# STANDING SEAM

## INSTALLATION DOCUMENT

A thoroughly concealed cladding system through its fixed flat profile with thin lines that is classic yet provides a striking and elegant finish.

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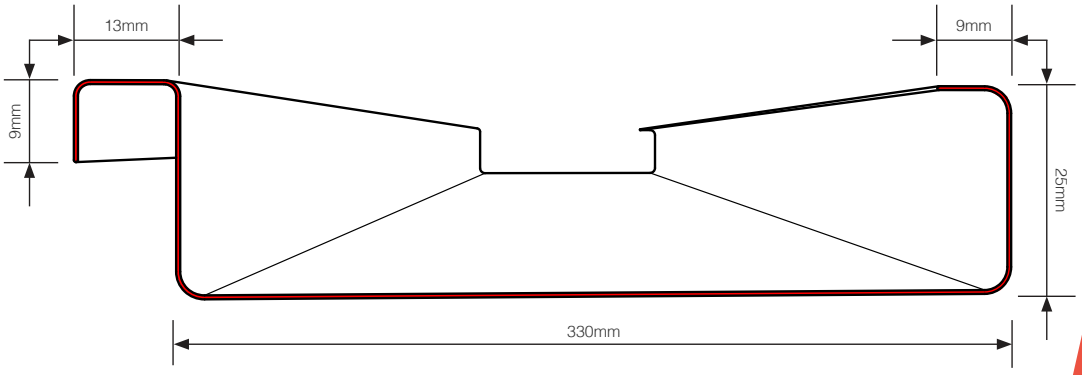
## OVERVIEW

COLORSPAN Standing Seam is a concealed fixed flat cladding system.

The panelling system is directly fixed onto supporting flat substrates such as plywood or fibre cement panels to exude a simplistic yet premium overall finish.


Standing Seam Sheet Profile




## SINGULAR PANEL SHEET PROFILE

The profile provides a curving capacity that is not achievable by most cladding profiles, magnifying the design capabilities of users.

Additional Notes:

This manual is a guide for Colorspan Standing Seam specifications and installation techniques only.

Colorspan is supported and guided by expert steel walling and roofing installers throughout the entire process to ensure proper quality control.

CS QUALITY ASSURED

Compliant checked and verified by Colorspan

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Additional Notes:

Panel Coverage Distances is recommended to be at 330mm or below when installed onto a flat substrate.

However, it can be customised from a range of 180mm - 500mm if deemed necessary, with a flat substrate installed to ensure proper installation of the panel.

# PRODUCT SPECIFICATIONS

| | |
|---|---|
| **Coverage Distance (mm)** | 330mm |
| **Metal Thickness (mm)** | 0.55mm |
| **Rib Height (mm)** | 25 mm |
| **Sheet Length (mm)** | 850mm min. ~ 24000mm max. |
| **Panel Tolerance (mm)** | Sheet length: ± 7mm<br>Covering width: ± 4mm |
| **Thermal Expansion** | 2.9mm increase on average for every 5m @50°C change in temp. |
| **Minimum Roof Pitch** | 3 Degrees |

# MATERIALS

| Material | Thickness (mm) | Weight per m2 | Warranty | Flammability |
|---|---|---|---|---|
| Colorbond | 0.55mm | 7.31kg | Up to 15 years | Non-Combustible |
| Greencoat | 0.55mm | 7.31kg | Up to 50 years | Non-Combustible |
| Nedzink | 0.70mm | 7.97kg | Up to 10 years | Non-Combustible |
| Aluminium | 0.80mm | 3.59kg | Up to 20 years | Non-Combustible |
| Copper | 0.80mm | 11.36kg | Up to 30 years | Non-Combustible |
| Weathering Steel | 0.75mm | 9.47kg | Up to 10 years | Non-Combustible |

*Please contact our specialised Colorspan team for further information about material specifications.

# FASTENER SPECIFICATIONS

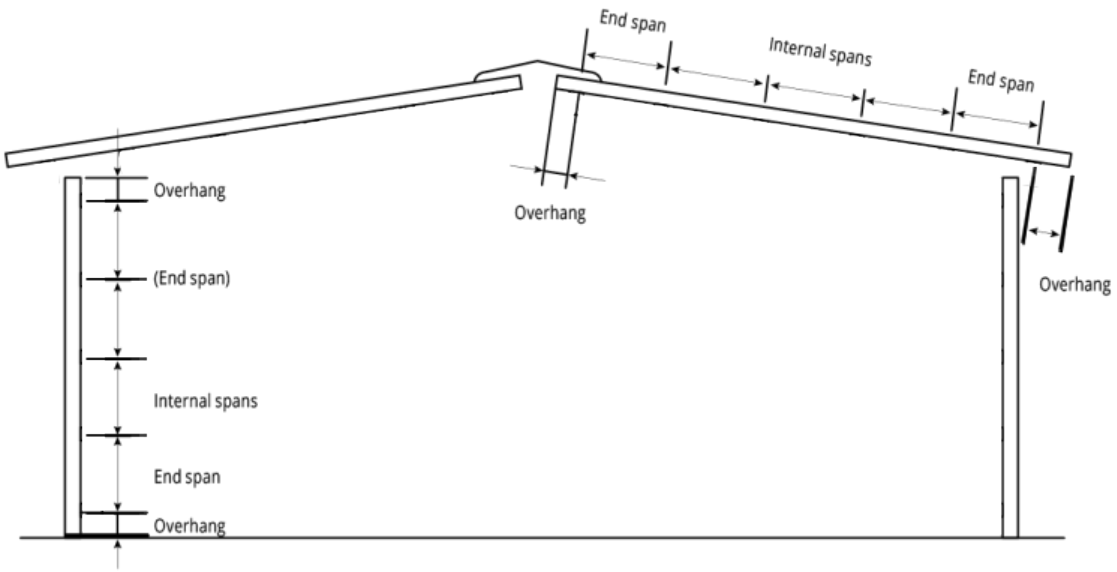
- Colorspan Standing Seam is a concealed fixed cladding system that requires fastener screws to be fixed onto the steel clips used to install the panels onto the specified wall or roof.
- Fasteners are required to be screwed through the slotted holes on the steel clips.

Smooth Top Flat Head Metal Screw (Steel)

Countersunk Head Metal Screw (Plywood)

| Fixing-on Material | Application Technique |
|---|---|
| Fixing on Steel | Fixed clip: 2x M4.8-16x16 Smooth top flat head metal screw with minimum Class-3 coating |
| Fixing on Plywood | Fixed clip: 2x 8g-10x25 Countersunk head metal screw with minimum Class 3-coating<br>Sliding clip: 3x 8g-10x25 Countersunk head metal screw with minimum Class-3 coating |

# LOAD SPAN TABLES (NON-CYCLONIC)




Sectional diagram showcasing Single, End & Internal & Overhang spans.

