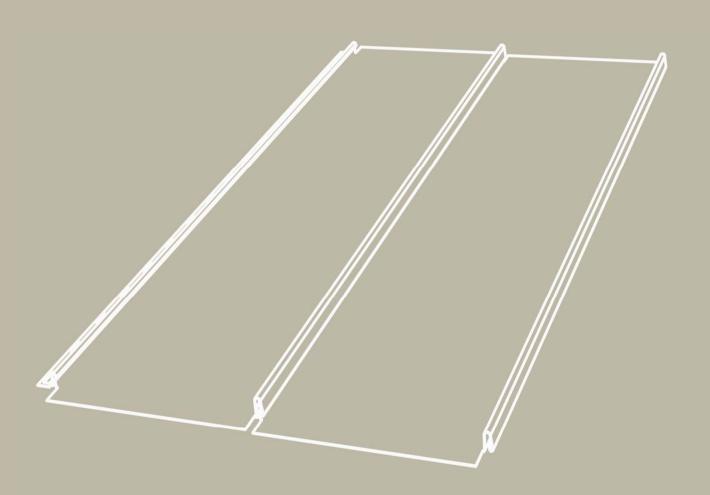
## Colorcoat Urban®



# **Specification Guide**

## **Tata Steel Colors**





## Introduction

Tata Steel introduces a product that provides an innovative and sustainable solution for roofs and walls, specifically designed for the urban environment.

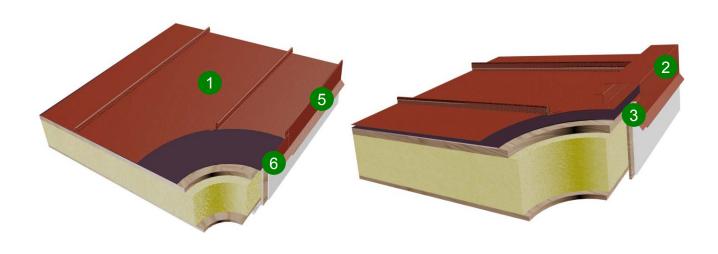
- Matt colour range specifically designed for the urban fabric.
- Stable colour ensures an aesthetic of consistent, even shade.
- Zero maintenance for up to 40 years.
- Can be laid to a minimum pitch of 5°.
- Eco-designed to remove environmentally harmful elements and deliver the lowest impact without reducing the performance.
- 100% recyclable and Carbon Neutral, via a government approved carbon measuring, reducing and offsetting scheme.
- Simple integration of renewable technologies, helping achieve forthcoming legislation.

The specification guide explains the standard range of details and components used to design a roof using the Colorcoat Urban® system.

Particular attention should be made of the panel widths for low pitch applications in high wind speed locations.



# **Product Selector**







## **Product Selector**

Product description	Reference code	Quantity	Detail No.
Urban Seam <sup>®</sup> profile			
514 mm width	CU051400	$m^2$	1
305 mm width	CU030500	m²	
Ridge Profiles*			
Mono Ridge	CU002400	3m	2
Mono Ridge Backing Plate	CU002500	3m	3
Stepped Ridge	CU004500	3m	
Standard Duo Ridge	CU004600	3m	
Large Duo Ridge	CU004700	3m	
Mono Ridge End Caps			
Left Hand	CU012700	1	
Right Hand	CU022700	1	
Duo Pitch Ridge End Caps			
Stepped Ridge	CU014500	1	
Standard Duo Ridge	CU014600	1	
Large Duo Ridge	CU024700	1	
Eave Detail	CU003600	3m	4
Verge Detail			
Verge	CU002700	3m	5
Verge Backing Plate	CU002800	3m	6
Z bar	CU004000	3m	7
Notched Z bar	CU004105	3m	
Ventilated Z bar	CU004205	3m	

00 - last two figures denote colour code

<sup>\*</sup> Contractor to specify roof pitch



# **Product Selector**

Product description	Reference code	Quantity	Detail No.
Fixings			
3.5 x 38 mm ring pin nails	CU020100	1000	
M4 x 20 mm Pan Head	CU020200	1000	
Stainless Steel Screw			
Colour Matched Pot rivets,	CU020300	100	
Aluminium / Stainless shaft 4.8			
x 15 mm			
Colour matched stainless steel	CU020400	100	
low profile head 5.5 x 35 mm			
Ancillary products	011000400	405 1	
Touch up paint with brush	CU030100	125ml	
Coloured Sealant Black	CU030201	300cc	
Coloured Sealant Grey	CU030202	300cc	
Filler Block 510 x 30 x 30 mm	CU030300	Pack of	
		10	



## **Colour choice**

The naturally inspired colour range can blend with the urban landscape, ensuring the building harmoniously integrates with the local vernacular.



Winter Sky 01
RAL 7040



Alaska 02



Merlin 03 BS 18B25



Anthracite 04



Oxidised 07
RAL 8014 or 0502010



Terracotta 05
BS 04C39



Green Grey 06
RAL 6003 or 1504010



Patina 08
RAL 6027 or 1807025

#### **Urban fabric**

The Colorcoat Urban® colour range has been inspired by architects specifically for the urban environment. As such they partner harmoniously with existing buildings and building envelope materials, including glass, wood, brick, stone and render.

#### Note:

Hand sample requests are available online at www.colorcoaturban.com or via Colorcoat Connection® helpline on +44 (0) 1244 892434.

#### **Matt shades**

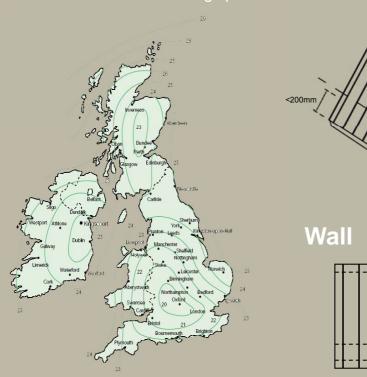
The tonal colour range of the matt shades have been carefully selected. With the ability to achieve a stable colour ensures a consistency of even colour, which is unachievable from most other roofing materials.

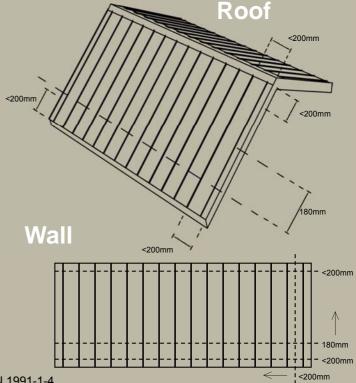


# Wind Speed and Fixing Chart

## **Essential points**

- For all buildings between 1 8 stores at a pitch 5° 45°
- Please refer to the following specification





- In accordance with BS 6339-2 and BS5534 & BS EN 1991-1-4 Section 7.2.5
- Specification of the 514mm/305mm wide panel is dependant location, wall height, storey height and roof pitch.\*A structural engineer should complete a wind uplift calculation for your specific area before making any final decision. Please note table below is for guidance only;

Roof Pitch (Degree) & Wall	No. Storeys	Wind Speed V <sub>s</sub>	Panel Width 305mm	Panel Width 514mm
(5-9)	<3 4-8	≥ 25	<b>✓</b>	X X
(5-9)	<3 4-8	<25	✓ ✓	√ X
(≥10)	<3 4-8	≥ 25	√ √	✓ X
(≥10)	<3 4-8	<25	√ √	√ √

- When Building over 3 storey or in exposed locations the structural engineer should complete a wind uplift calculation and provide Tata Steel with details so the best fixing solutions can be developed.
- Please follow our recommendations for fixing the Urban Seam® profile as described.
- Fixings along the eaves, verge and Mono Ridge backing plates require fitting at 200mm fixing centres. Same principle applies to wall.
- Fixings into the panel nailing strip must be at 180mm centres.
- For detailed nailing patterns please refer to fixing of Urban Seam profile section in the installation guide.
- Urban Seam® profile is fixed to 18mm
   OSB 3, WBP or Marine Ply board. (15mm board
   is used for SIP panels) For other board types or
   dimensions please contact our technical advice
   line.
- For any advise and technical assistance in regards to wind speed or fixing positions please e-mail or contact our technical advise on Colourcoaturban@tatasteel.com



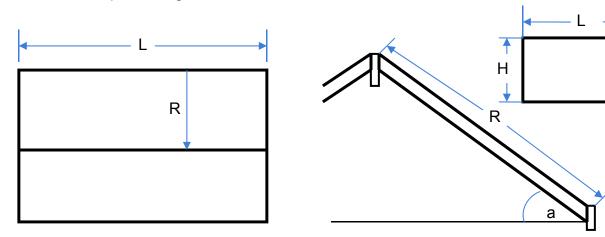
## Ordering the Roof or Wall

## **Essential points**

Tata Steel manufactures the roof or wall based on measurements provided by the customer.

These details can be found on the drawing produced by the roof truss or SIP panel manufacturer.

The maximum panel length is 12.5 metres



## Estimating straight roofs or walls

For the straight roof we need four details: length (L), rafter length including facia board (R), angle of pitch (a) and whether it is mono or duo pitch roof. For a wall we need length (L) and height (H) and any potential junctions or breaks.

## **Estimating fixings**

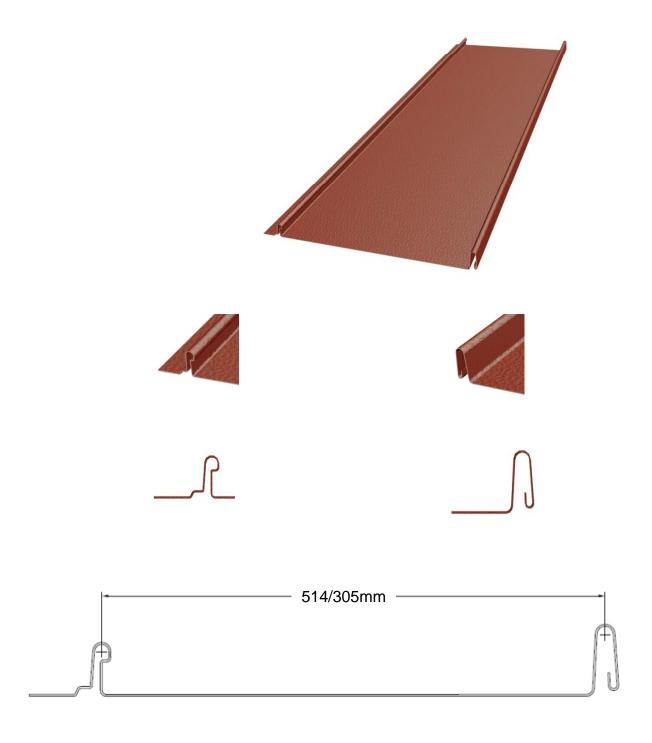
For the Urban Seam® profile at 514mm wide then you will need a minimum 6 fixings per square metre, and four fixings per linear metre along the eaves and verges, and at the ridge it will be 8 fixings per linear meter for the duo pitch and 4 for the mono pitch. If using screws for the ridge then the spacing is every 500mm halving the number of ridge fixings.

