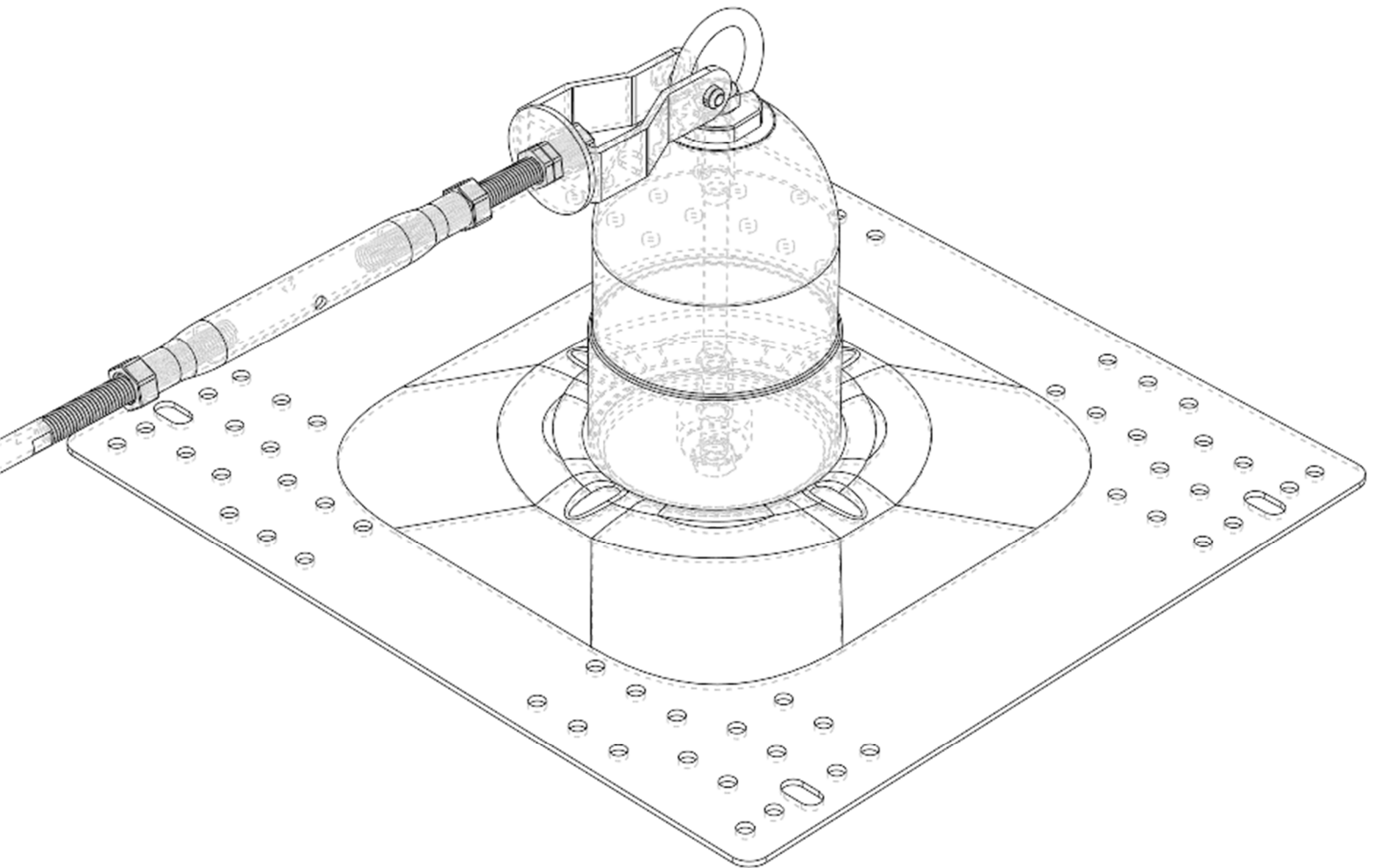


Technical Manual

October 2023
Revision 5.2

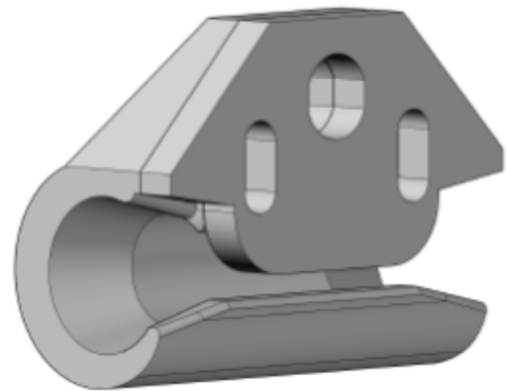
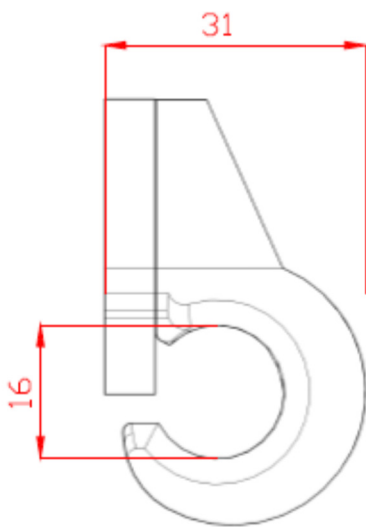
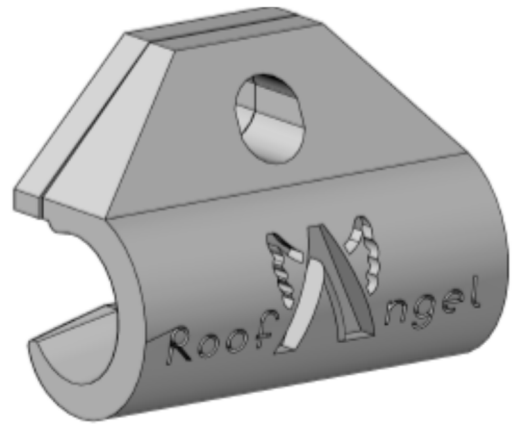
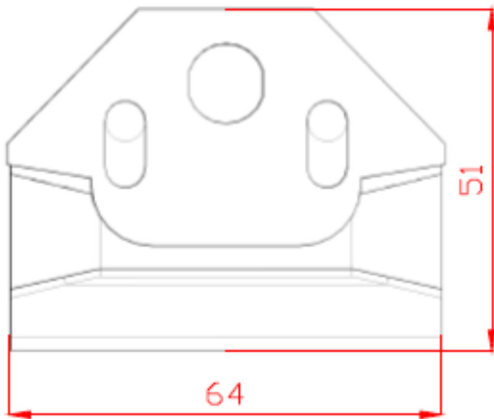


RA-3001

Roof Angel Traveller

The anchorage device for the Roof Angel® Horizontal System. The only approved means of anchorage.

Supplied with BSP001 Karabiner.

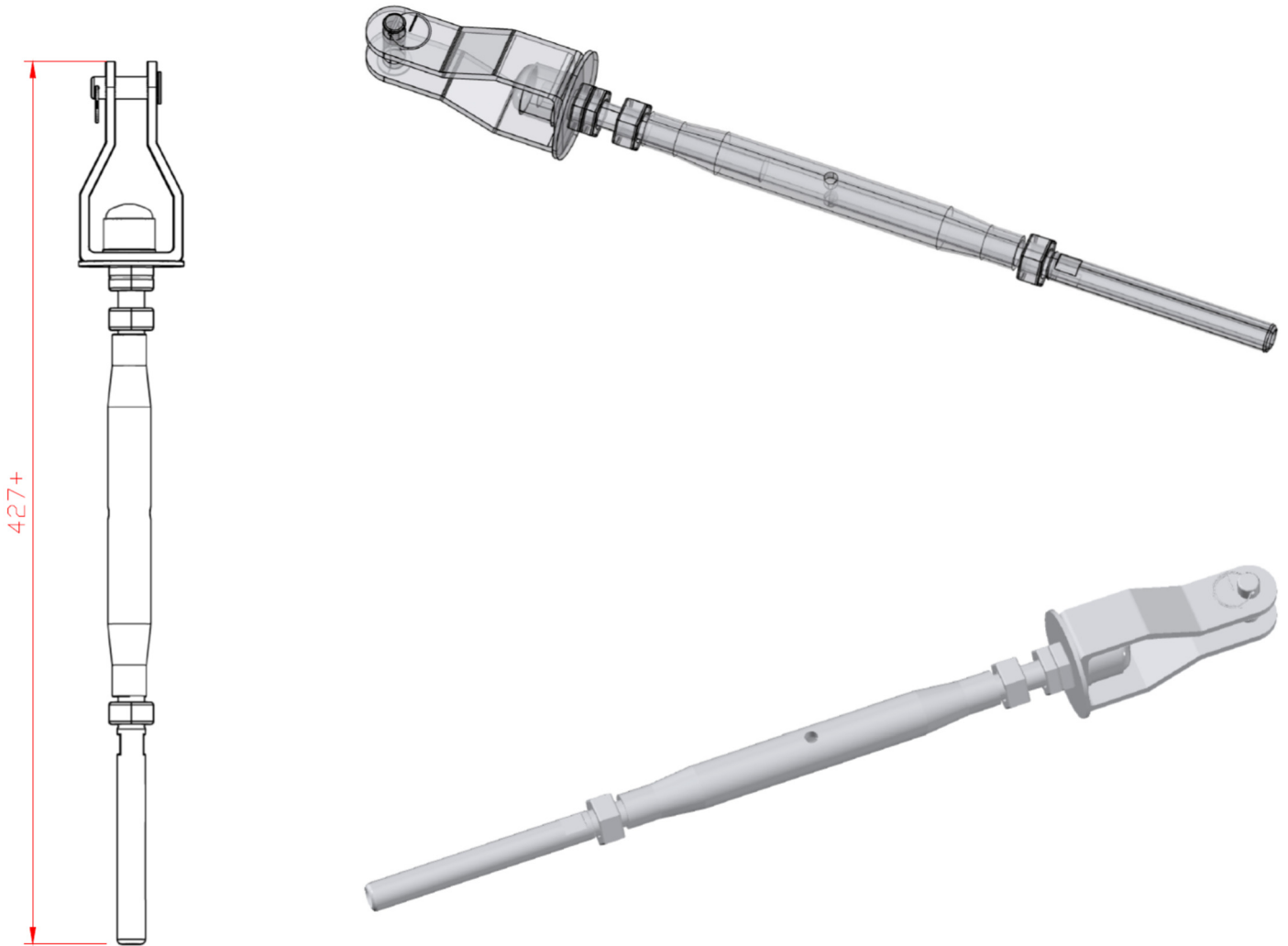


Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	0.561kg
Drawing Revision Date	01-07-2016

RA-2001

Swage End Tensioner

An adjustable tensioner unit is provided to take up the excess slack in the cable, once installation is complete. A built in tension indicator shows when enough slack has been removed from the system.

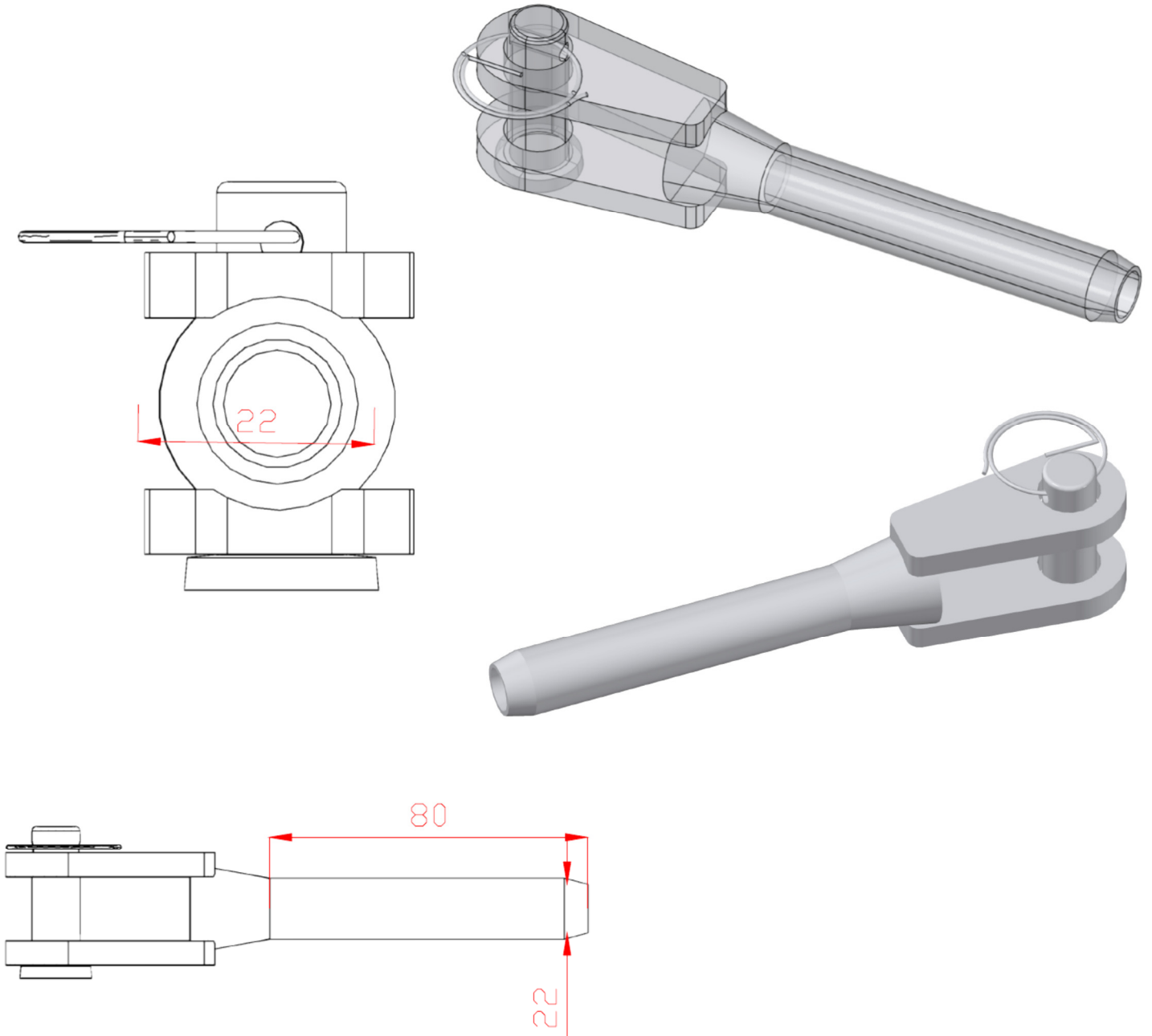


Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	0.826kg
Drawing Revision Date	01-10-2016

RA-2002

Swage End

A swaged fork terminal unit is provided to finish the cable allowing it to be attached to the anchorage ring.



