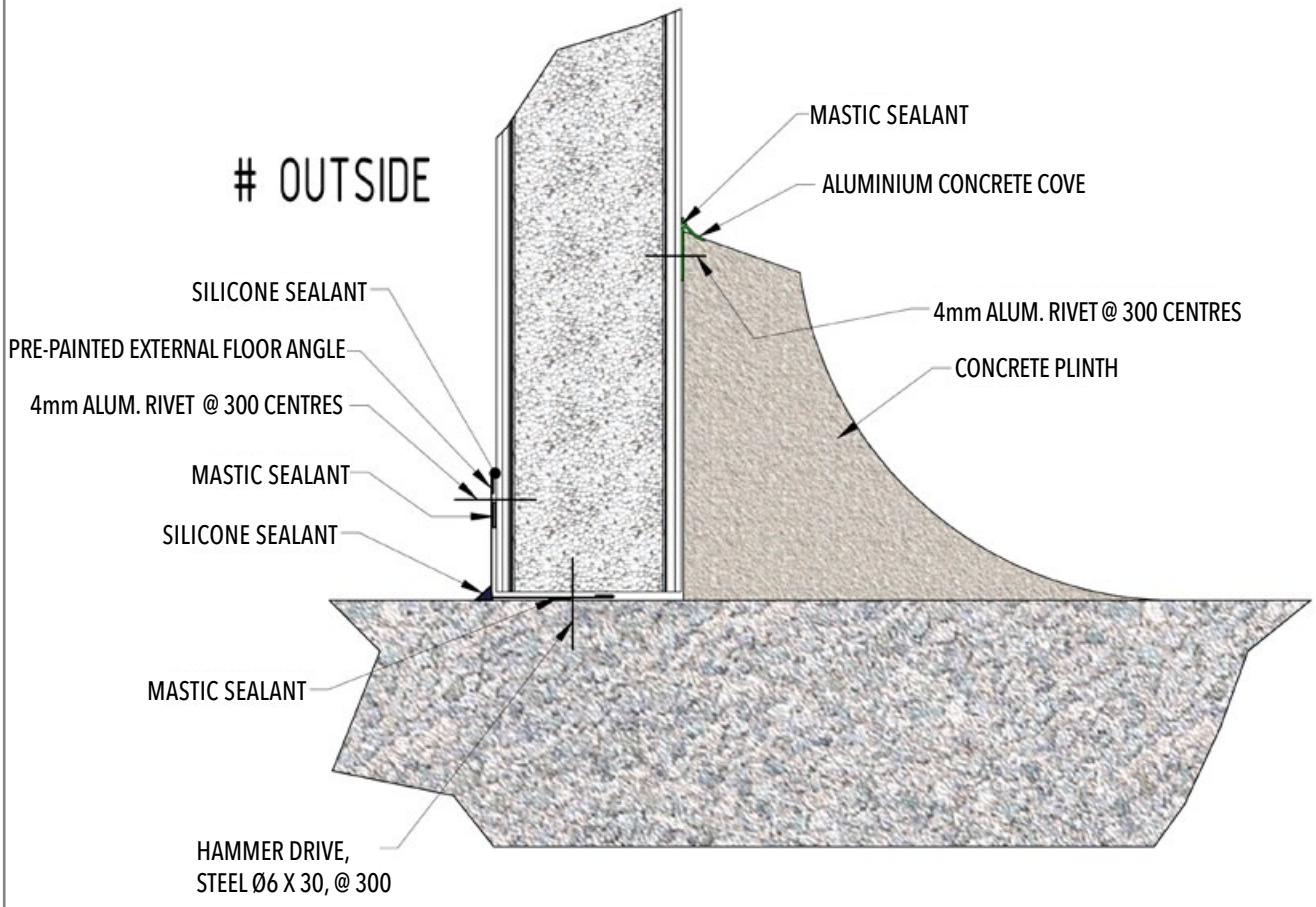
DELTA PANELS

Email: info@deltapanels.com

Description: WALL TO INSULATED FLOOR			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1D		Rev: A	Sheet: 5/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.6 WALL TO FLOOR DETAIL



DELTA PANELS

Email: info@deltapanels.com

Description			
WALL TO FLOOR DETAIL			
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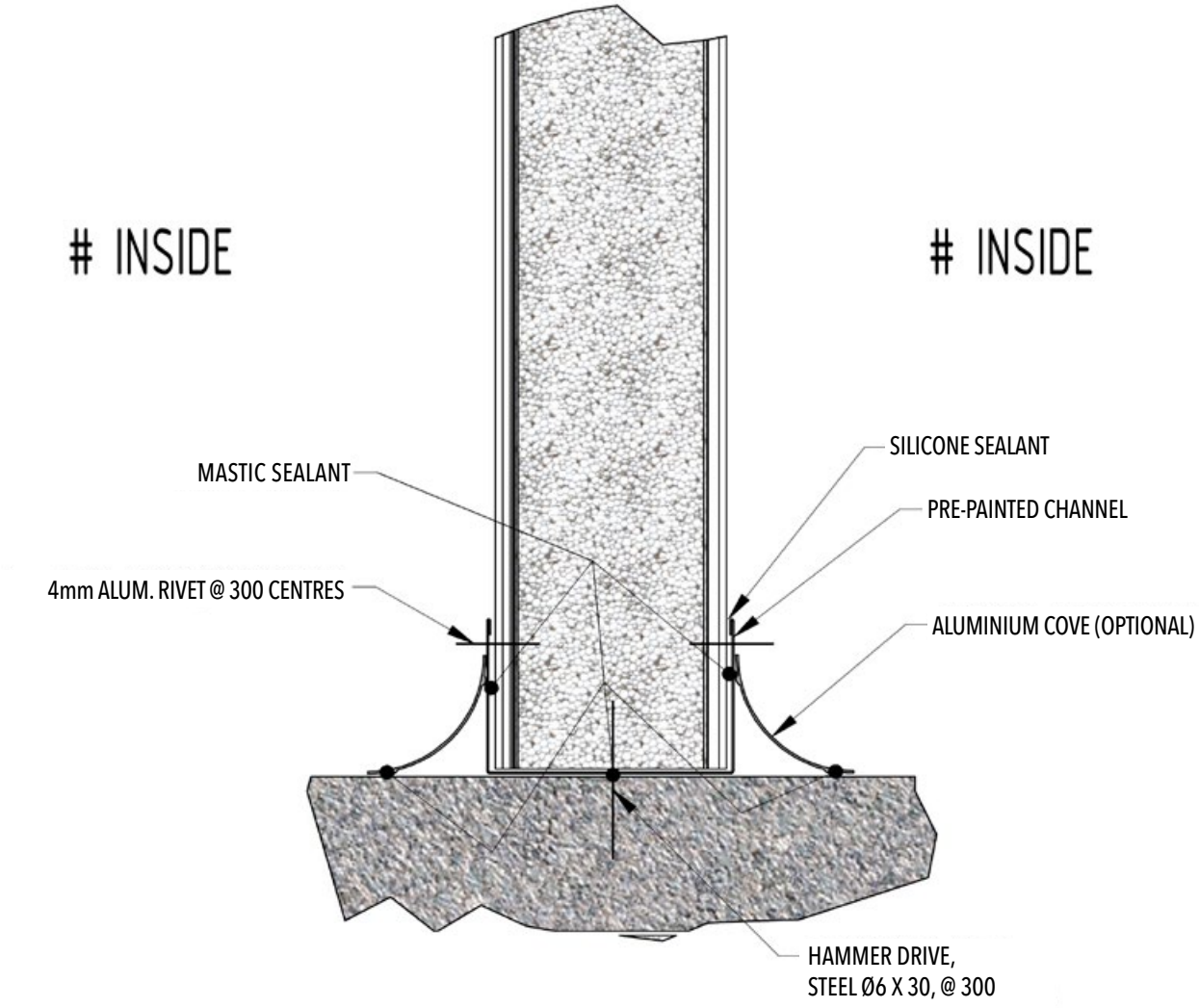
Drawing No.: COLD STORE 1E		Rev: A	Sheet: 6/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.7 PARTITION TO FLOOR DETAIL



DELTA PANELS

Email: info@deltapanels.com

Description			
PARTITION TO FLOOR DETAIL			
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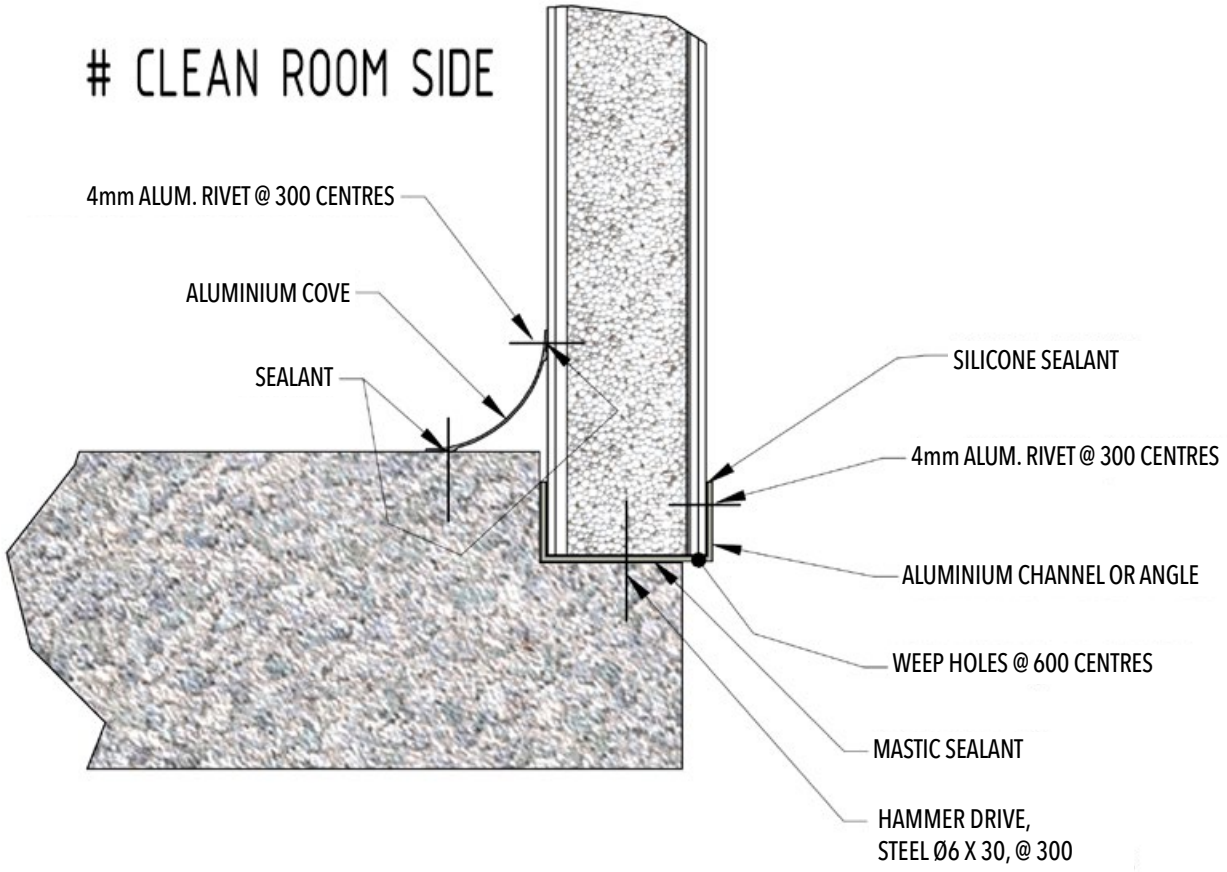
Drawing No.: COLD STORE 1F		Rev: A	Sheet: 7/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.8 ALTERNATE WALL TO FLOOR DETAIL



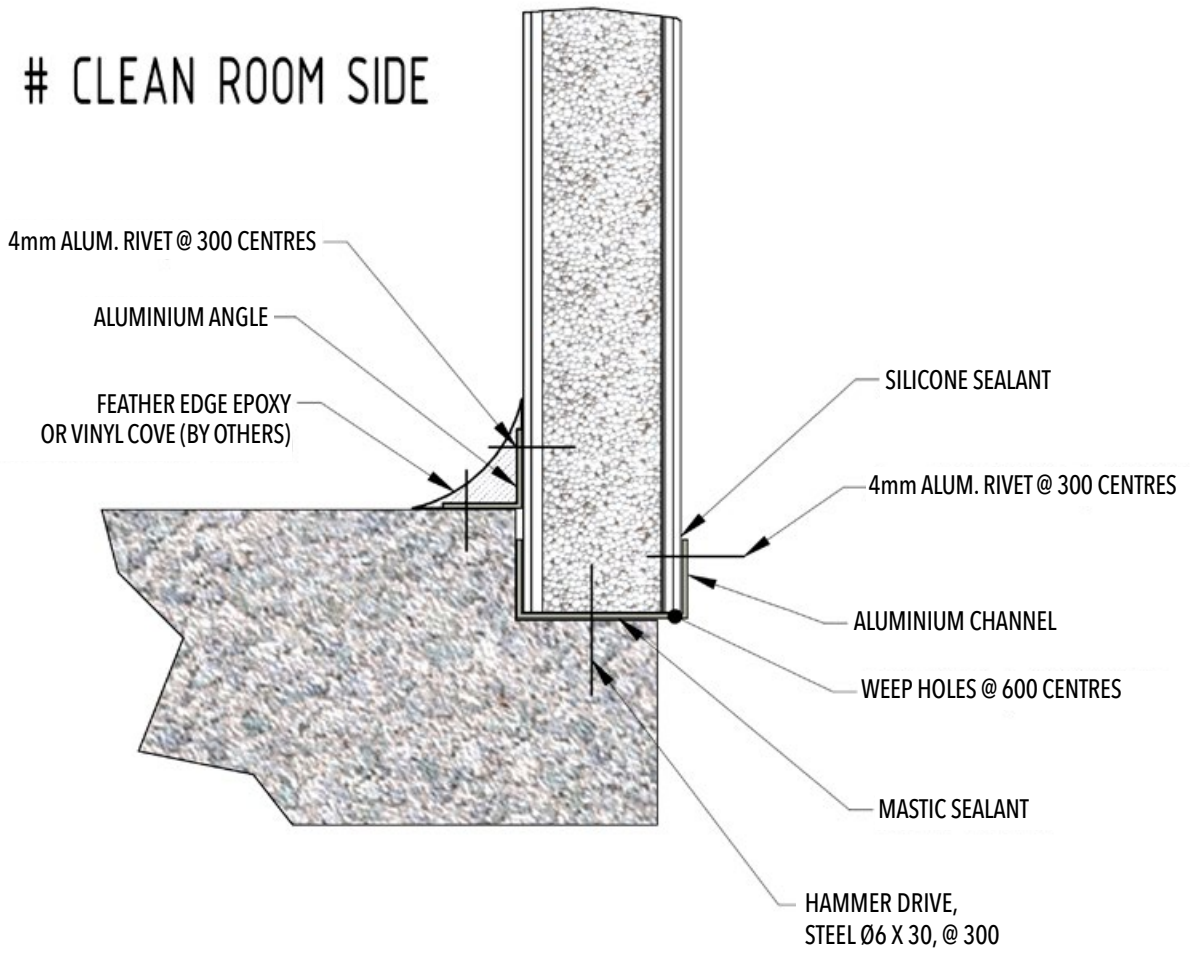
DELTA PANELS

Email: info@deltapanels.com

Description			
ALTERNATE WALL TO FLOOR DETAIL			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1G		Rev: A	Sheet: 8/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.9 ALTERNATE WALL TO FLOOR DETAIL



DELTA PANELS

Email: info@deltapanels.com

Description			
ALTERNATE WALL TO FLOOR DETAIL			
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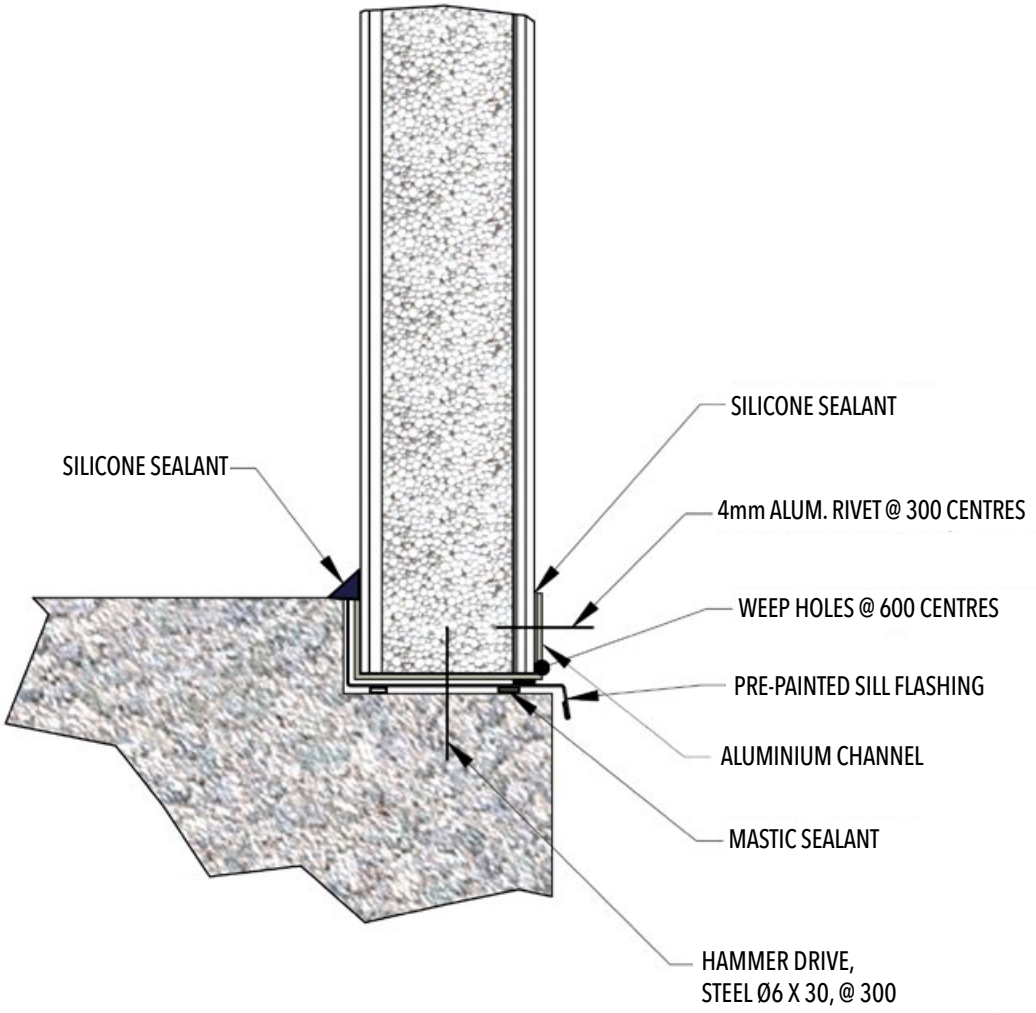
Drawing No.: COLD STORE 1H		Rev: A	Sheet: 9/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.10 ALTERNATE WALL TO FLOOR DETAIL