## **Panel Lengths**

The panel maximum length (R) is 12.5 metres, this is due to the thermal expansion of the panel. How to deal with roof over 12.5 metres is to split the panels or create a change in fall in the roof, for example a mansard or join two panels.



# **Urban Profile**





## **Technical Details**

### **Urban Seam® Profile**

### Standard Details

ASU01 - Duo Pitch Ridge

ASU02 - Eave Detail

ASU03 - Verge Detail

ASU04 - Mono Ridge

ASU05 – Top Abutment ASU06 – Side Abutment

ASU07 - Valley

ASU08 - Hip

### Ventilation

ASU010 - Ventilated Duo Ridge Detail

ASU011 - Ventilated Eave Detail

ASU012 - Ventilated Mono Detail

ASU013 - Ventilated Duo Ridge Low Pitch

**ASU014 – Ventilated Top Abutment Low Pitch** 

### **Build Up Options**

**ASU015 – Roof Build Up Options** 

**ASU016 - Cross Section Cold Roof** 

ASU017 - SIP Panel Build Up

### **Additional Details**

ASU020 - Window detail (Roof lights)

ASU021 – Mansard Detail ASU022 – Renewable fixing Clamp

ASU022 02 - Renewable fixing Clamp Assembly

ASU023 - Joining panels

ASU024 – Square Penetration

ASU025 - SVP or round Chimney

ASU026 - Fascia, Soffit and internal gutter

ASU027 - Weatherboard

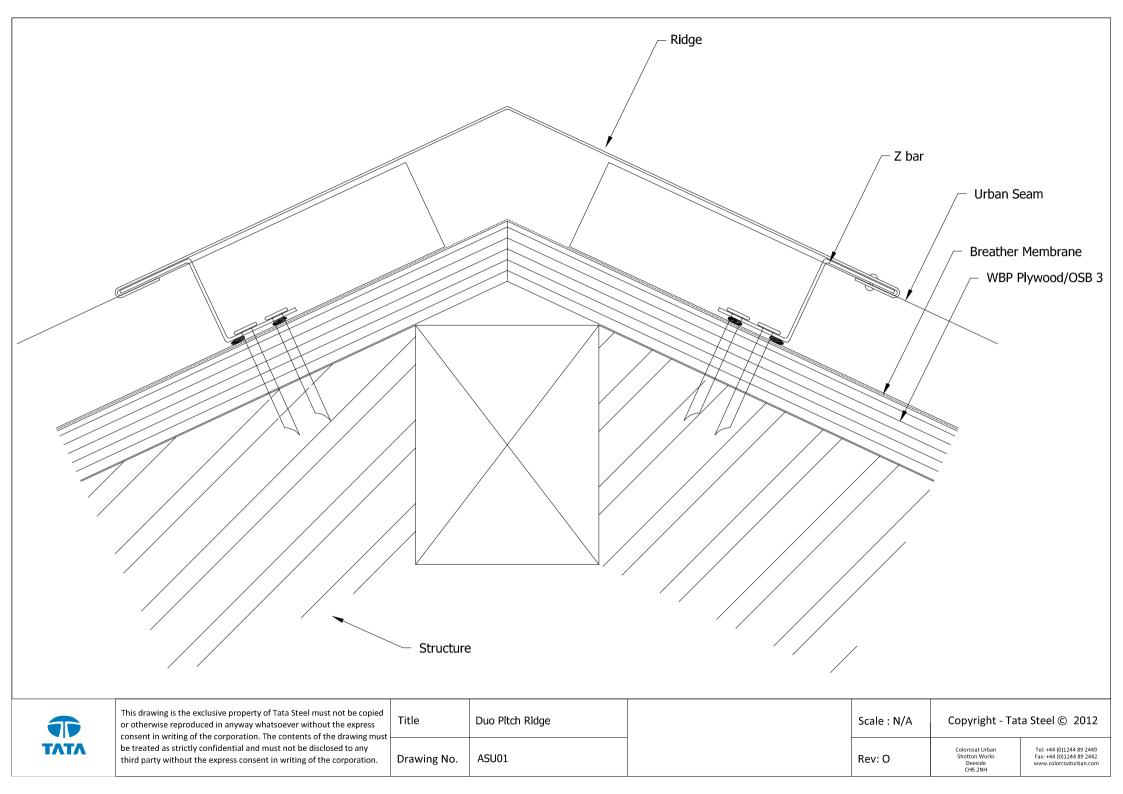
### **Wall Details**

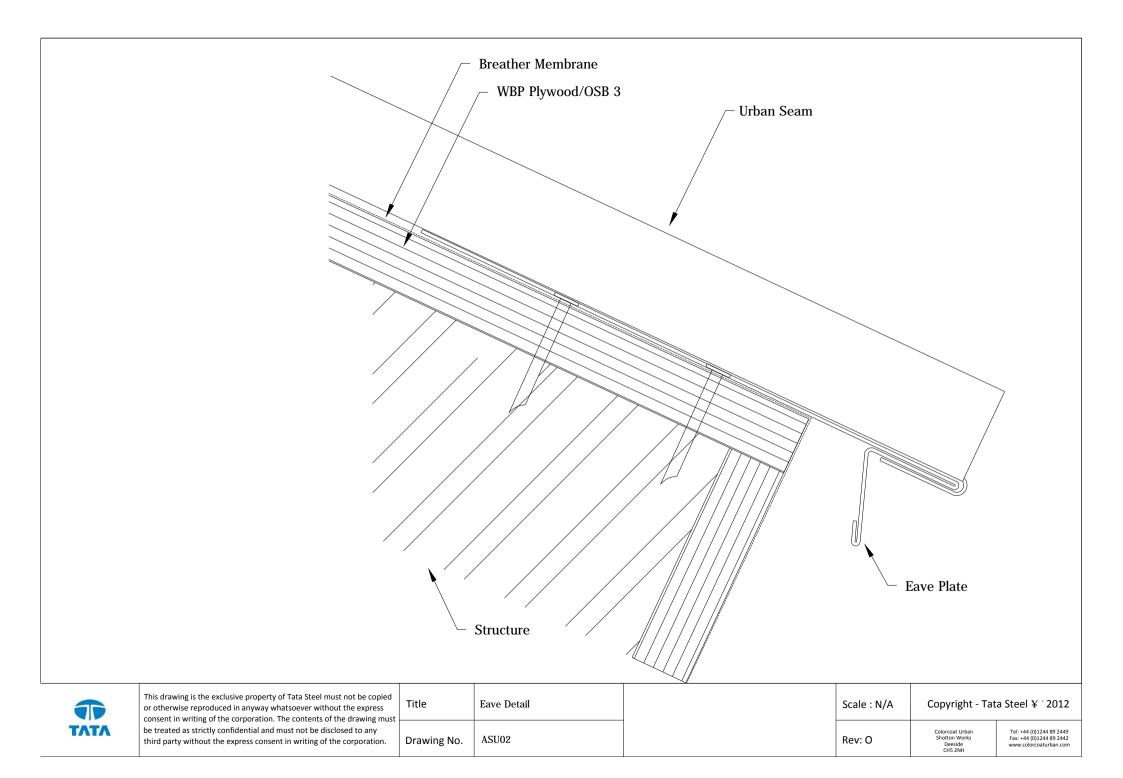
ASU030 - Wall Details

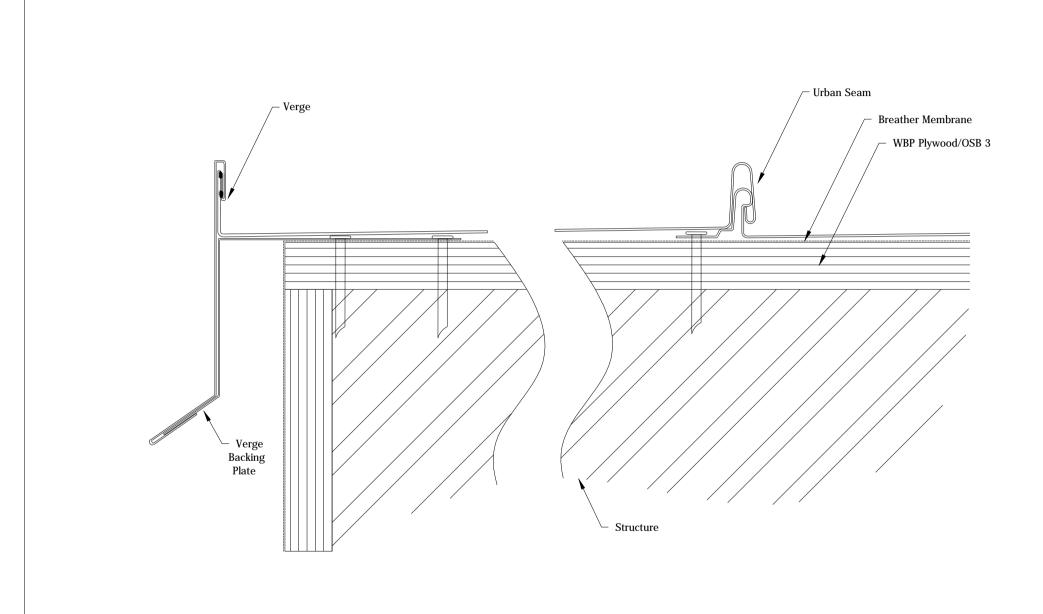
ASU032 - External and Internal Corner

ASU033 – Laying panels horizontally

For electronic versions of the technical drawings then please e-mail or contact our technical advise line on Colourcoaturban@tatasteel.com