# RECOMMENDED ROOF CLADDING SPANS (MAXIMUM)

| Coverage Distance (mm) | Base Metal Thickness (mm) | Single Span (mm) | End Span (mm) | Internal Span (mm) | Overhang Span (mm) |
|---|---|---|---|---|---|
| 330mm | 0.55mm | Fixed Clip: 350mm on roof edge<br>Sliding Clip: 700mm on general areas | | | 50mm |

# RECOMMENDED WALL CLADDING SPANS (MAXIMUM)

| Coverage Distance (mm) | Base Metal Thickness (mm) | Single Span (mm) | End Span (mm) | Internal Span (mm) | Overhang Span (mm) |
|---|---|---|---|---|---|
| 330mm | 0.55mm | Fixed Clip: 350mm on wall edge<br>Sliding Clip: 700mm on wall areas | | | 100mm |

# FLAMMABILITY & COMBUSTIBILITY

- All cladding profiles and materials from Colorspan are non-combustible.
- Colorspan products do not require a code mark certificate and is deemed to satisfy all requirements as per stated within the National Construction Code 2019 under AS1530.1 Section C1.9.(e).(v) and 3.7.1.1.(e).
- All pre-finished metal sheetings specified consists of a surface finish that is less than 1mm in thickness and has a Spread of Flame Index of 0.

Additional Notes:

Colorspan's panelling products are the main components utilised in the construction of the built product, but they are not the only elements used throughout the process.

It is important to ensure that the other components used must also satisfy the necessary requirements instilled by the Australian Standards and the National Construction Code.

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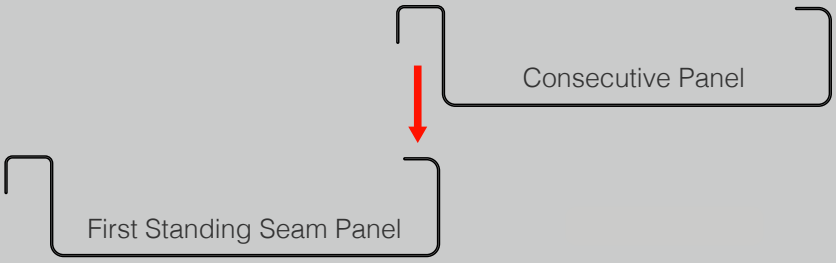
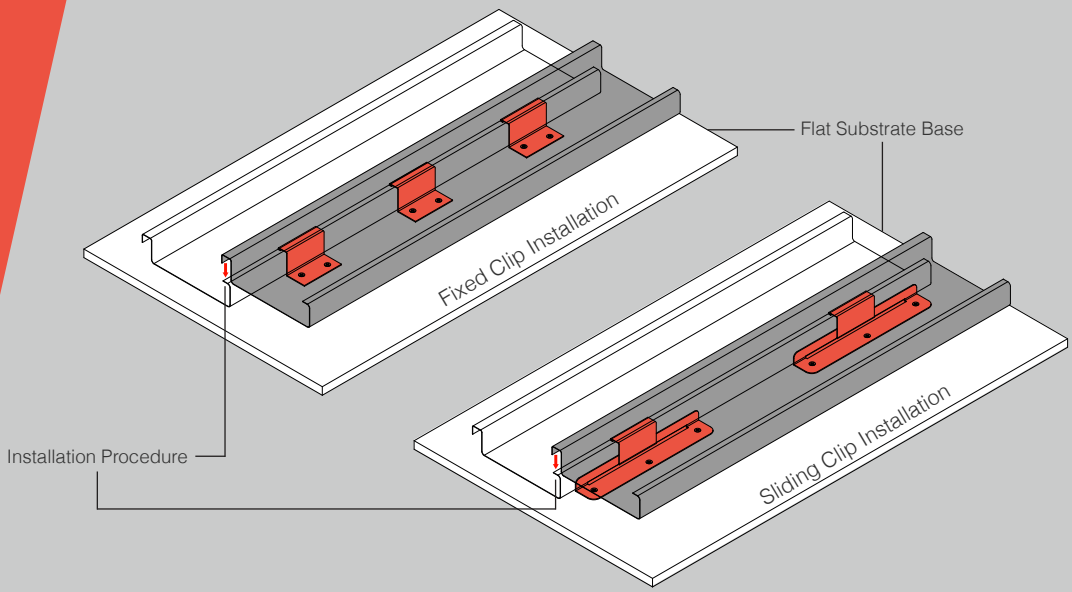
# STANDARD LAP ENGAGEMENT PROCEDURE




A Colorspan Standing Seam Starter Panel will be installed along the wall-edge before another Standing Seam panel is fixed over the under lap edge to the substrate wall to ensure stability of the cladding.

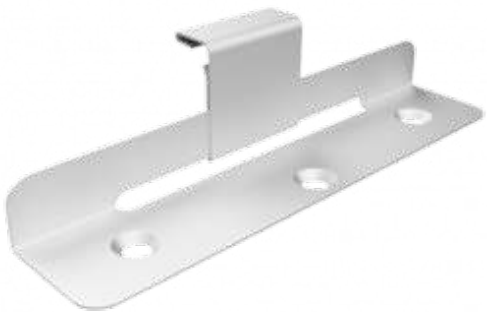



# STAINLESS STEEL CLIPS

A combination of fixed and sliding stainless steel clips are utilised during the installation of Colorspan Standing Seam Panels to allow for flexible expansions and contractions.

The fixed clip is usually positioned along building edges whilst the sliding clip would be utilised along non-perimeter areas as well as on building edges.

Colorspan Fixed Clip

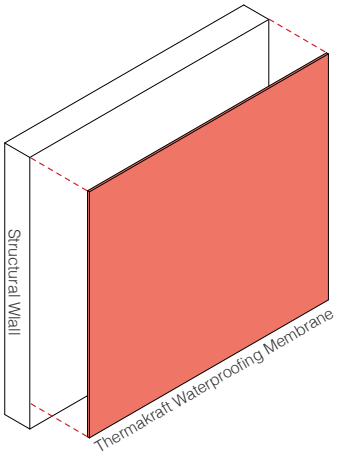


Colorspan Sliding Clip

# SYNTHETIC WALL WATERPROOFING MEMBRANE

Watergate Plus by Thermakraft is a two-layer laminated pliable building membrane combining a Polyester non-woven layer with a high quality vapour permeable film.

The membrane allows water vapour to pass through from inside the wall cavity whilst water from the exterior is kept out.