DELTA PANELS

Email: info@deltapanels.com

Description: ALTERNATE WALL TO FLOOR DETAIL			
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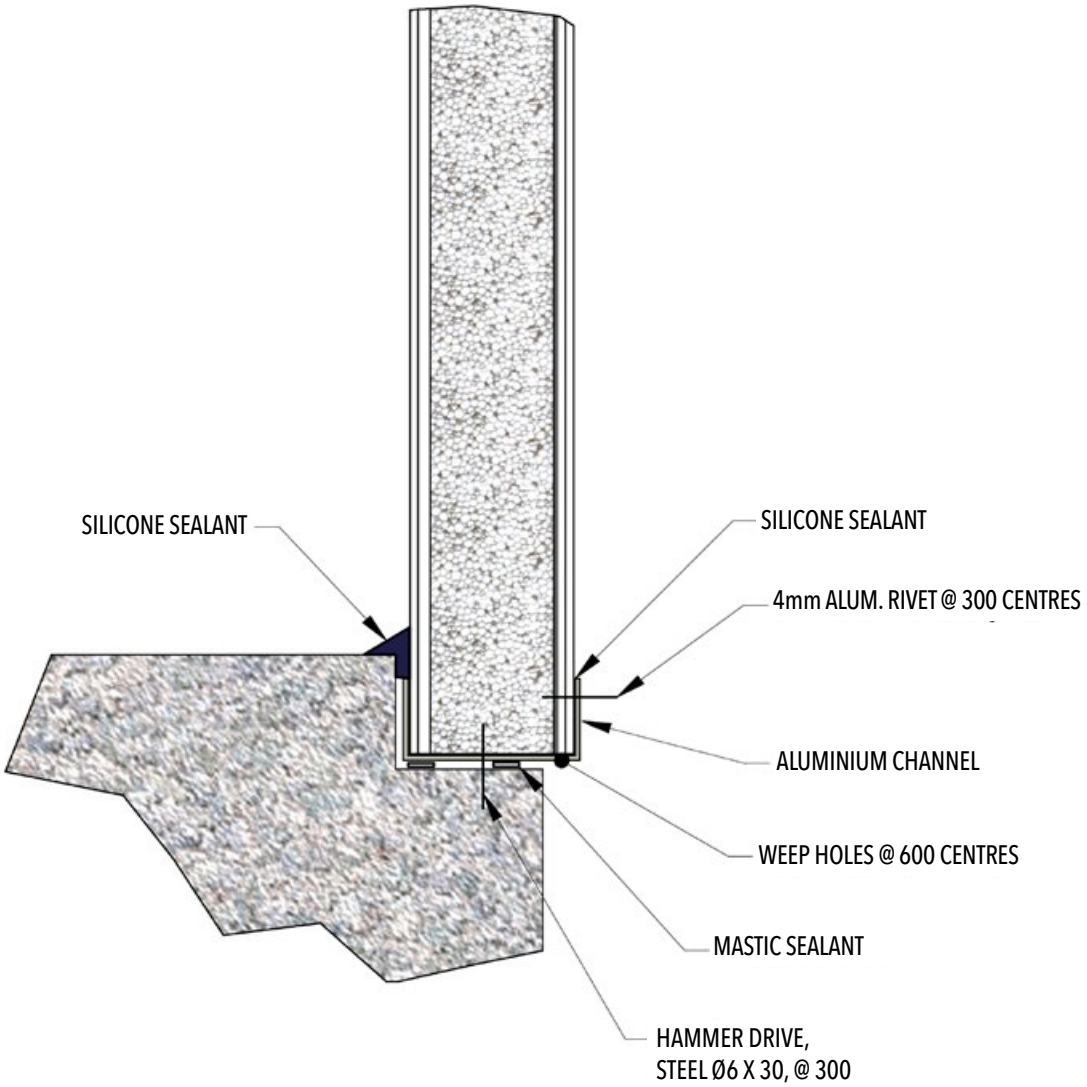
Drawing No.: COLD STORE 1I		Rev: A	Sheet: 10/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.11 ALTERNATE WALL TO FLOOR DETAIL



DELTA PANELS

Email: info@deltapanels.com

Description			
ALTERNATE WALL TO FLOOR DETAIL			
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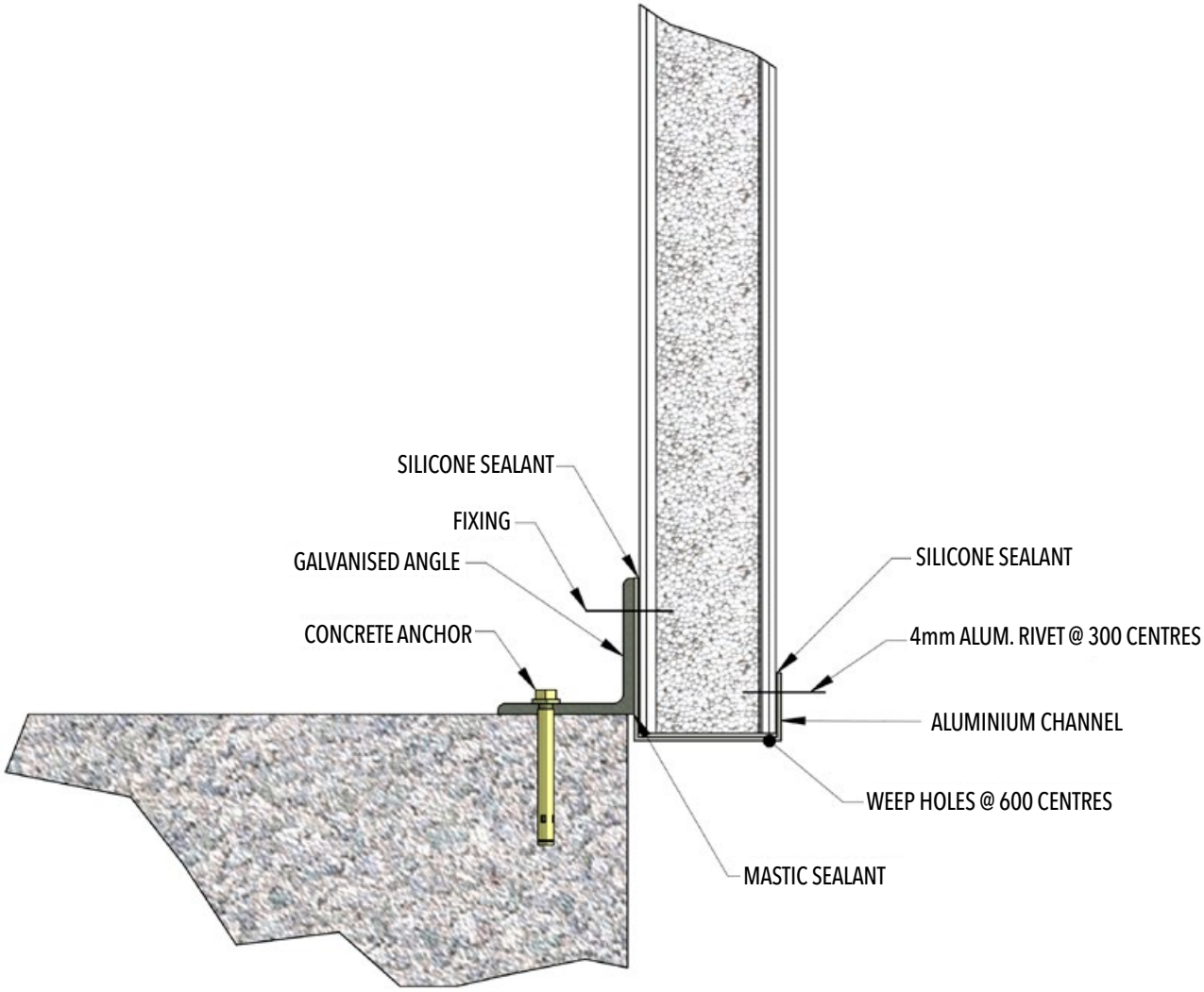
Drawing No.: COLD STORE 1J		Rev: A	Sheet: 11/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.12 ALTERNATE WALL TO FLOOR DETAIL



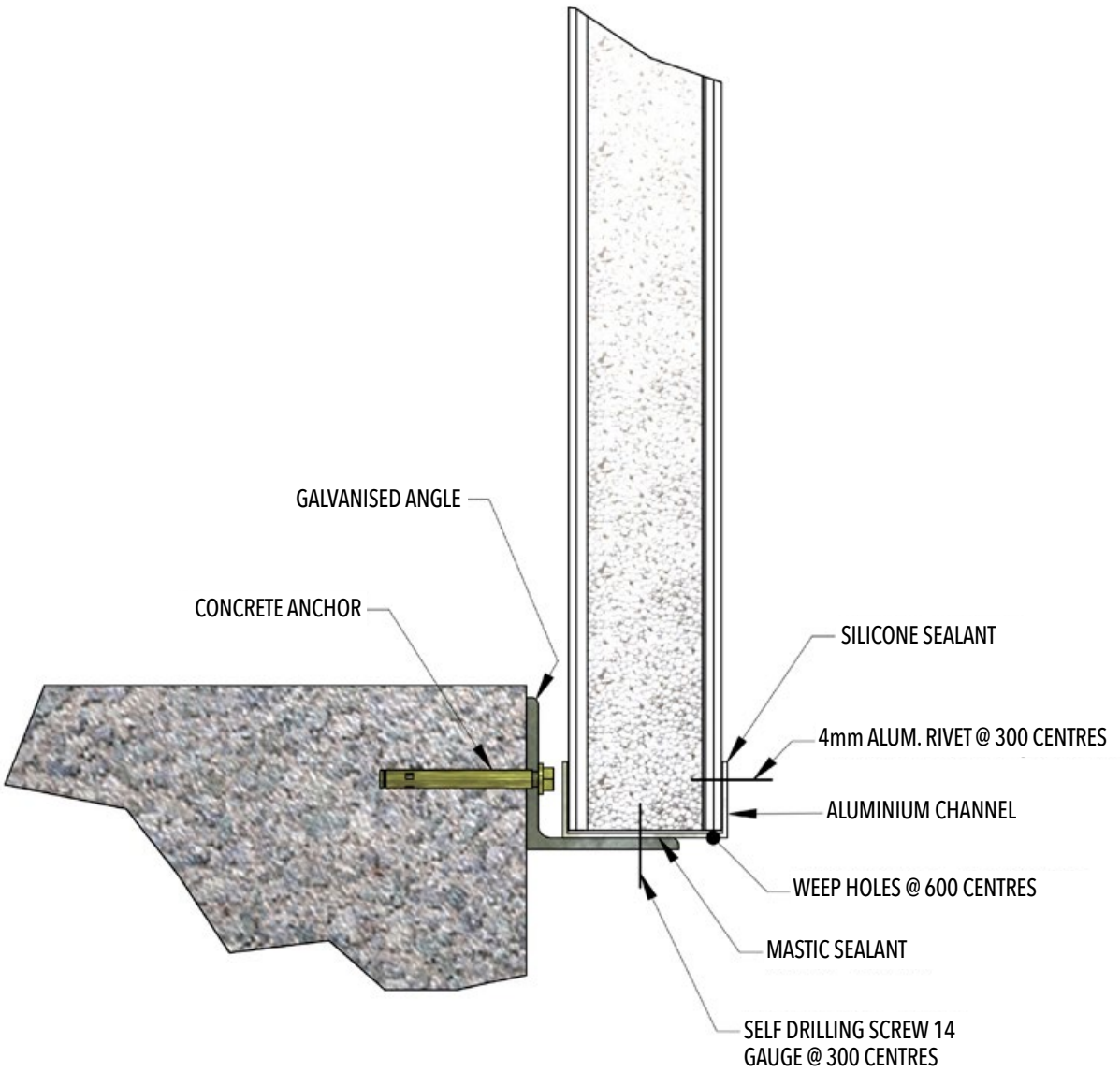
DELTA PANELS

Email: info@deltapanels.com

Description			
ALTERNATE WALL TO FLOOR DETAIL			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1K		Rev: A	Sheet: 12/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.13 ALTERNATE WALL TO FLOOR DETAIL



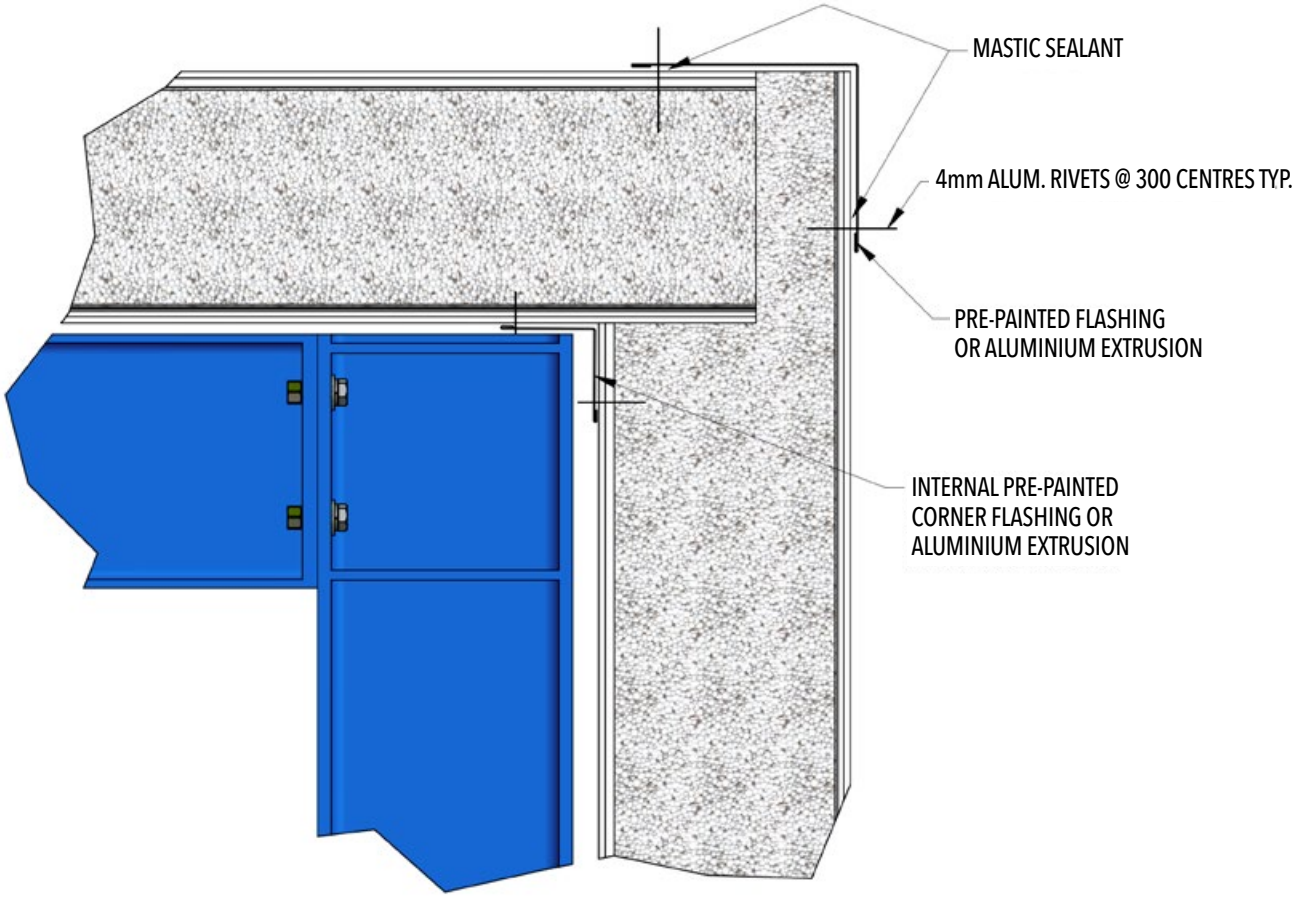
DELTA PANELS

Email: info@deltapanels.com

Description			
ALTERNATE WALL TO FLOOR DETAIL			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1L		Rev: A	Sheet: 13/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.14 TYPICAL EXTERNAL CORNER