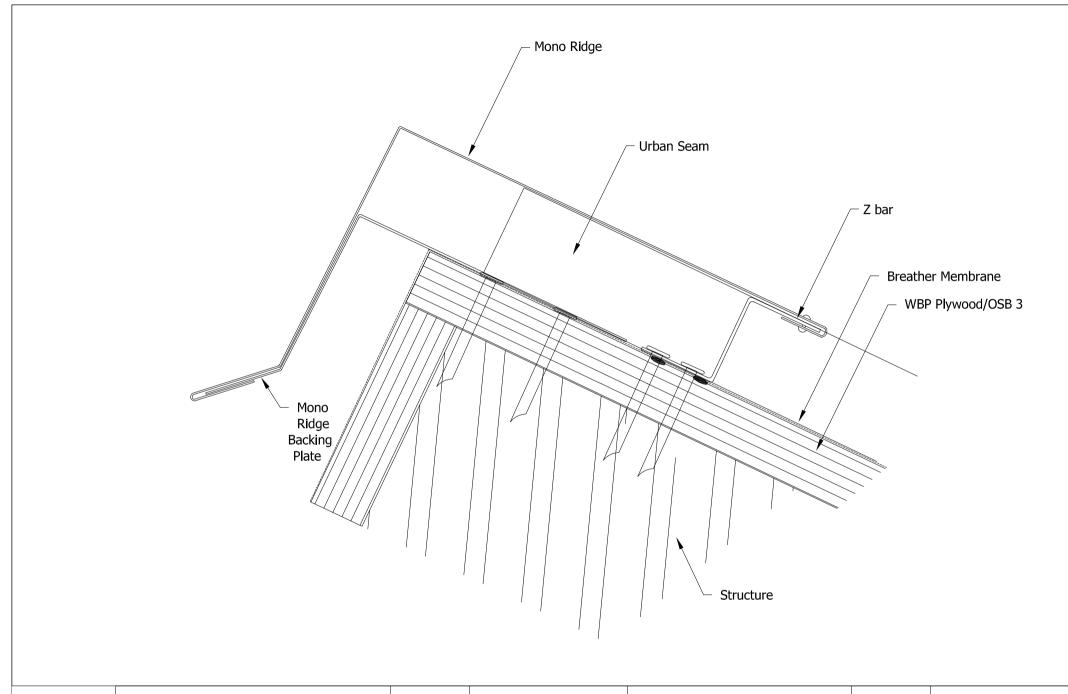


+	Title	Verge Detail
٠	Drawing No.	ASU03

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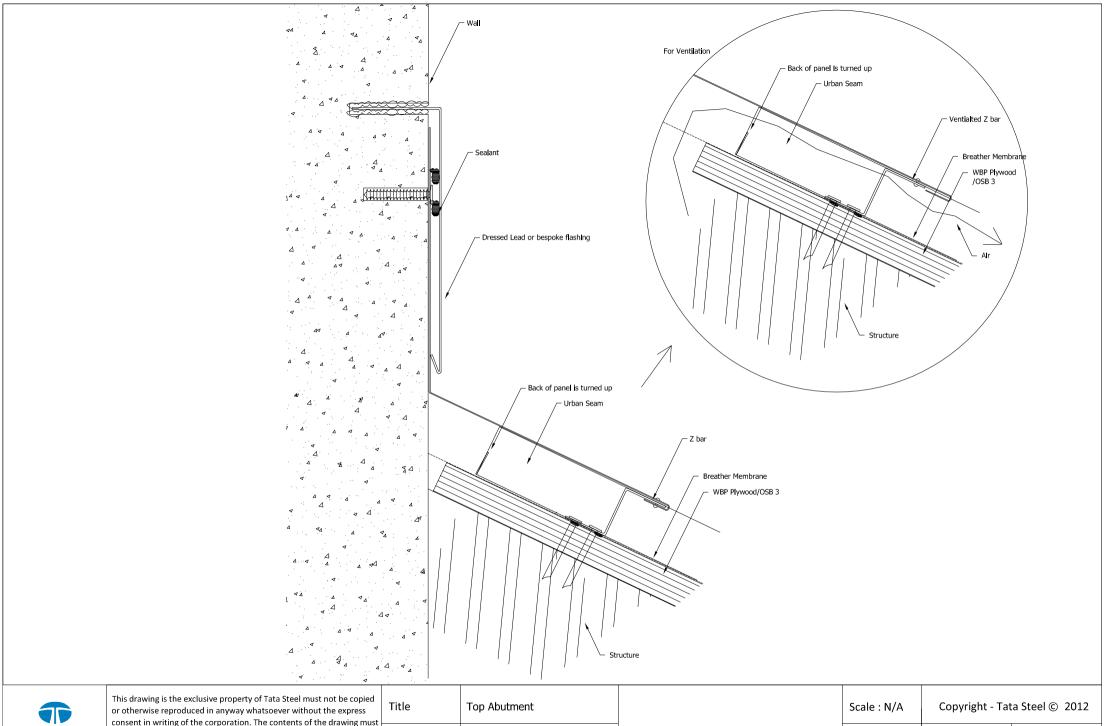
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st .	Title	Mono Ridge	
	Drawing No.	ASU04	

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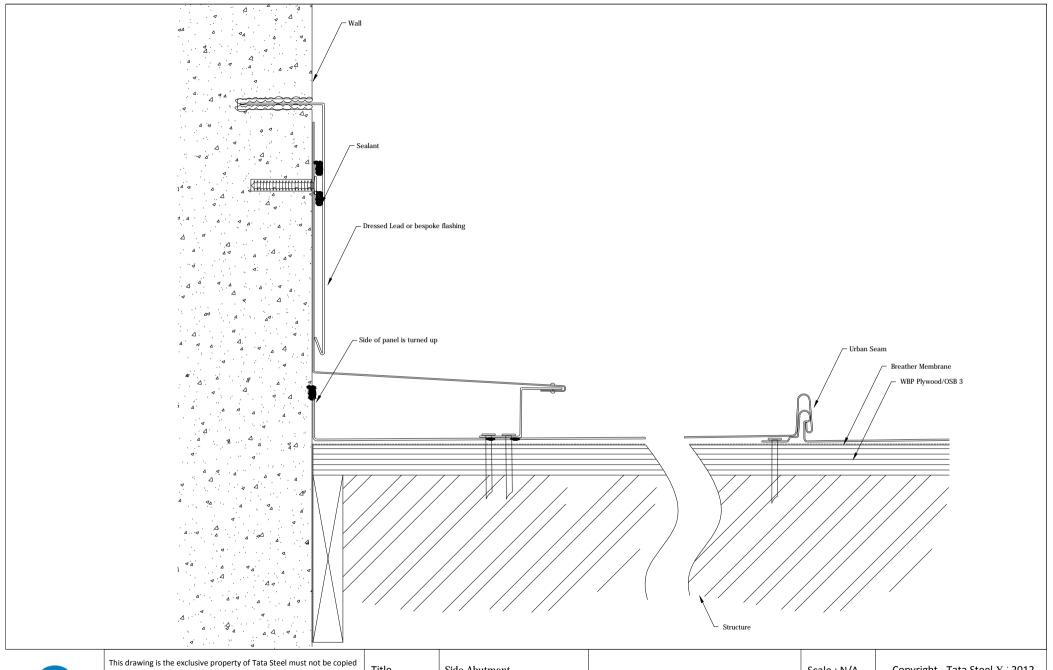




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ASU05 Drawing No.

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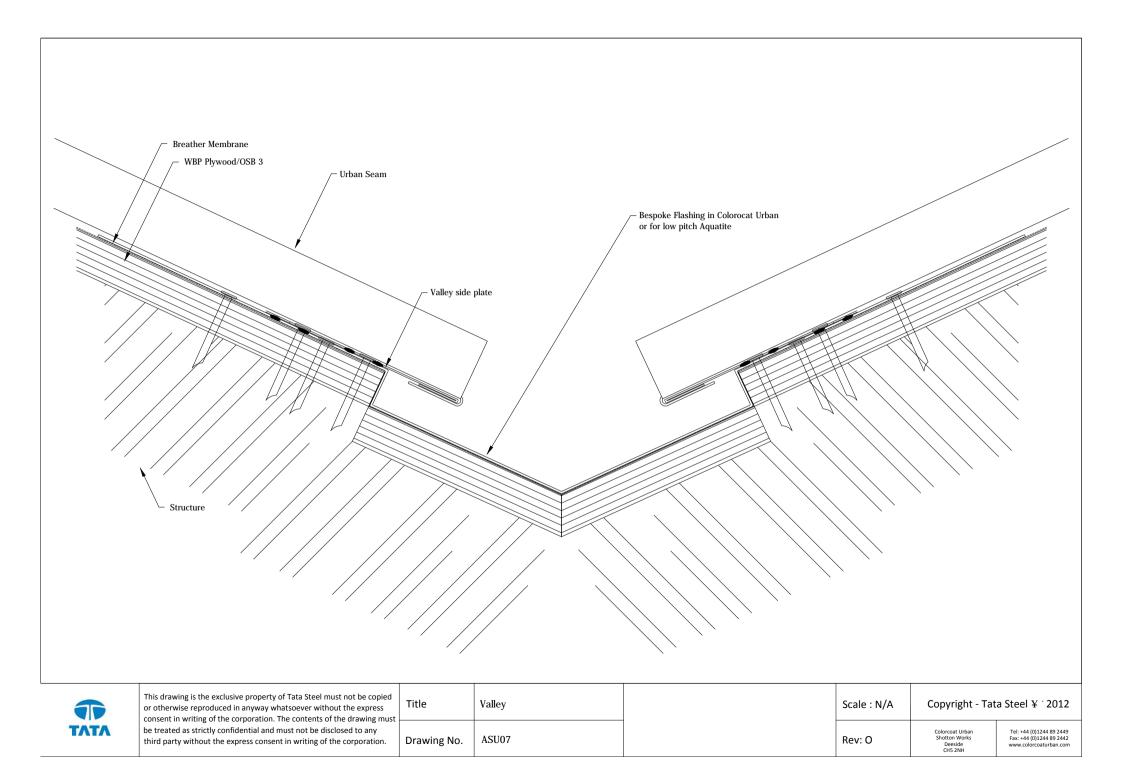


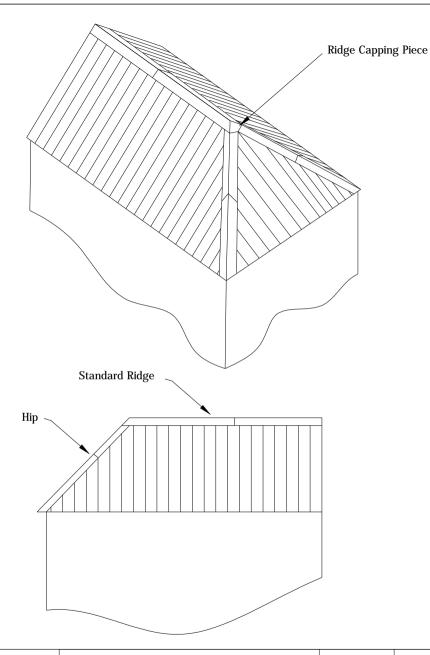
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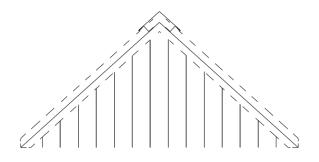
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•	Drawing No.	ASU06	