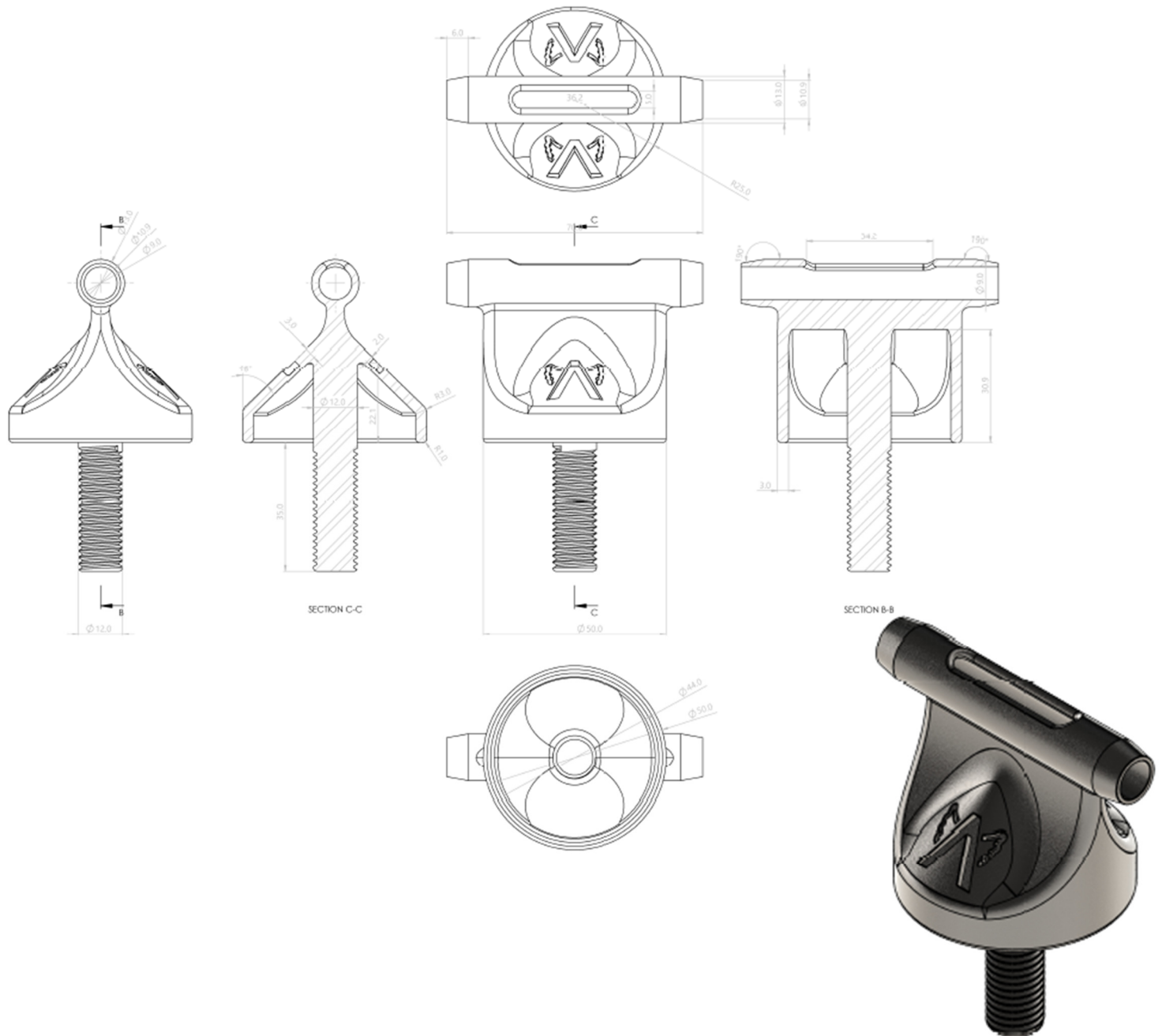
Attach to an End/Corner post when used with Roof Angel Top Fix.

Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	0.219kg
Drawing Revision Date	01-07-2016

RA-2003

Intermediate Cable Guide

The RA-2003 is the principal cable guide and is designed to be installed on the Roof Angel Anchorage Posts or Wall Mount Bracket.



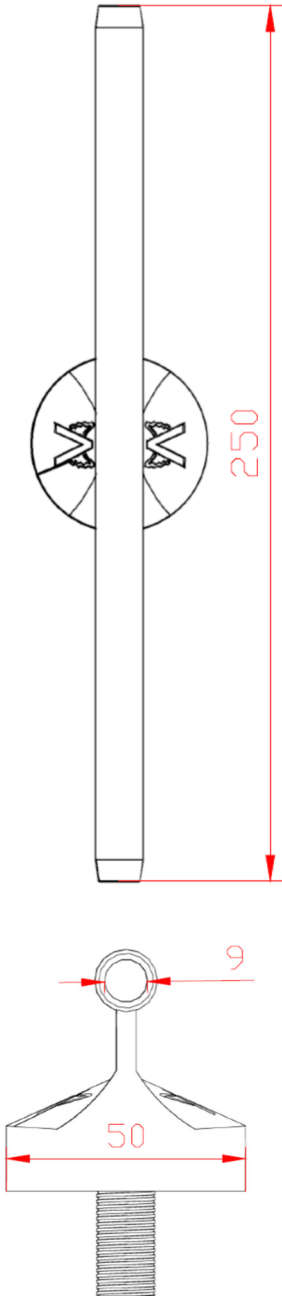
Attach to an Intermediate post when used with AxxessLine Top Fix.

Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	0.231kg
Drawing Revision Date	

RA-2004

Long Tail Variable Cable Guide

The Long Tail Variable Cable Guide can be adapted giving a cable deviation of up to 45° and is designed to be installed on the Roof Angel Anchorage Posts or Wall Mount Bracket.



Attach to an End/Corner post when used with Roof Angel Top Fix as a corner.

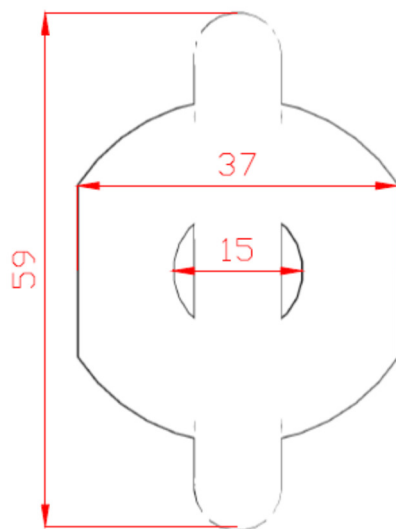
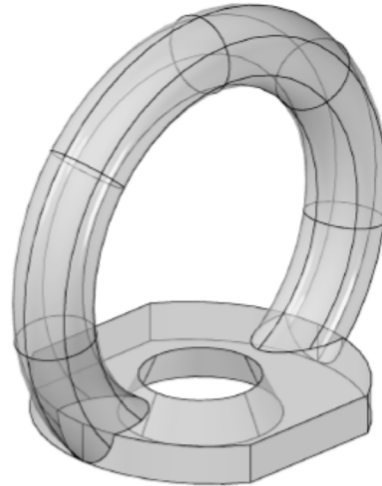
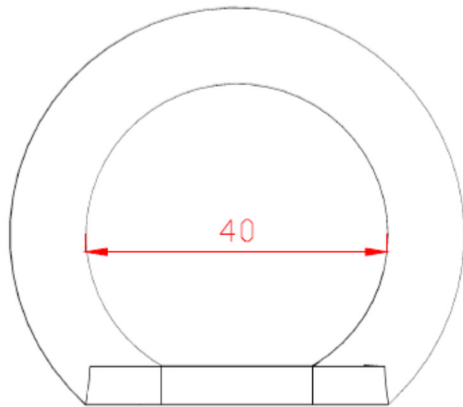
Attach to an Intermediate post when used with Roof Angel Top Fix as a ridge break-over.

Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	0.314kg
Drawing Revision Date	

RA-2006

End Anchor Ring

For use with every system the End Anchor Ring provides the termination for the system and attachment for the tensioner and fork units, or as the anchor on a single anchorage post.



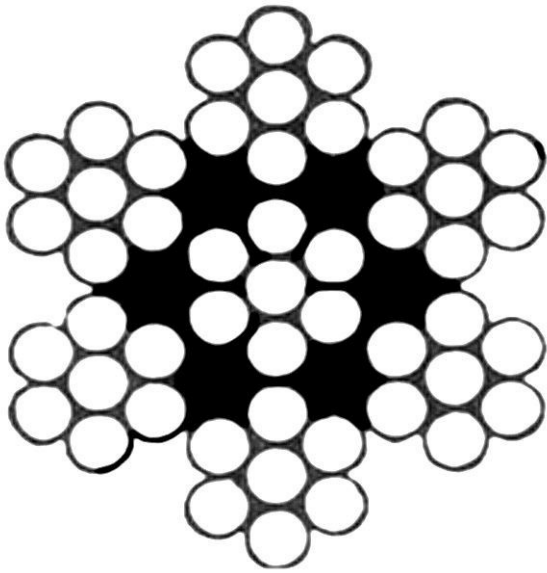
Attach to an End/Corner post when used with Roof Angel Top Fix, whether a system termination or single anchor.

Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	0.100kg
Drawing Revision Date	01-07-2016

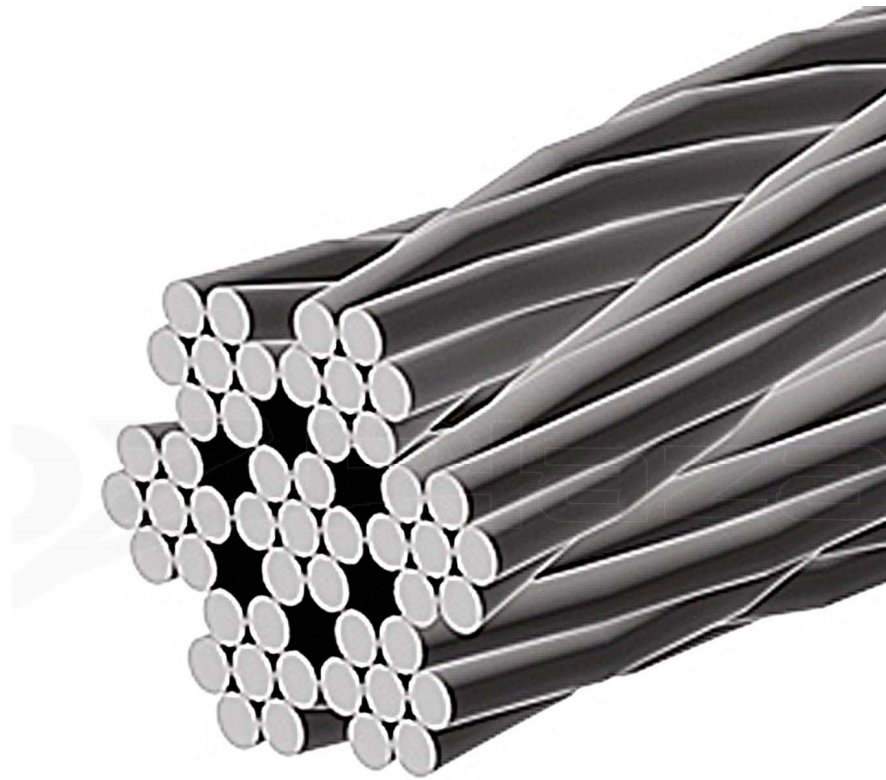
RA-2007

Cable

Cable drum of 200m 8mm 7x7 Stainless Steel Cable



RA-2007	8mm Cable 200m Drum
RA-2007A	8mm Cable 150m Drum
RA-2007-10	8mm Cable 10m Drum
RA-2007-25	8mm Cable 25m Drum
RA-2007-50	8mm Cable 50m Drum
RA-2007-75	8mm Cable 75m Drum
RA-2007-100	8mm Cable 100m Drum

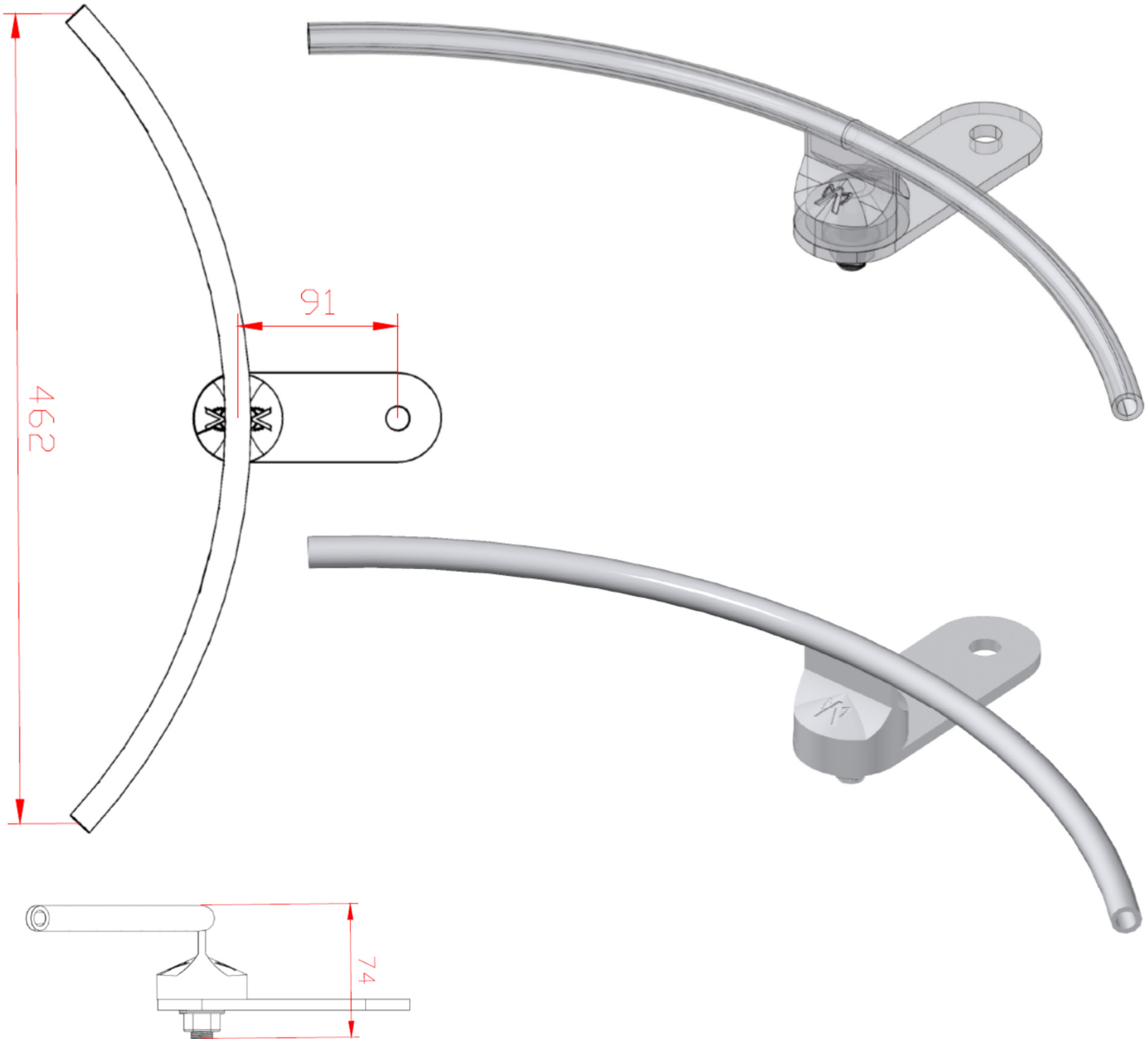


Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	54.000kg
Drawing Revision Date	

RA-2008

Single Anchor Post Mounted Corner Unit

The Single Anchor 90° corner unit is designed to turn the direction of the cable through 90° horizontally and is designed to be installed on the Roof Angel Anchorage Posts.