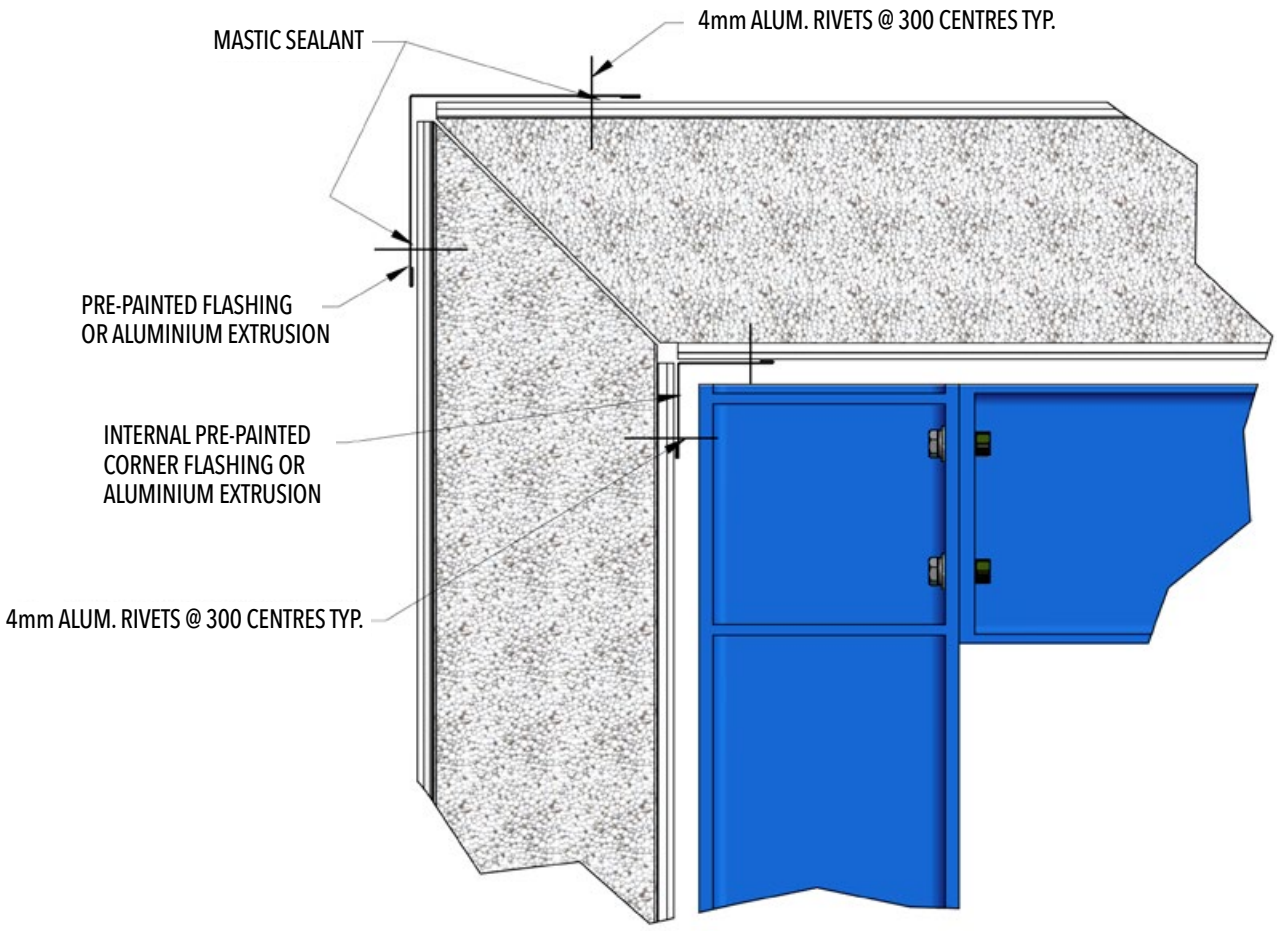
DELTA PANELS

Email: info@deltapanels.com

Description			
TYPICAL EXTERNAL CORNER			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1M		Rev: A	Sheet: 14/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.15 TYPICAL EXTERNAL CORNER WITH 45 DEG. MITRE



1
N

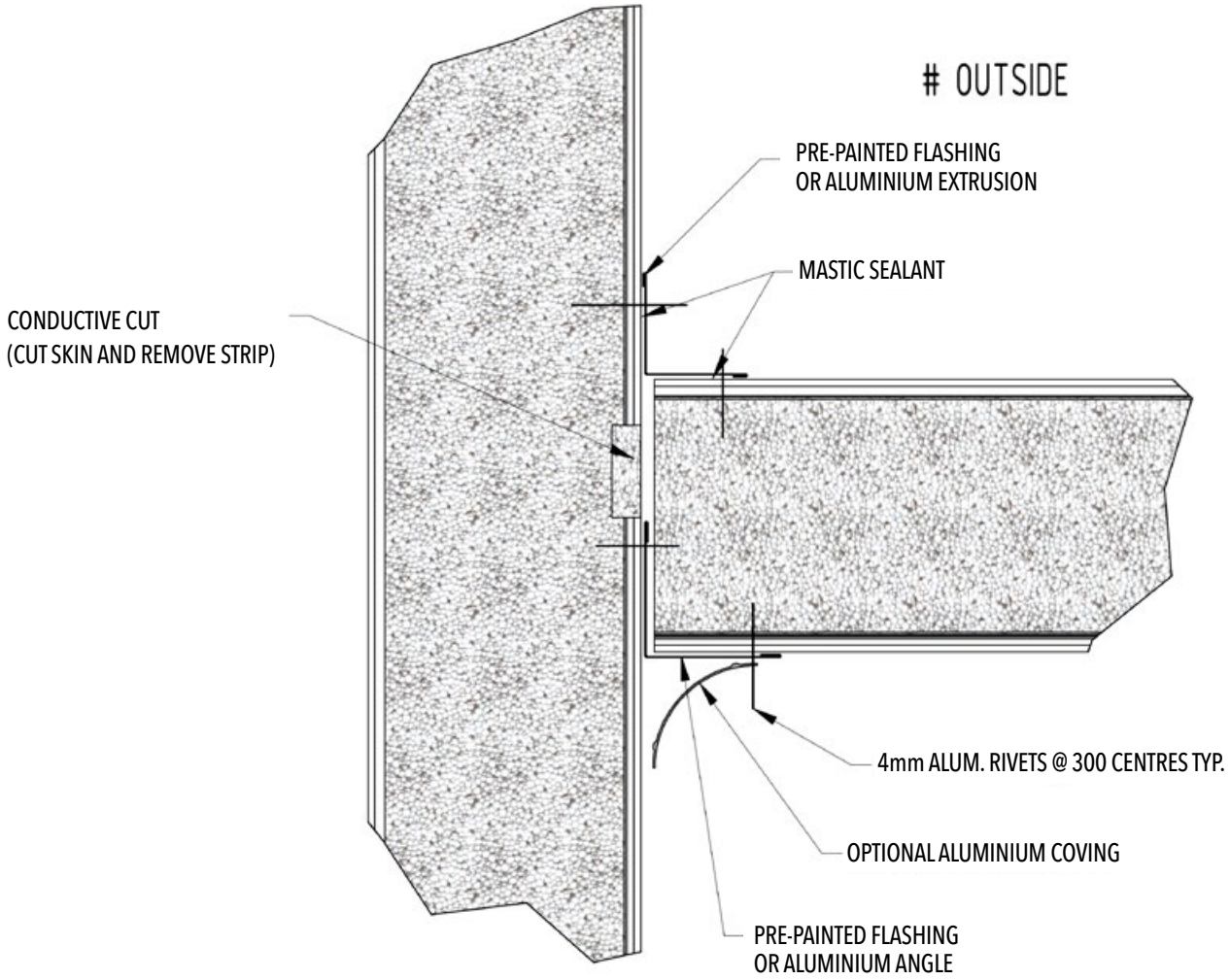
DELTA PANELS

Email: info@deltapanels.com

Description			
TYPICAL EXTERNAL CORNER WITH 45 DEG. MITRE			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1N		Rev: A	Sheet: 15/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.16 WALL TO LOW CEILING



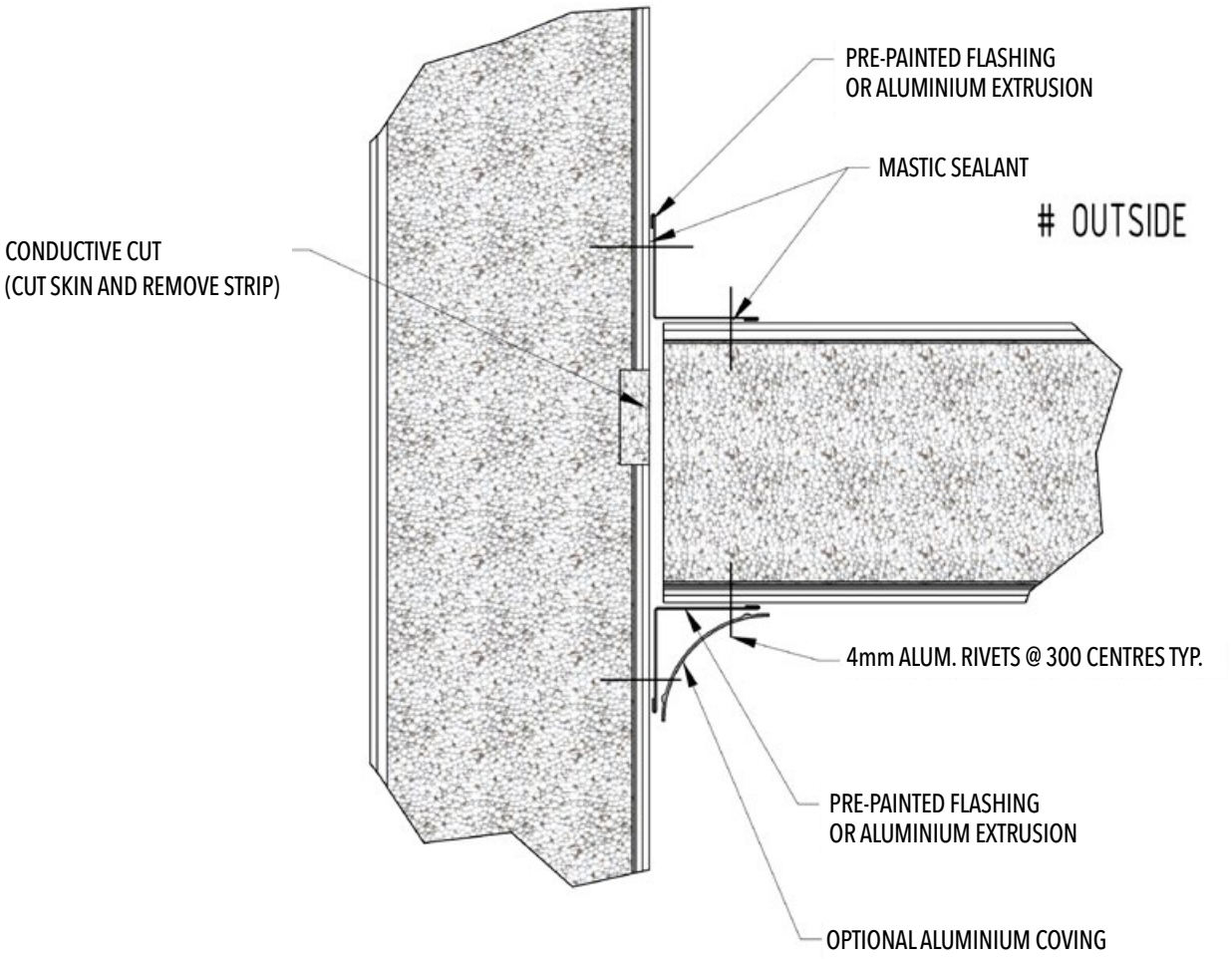
DELTA PANELS

Email: info@deltapanels.com

Description			
WALL TO LOW CEILING			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1O		Rev: A	Sheet: 16/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.17 WALL TO LOW CEILING



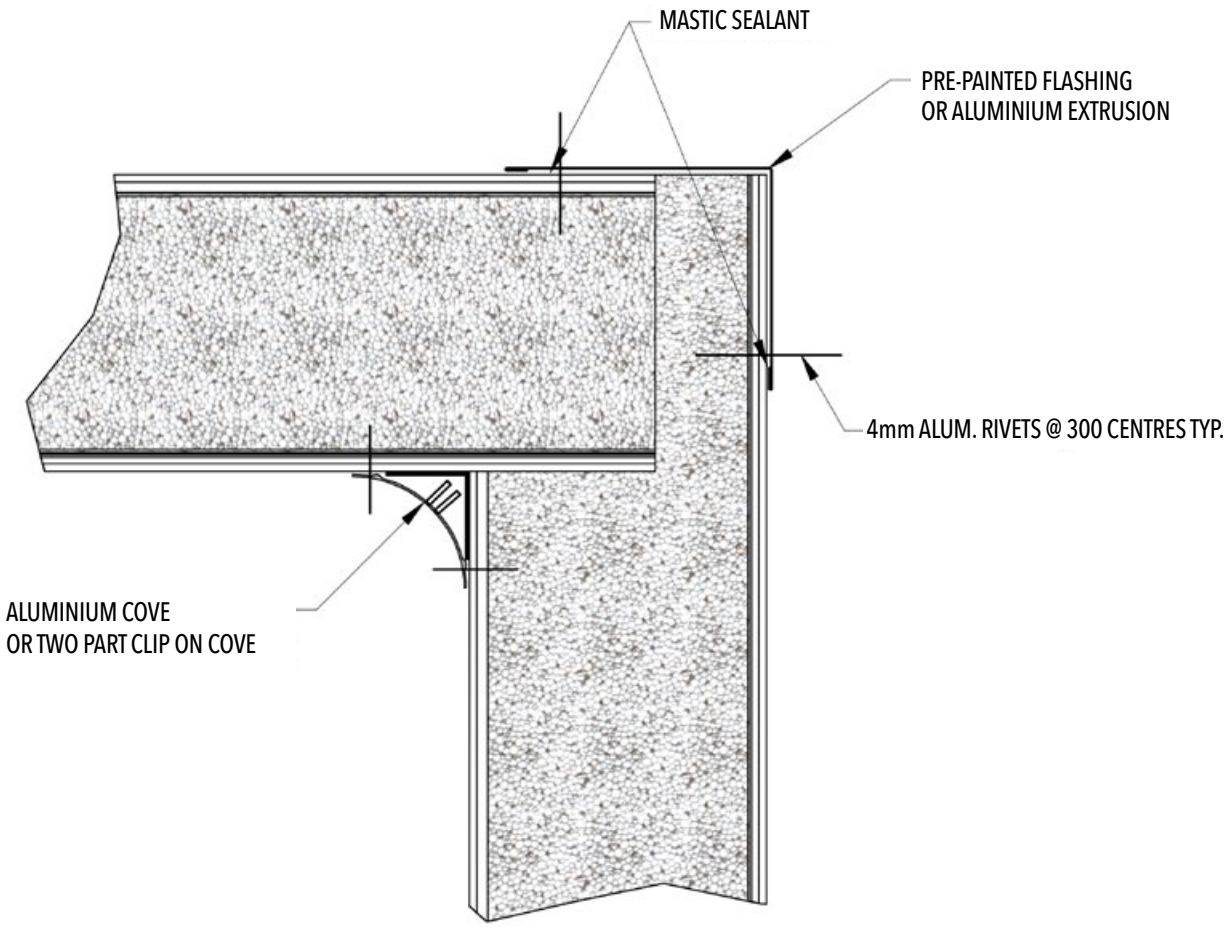
DELTA PANELS

Email: info@deltapanels.com

Description			
WALL TO LOW CEILING			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1P		Rev: A	Sheet: 17/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.18 TYPICAL EXTERNAL CORNER, CLEAN ROOM



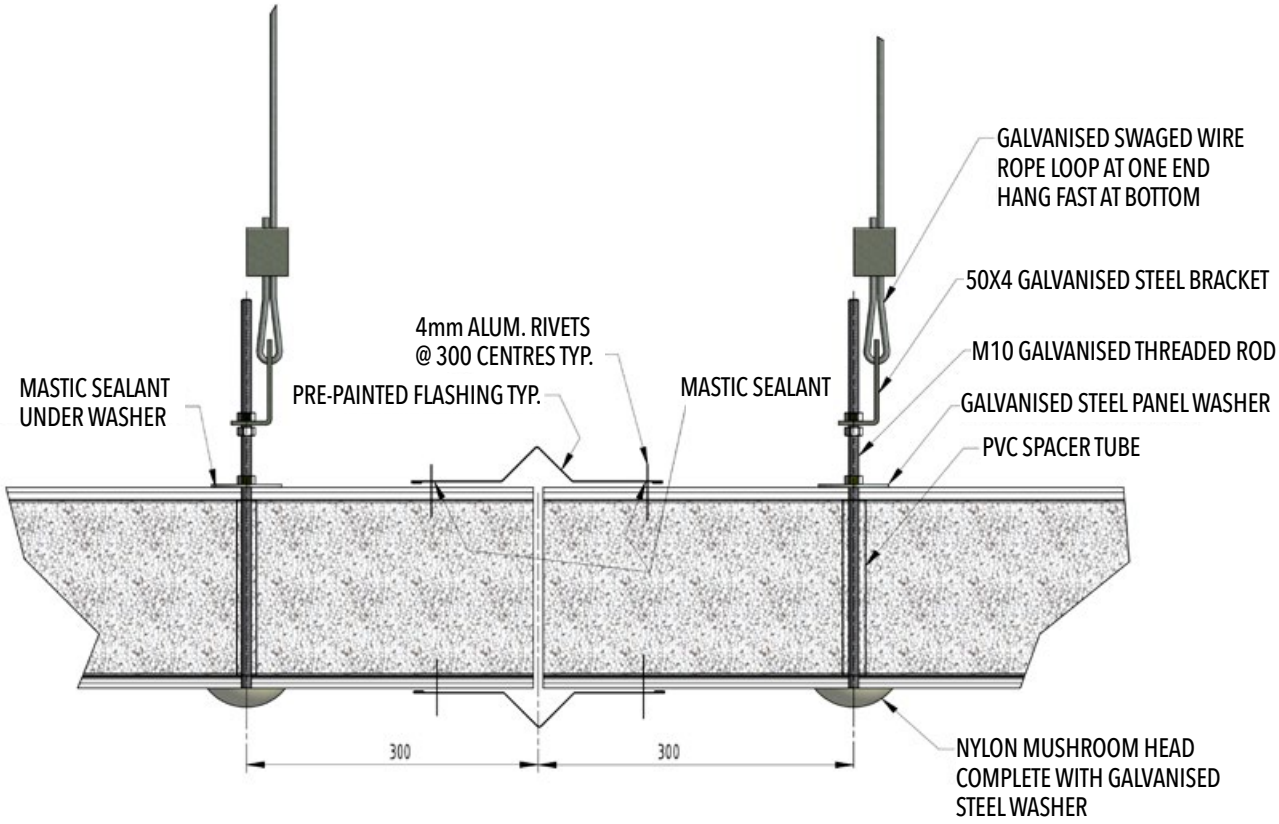
DELTA PANELS

Email: info@deltapanels.com

Description			
TYPICAL EXTERNAL CORNER, CLEAN ROOM			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1Q		Rev: A	Sheet: 18/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.19 MAIN CEILING SUSPENSION