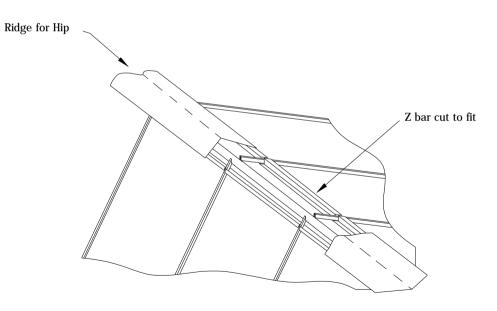
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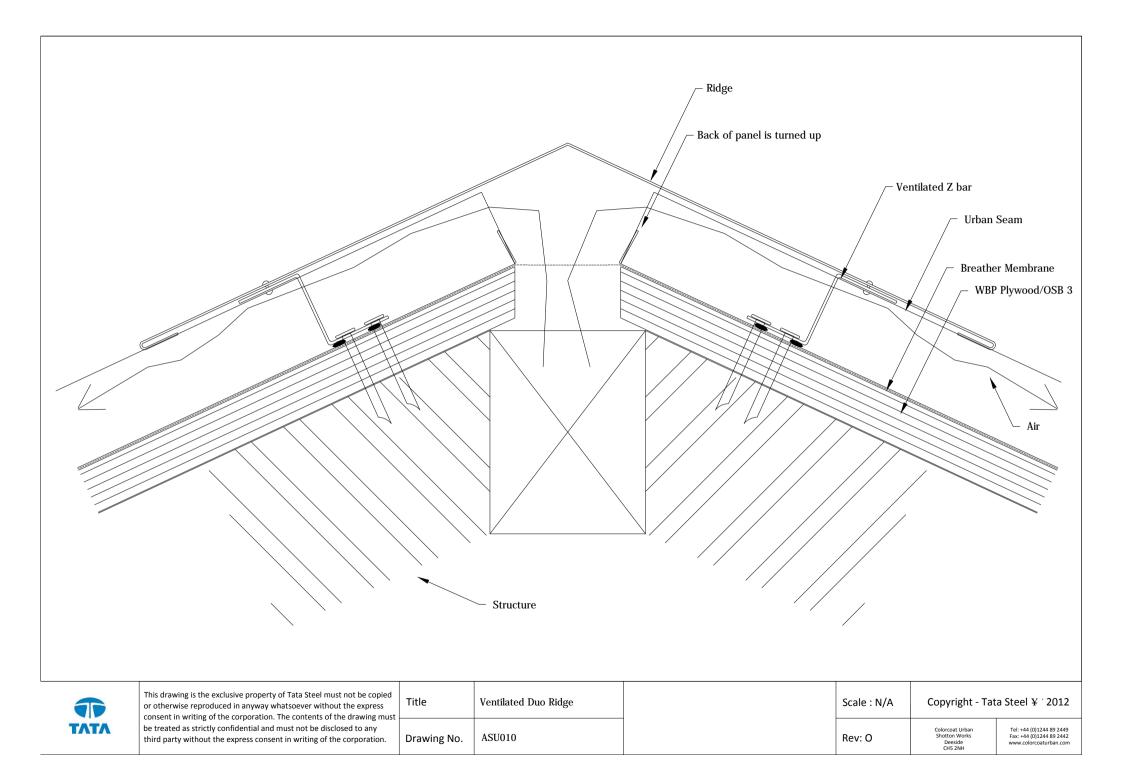


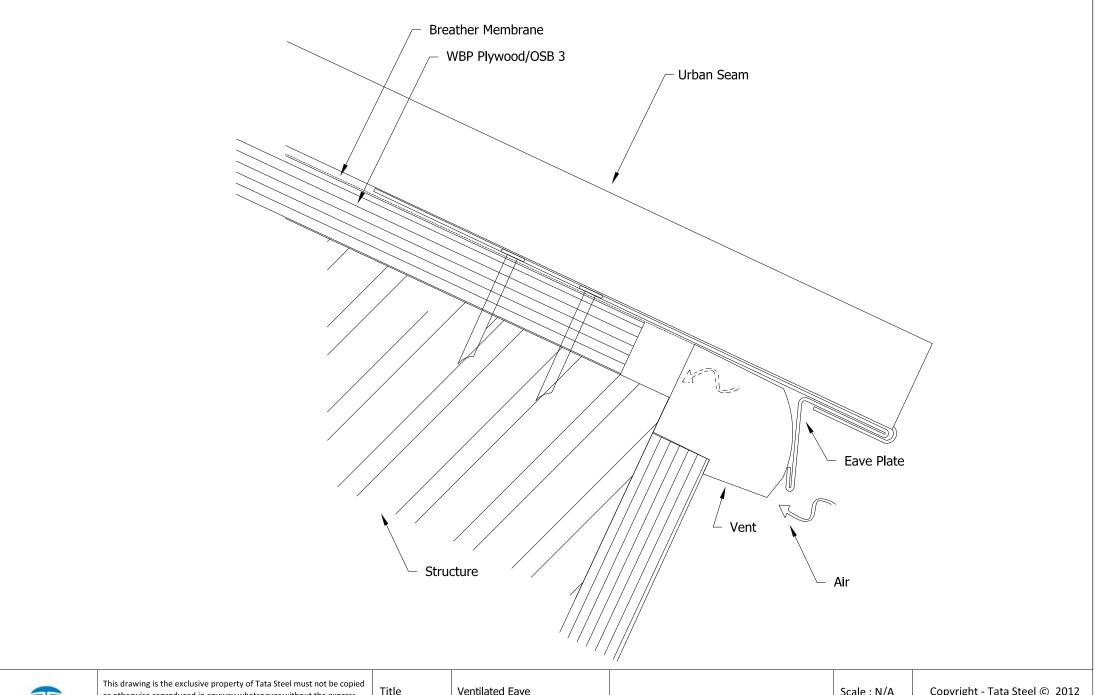
Title	Hip
Drawing No.	ASU08

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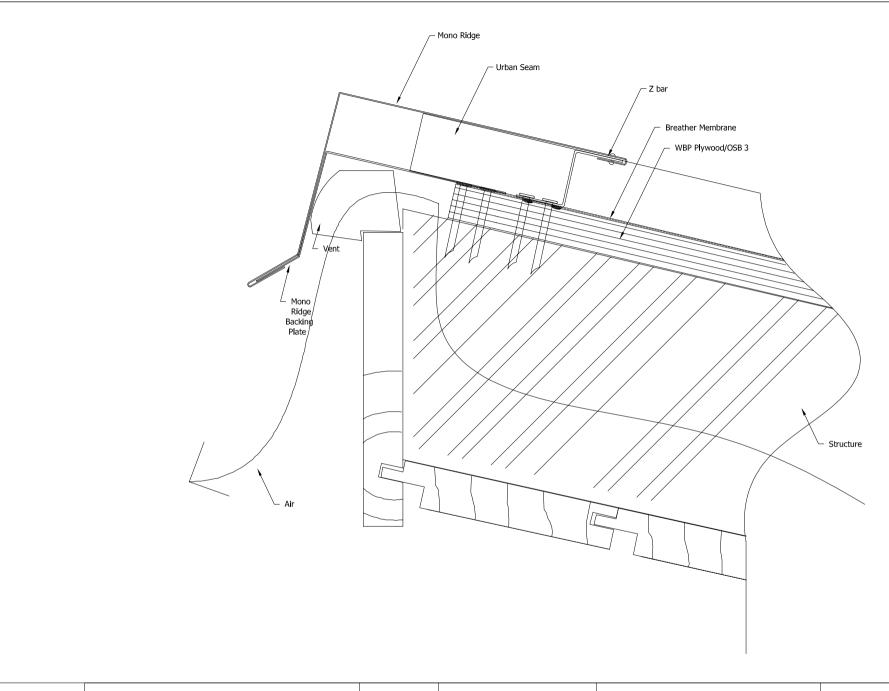


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Title Ventilated Eave ASU011 Drawing No.

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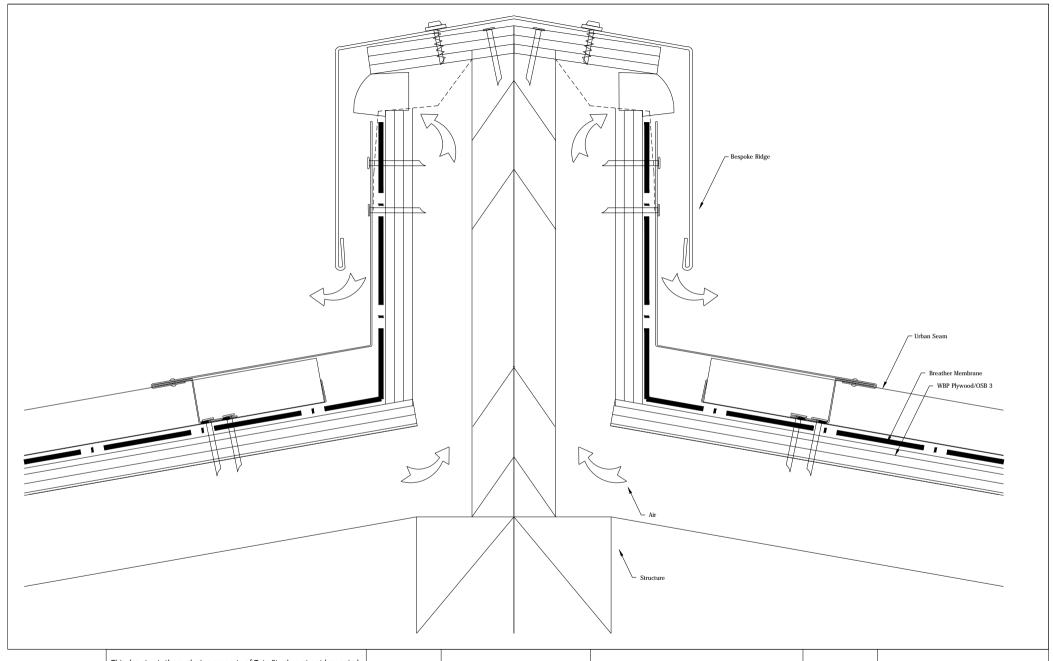
Title Ventilated Mono Ridge