Attach to an End/Corner post when used with Roof Angel Top Fix.

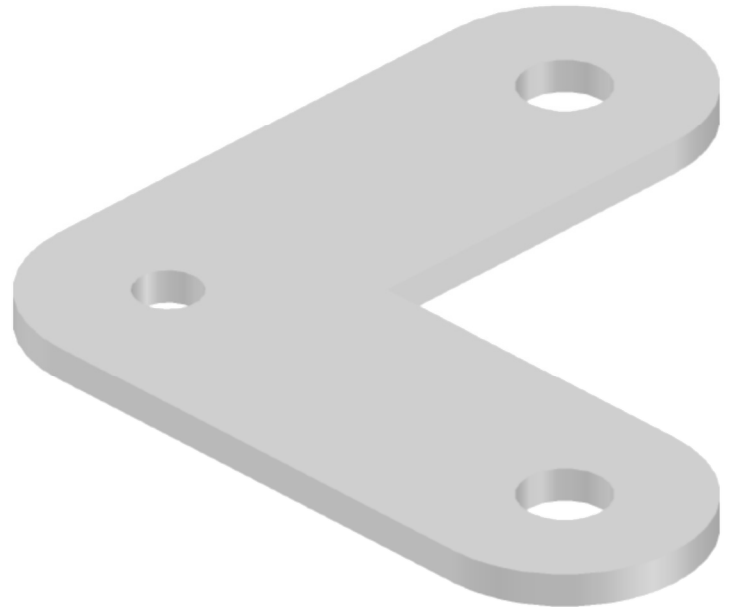
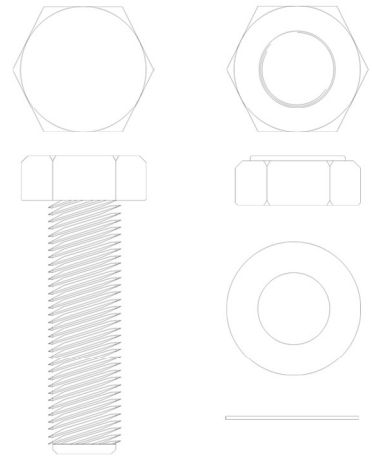
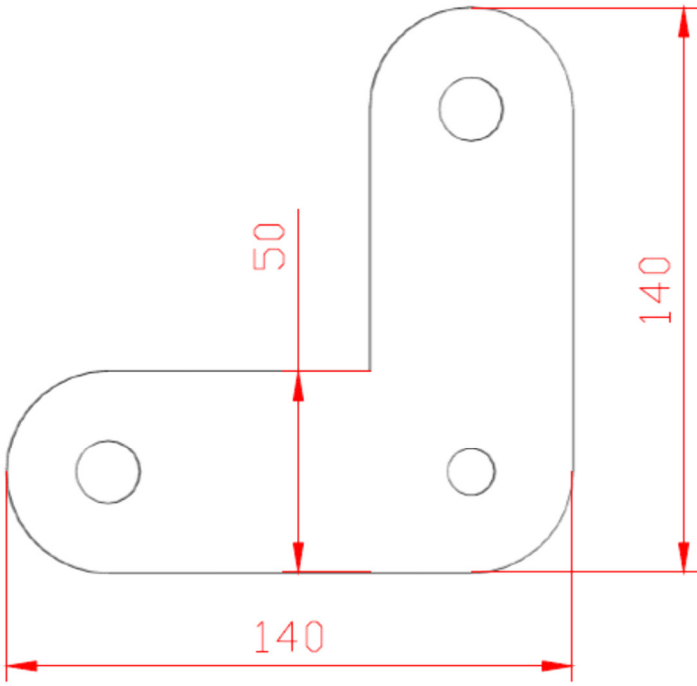
Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	
Drawing Revision Date	

RA-2009

Angled Thro Plate

To provide an anchorage for a T-system from a post with intermediate bracket. Helps reduce the amount of posts in a system and therefore the number of penetrations required. Can be used with either an intermediate and end, a variable corner and end, or two ends.

Supplied with 2 x 25 x 12mm Stainless Steel Bolts and Nuts.



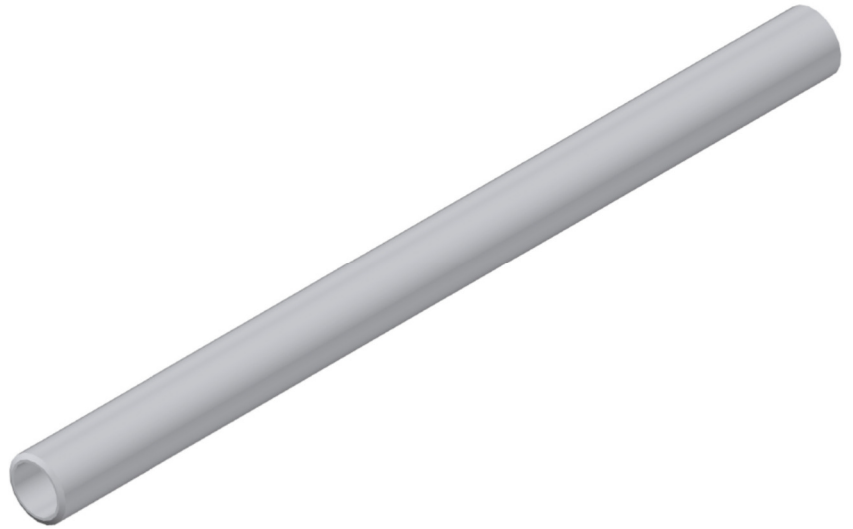
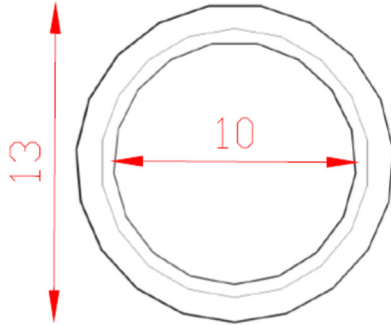
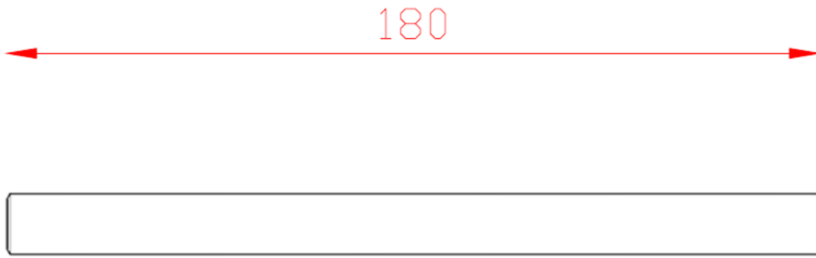
Attach to an End/Corner post when used with Roof Angel Top Fix.

Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	0.286kg
Drawing Revision Date	

RA-2011

Swage Joiner

When a system is required to be repaired, or the cable lengthened then the Swage Joiner is used to connect two ends of separate cable lengths to provide a continuous run for the traveller to navigate.



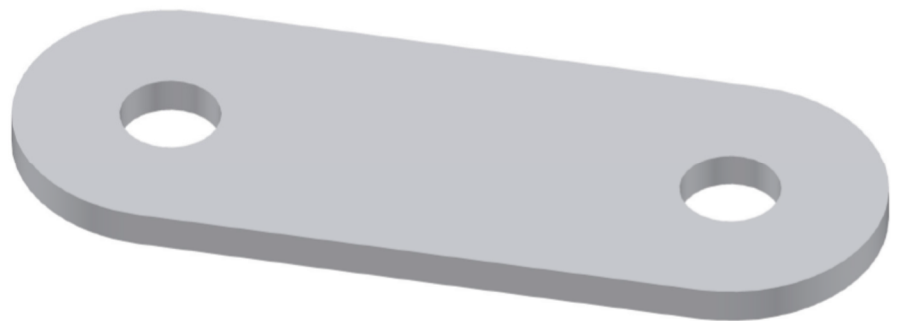
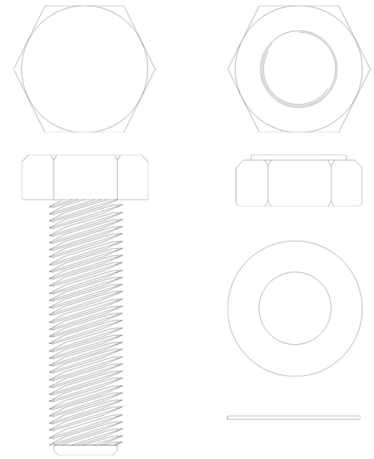
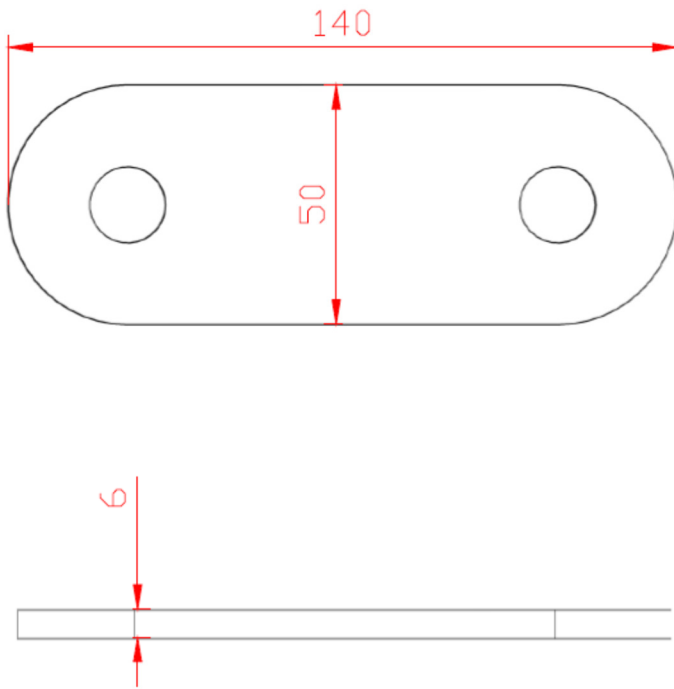
Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	0.104kg
Drawing Revision Date	

RA-2012

Thro Plate

To provide an anchorage for a T-system from a post with intermediate bracket. Helps reduce the amount of posts in a system and therefore the number of penetrations required. Can be used with either an intermediate and end, a variable corner and end, or two ends.

Supplied with 12mm Stainless Steel Bolts and Nuts.



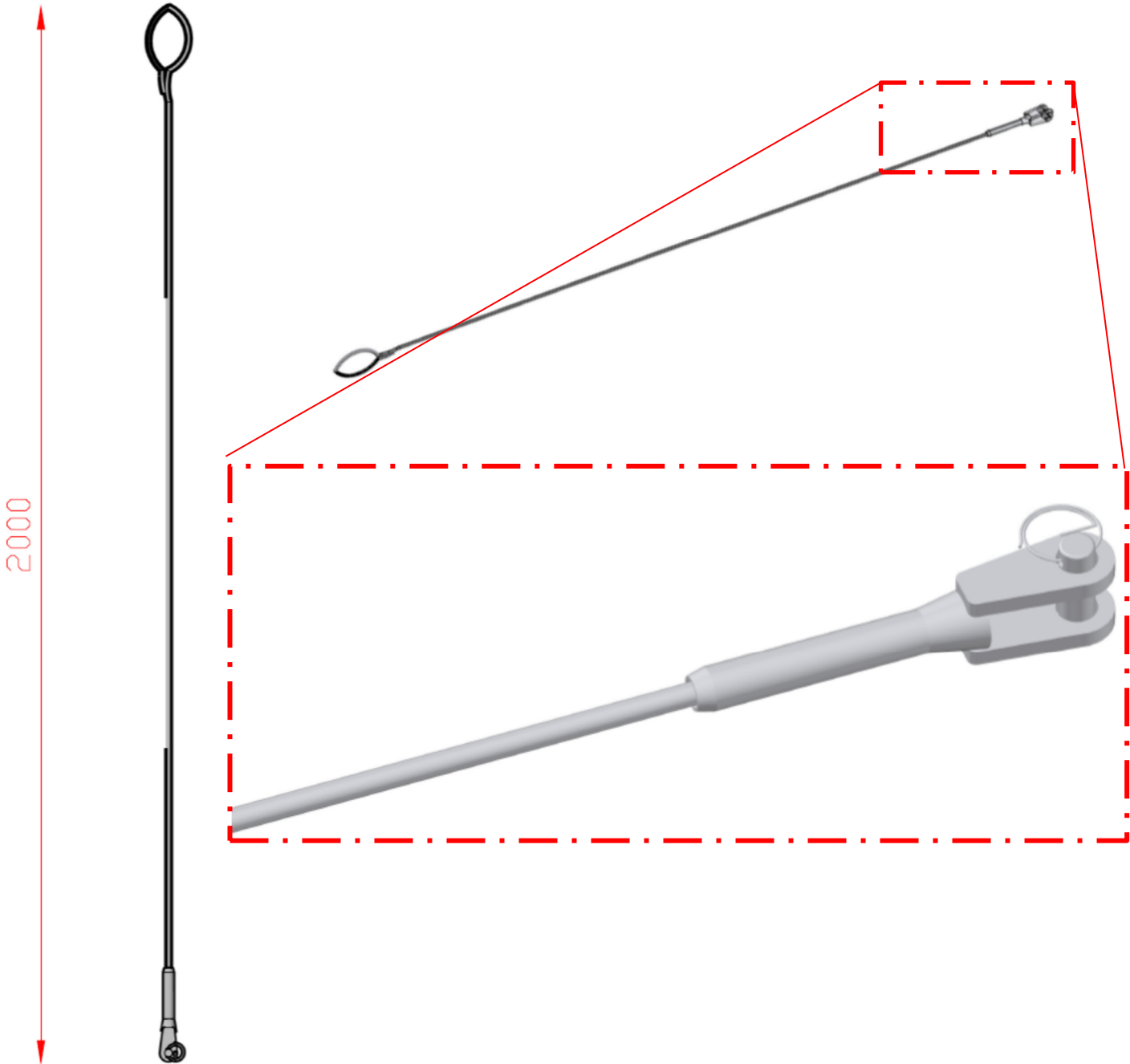
Attach to an End/Corner post when used with Roof Angel Top Fix.

Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	0.286kg
Drawing Revision Date	

RA-2013

Anchorage Cable Strop

To allow access to systems mounted back from the edge an anchorage strop can be used in conjunction with the correct PPE.

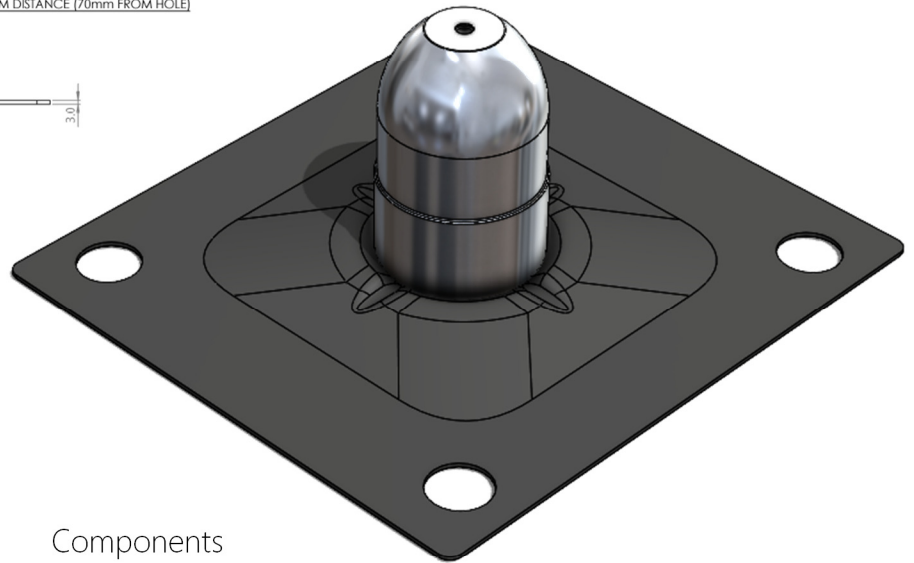
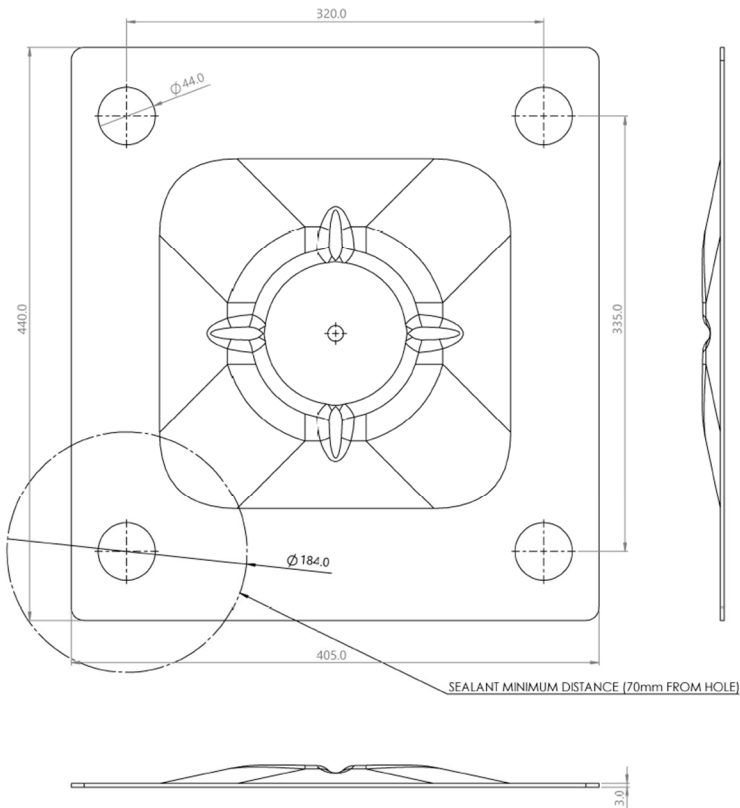


Attach to an End/Corner post when used with Roof Angel Top Fix.

Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	
Drawing Revision Date	

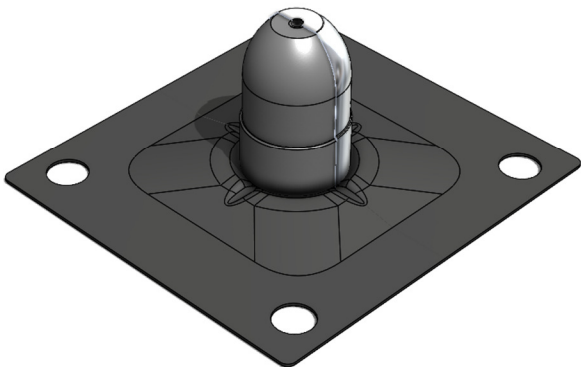
RA-1001-EC

PVC Post and Base
End and Corner



Components

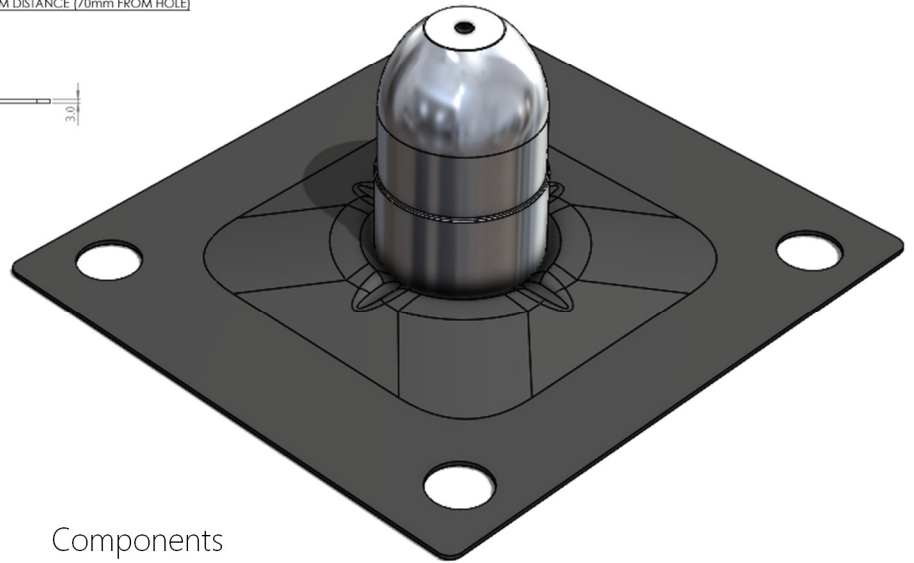
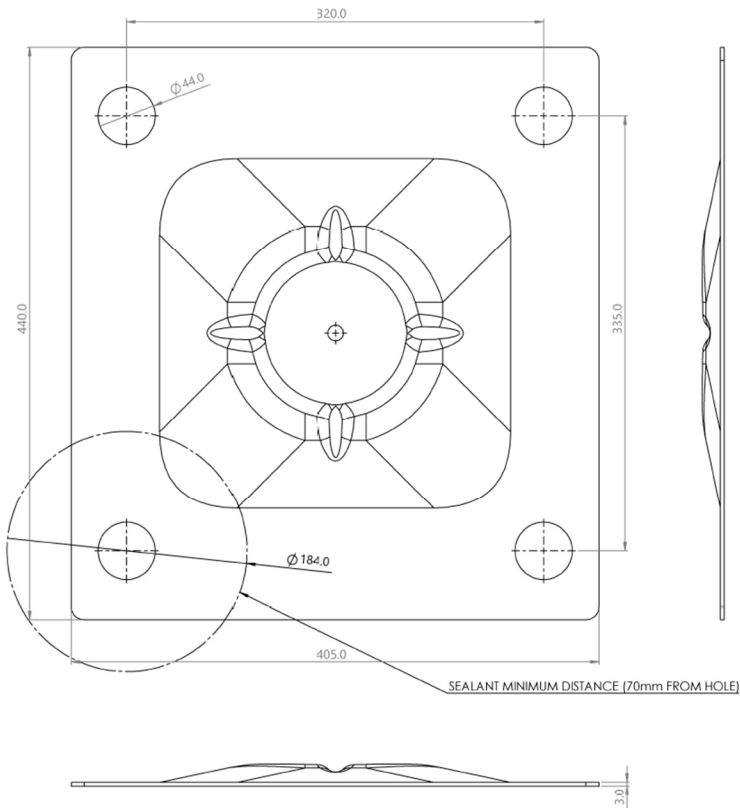
RA-1016	End/Corner Post Module
RA-1010	PVC (PC80) Coated Plate



Material	Aluminium, Stainless Steel, Polyurethane, PVC
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	3.441kg
Drawing Revision Date	

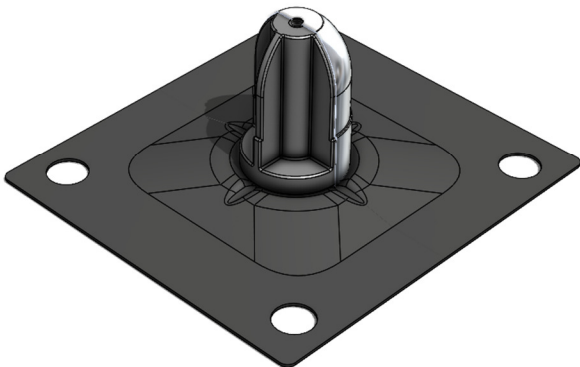
RA-1001-IN

PVC Post and Base
Intermediate



Components

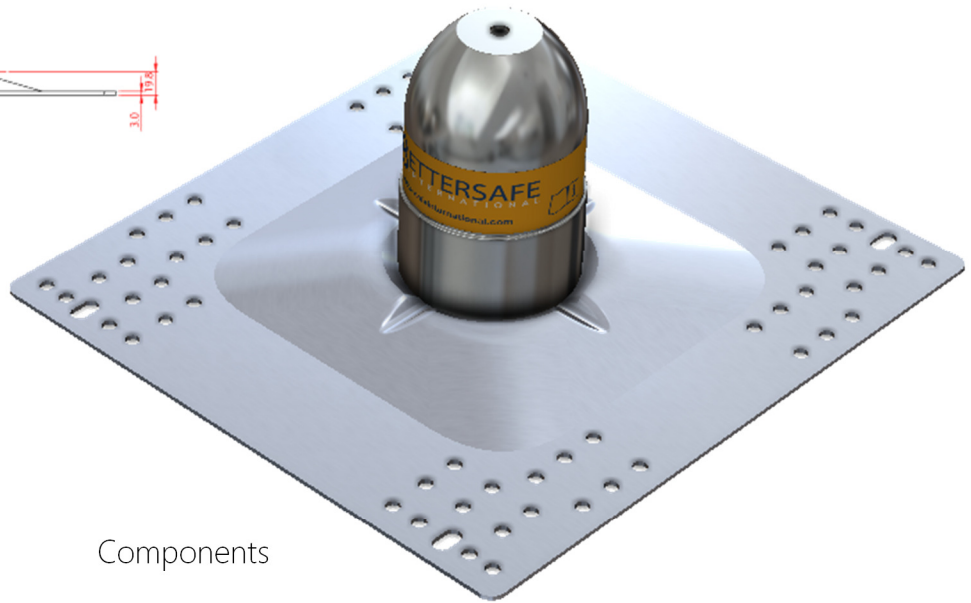
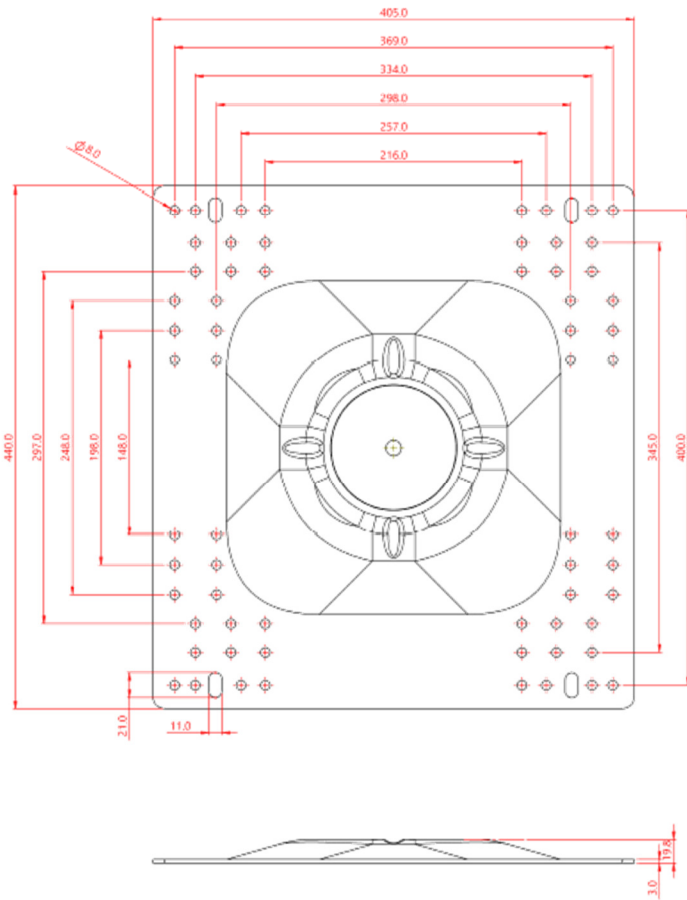
RA-1017	Intermediate Post Module
RA-1010	PVC (PC80) Coated Plate



Material	Aluminium, Stainless Steel, Polyurethane, PVC
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	2.725kg
Drawing Revision Date	

RA-1003-EC

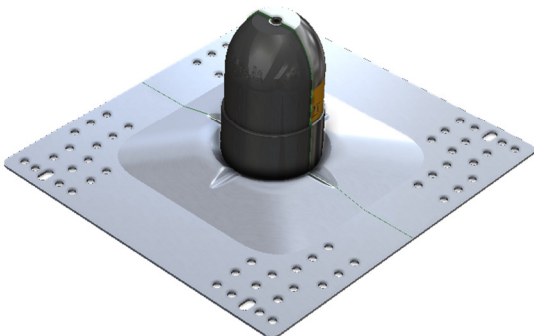
Top Fix Post and Base
333/400 End and Corner