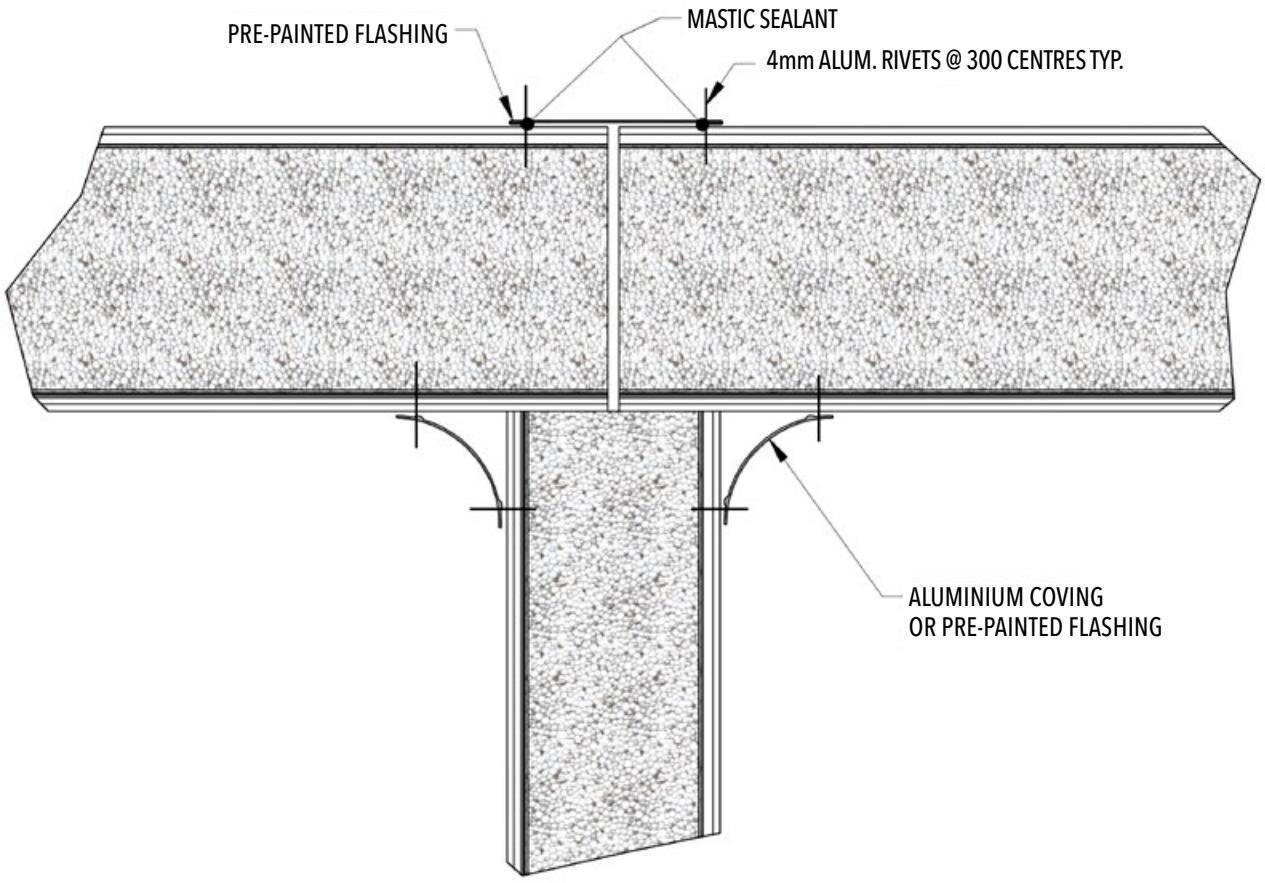
DELTA PANELS

Email: info@deltapanels.com

Description: MAIN CEILING SUSPENSION			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1R		Rev: A	Sheet: 19/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.20 PARTITION TO CEILING JOINT



DELTA PANELS

Email: info@deltapanels.com

Description: PARTITION TO CEILING JOINT			
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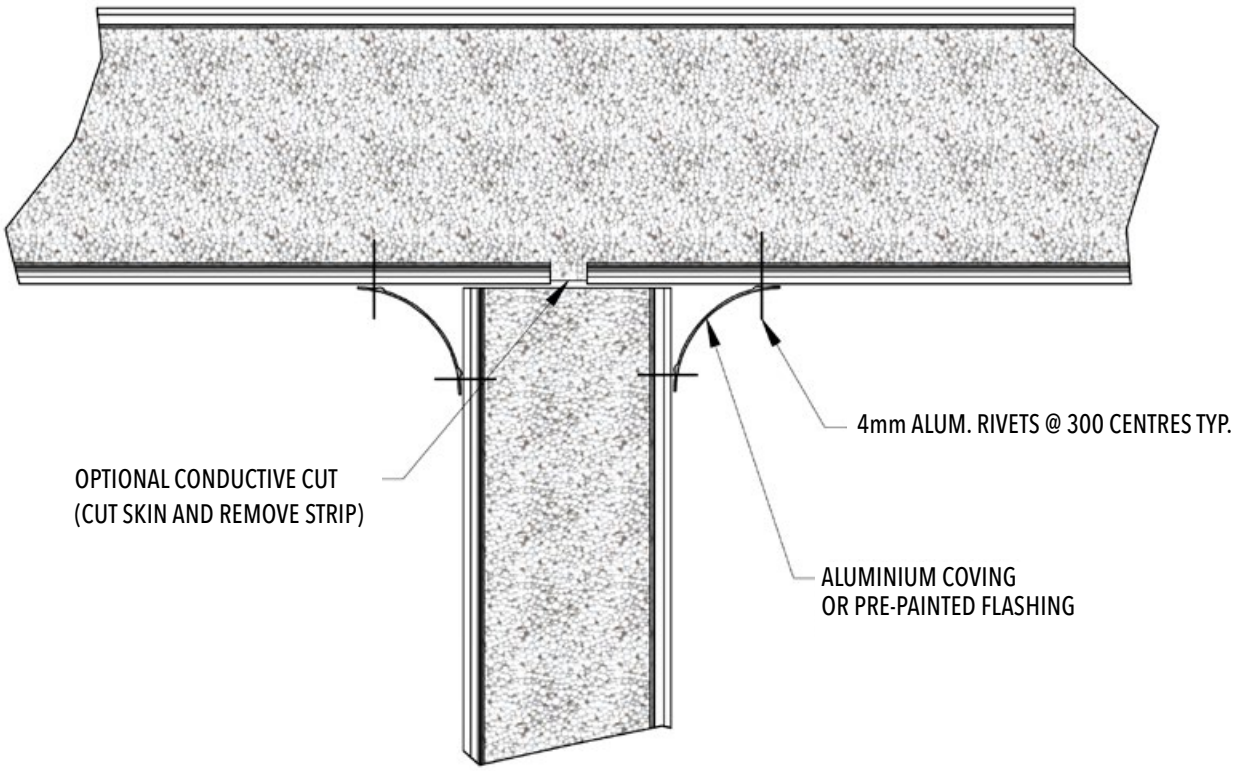
Drawing No.: COLD STORE 1S		Rev: A	Sheet: 20/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.21 PARTITION TO CEILING



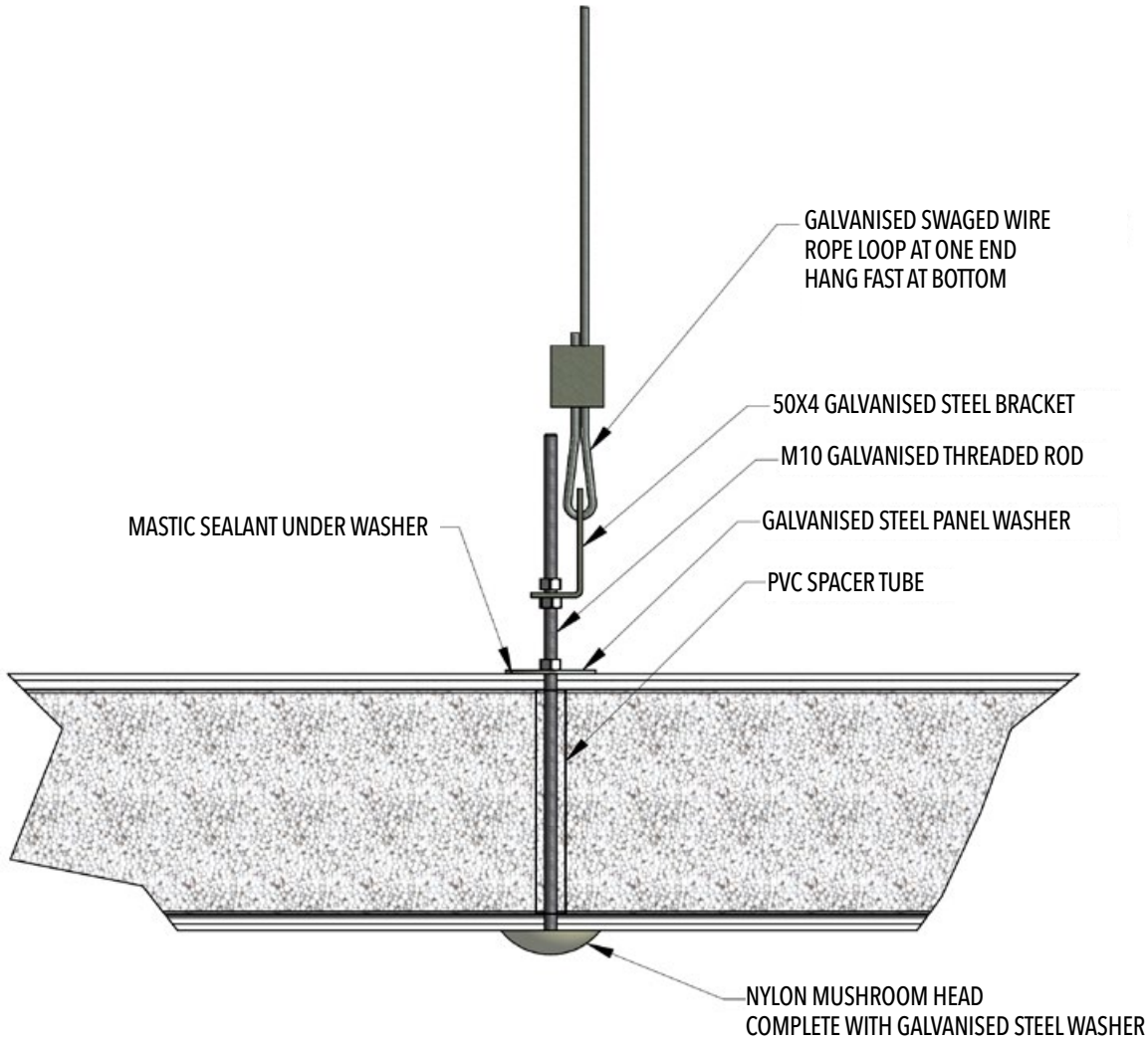
DELTA PANELS

Email: info@deltapanels.com

Description			
PARTITION TO CEILING			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1T		Rev: A	Sheet: 21/22

15. STANDARD INSTALLATION & CONNECTION DETAILS

15.22 INTERMEDIATE CEILING SUSPENSION



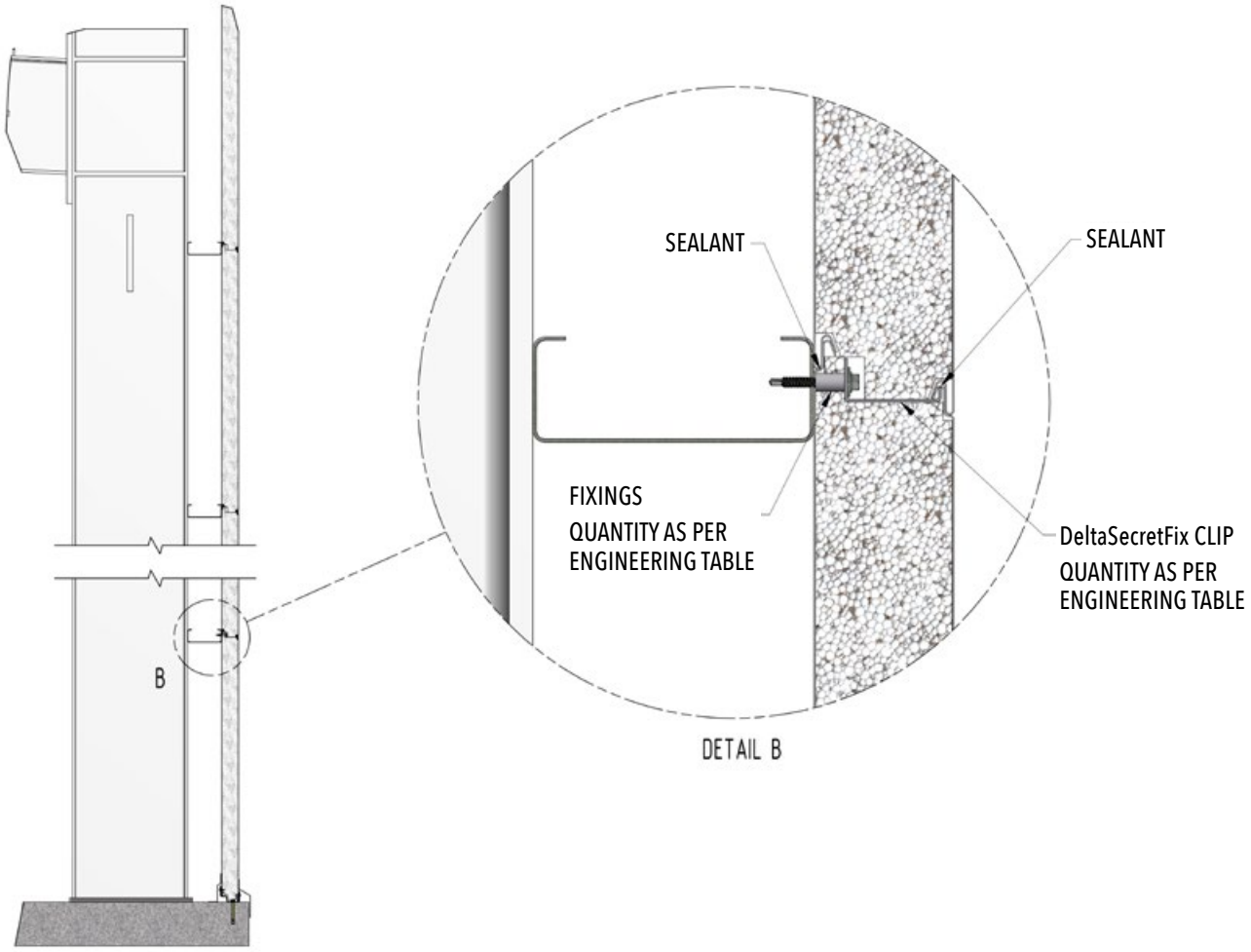
DELTA PANELS

Email: info@deltapanels.com

Description			
INTERMEDIATE CEILING SUSPENSION			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\DELTA COLDROOM\COLD STORE.iam	Date: 20/10/2020	Designed by: MDI	
Drawing No.: COLD STORE 1U		Rev: A	Sheet: 22/22

16. EXTERNAL CLADDING -
HORIZONTAL INSTALLATION & CONNECTION DETAILS

16.1 TYPICAL JOINTS FIXING



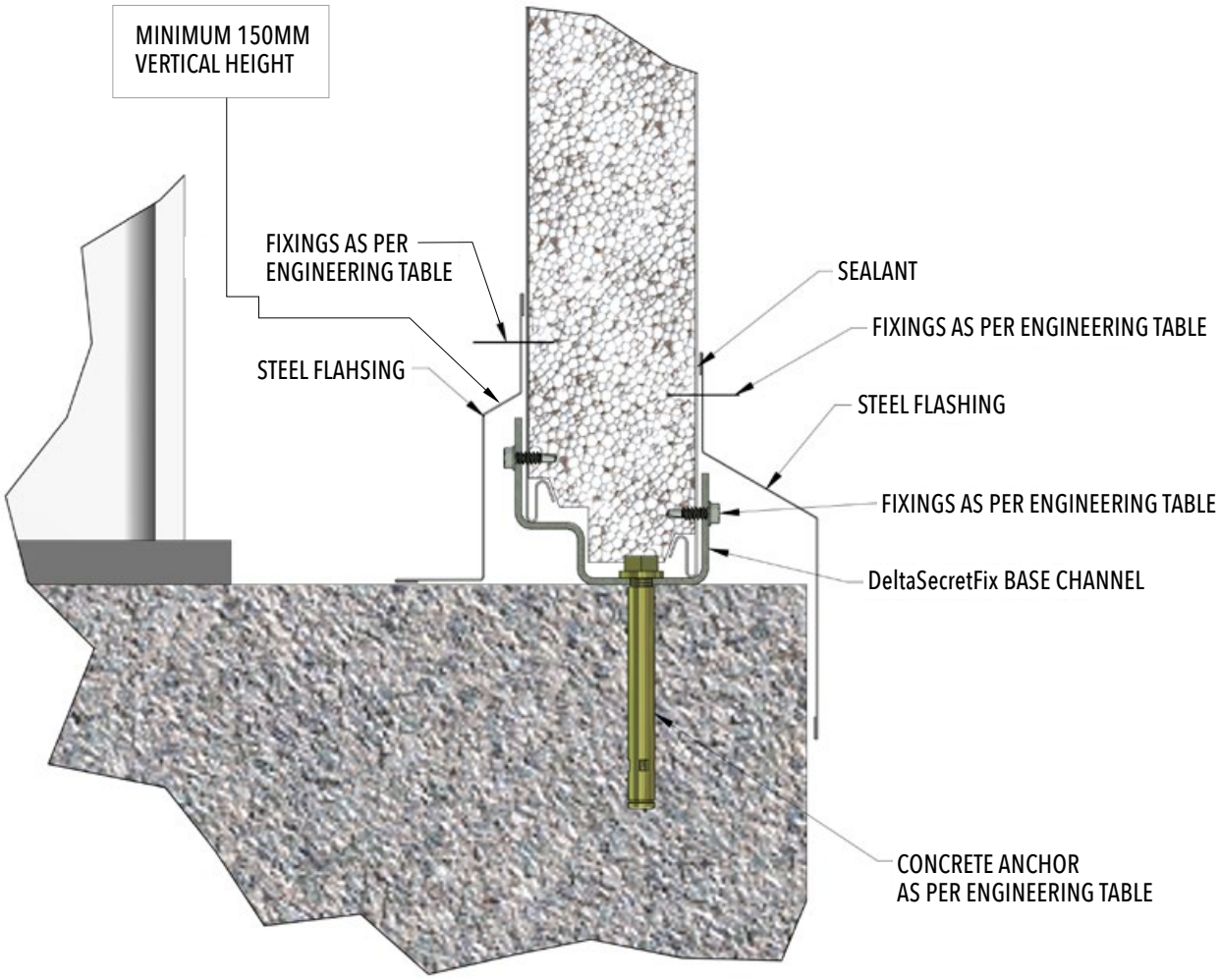
DELTA PANELS

Email: info@deltapanels.com

Description			
SECRET FIX HORIZONTAL JOINTS TYP. JOINTS FIXING			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1006-1		Rev: A	Sheet: 1/8