Drawing No. ASU012

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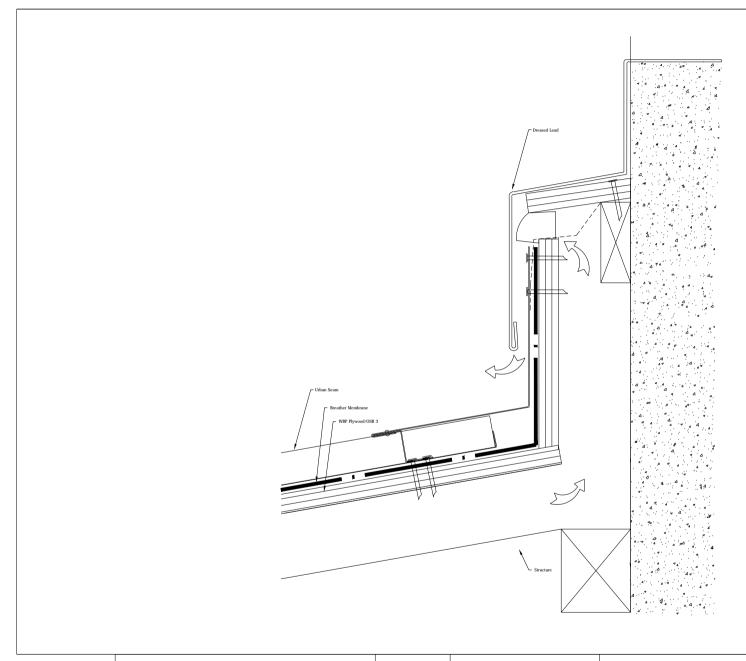


Title	Ventilated Duo Ridge Low Pitch
Drawing No.	ASU013

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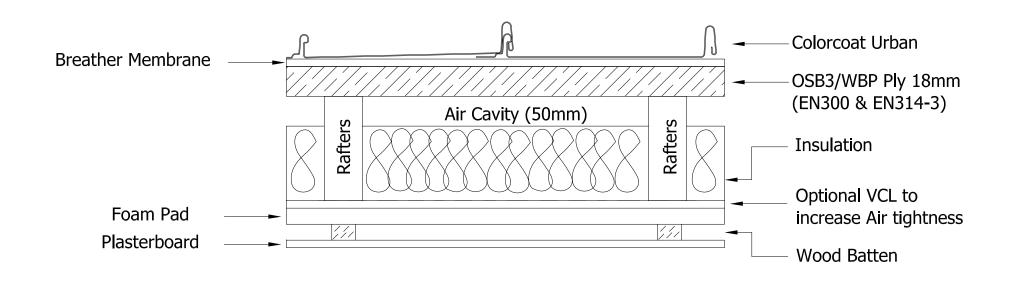


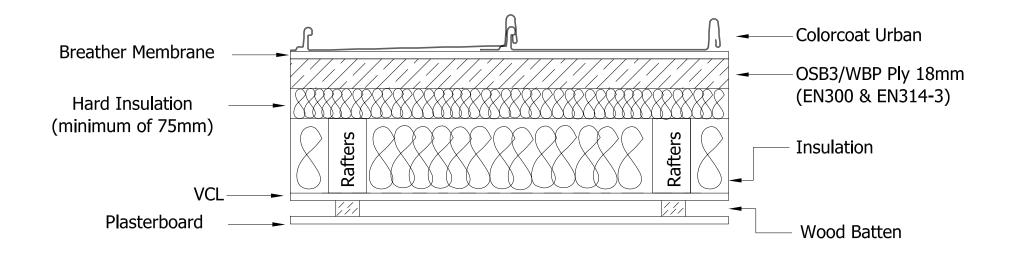
Title	(Vent) Top Abutment Low Pitch	
Drawing No.	ASU014	

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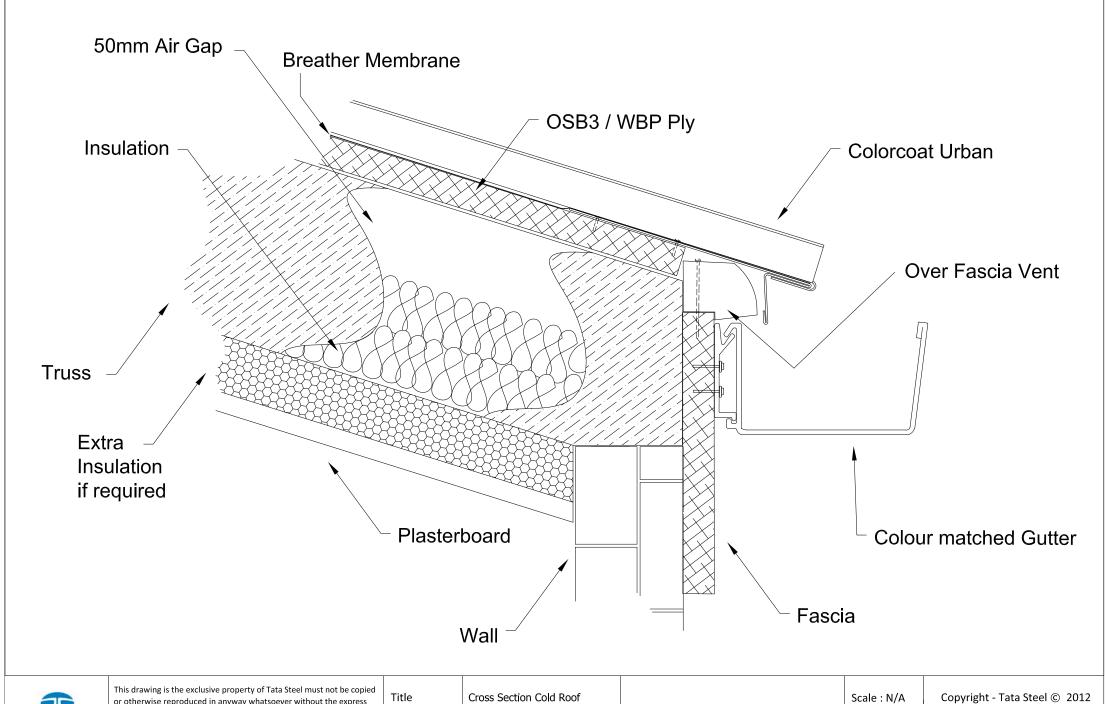
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Drawing No.	ASU015

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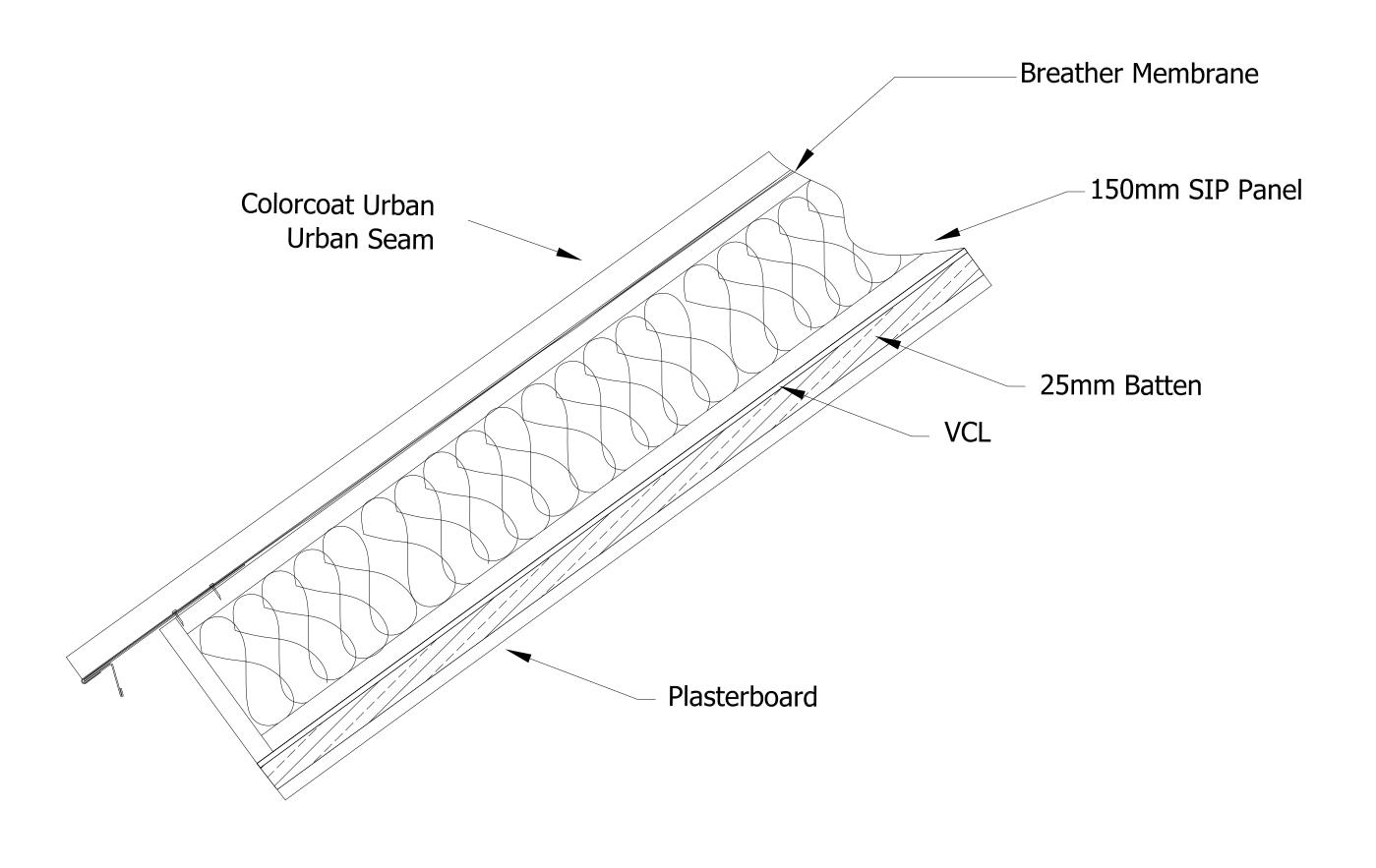