Components

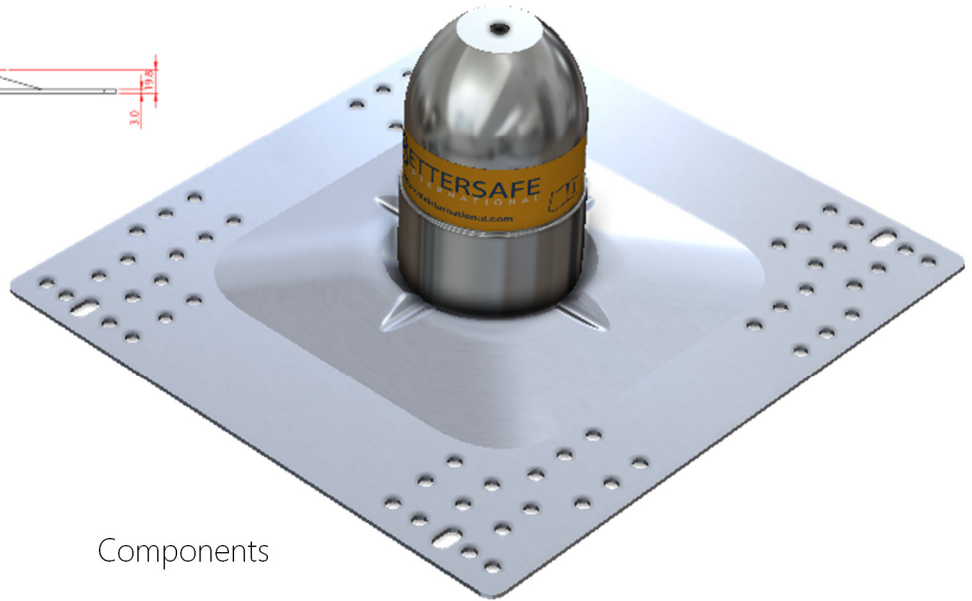
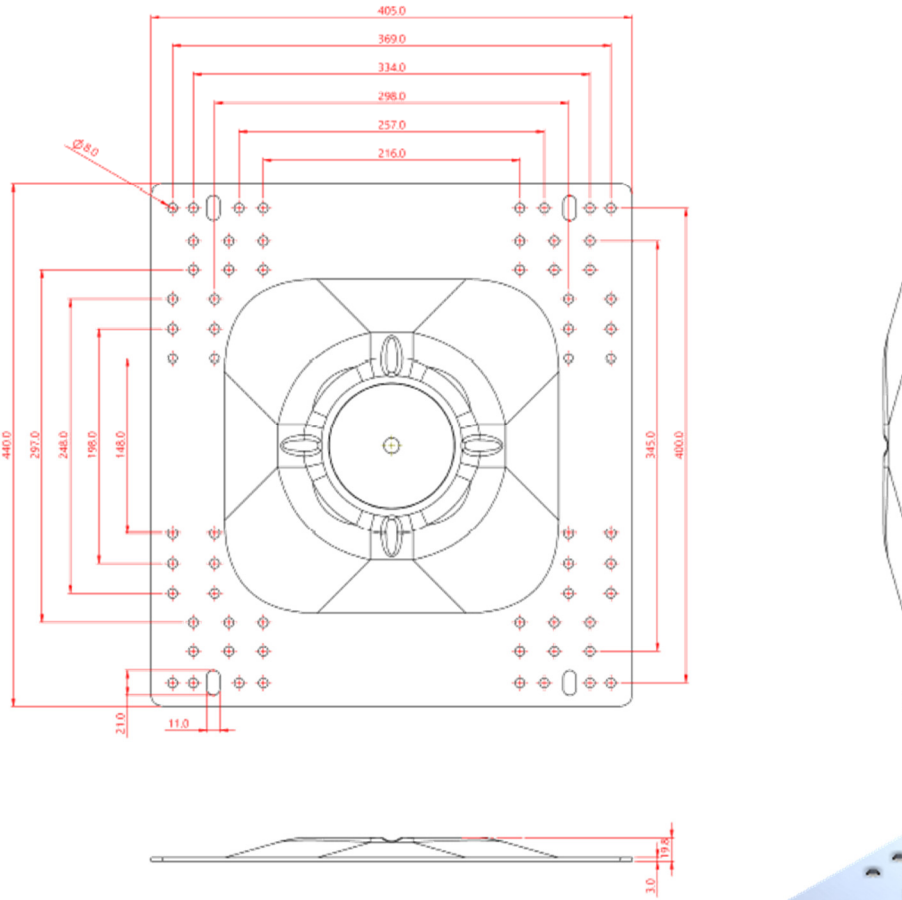
RA-1016	End/Corner Post Module
RA-1007	Aluminium Plate 333/400

Material	Aluminium, Stainless Steel, Polyurethane
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	3.218kg
Drawing Revision Date	



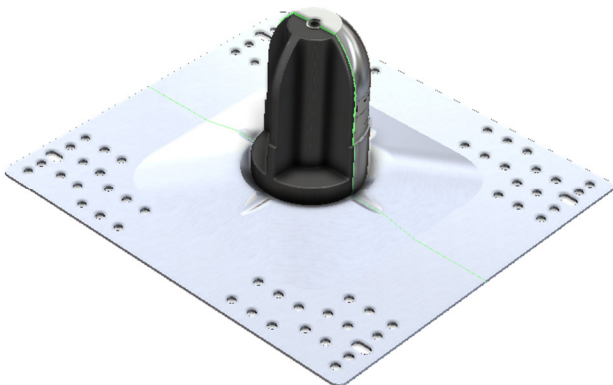
RA-1003-IN

Top Fix Post and Base
333/400 Intermediate



Components

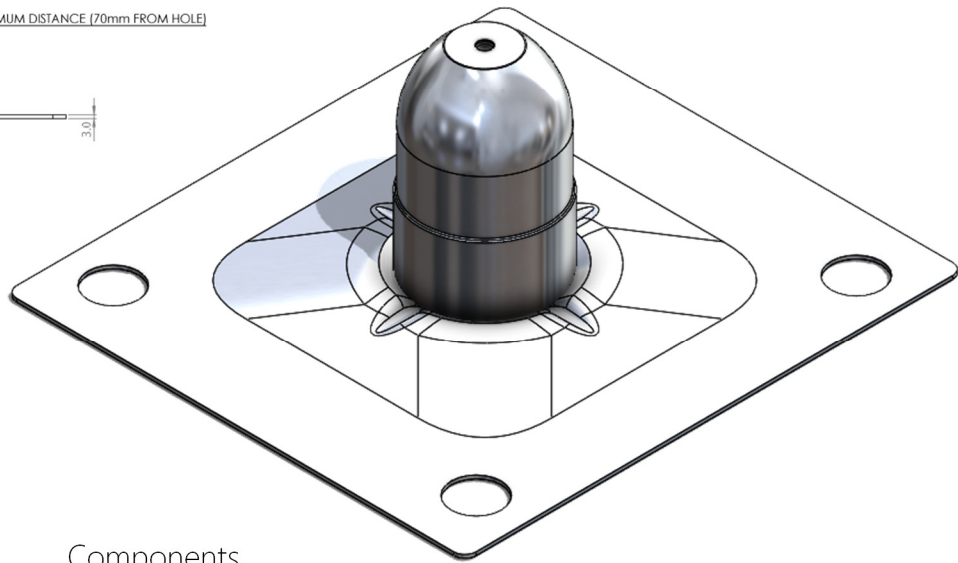
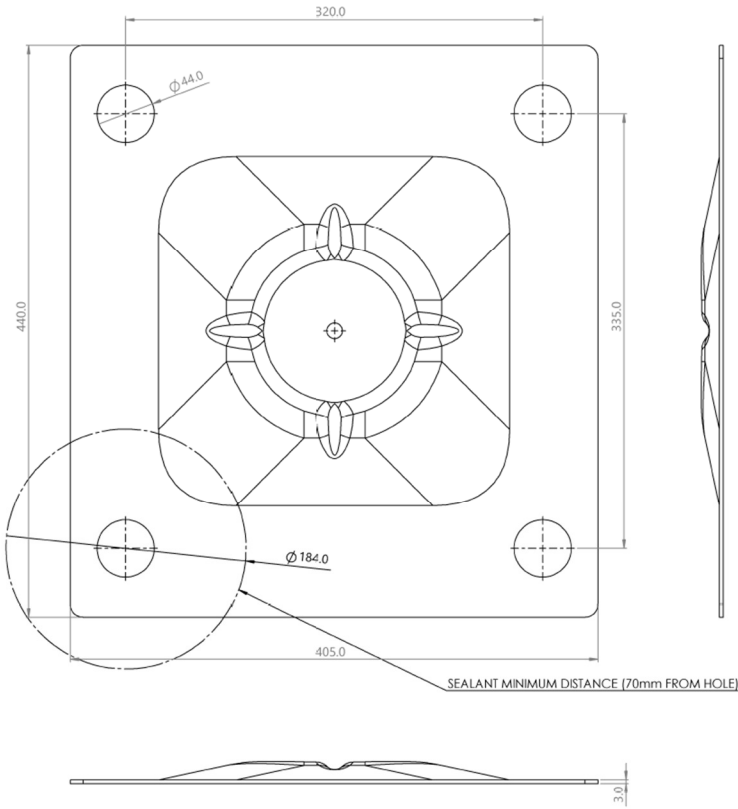
RA-1017	Intermediate Post Module
RA-1007	Aluminium Plate 333/400



Material	Aluminium, Stainless Steel, Polyurethane
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	2.725kg
Drawing Revision Date	

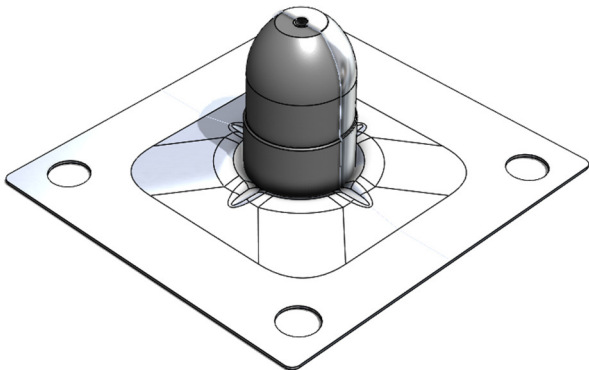
RA-1003A-EC

Top Fix Post and Base
333/400 End and Corner



Components

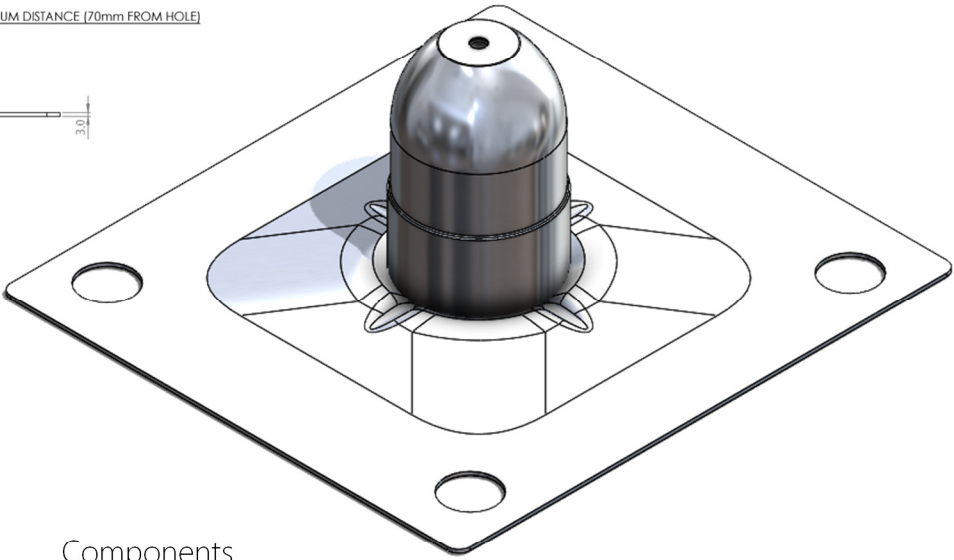
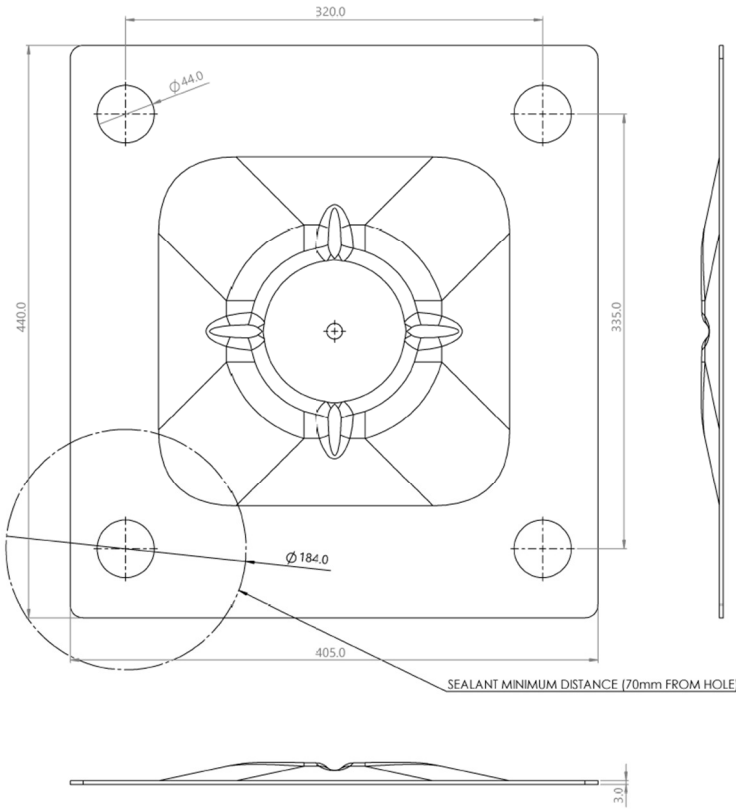
RA-1016	End/Corner Post Module
RA-1007A	Aluminium Plate 333/400



Material	Aluminium, Stainless Steel, Polyurethane
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	3.218kg
Drawing Revision Date	

RA-1003A-IN

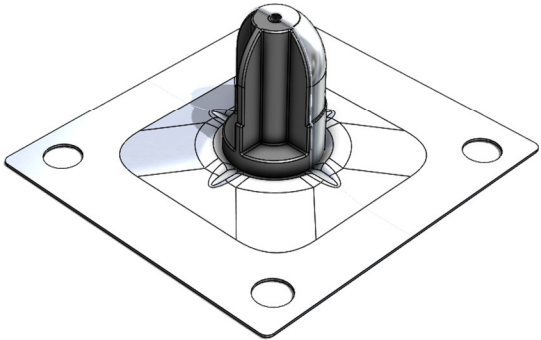
Top Fix Post and Base
333/400 Intermediate