16. EXTERNAL CLADDING -
HORIZONTAL INSTALLATION & CONNECTION DETAILS

16.2 JOINTS BASE DETAIL



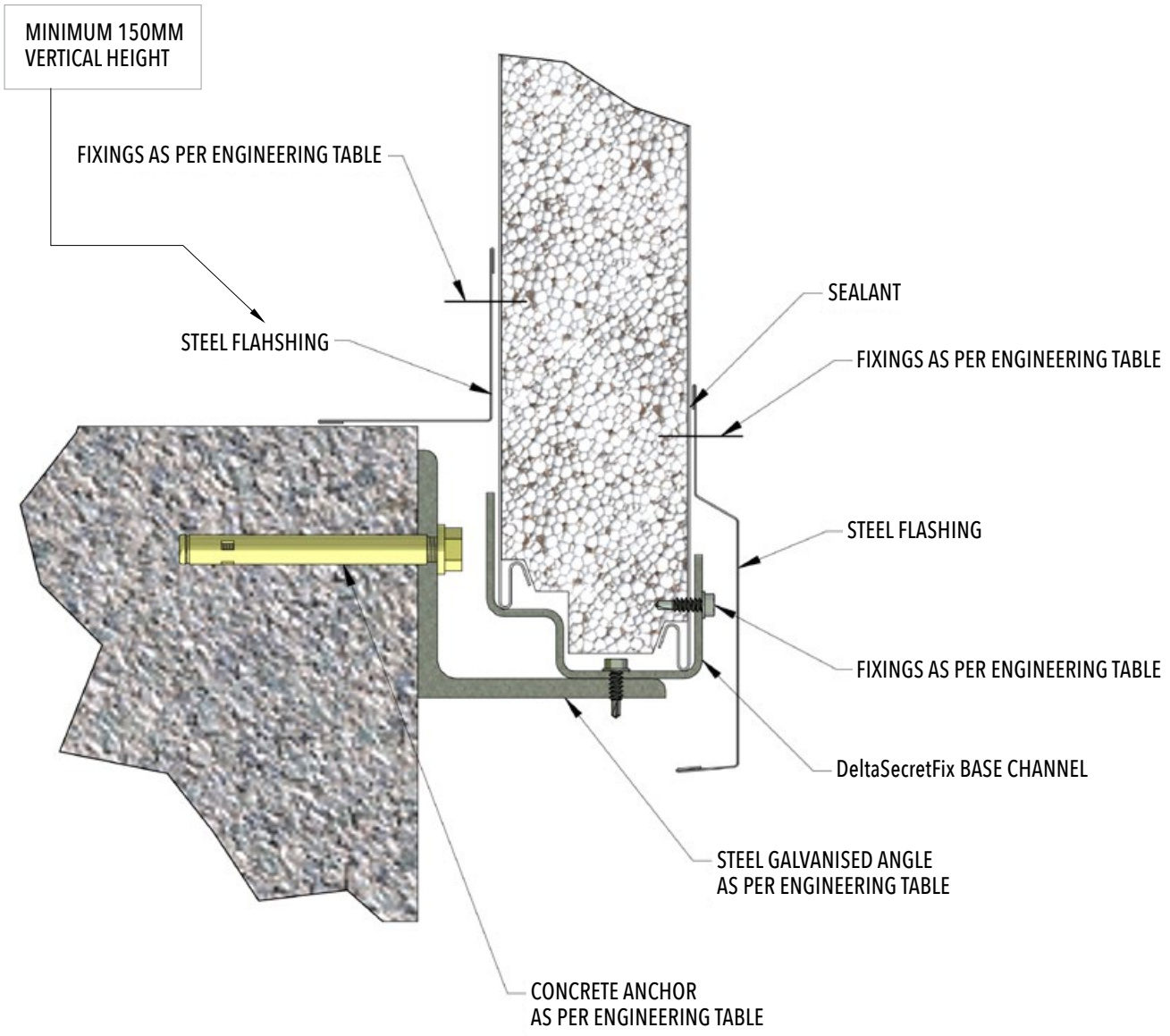
DELTA PANELS

Email: info@deltapanels.com

Description: SECRET FIX HORIZONTAL JOINTS BASE DETAIL			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1006-2		Rev: A	Sheet: 2/8

16. EXTERNAL CLADDING -
HORIZONTAL INSTALLATION & CONNECTION DETAILS

16.3 JOINTS BASE DETAIL



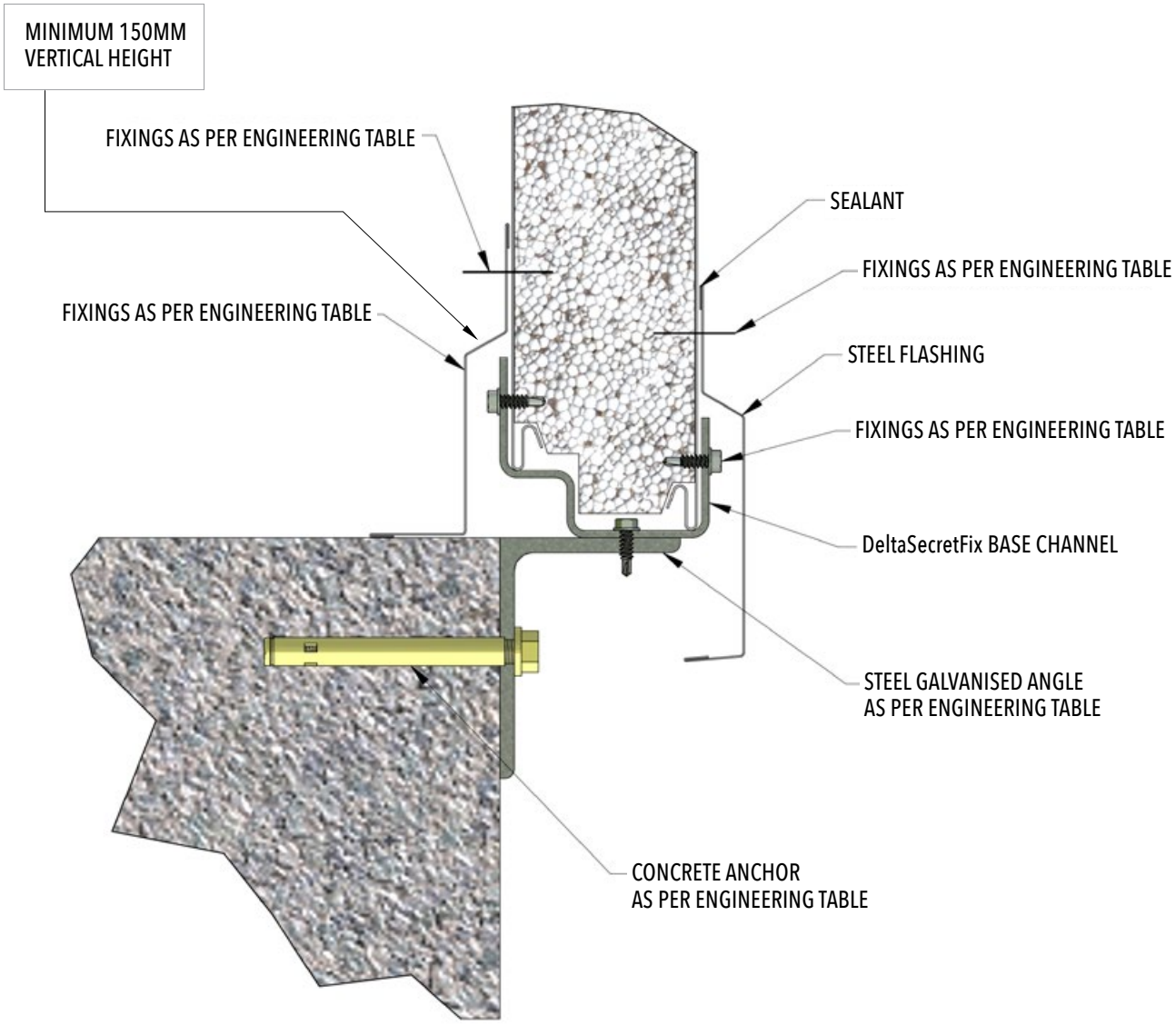
DELTA PANELS

Email: info@deltapanels.com

Description: SECRET FIX HORIZONTAL JOINTS BASE DETAIL			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1006-3		Rev: A	Sheet: 3/8

16. EXTERNAL CLADDING -
HORIZONTAL INSTALLATION & CONNECTION DETAILS

16.4 JOINTS BASE DETAIL



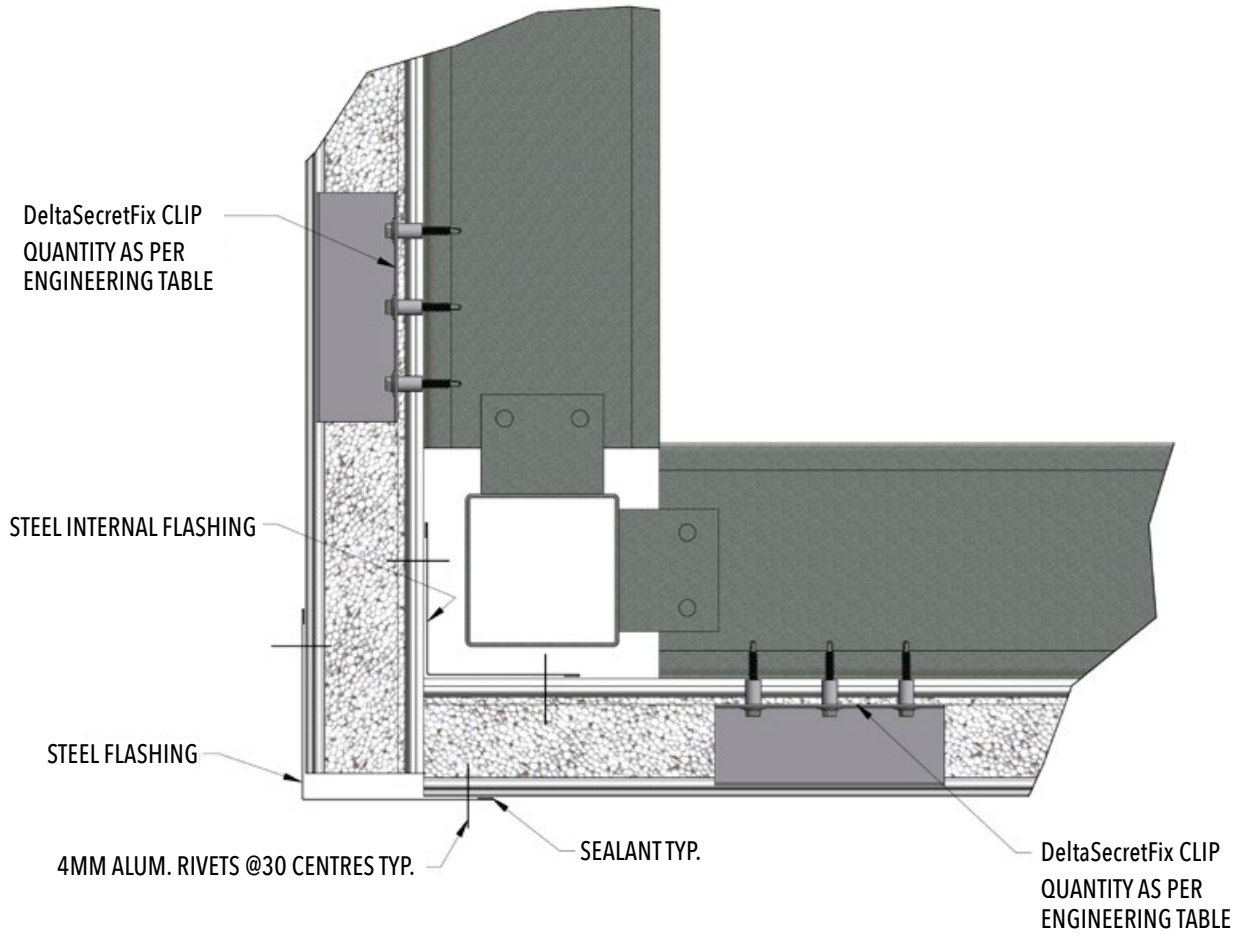
DELTA PANELS

Email: info@deltapanels.com

Description			
SECRET FIX HORIZONTAL JOINTS BASE DETAIL			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1006-4		Rev: A	Sheet: 4/8

16. EXTERNAL CLADDING -
HORIZONTAL INSTALLATION & CONNECTION DETAILS

16.5 JOINTS EXTERNAL CORNER



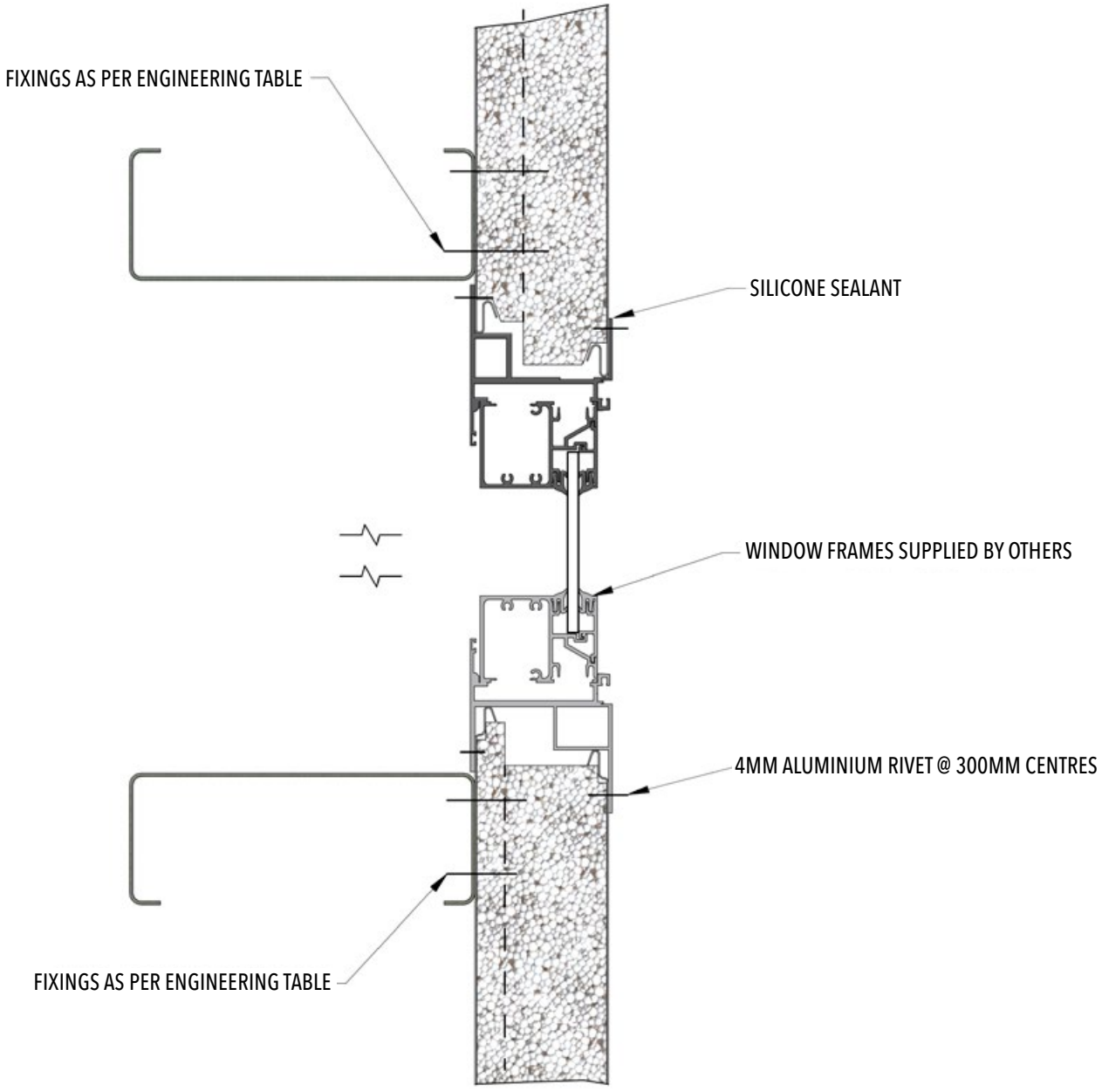
DELTA PANELS

Email: info@deltapanels.com

Description			
SECRET FIX HORIZONTAL JOINTS EXTERNAL CORNER			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1006-5		Rev: A	Sheet: 5/8