Thermakraft

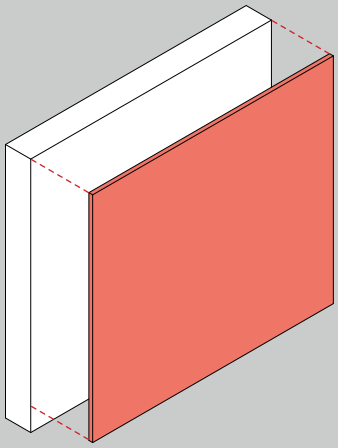
Watergate Plus comes in 5 roll sizes & 2 soffit roll sizes:

| Width (mm) | Length (m) | Coverage (m2) |
|---|---|---|
| 1370mm | 36.5m | 50m2 |
| 2740mm | 30m | 82m2 |
| 3000mm | 30m | 90m2 |

*Further information on Thermakraft Watergate Plus can be obtained at thermakraft.com.au

# PANEL FIXING PROCEDURE

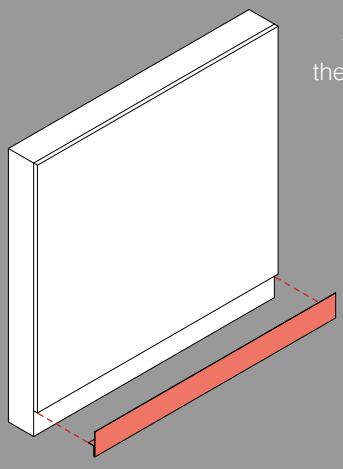
## Step 1



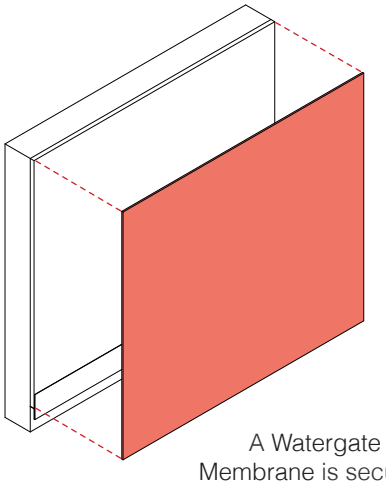
A 15mm thick plywood is installed onto a structural wall.

## Step 2

A Foot Mould is then installed at the bottom section of the wall.



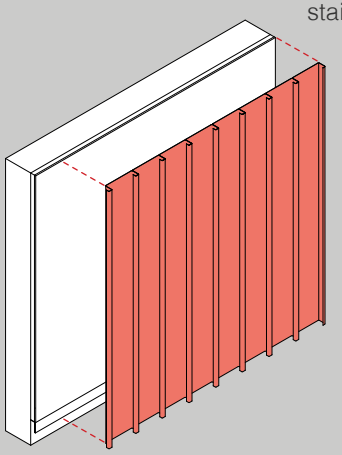
## Step 3



A Watergate Plus Membrane is secured onto the plywood substrate.

## Step 4

Standing Seam panels are then installed over the waterproofed membrane with stainless steel clips.



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# PANEL FIXING PROCEDURE

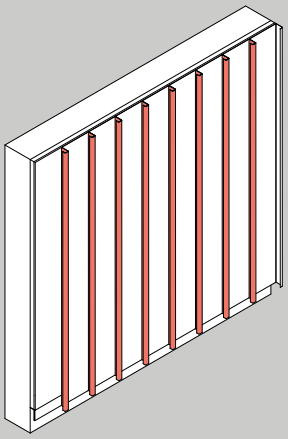
Disclaimer:

This installation sequence is just for general uses only.

If a variable order is required, it is the responsibility of the installer to adhere to Australian Standards as well as the National Construction Code.

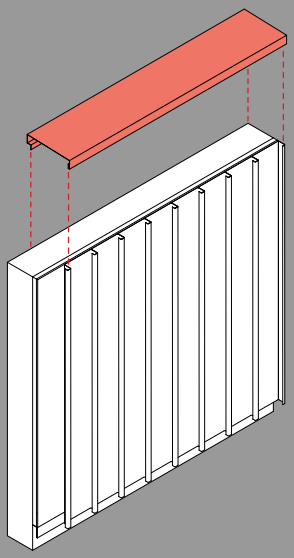
### Step 5

The seams of the Standing Seam panels are firmly locked with a seaming tool to clasp the panels in place.



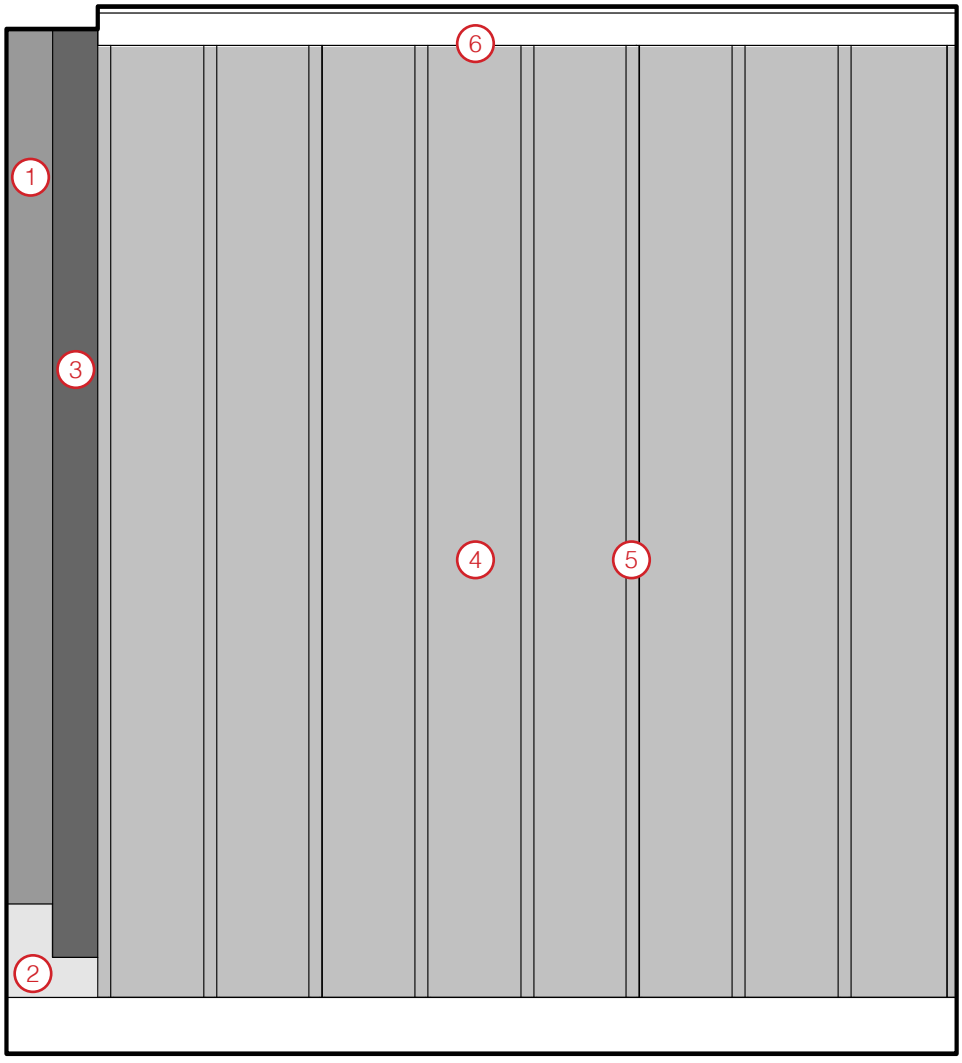
### Step 6

A Capping is placed on top to secure the panels in place and to ensure no water leakage.