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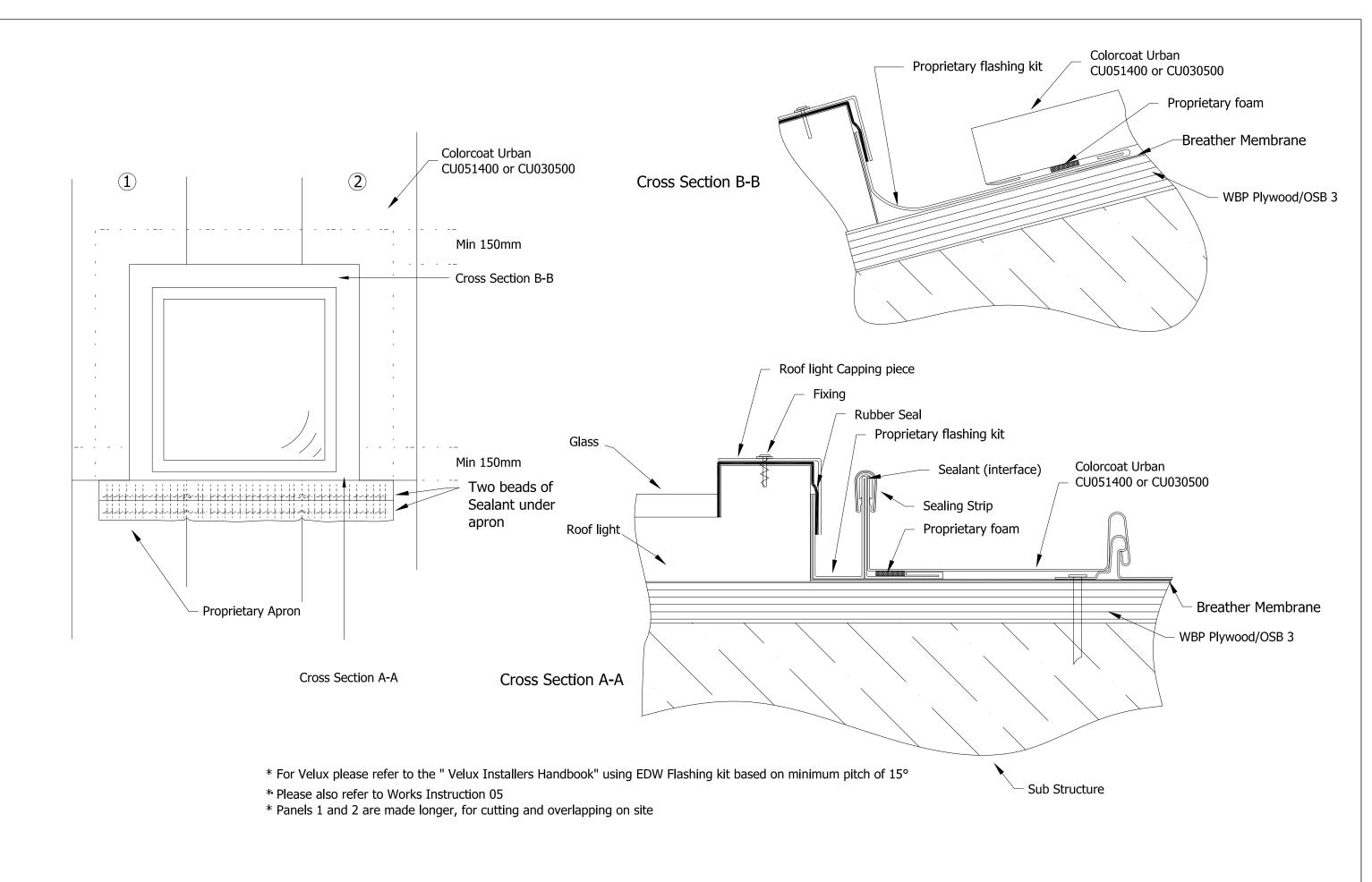
+	Title	SIP Panel Build Up
	Drawing No.	ASU017

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Title Window Detail (Roof Lights)

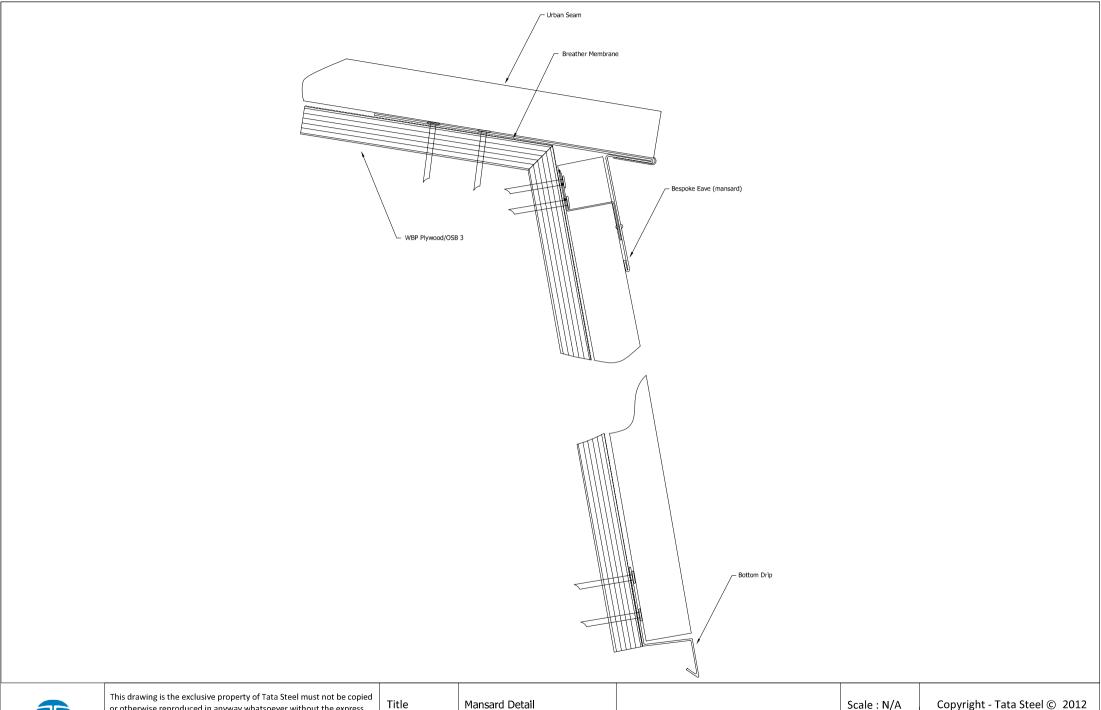
Drawing No. ASU020

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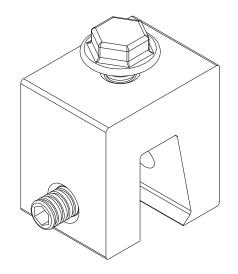


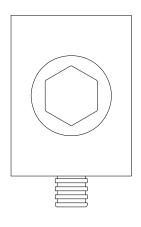
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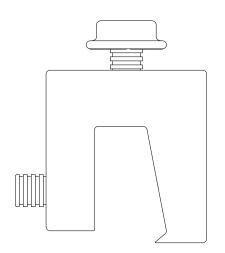
Title Mansard Detail ASU021 Drawing No.

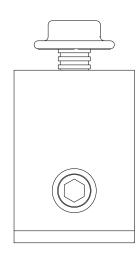
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TA	TA

t	Title	Fixing Clamp	
	Drawing No.	ASU022	

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# **Urban Clamp**

The urban clamp has been specially designed for Colorcoat Urban<sup>®</sup> seam profile. When attaching the clamps they are designed to engage with the seam as shown. For horizontal seam applications, the set screw must be accessible from the top for tightening.

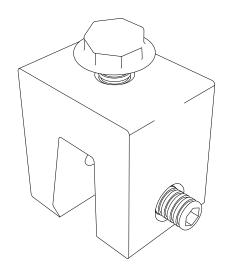
The setscrews are opposite the open (or overlap) side of the seam. Only one orientation is possible with the Urban clamp for it to engage with the seam correctly.

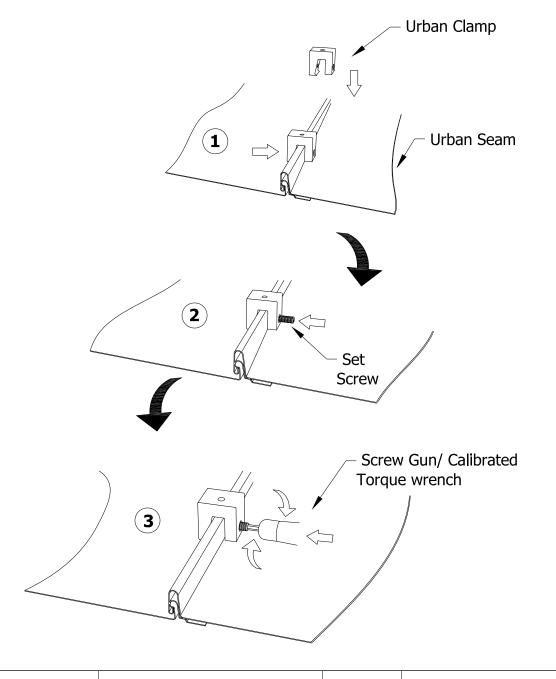
For the maximum holding strength, setscrews should be tensioned and re-tensioned as the seam material compresses.

Please use the Urban clamp responsibly! Please see the load test results below based on pulling load normal to seam. The user and/or installer of the Urban Clamp are responsible for all necessary engineering and design for the intended use of the Urban Clamp in any assembly or application.

Please note one M8 bolt and one set screw is supplied with every Urban Clamp.

Profile	Screw Tension (Nm)	Allowable (KNs)	Ultimate (KNs)
Urban Seam <sup>®</sup>	13	1.5	4.51







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Title Urban Clamp Assembly

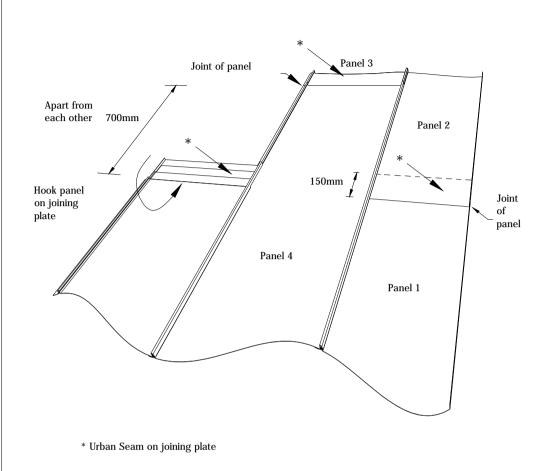
Drawing No. ASU022 02

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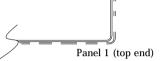
Panel 1 (top end)





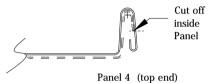
Panel 2





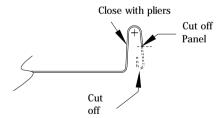
Panel 3

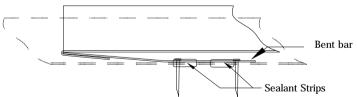




Panel 4 (top end)