16. EXTERNAL CLADDING -
HORIZONTAL INSTALLATION & CONNECTION DETAILS

16.6 JOINTS INTEGRATED WINDOW



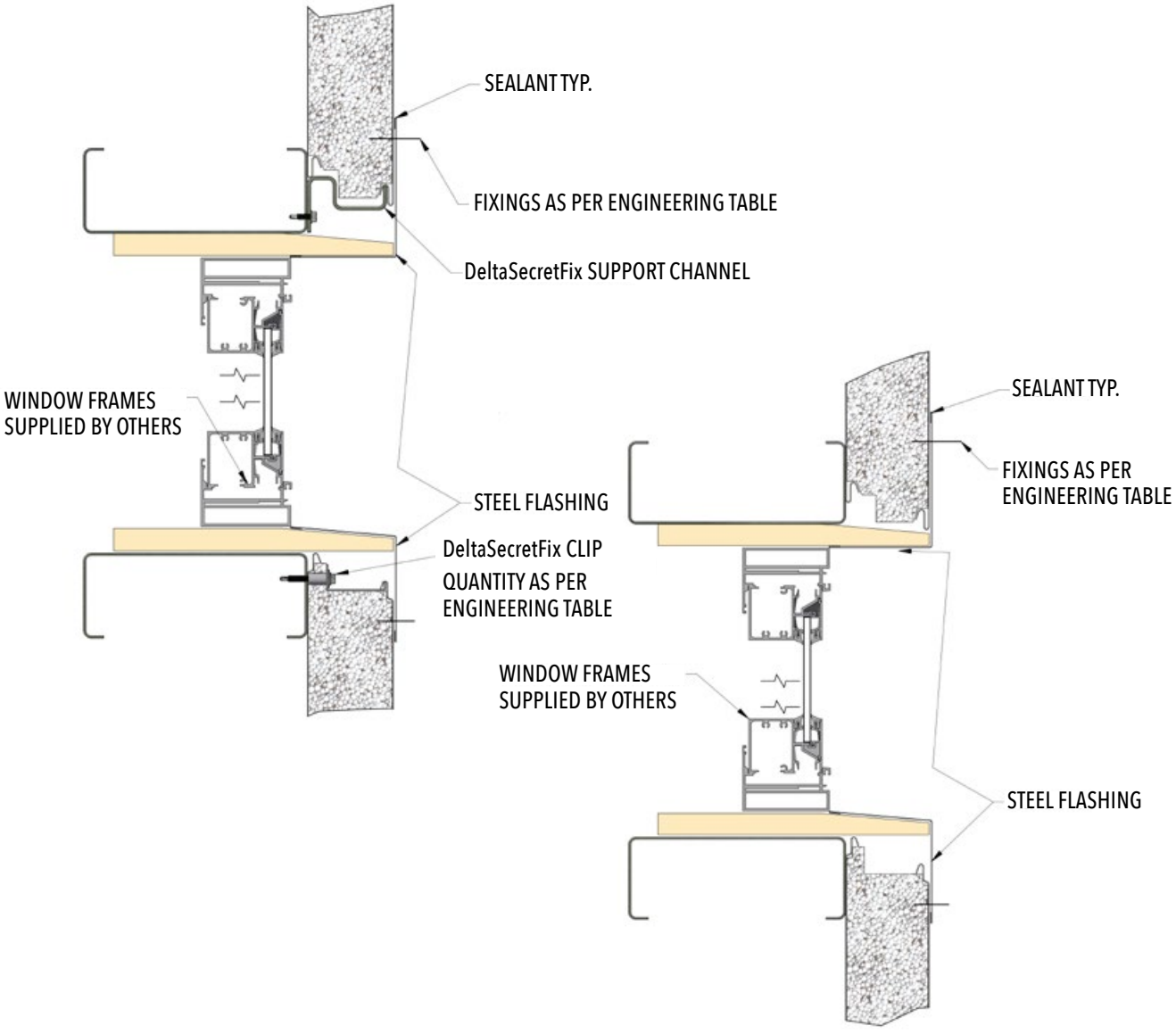
DELTA PANELS

Email: info@deltapanels.com

Description			
SECRET FIX HORIZONTAL JOINTS INTEGRATED WINDOW			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1006-6		Rev: A	Sheet: 6/8

16. EXTERNAL CLADDING -
HORIZONTAL INSTALLATION & CONNECTION DETAILS

16.7 JOINTS RECESSED WINDOW



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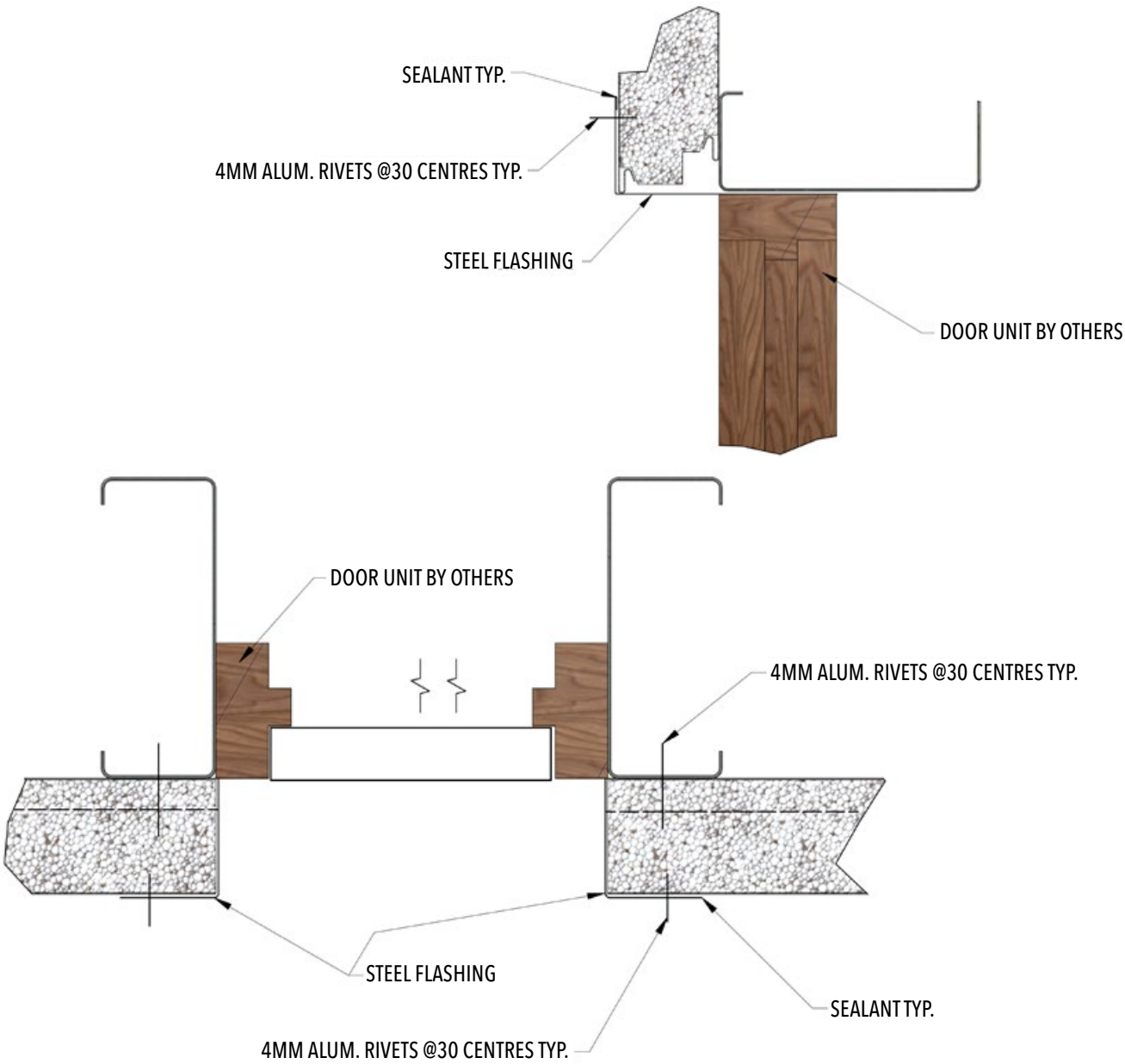
Description: SECRET FIX HORIZONTAL JOINTS RECESSED WINDOW			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1006-7		Rev: A	Sheet: 7/8

16. EXTERNAL CLADDING -
HORIZONTAL INSTALLATION & CONNECTION DETAILS

16.8 JOINTS PERSONNEL DOOR DETAIL



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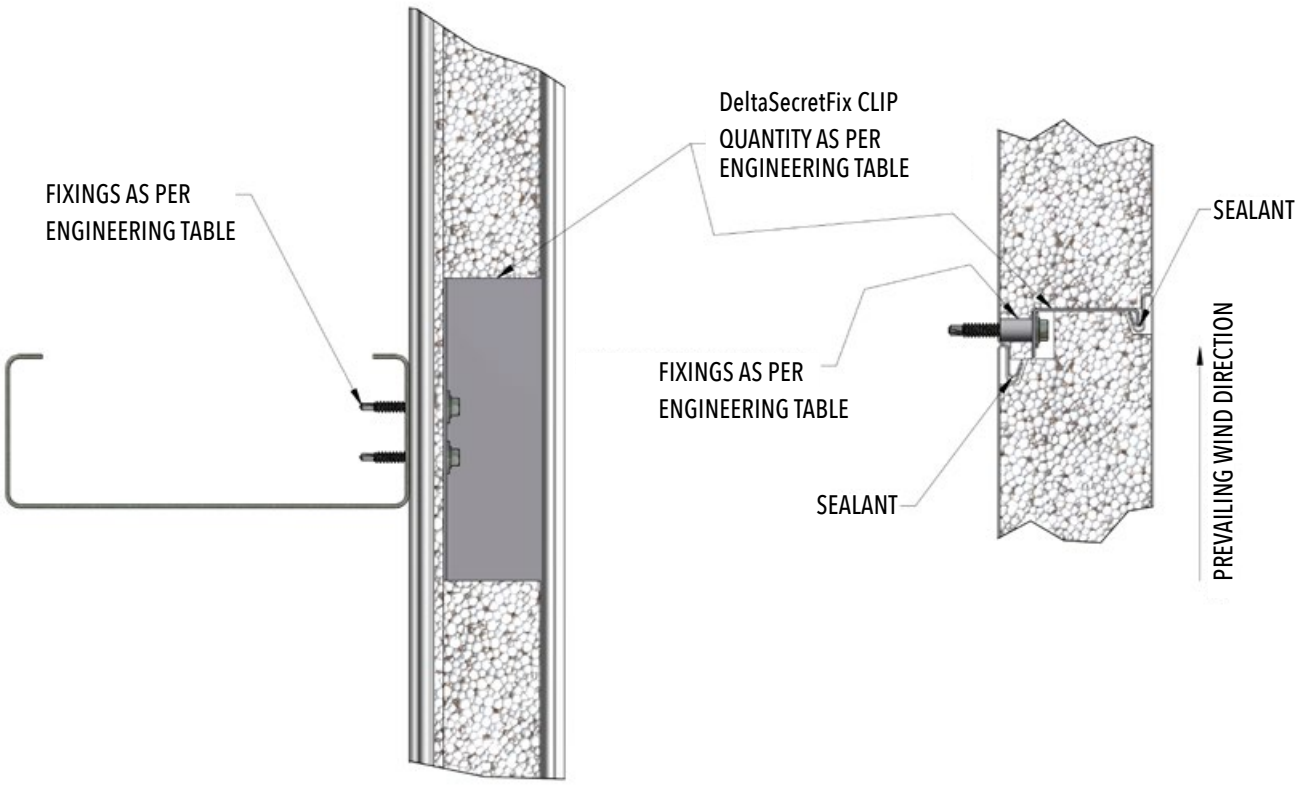
Description: SECRET FIX HORIZONTAL JOINTS PERSONNEL DOOR DETAIL			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1006-8		Rev: A	Sheet: 8/8

17. EXTERNAL CLADDING -
VERTICAL INSTALLATION & CONNECTION DETAILS

17.1 JOINTS FIXING



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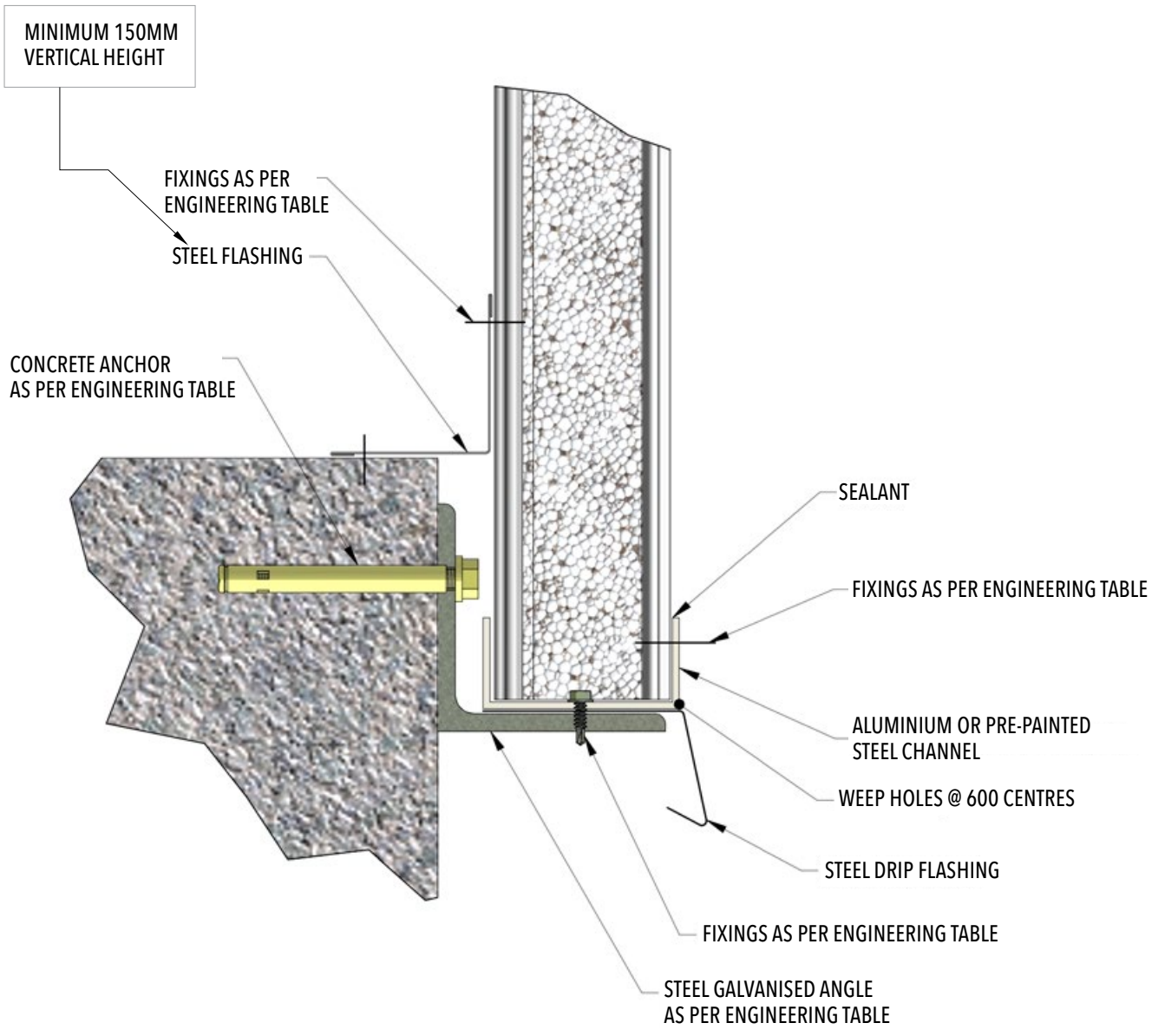
Description			
SECRET FIX VERTICAL JOINTS FIXING			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1005-1		Rev: A	Sheet: 1/9

17. EXTERNAL CLADDING -
VERTICAL INSTALLATION & CONNECTION DETAILS

17.2 JOINTS BASE DETAIL



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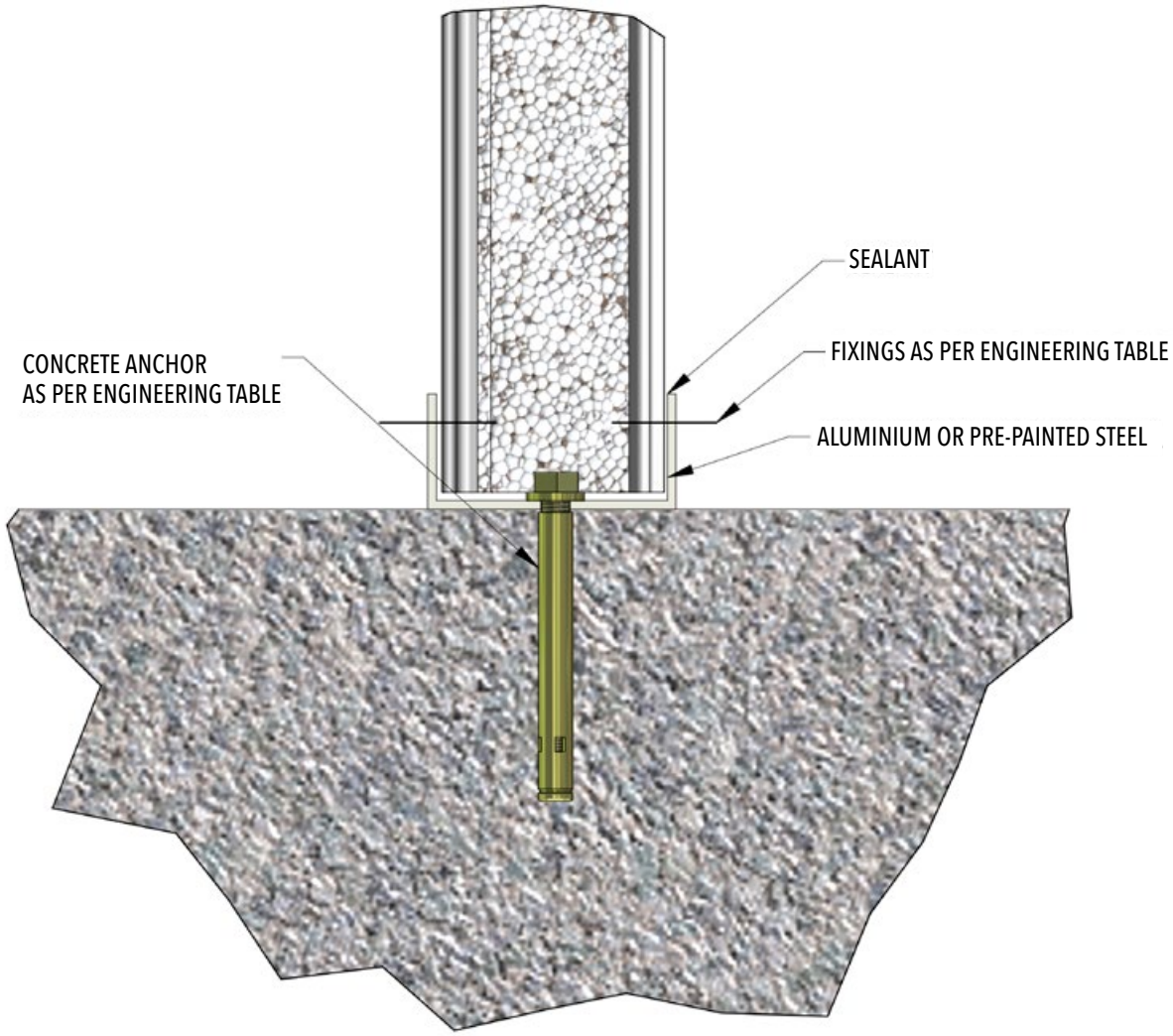
Description			
SECRET FIX VERTICAL JOINTS BASE DETAIL			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1005-2		Rev: A	Sheet: 2/9