Capping Profile

# COMPLETED WALL PANEL INSTALLATION




1. 15mm Plywood
2. Foot Mould
3. Thermakraft Watergate Plus Weather Barrier Wall Wrap
4. Colorspan Standing Seam Panel
5. Seamed Ribs
6. Capping

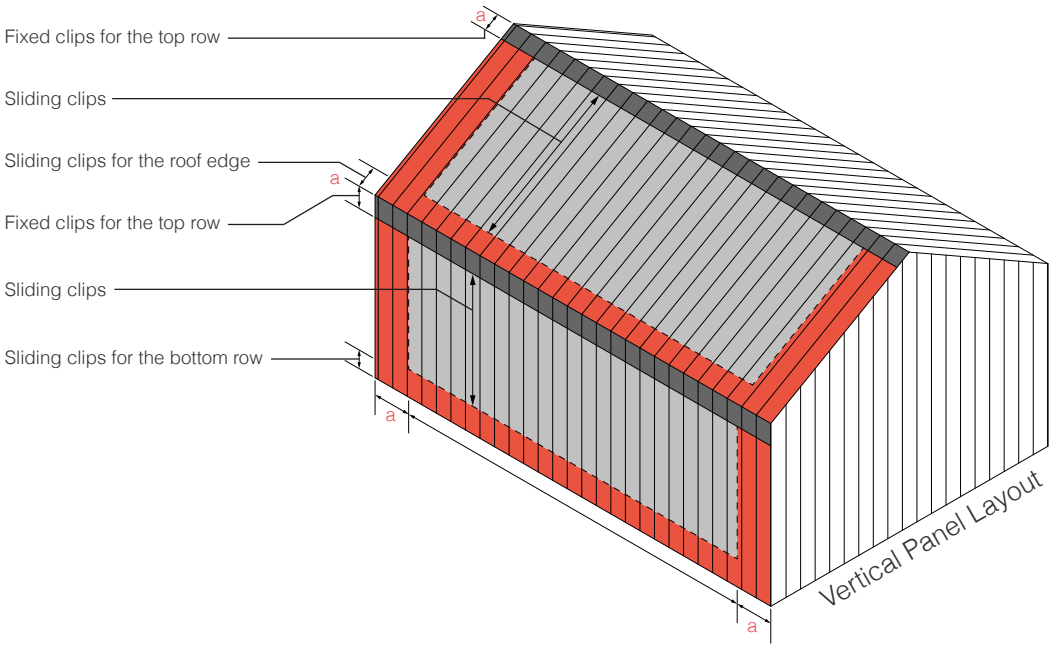
# SEAMING TOOL

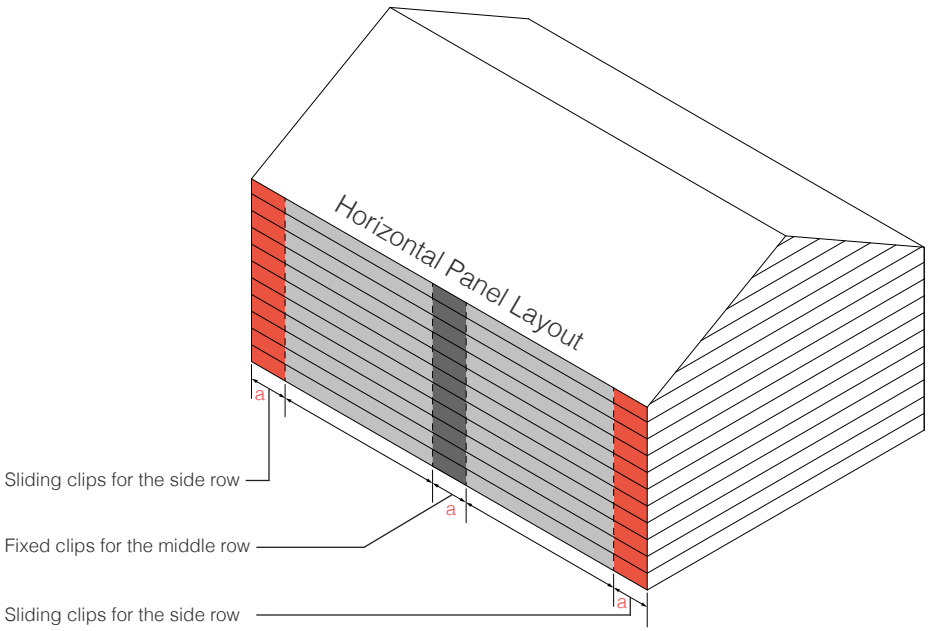
- Colorspan Standing Seam panels are to be installed with the seam running at 90° to the immediate support.
- The seam is then formed using a specially designed seaming tool that bends the lip of the overlap rib at 90° degrees, firmly locking it into the underlap rib. This process is done once for single seam panels.

# TYPICAL WALL & ROOF SHEET LAYOUT

- Clip Layout "a" is calculated as per the following formula:

  Overall building length (OBL) x 0.2. - If OBL x 0.2 < 1200mm then 1200mm shall apply
  Average building height (ABH) x 0.2. - If ABH x 0.2 < 1200mm then 1200mm shall apply




Additional Notes:

Fixed clips used will restrict thermal movement of the profile and that may contribute to oil-canning on wider profiles and darker colours.

Shorter lengths of panels would be optimal if this were the case.

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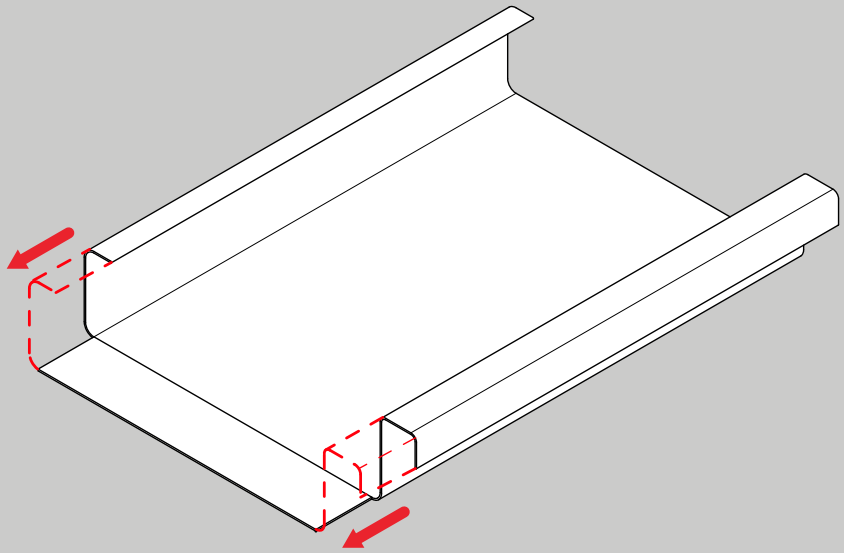
# TYPICAL PANEL TURN-DOWN PROCEDURE