Components

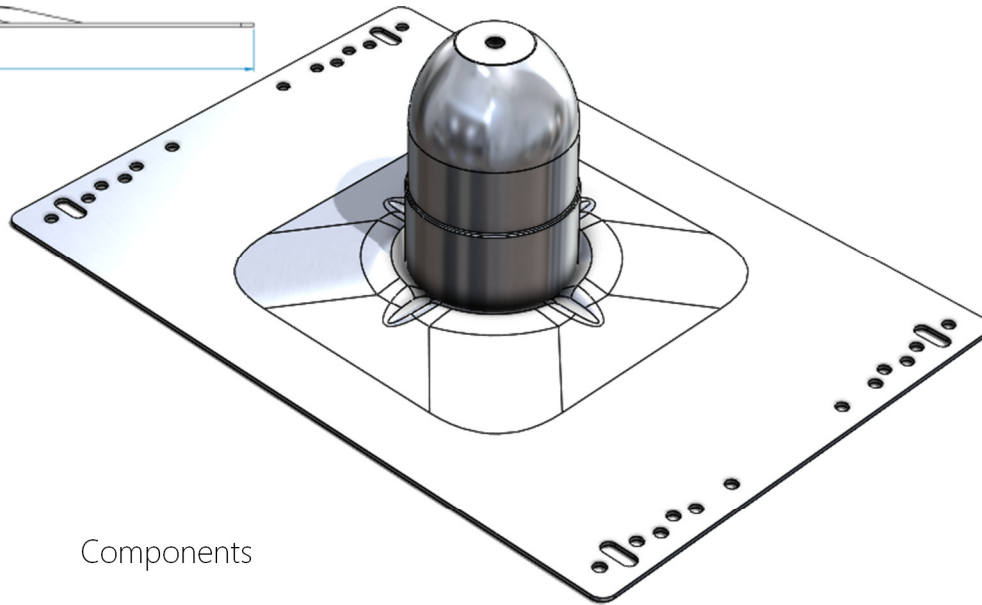
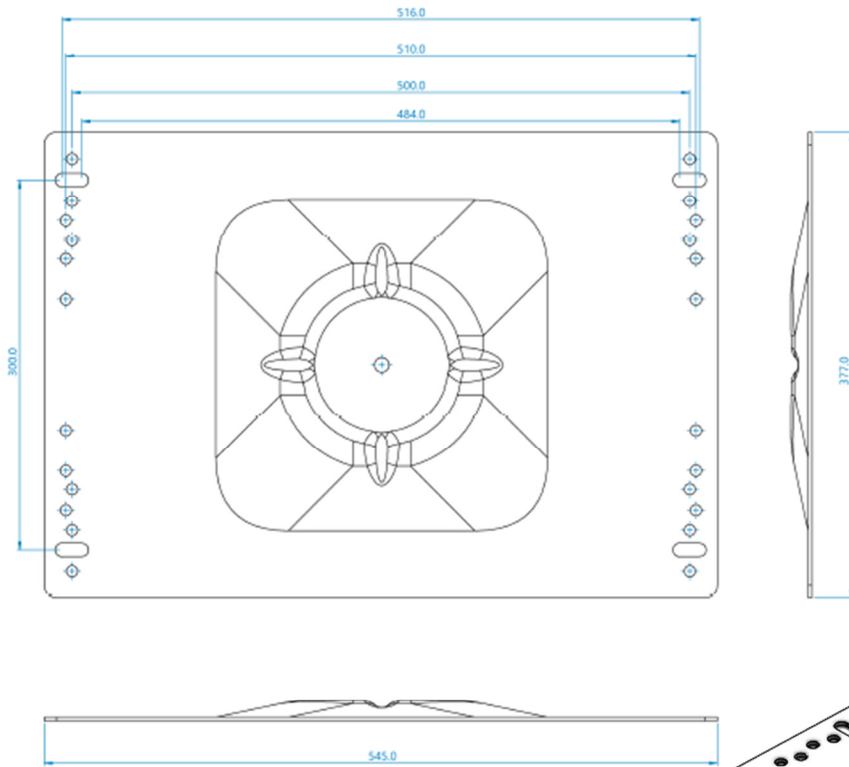
RA-1017	Intermediate Post Module
RA-1007A	Aluminium Plate 333/400

Material	Aluminium, Stainless Steel, Polyurethane
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	2.725kg
Drawing Revision Date	



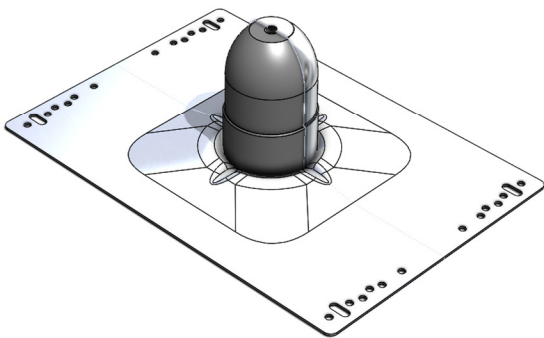
RA-1004-EC

Top Fix Post and Base
500/509 End and Corner



Components

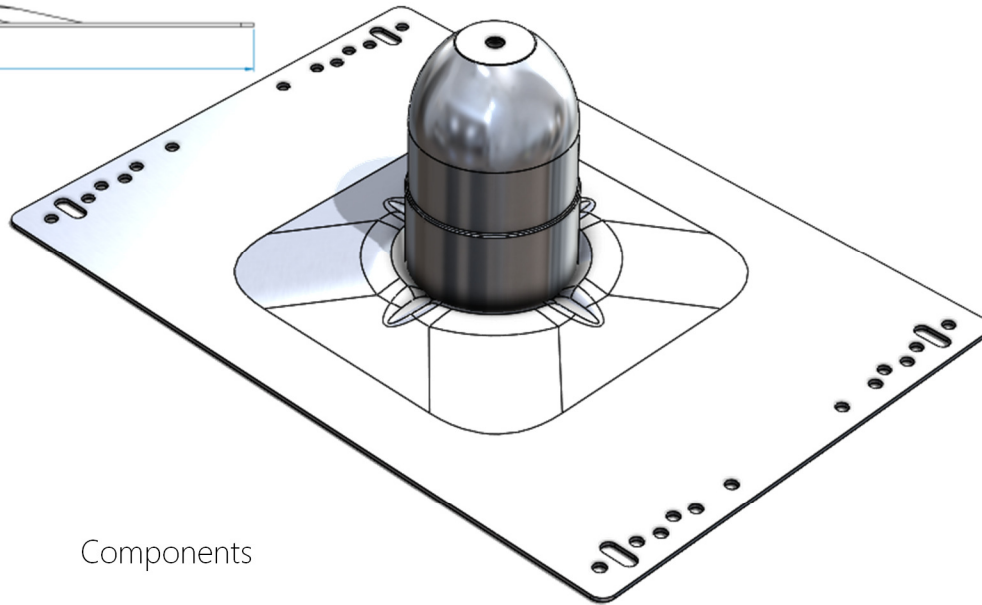
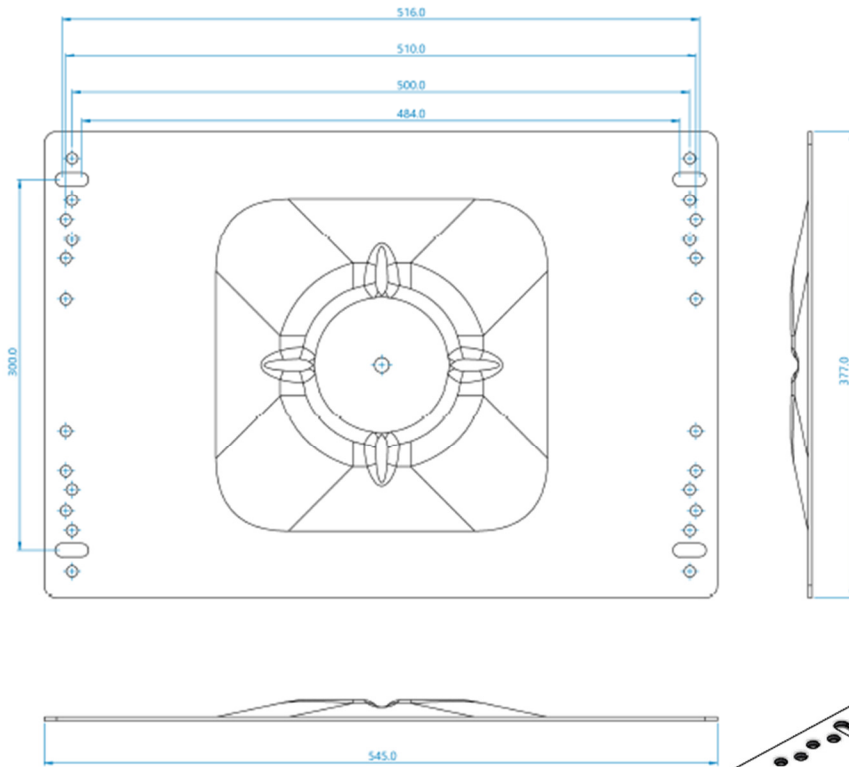
RA-1016	End/Corner Post Module
RA-1009	Aluminium Plate 500/509



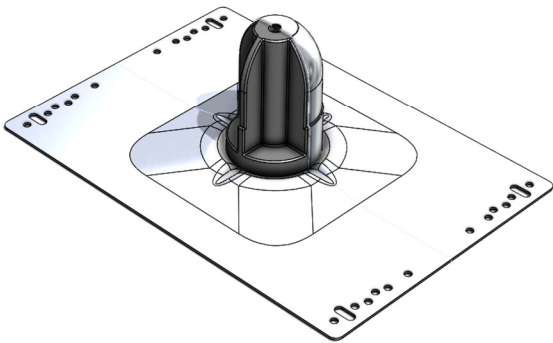
Material	Aluminium, Stainless Steel, Polyurethane
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	3.448kg
Drawing Revision Date	

RA-1004-IN

Top Fix Post and Base
500/509 Intermediate



Components



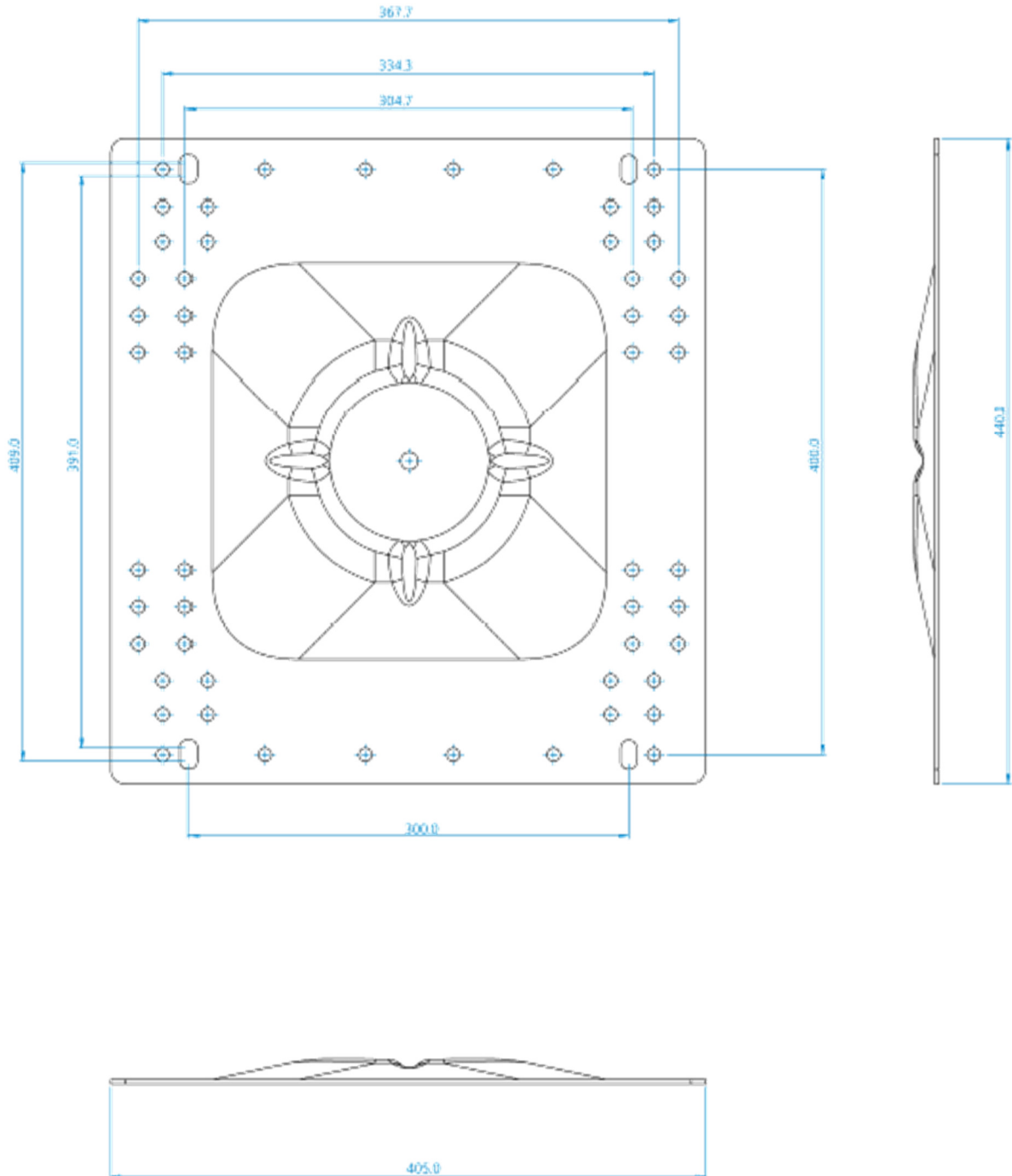
RA-1017	Intermediate Post Module
RA-1009	Aluminium Plate 500/509

Material	Aluminium, Stainless Steel, Polyurethane
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	2.950kg
Drawing Revision Date	

RA-1007

Base Plate Uncoated
333/400

This is the plate for use with intermediate or end/corner modules.
For Installation on Membrane, Profile Sheets, Standing Seam Sheets, Concrete Deck



Material	Aluminium
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	
Drawing Revision Date	

RA-1009

Base Plate Uncoated
500/509

This is the plate for use with intermediate or end/corner modules.