17. EXTERNAL CLADDING -
VERTICAL INSTALLATION & CONNECTION DETAILS

17.3 JOINTS BASE DETAIL



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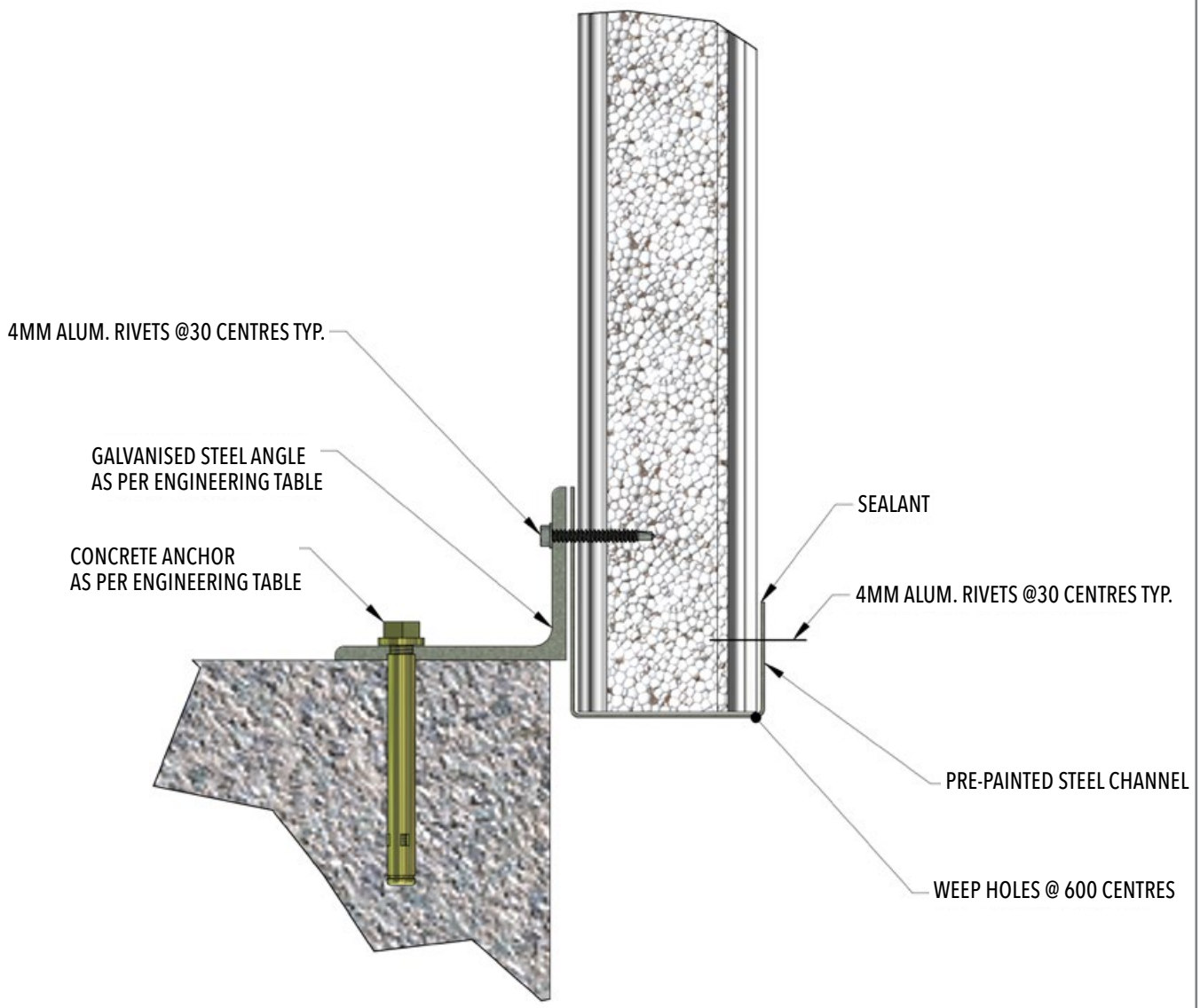
Description			
SECRET FIX VERTICAL JOINTS BASE DETAIL			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1005-3		Rev: A	Sheet: 3/9

17. EXTERNAL CLADDING -
VERTICAL INSTALLATION & CONNECTION DETAILS

17.4 JOINTS BASE DETAIL



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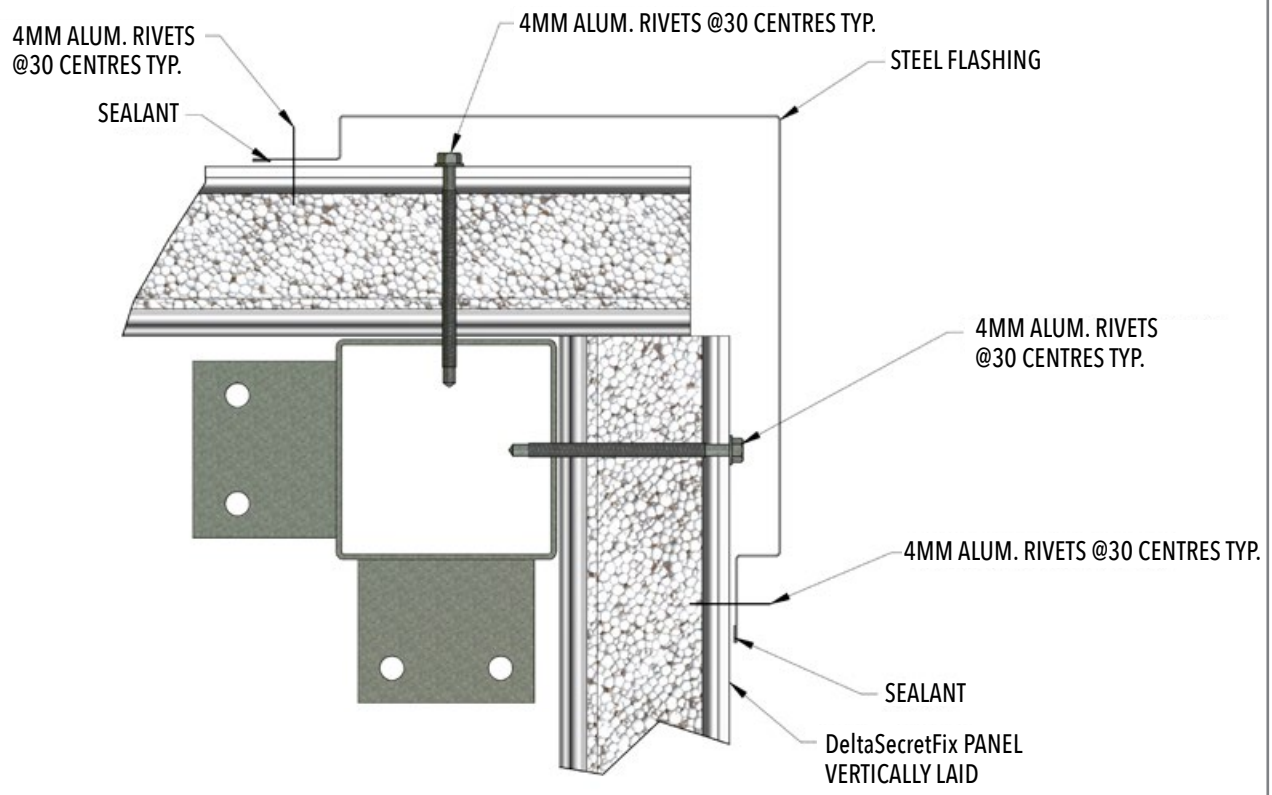
Description			
SECRET FIX VERTICAL JOINTS BASE DETAIL			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1005-4		Rev: A	Sheet: 4/9

17. EXTERNAL CLADDING -
VERTICAL INSTALLATION & CONNECTION DETAILS

17.5 JOINTS EXTERNAL CORNER



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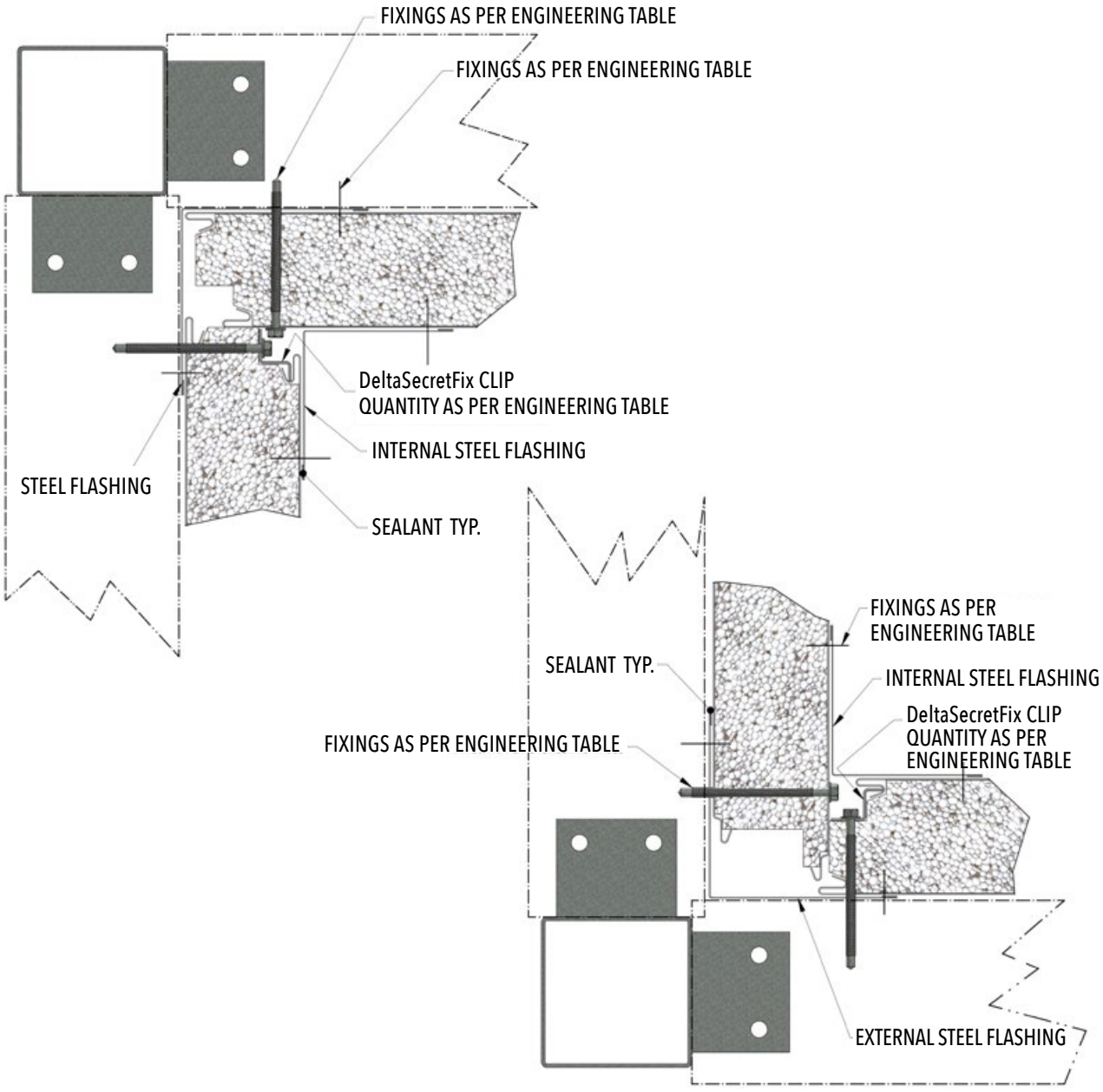
Description			
SECRET FIX VERTICAL JOINTS EXTERNAL CORNER			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1005-5		Rev: A	Sheet: 5/9

17. EXTERNAL CLADDING -
VERTICAL INSTALLATION & CONNECTION DETAILS

17.6 JOINTS INTERNAL CORNER



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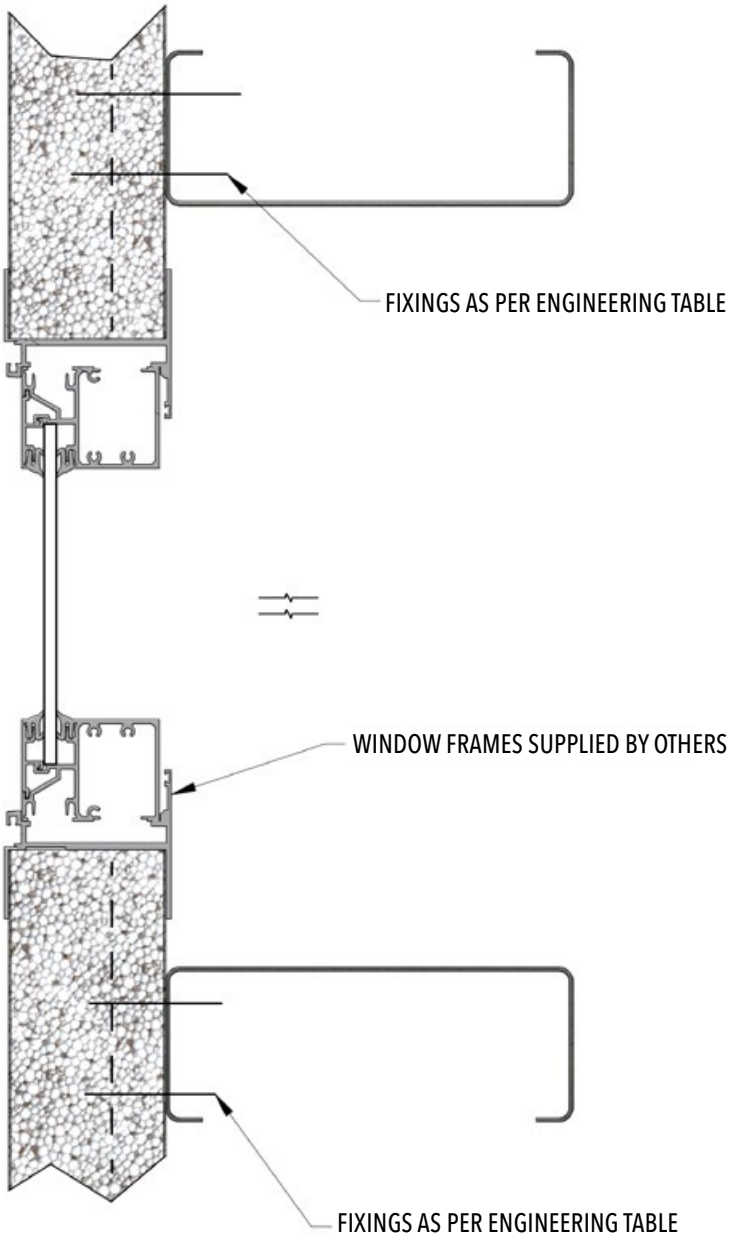
Description			
SECRET FIX VERTICAL JOINTS INTERNAL CORNER			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1005-6		Rev: A	Sheet: 6/9

17. EXTERNAL CLADDING -
VERTICAL INSTALLATION & CONNECTION DETAILS

17.7 JOINTS INTEGRATED WINDOW



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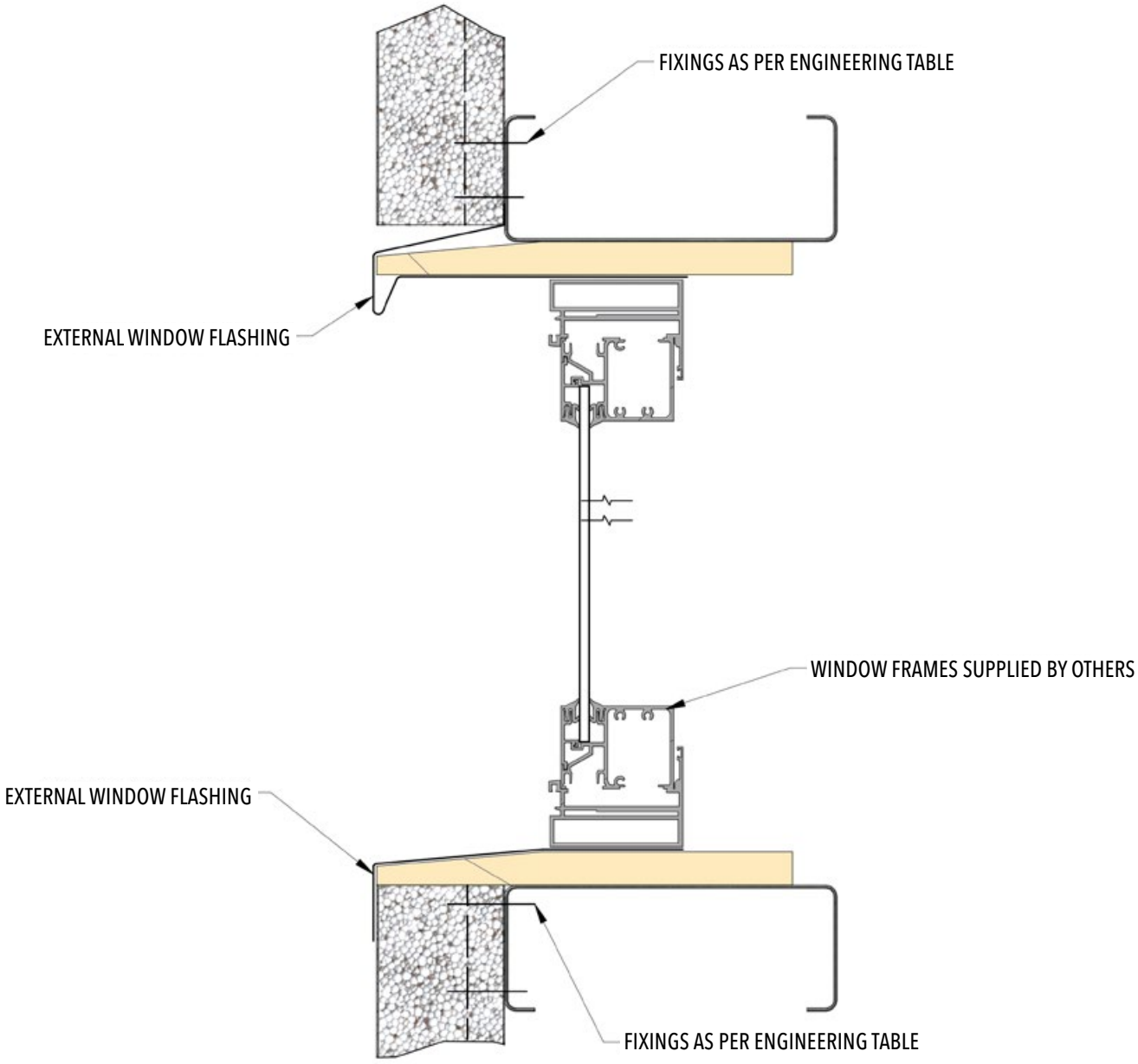
Description			
SECRET FIX VERTICAL JOINTS INTEGRATED WINDOW			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1005-7		Rev: A	Sheet: 7/9