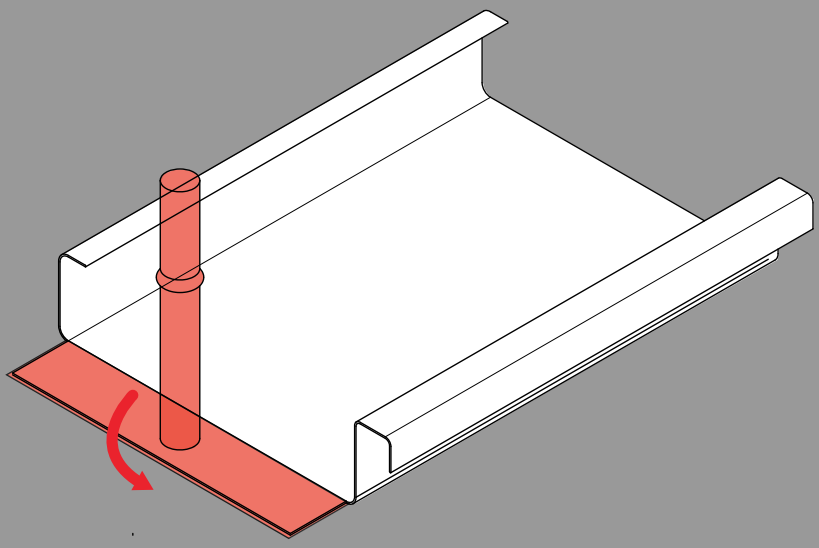
The panels of Standing Seam sheets require to be fabricated with an excess of 20mm in length in comparison to the original finished panel to be applicable for field hemmed ends.



Step 1

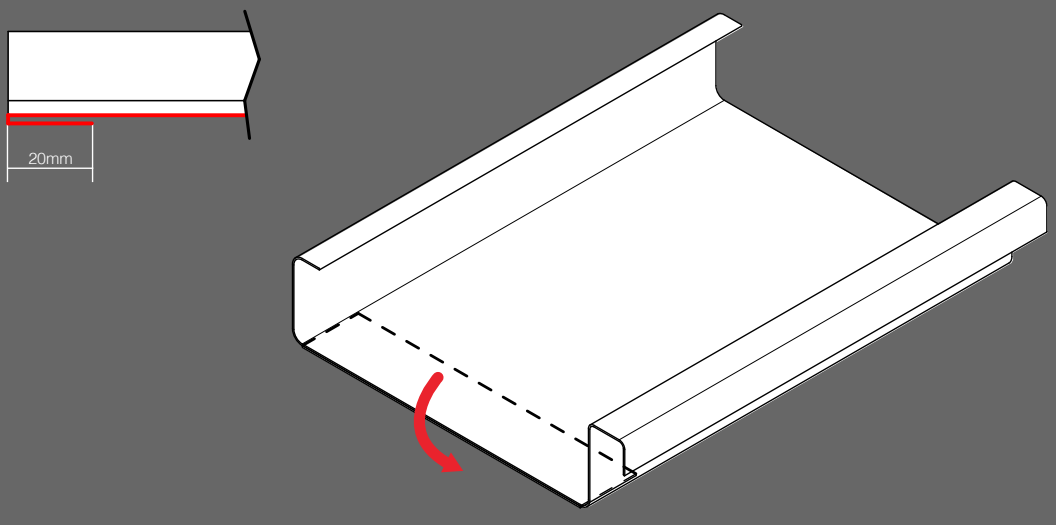
The plan of the sheet is placed into a hemming tool, with the front edge resting in between the ribs.

With pressure being placed against the sheet panel, the hemming tool is then rotated to a 90° angle downwards.



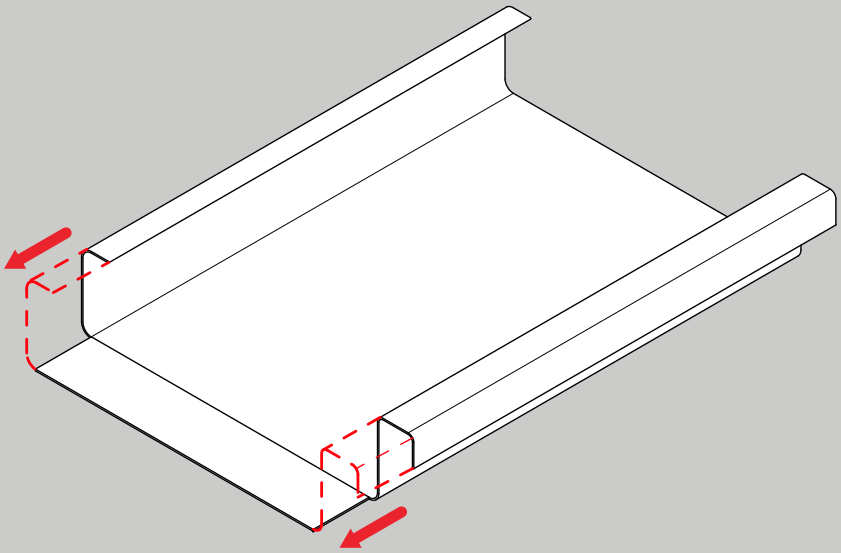
Step 2

The front edge is bent and ready for quality inspection.



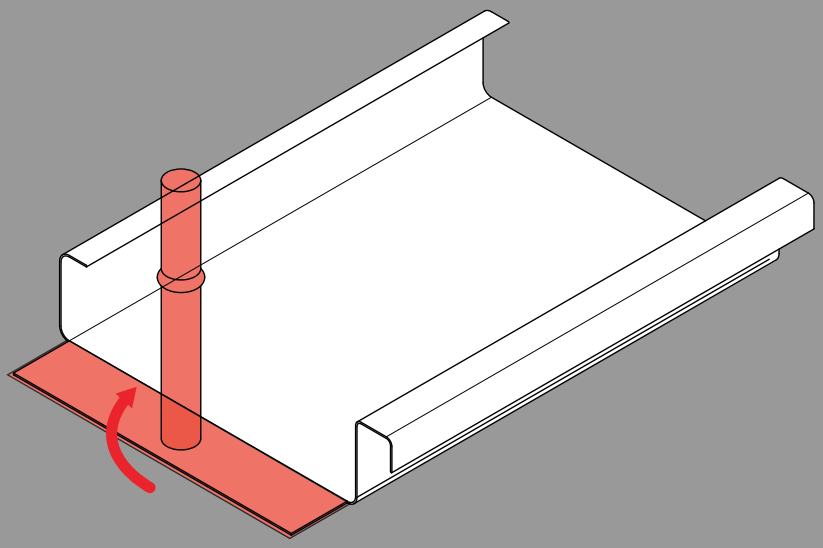

Step 3

# TYPICAL PANEL STOP-END PROCEDURE



Step 1

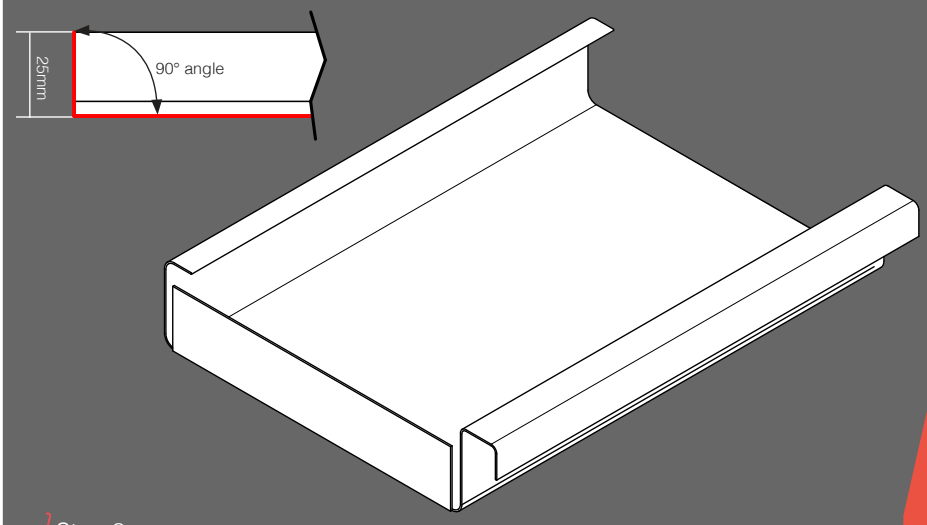
The panels of Standing Seam sheets require to be fabricated with an excess of 25mm in length in comparison to the original finished panel to be applicable for field hemmed ends.