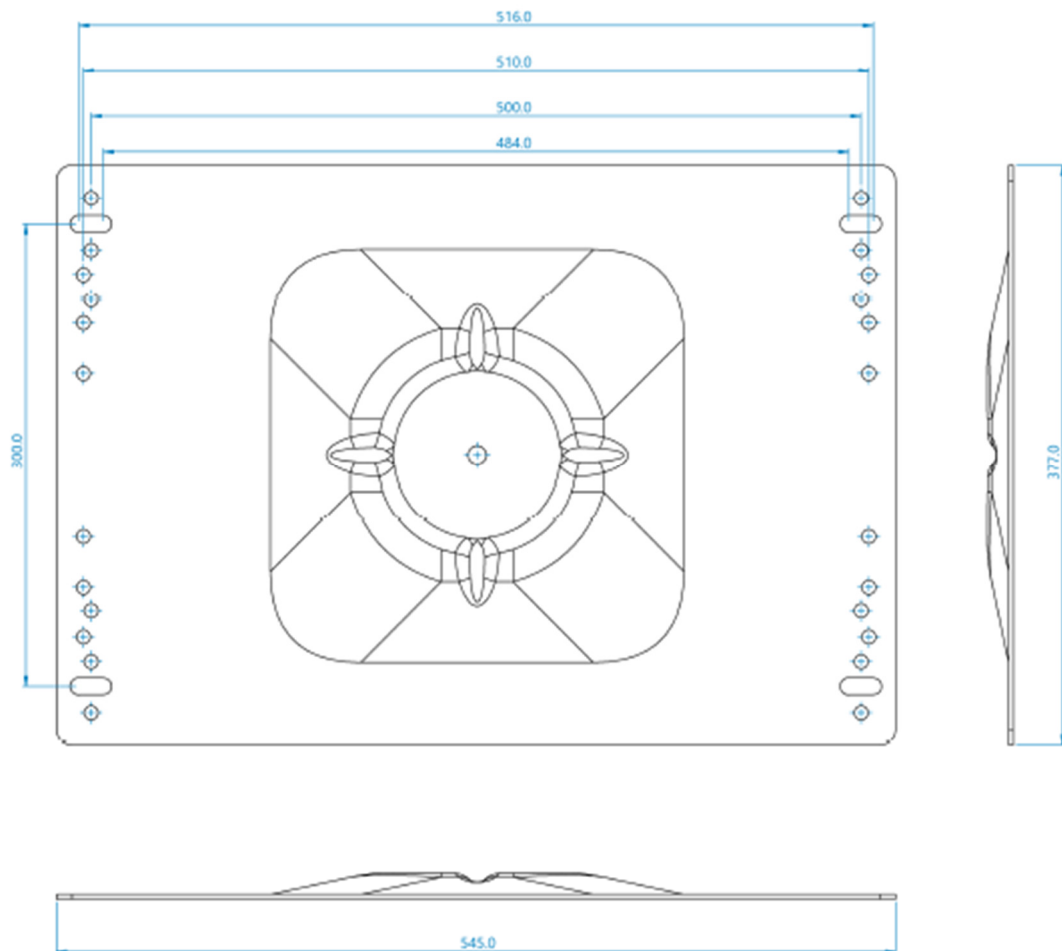
For Installation on

Membrane

Profile Sheets

Standing Seam Sheets

Concrete Deck



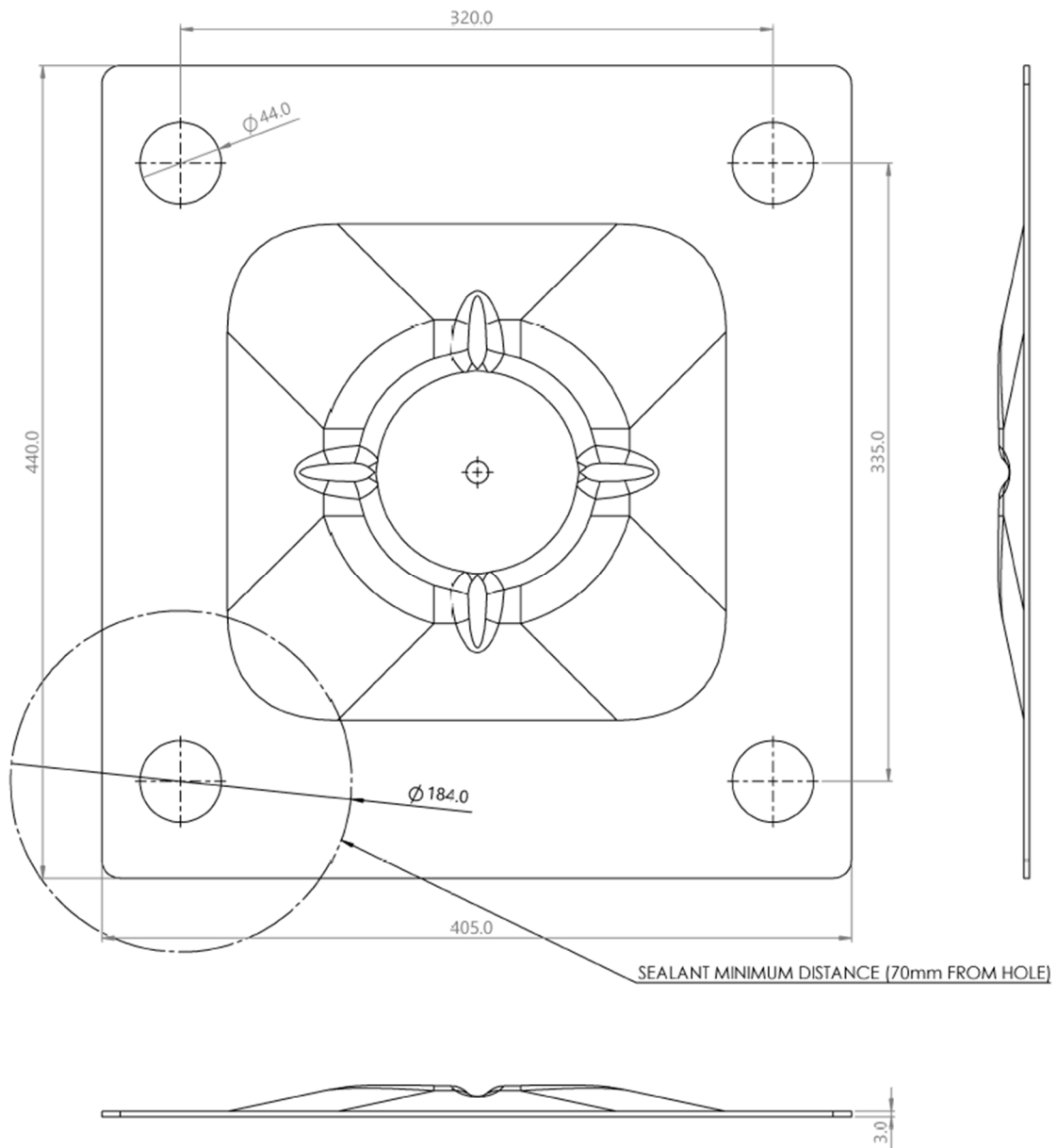
Material	Aluminium
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	
Drawing Revision Date	

RA-1010

Base Plate PVC PC80 coated
333/400

This is the plate for use with intermediate or end/corner modules.

For Installation on
Membrane
Concrete Deck



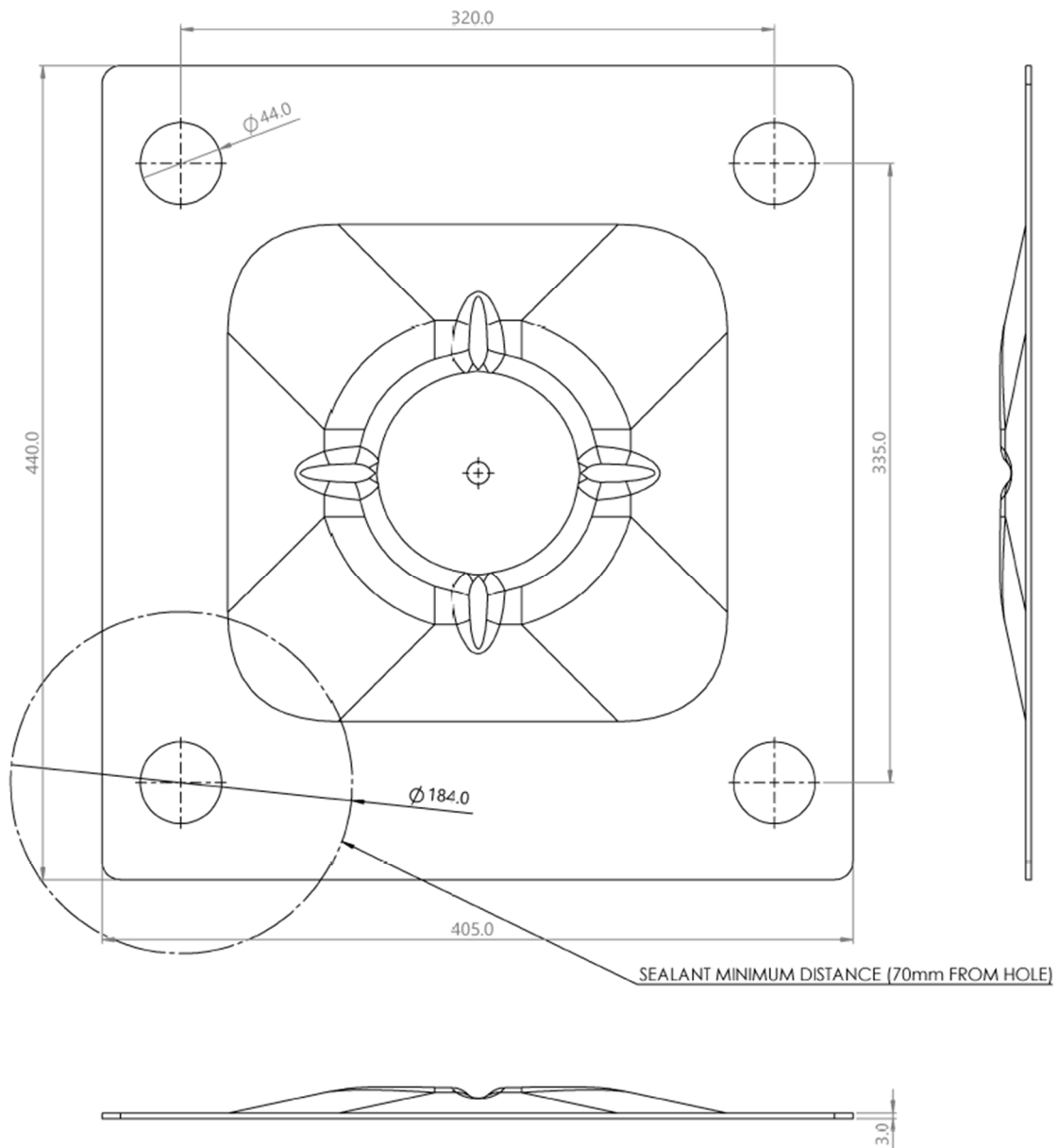
Material	Aluminium, PVC (PC80)
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	
Drawing Revision Date	

RA-1010A

Base Plate

This is the plate for use with intermediate or end/corner modules.

For Installation on
Membrane
Concrete Deck

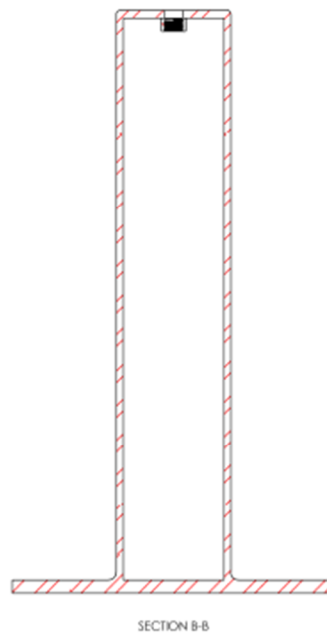
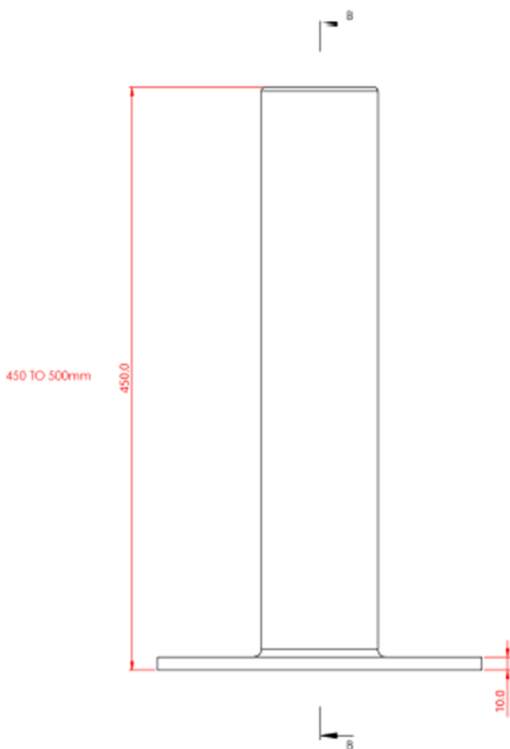
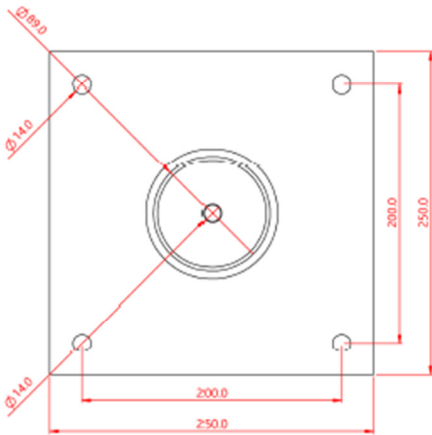


Material	Aluminium, PVC (PC80)
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	
Drawing Revision Date	

RA-1005 – RA-10066

Stainless Steel Rigid Post

For fixing to concrete decks or traditional steel work fixing.