17. EXTERNAL CLADDING -
VERTICAL INSTALLATION & CONNECTION DETAILS

17.8 JOINTS RECESSED WINDOW



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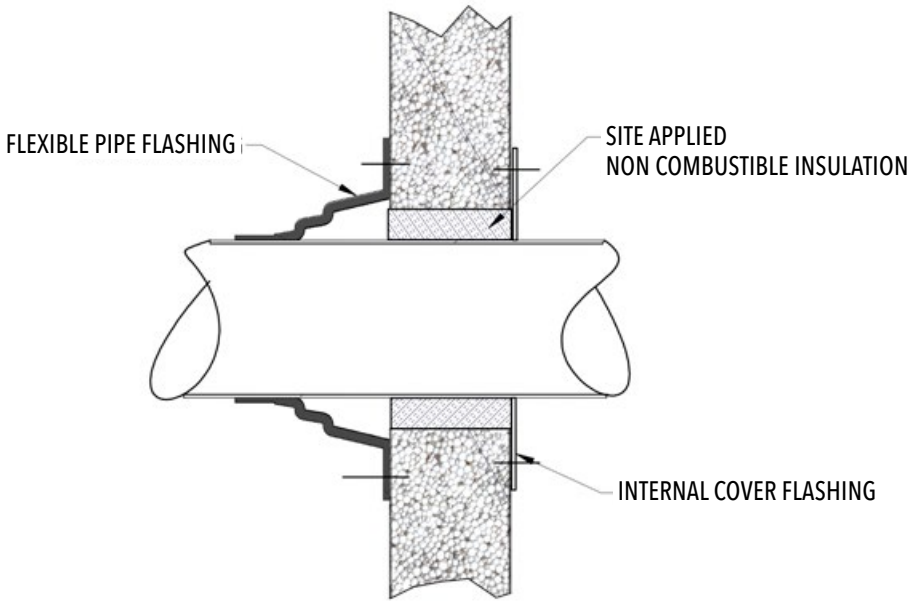
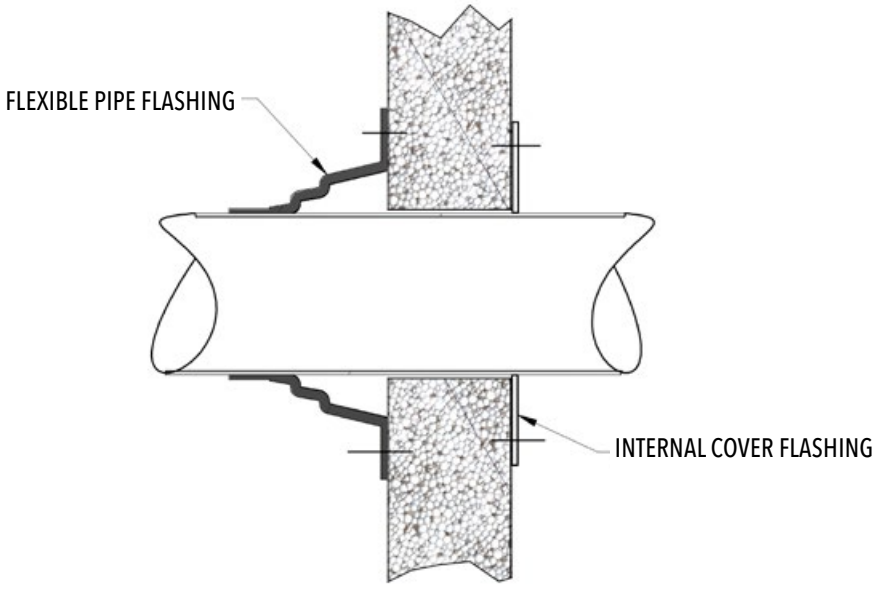
Description			
SECRET FIX VERTICAL JOINTS RECESSED WINDOW			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1005-8		Rev: A	Sheet: 8/9

17. EXTERNAL CLADDING -
VERTICAL INSTALLATION & CONNECTION DETAILS

17.9 PENETRATION DETAIL



HIGH TEMPERATURE



NORMAL TEMPERATURE

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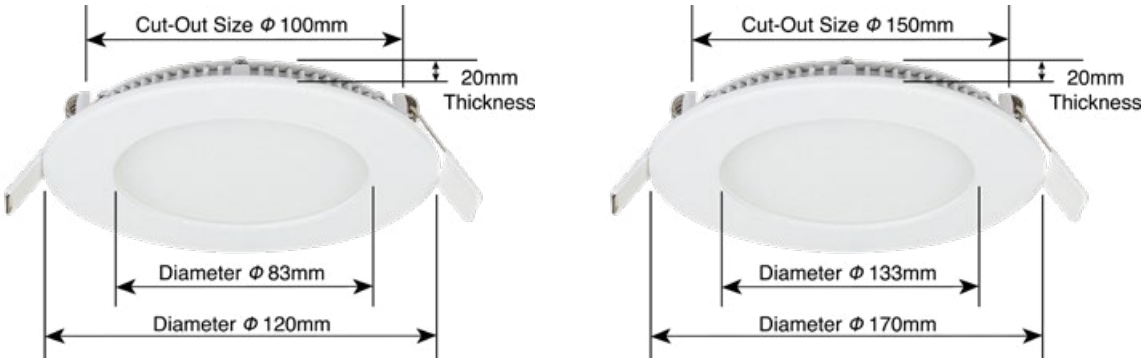
Description			
SECRET FIX PENETRATION DETAIL			
Filename & Path: Z:\Vault\DELTA PANELS & PATIOS\WALL CLADDING INSTRUCTIONS\WC1005.iam	Date: 7/12/2020	Designed by: DP	
Drawing No.: WC1005-9		Rev: A	Sheet: 9/9

18. INSTALLATION OF SERVICES & ACCESSORIES

Recessed Lighting

Delta Panels™ have a range of low voltage LED recess lighting, DeltaLowProfile™ Light, specifically designed to be installed into insulated panels.

Recess cut-outs are required to be made into the underneath of the panel



All electrical cabling is double insulated but the use of electrical conduit is still recommended

For ease of future access it is recommended to house the driver either behind the light fitting or in the eave of ridge capping.

A qualified electrician is required to install the GPO outlets for the low voltage lights.

Detailed procedures are outlined in the DeltaLowProfile™ Safety & Installation Manual, which is supplied with the lights and is also available online at *www.deltapanels.com*

Panel Lighting

Delta Panels™ have a range of low voltage LED panel lighting, DeltaPanelLight™, specifically designed to be installed into the underneath skin of insulated panels.

There is no requirement for cut-outs into the underneath of the panel, as frame is directly attached onto the underneath surface of the panel.

All electrical cabling is double insulated but the use of electrical conduit is still recommended

For ease of future access it is recommended to house the driver behind the light panel within the support frame.

A qualified electrician is required to install the GPO outlets for the low voltage LED panel lights.

Detailed procedures are outlined in the DeltaPanelLight™ Safety & Installation Manual, which is supplied with the lights and is also available online at *www.deltapanels.com*

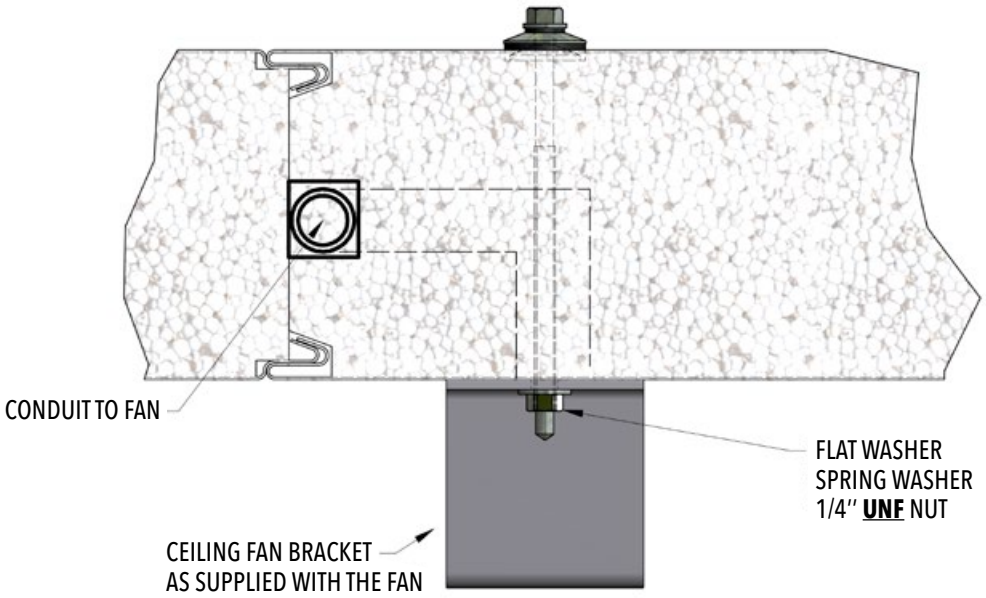
18. INSTALLATION OF SERVICES & ACCESSORIES

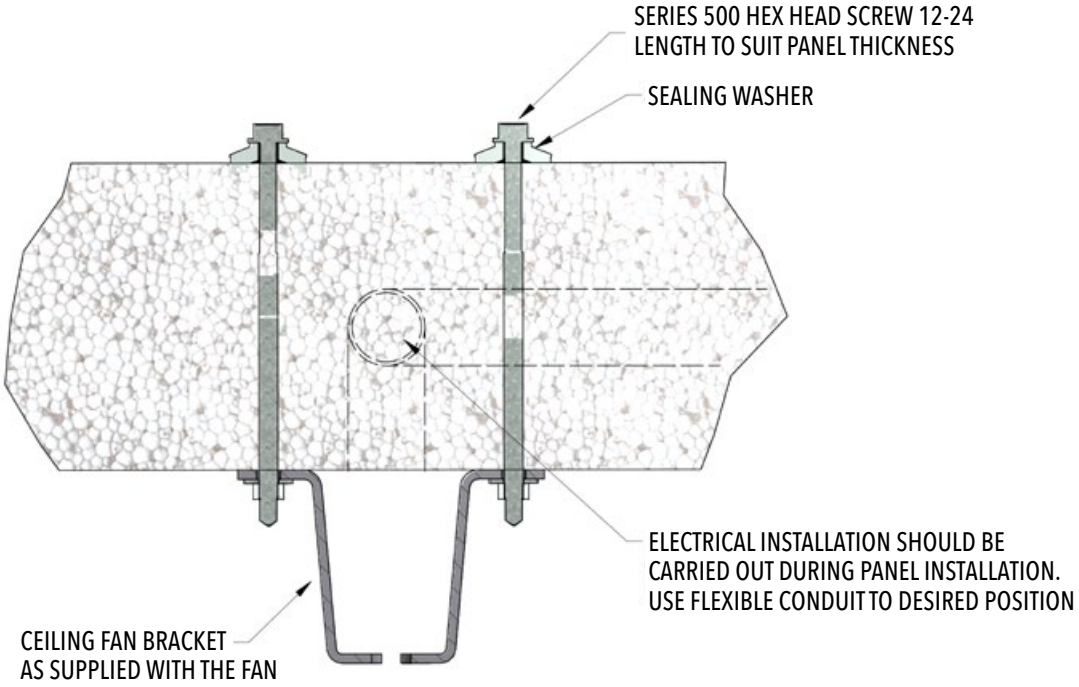
Ceiling Fans

To mount ceiling fans to insulated panels it is necessary to ensure that the weight of the fan is spread over the whole of the top skin of the ceiling panel.

All electrical work must be carried out by a Licensed Electrician.

BRACKET INSTALLATION DETAILS





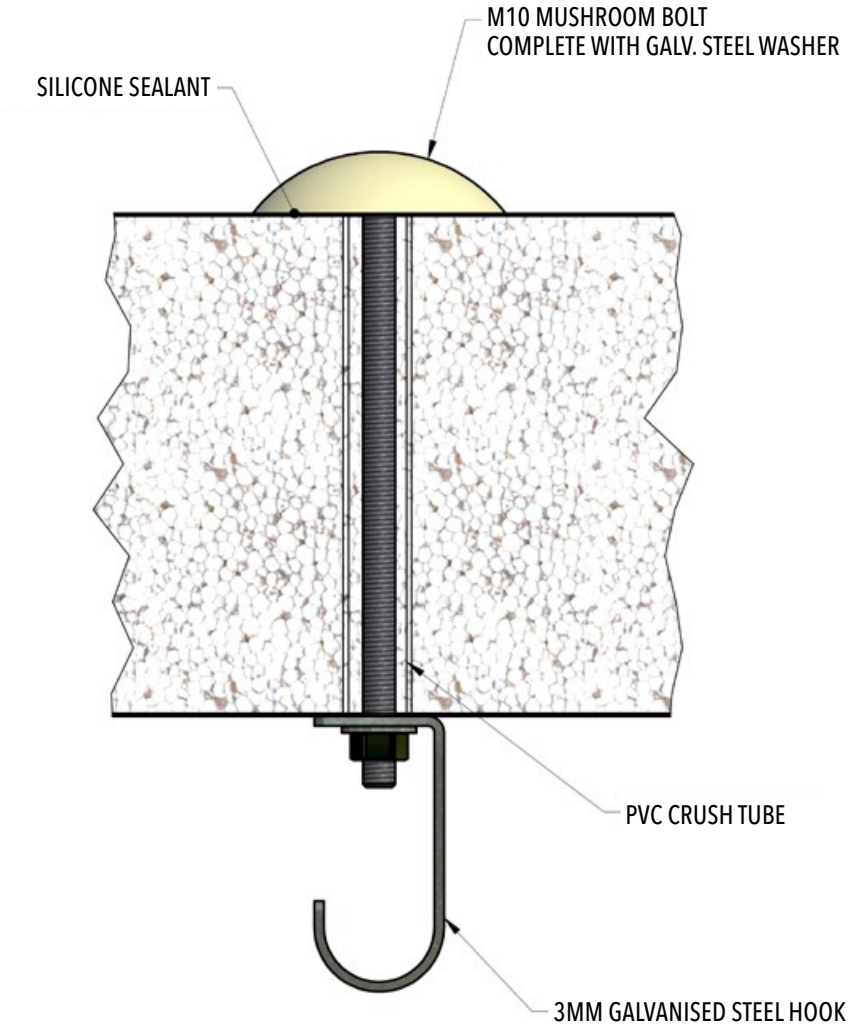
18. INSTALLATION OF SERVICES & ACCESSORIES

All Purpose Service Support Bracket

To fix an all purpose support bracket to insulated panels it is necessary to ensure that the weight is spread over the whole of the top skin of the panel. Therefore a through-fastening arrangement is required.

Ridge fixing as close as possible to the panel join is highly recommended

ALL PURPOSE SERVICE SUPPORT BRACKET

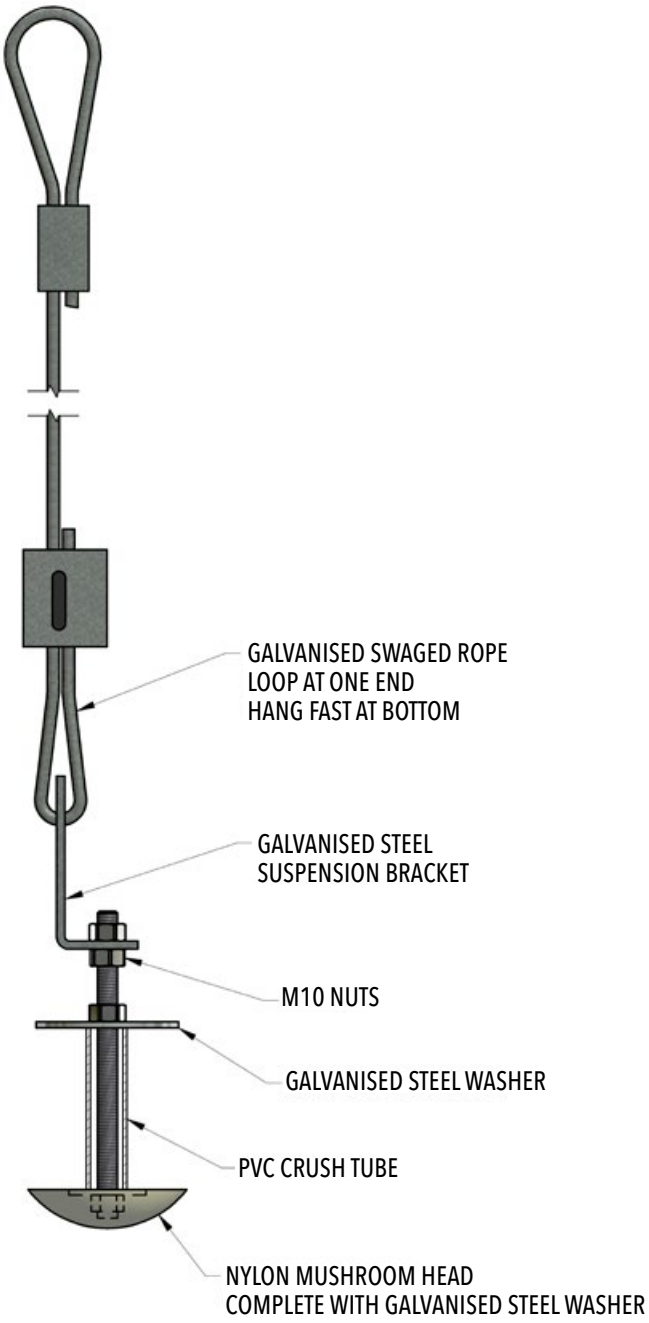


18. INSTALLATION OF SERVICES & ACCESSORIES

Mushroom Head Suspension Assembly

To allow for clear spans in working areas it is necessary to suspend the roof from the structural frame of the building. To attached this a mushroom head suspension system is used. Please refer to the engineering in regarding to spacings and allowable load limits

MUSHROOM HEAD BOLT FOR CEILING SUSPENSION

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