Step 2

The plan of the sheet is placed into a hemming tool, with the front edge resting in between the ribs.

With pressure being placed against the sheet panel, the hemming tool is then rotated to a 90° angle upwards.




Step 3

The front edge is bent and ready for quality inspection.

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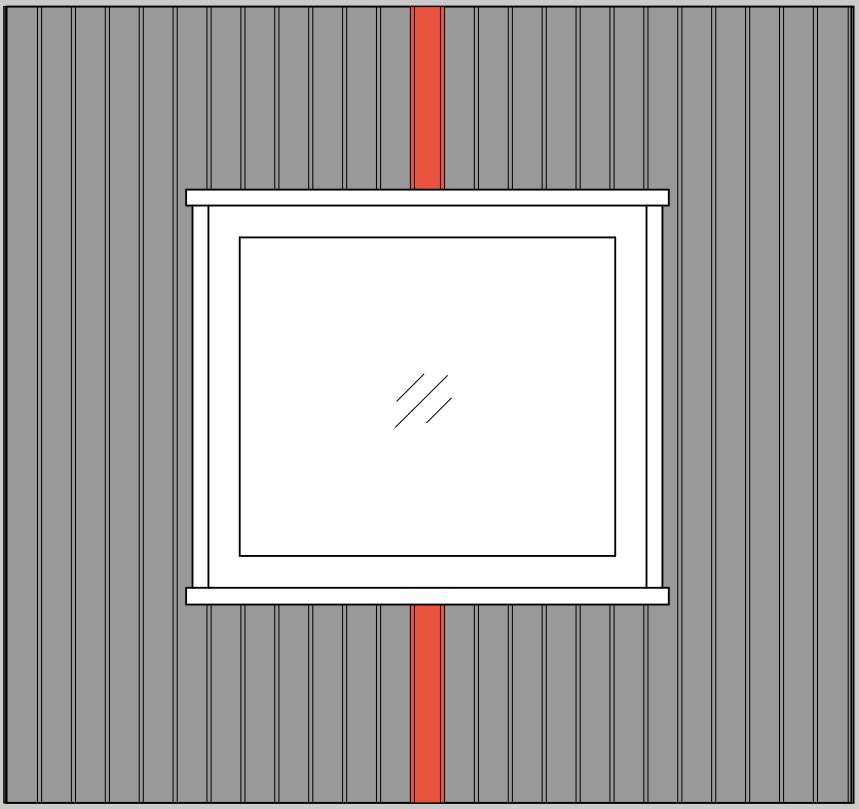
# TYPICAL WINDOW DETAILING