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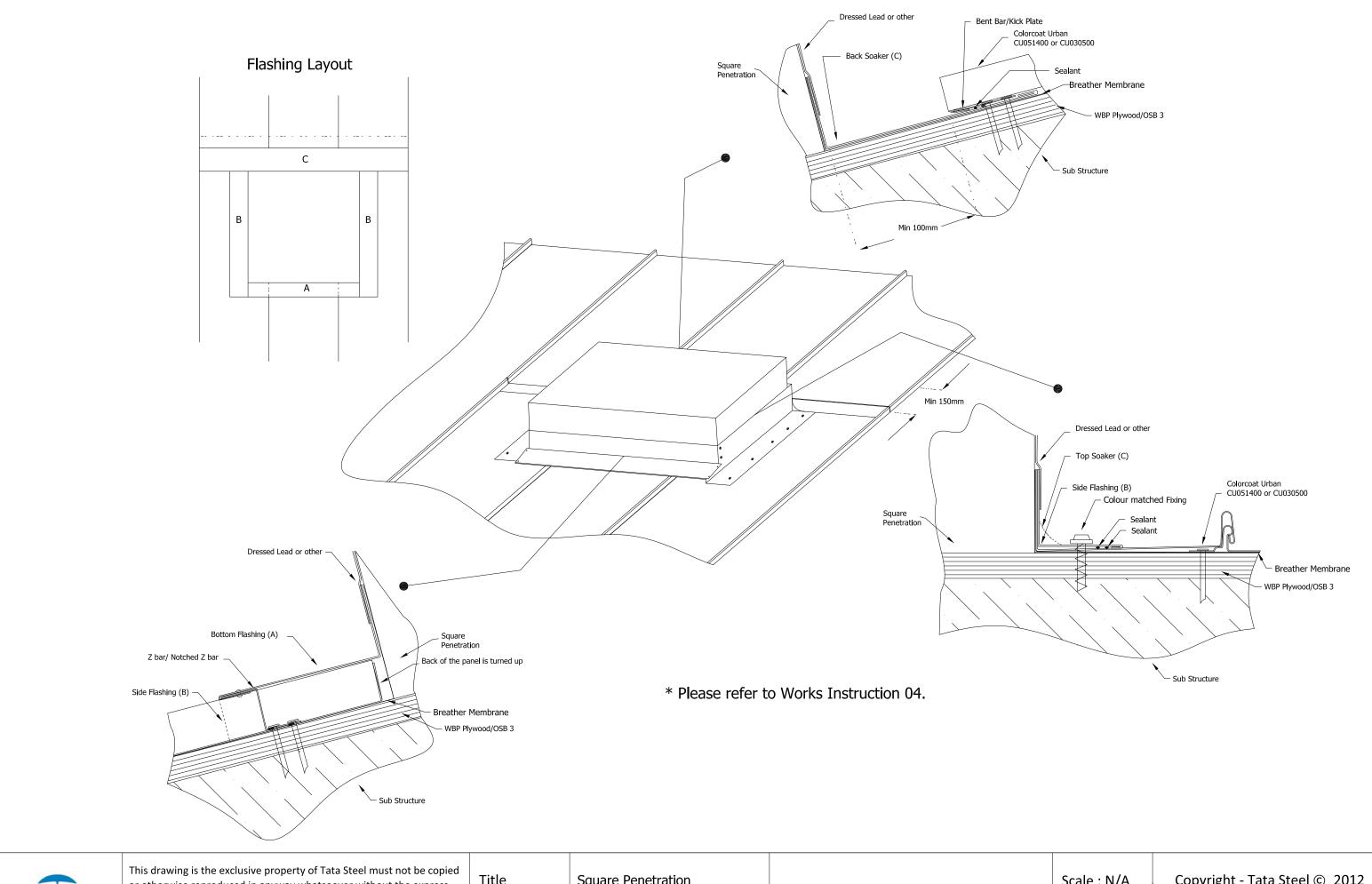
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	Title	Joining Panels	
	Drawing No.	ASU023	

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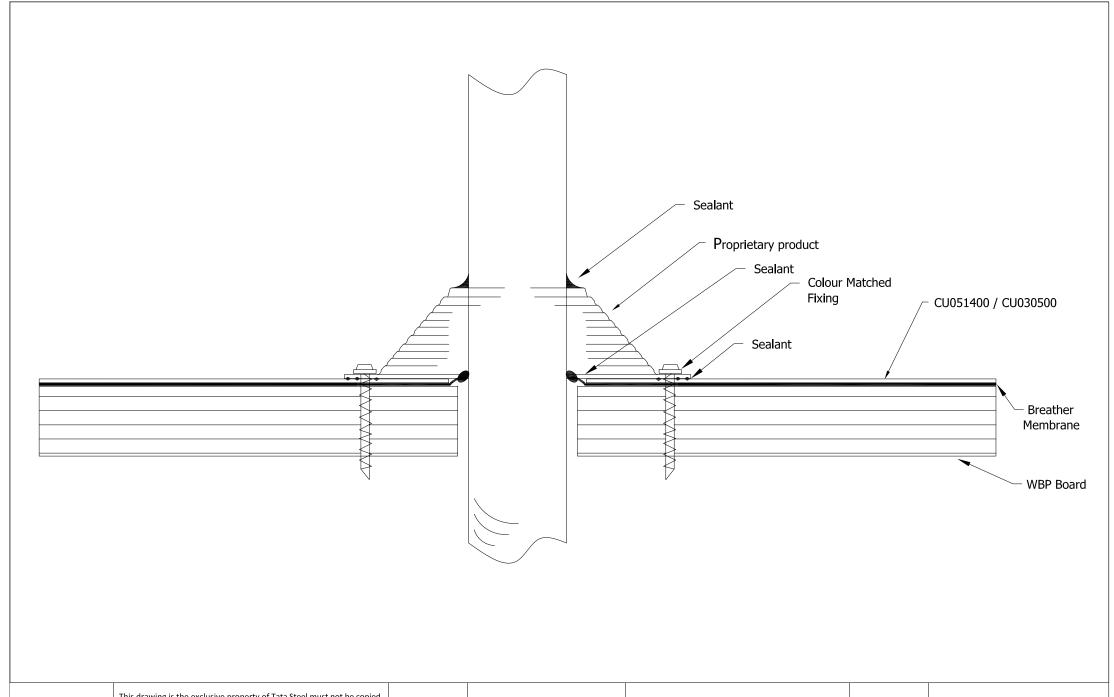


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Title **Square Penetration** ASU024 Drawing No.

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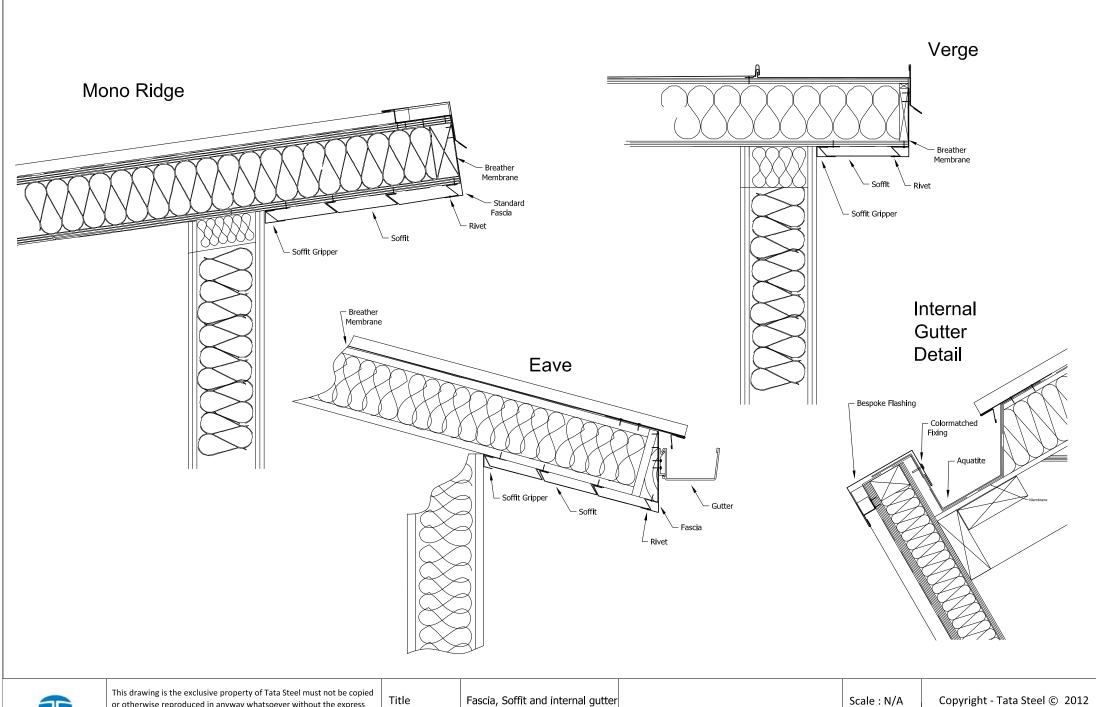
Title SVP or round Chimney

Drawing No. ASU025

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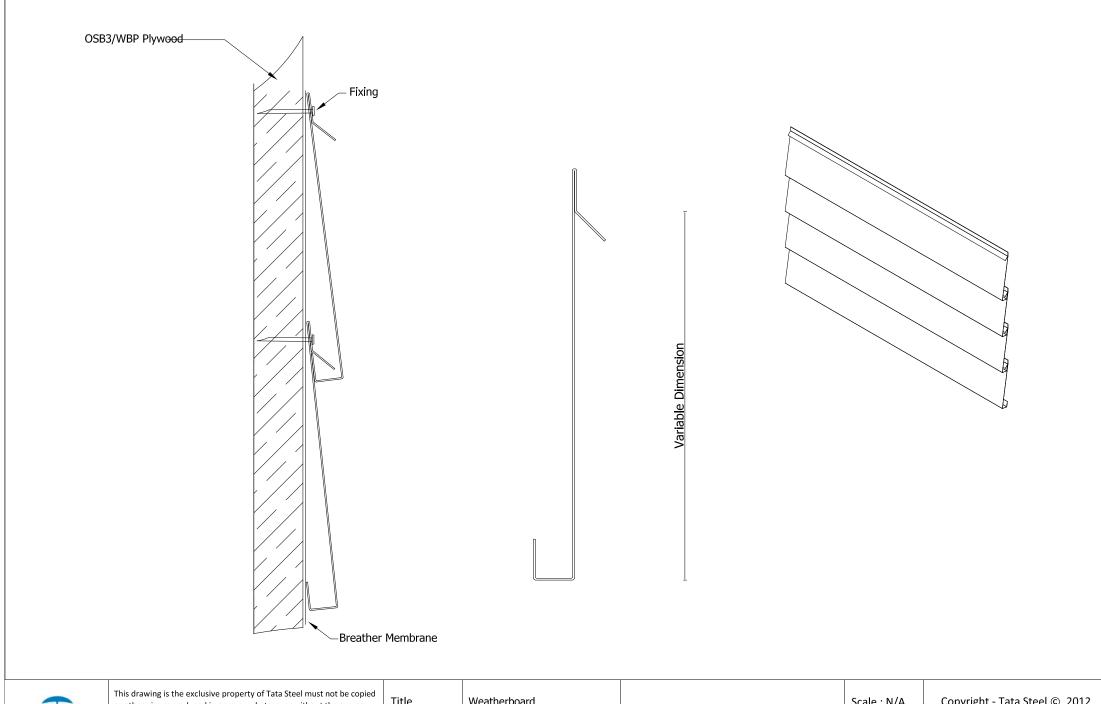




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ASU026 Drawing No.

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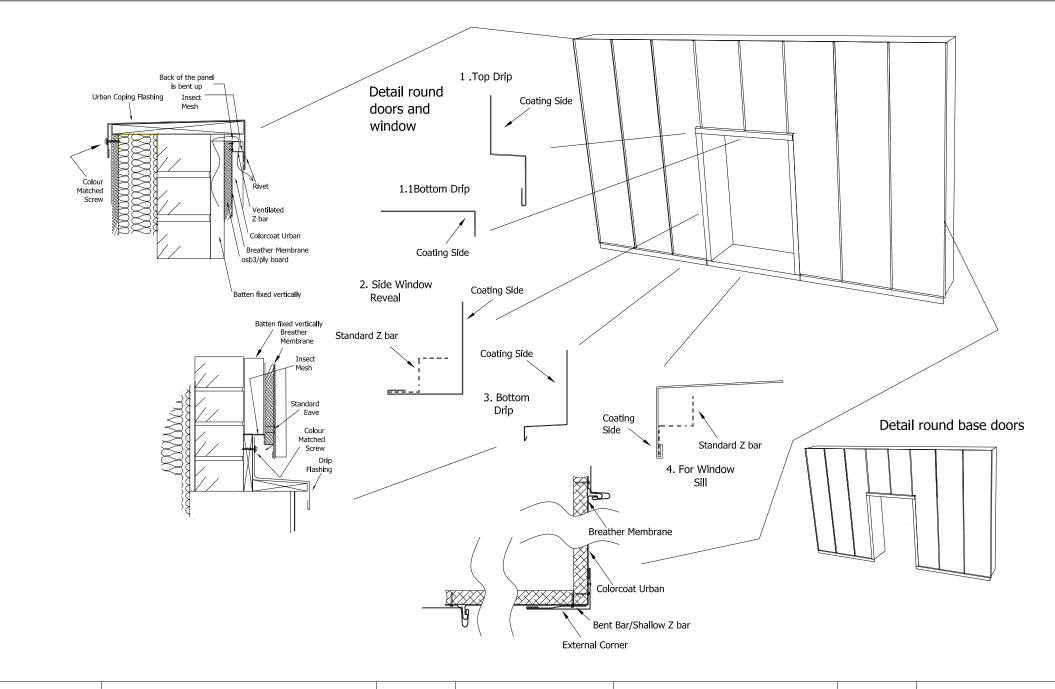


t	Title	Weatherboard
	Drawing No.	ASU027

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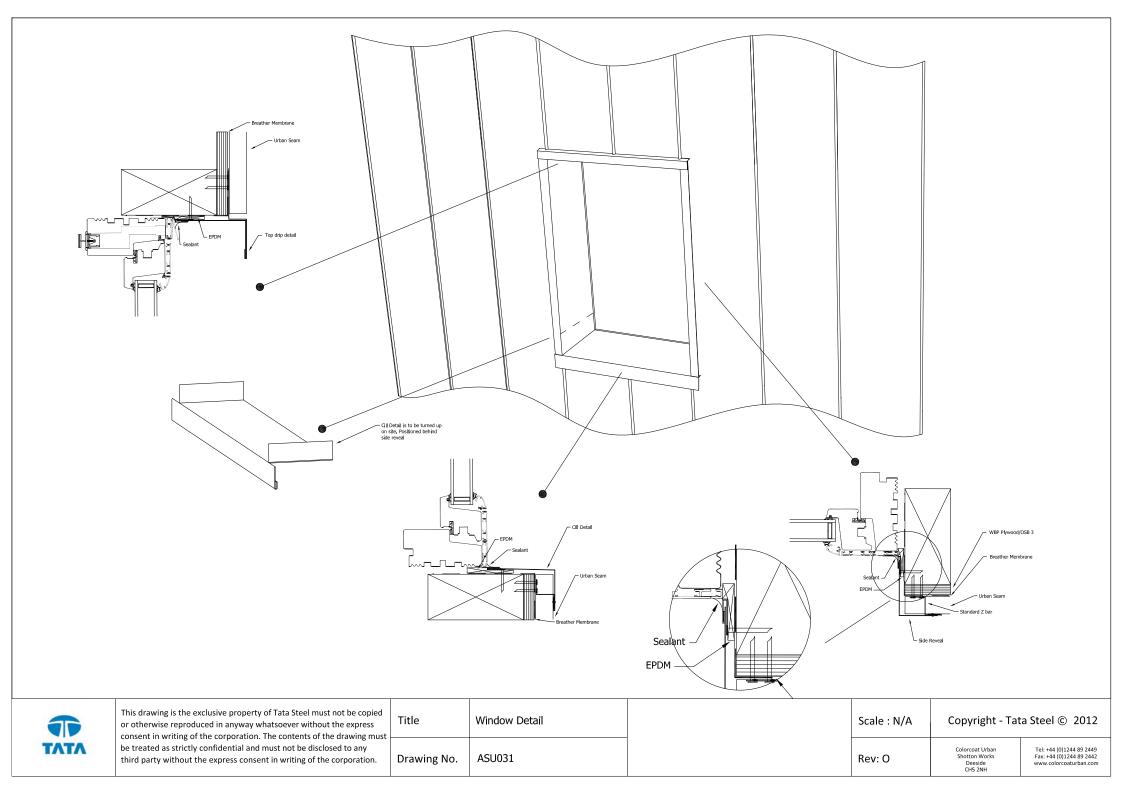


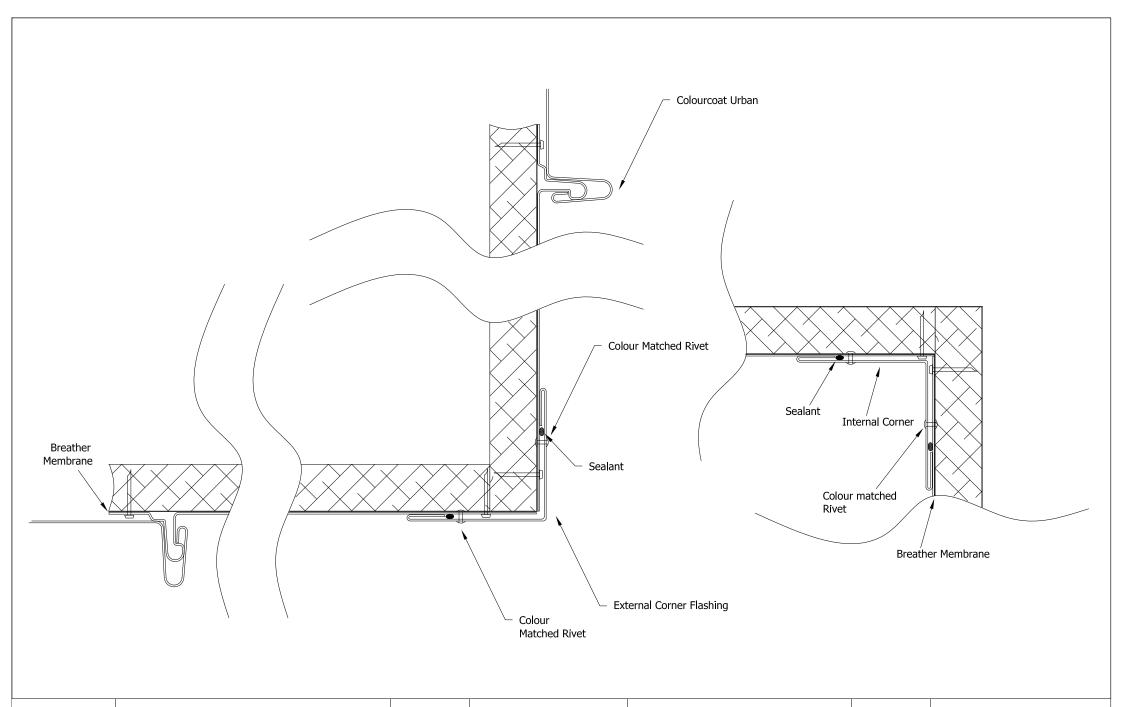
d ist	Title	Wall Details	
J.C	Drawing No.	ASU030	

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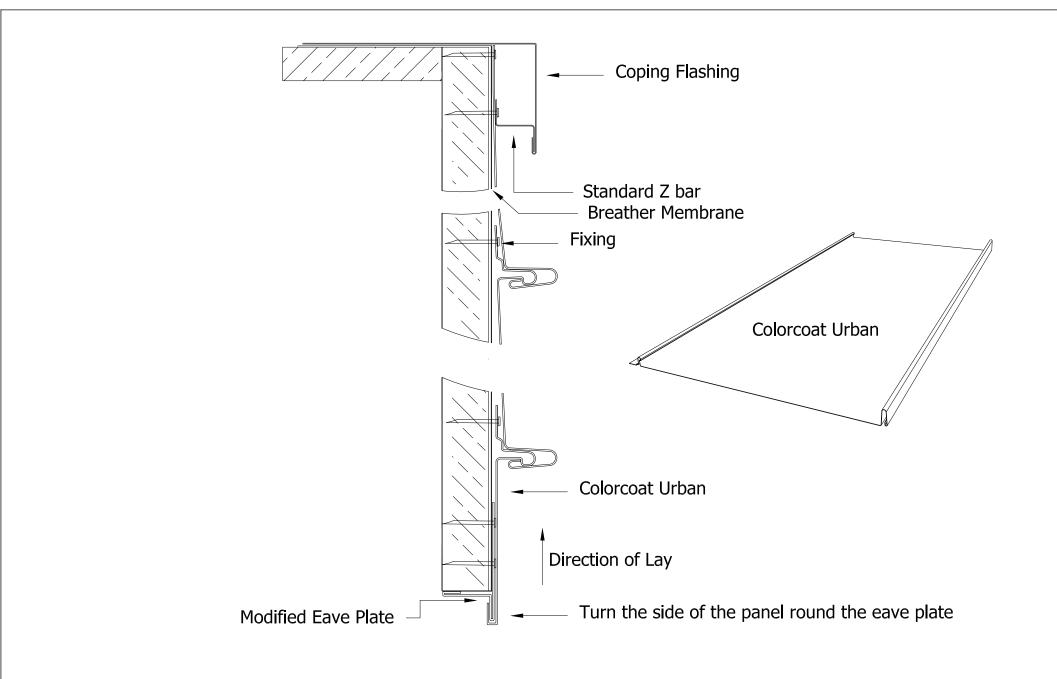


t	Title	External and Internal Corner
	Drawing No.	ASU032

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Title Laying panels horizontally

Drawing No. ASU033

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