Laying of Standard Panel

Laying of Standard Panel

Colorspan Standing Seam Starter Panel

Standard Standing Seam Panel

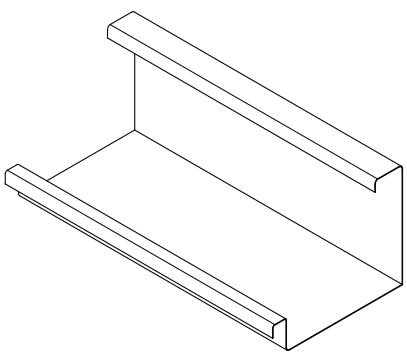
Standing Seam Double Female Panel

Standard Standing Seam Panel

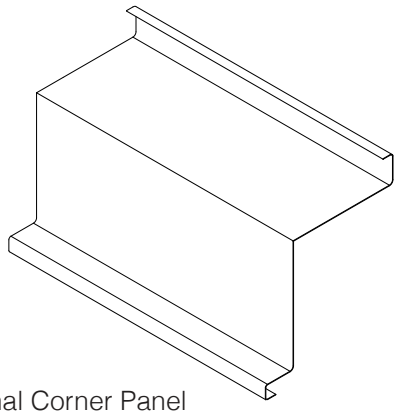
# CUSTOM STANDING SEAM PANEL PROFILES

Standing Seam Double Female Panel

Standing Seam Double Male Panel

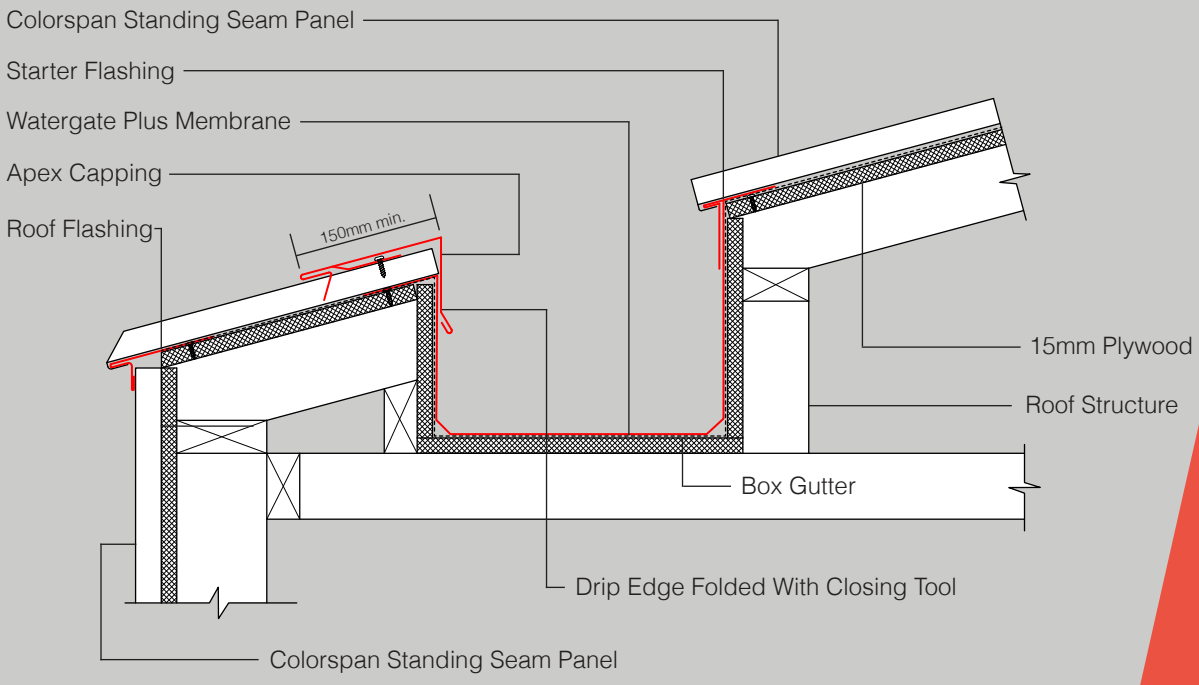


Internal Corner Panel

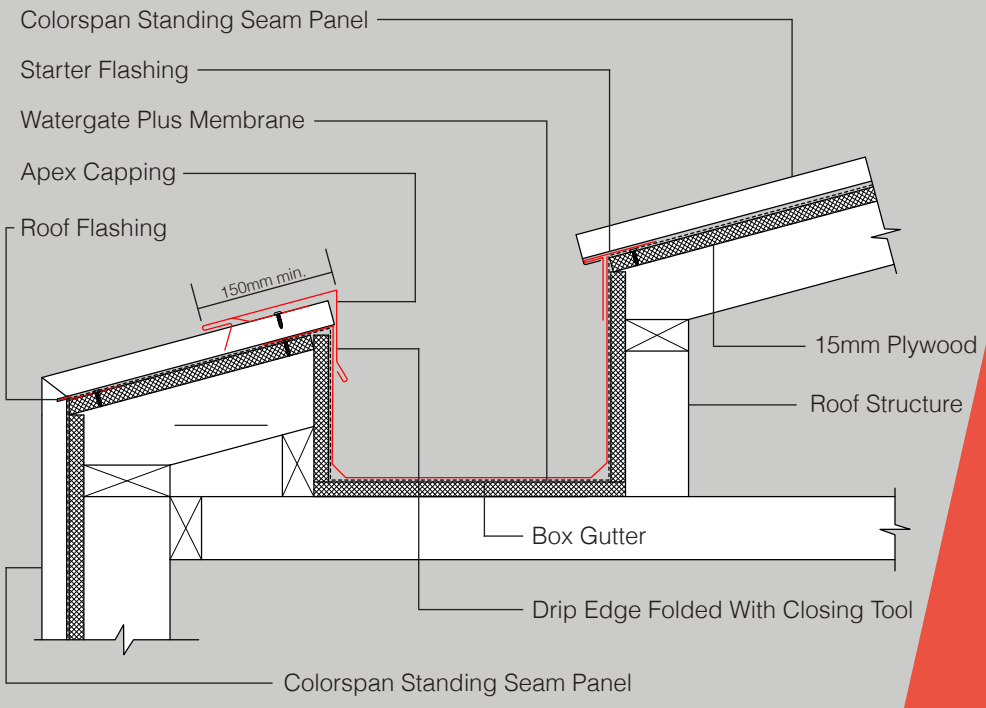


External Corner Panel

# STANDARD BOX GUTTER FLASHING DETAIL




# OVERFLOW BOX GUTTER FLASHING DETAIL

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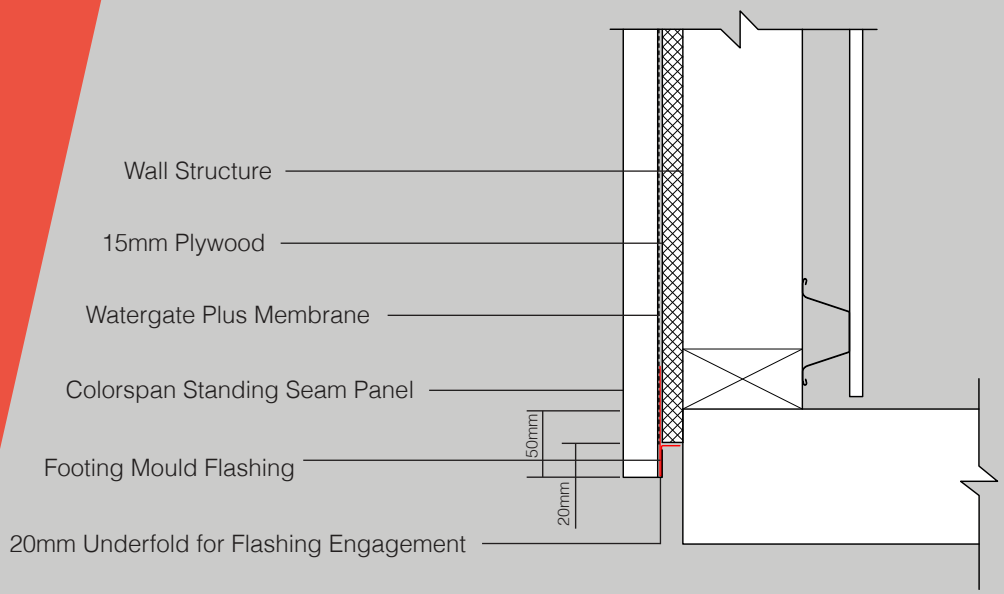
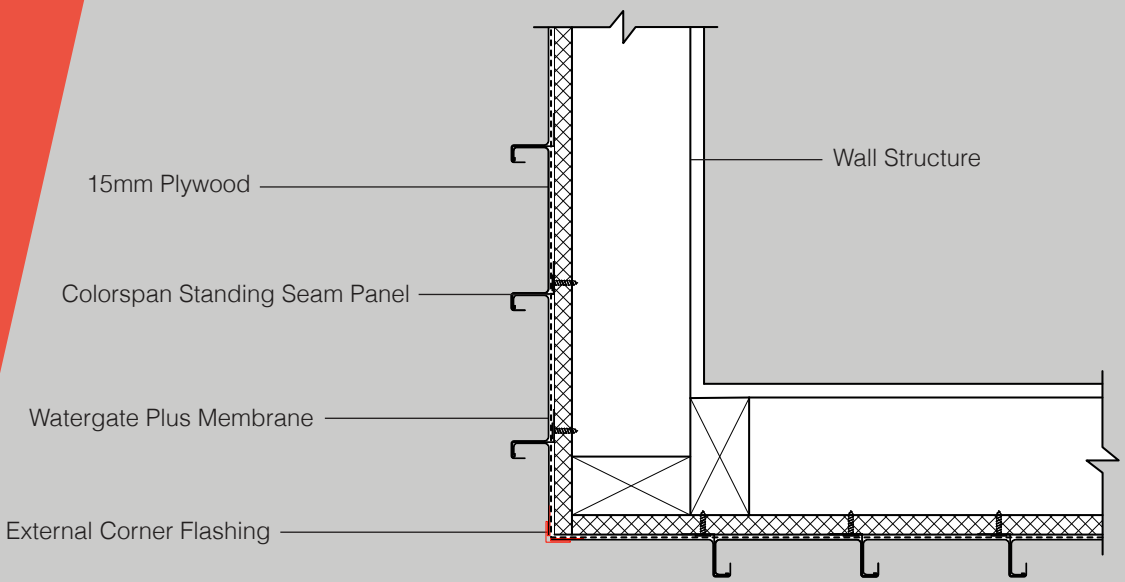
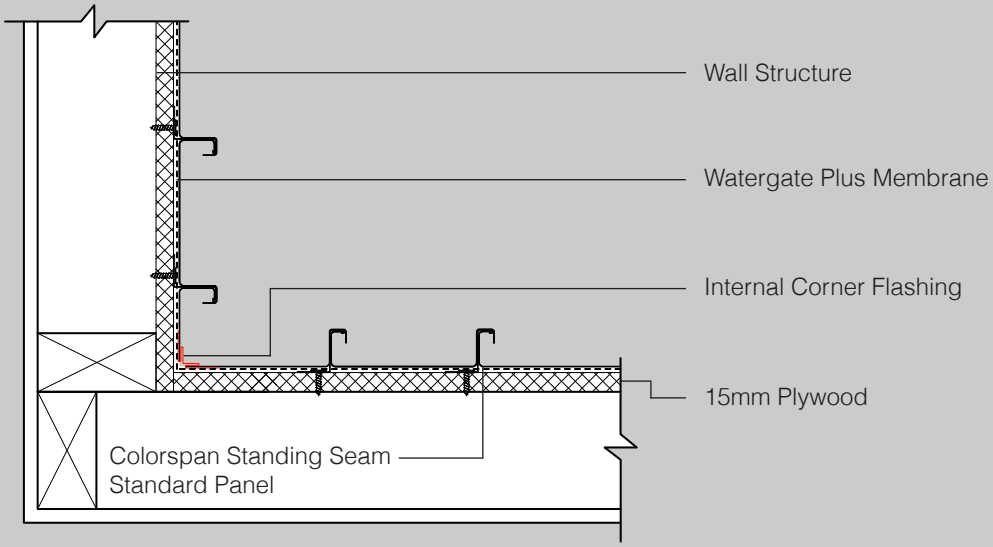
## FOOTING MOULD FLASHING DETAIL



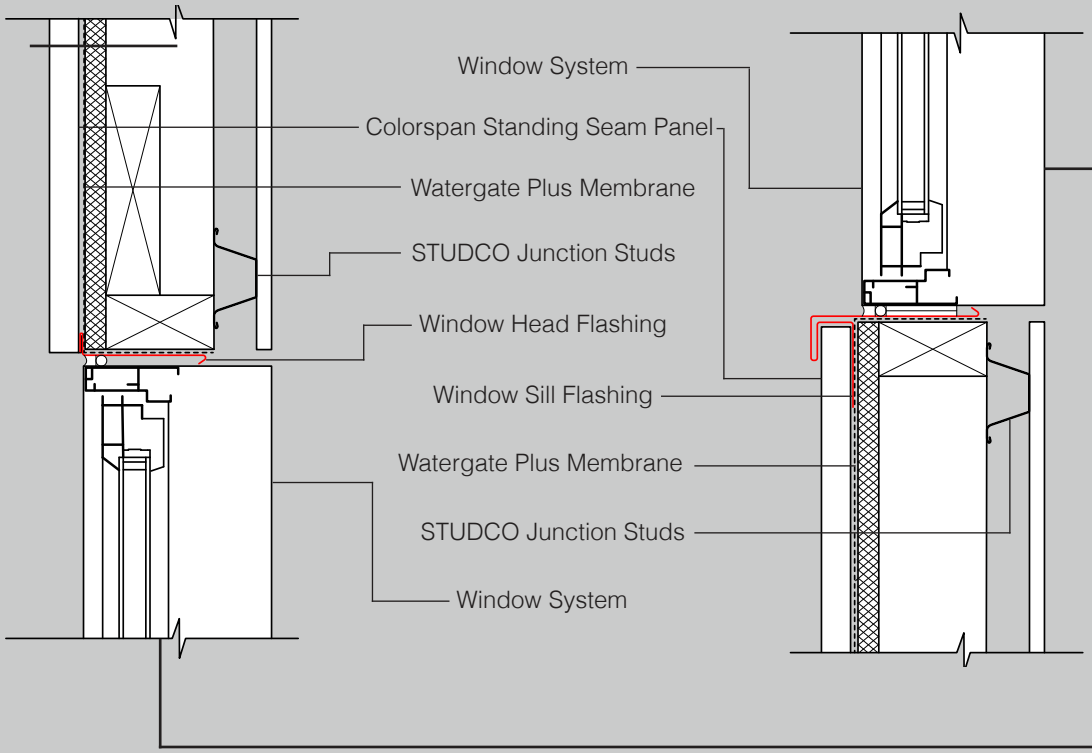

## EXTERNAL CORNER FLASHING DETAIL



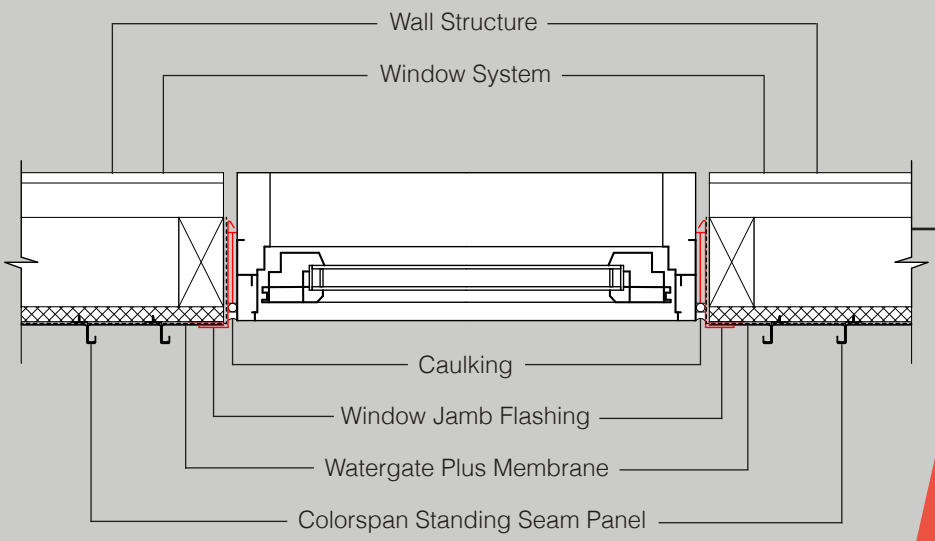

## INTERNAL CORNER FLASHING DETAIL



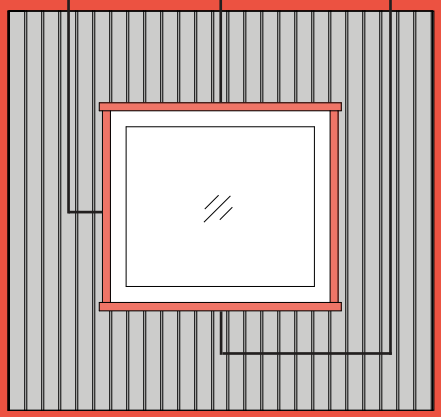
# WINDOW HEAD AND SILL FLASHING DETAIL




# WINDOW JAMB FLASHING DETAIL




Window Detailing Diagram:



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