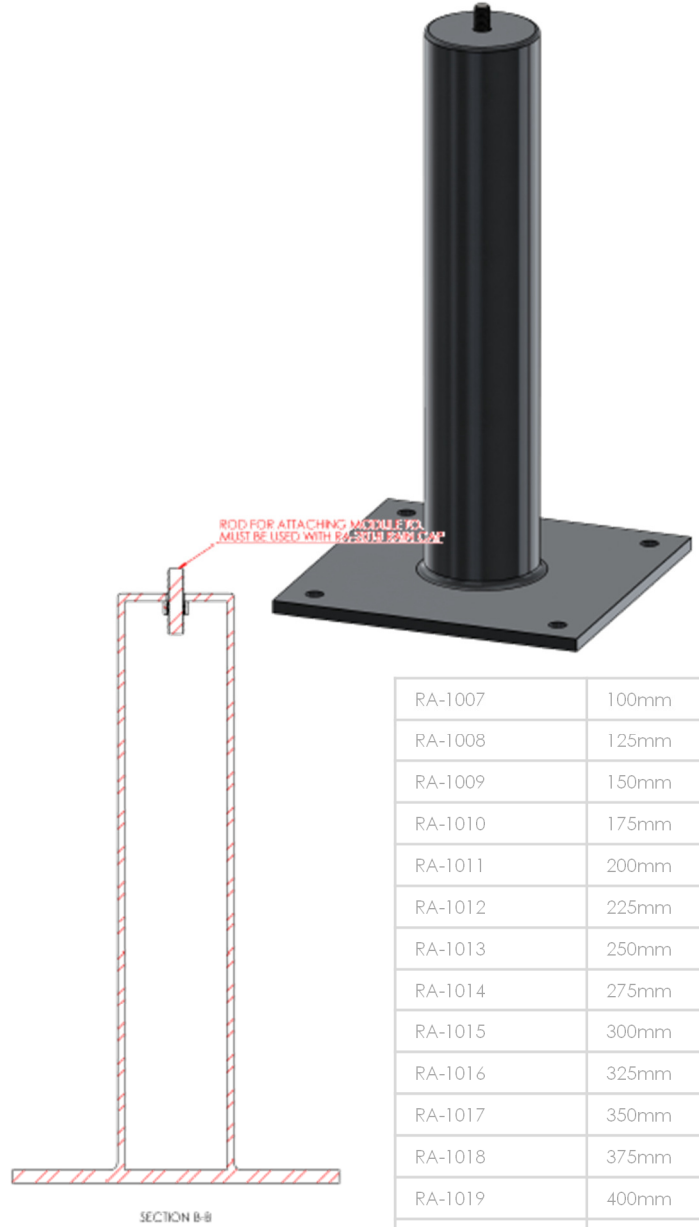
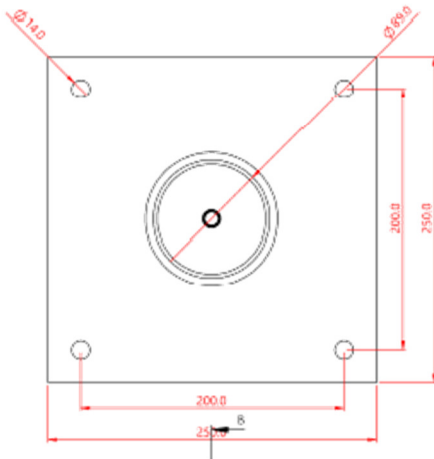


Material	304 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	6.950kg
Drawing Revision Date	

RA-1007 to RA-1023 Green Roof Post

Stainless Steel Rigid Post for Green Roofing
Various Lengths

For fixing to concrete decks or traditional steel work fixing. To be used with the RA-1016 and RA-1017 post modules.



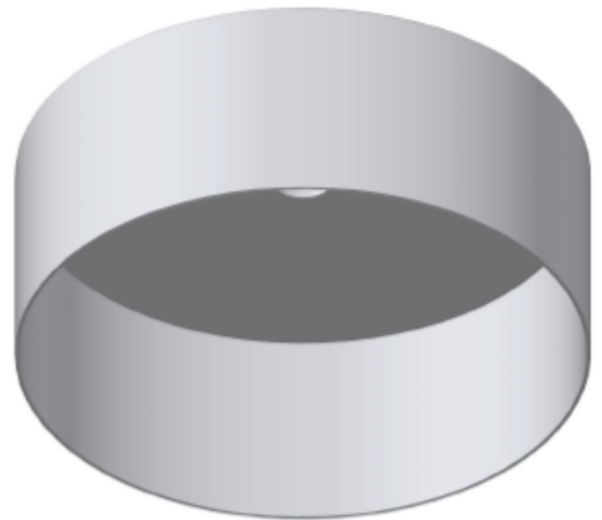
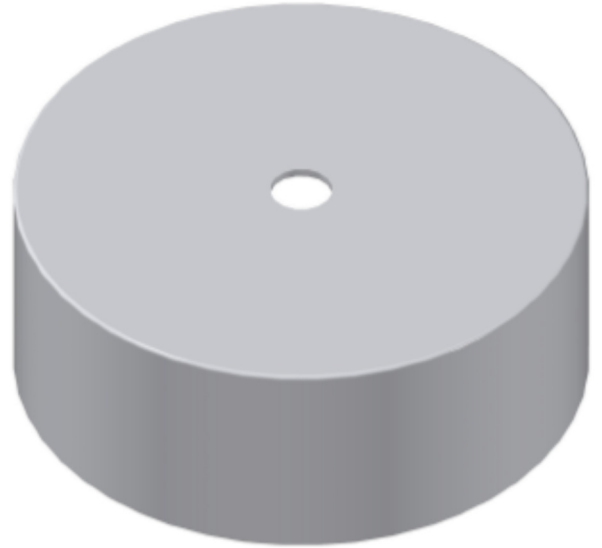
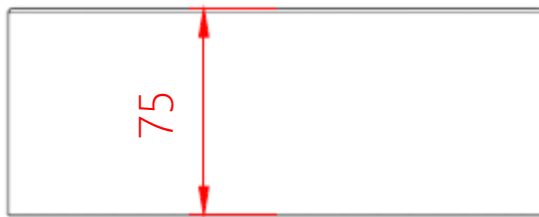
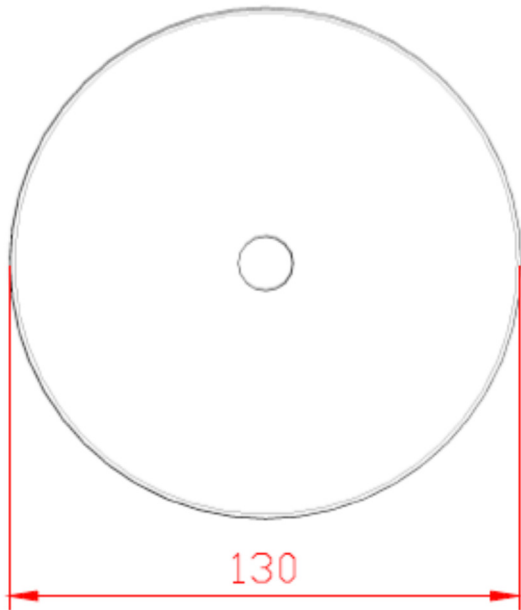
RA-1007	100mm
RA-1008	125mm
RA-1009	150mm
RA-1010	175mm
RA-1011	200mm
RA-1012	225mm
RA-1013	250mm
RA-1014	275mm
RA-1015	300mm
RA-1016	325mm
RA-1017	350mm
RA-1018	375mm
RA-1019	400mm
RA-1020	425mm
RA-1021	450mm
RA-1022	475mm
RA-1023	500mm

Material	304 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	6.500kg
Drawing Revision Date	

RA-2018

Aluminium Post Weathering Cap

To prevent water ingress at the top of the post or down the joint to the weathering detail this cap is used with all rigid posts

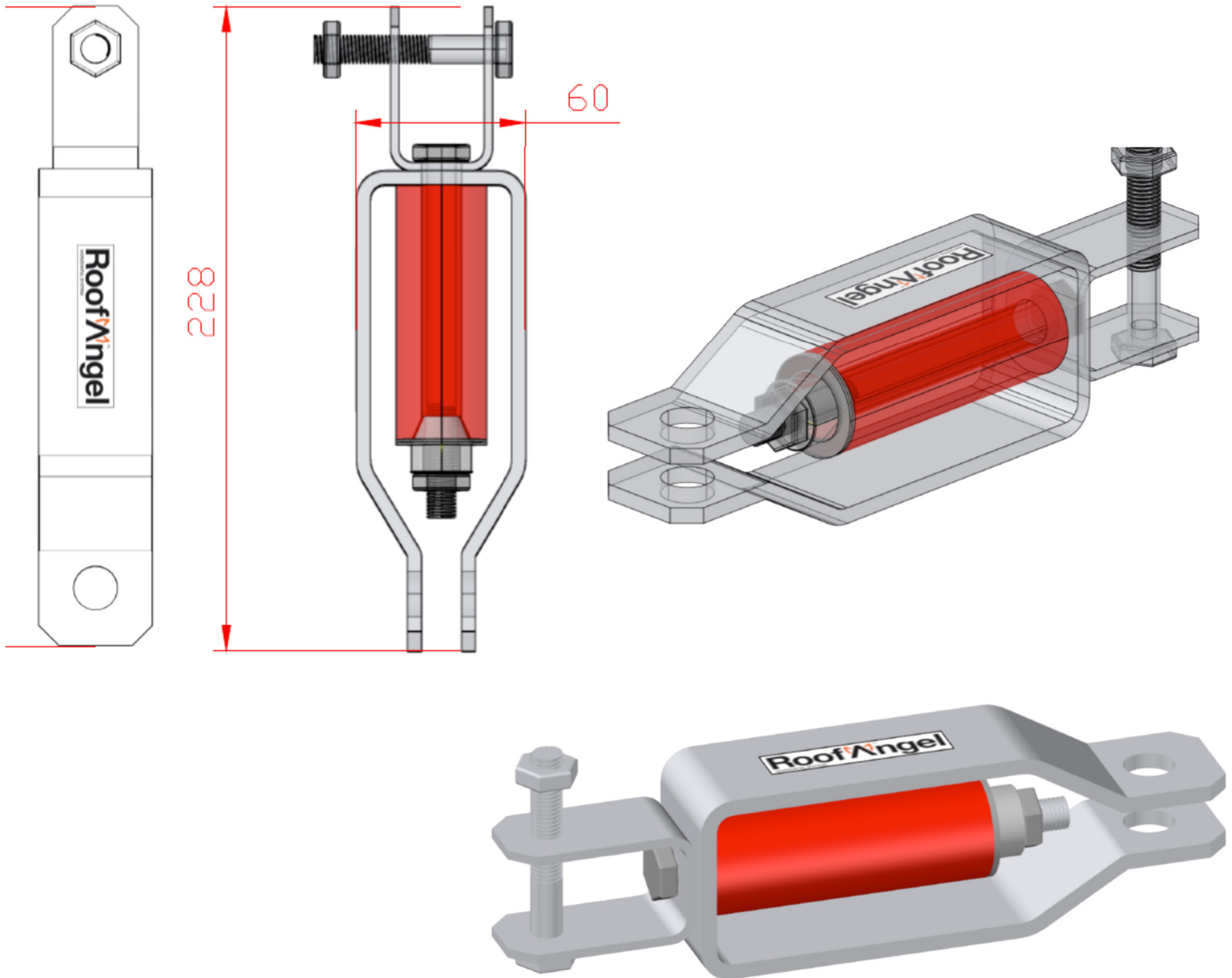


Material	Aluminium
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	
Drawing Revision Date	

RA-2010

In-Line Shock Absorber

The In-Line Shock Absorber should be used for all systems mounted to rigid posts, concrete or similar fixings or direct to steel work. It is designed to dissipate the applied end loads generated in a fall when then system is not mounted to the Roof Angel absorbing posts.



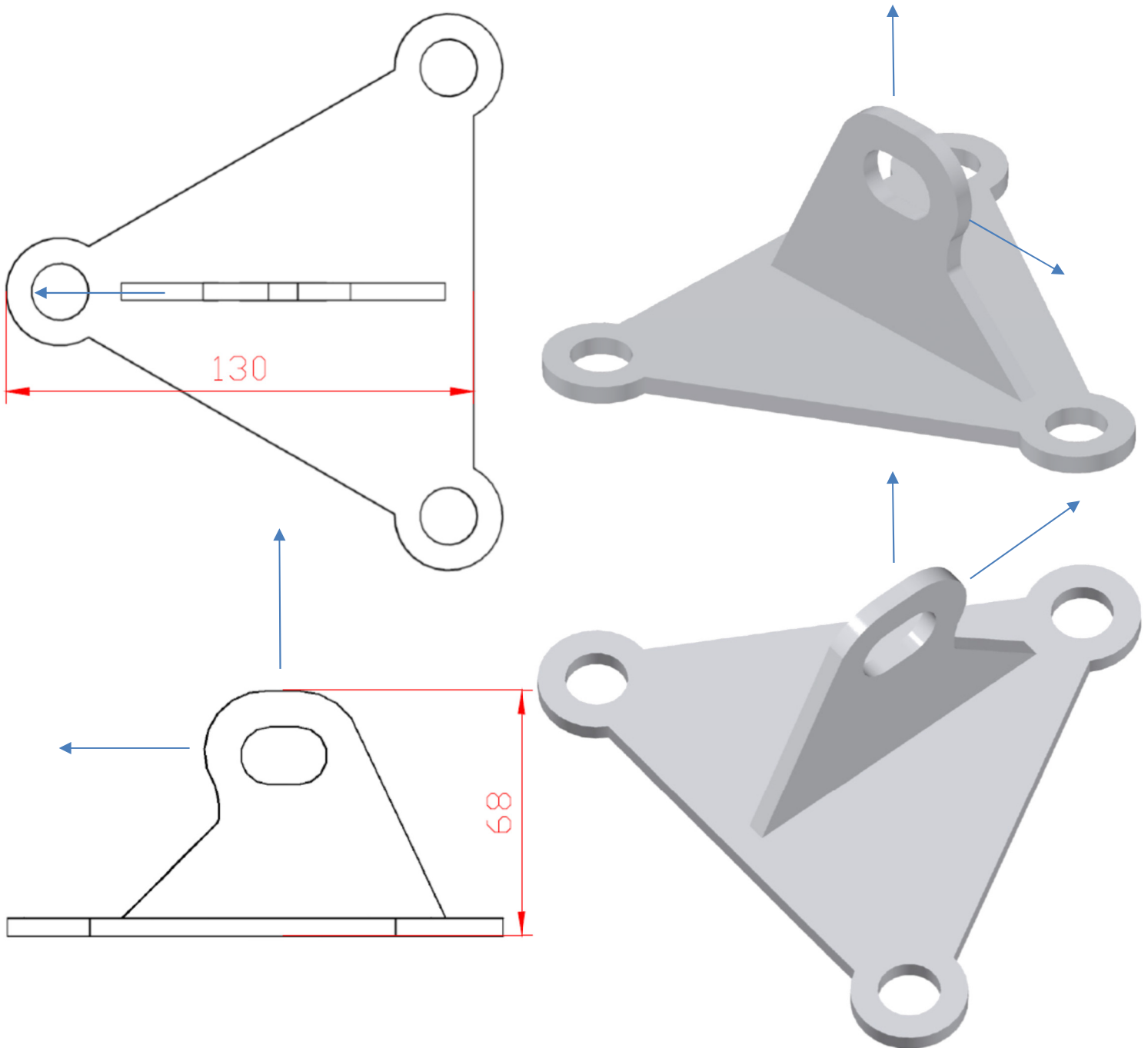
Attach to an End/Corner post when used with Roof Angel Rigid Posts, or to End Anchor Plate when used with Structural Fixing.

Material	316 Stainless Steel, Polyurethane
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	1.092kg
Drawing Revision Date	01/10/2016

RA-2014

Multi Angle End Anchor

For use with a wall mount system the Multi Angle End Anchor provides the termination for the system and attachment for the tensioner and fork units and can be used in shear or tension.

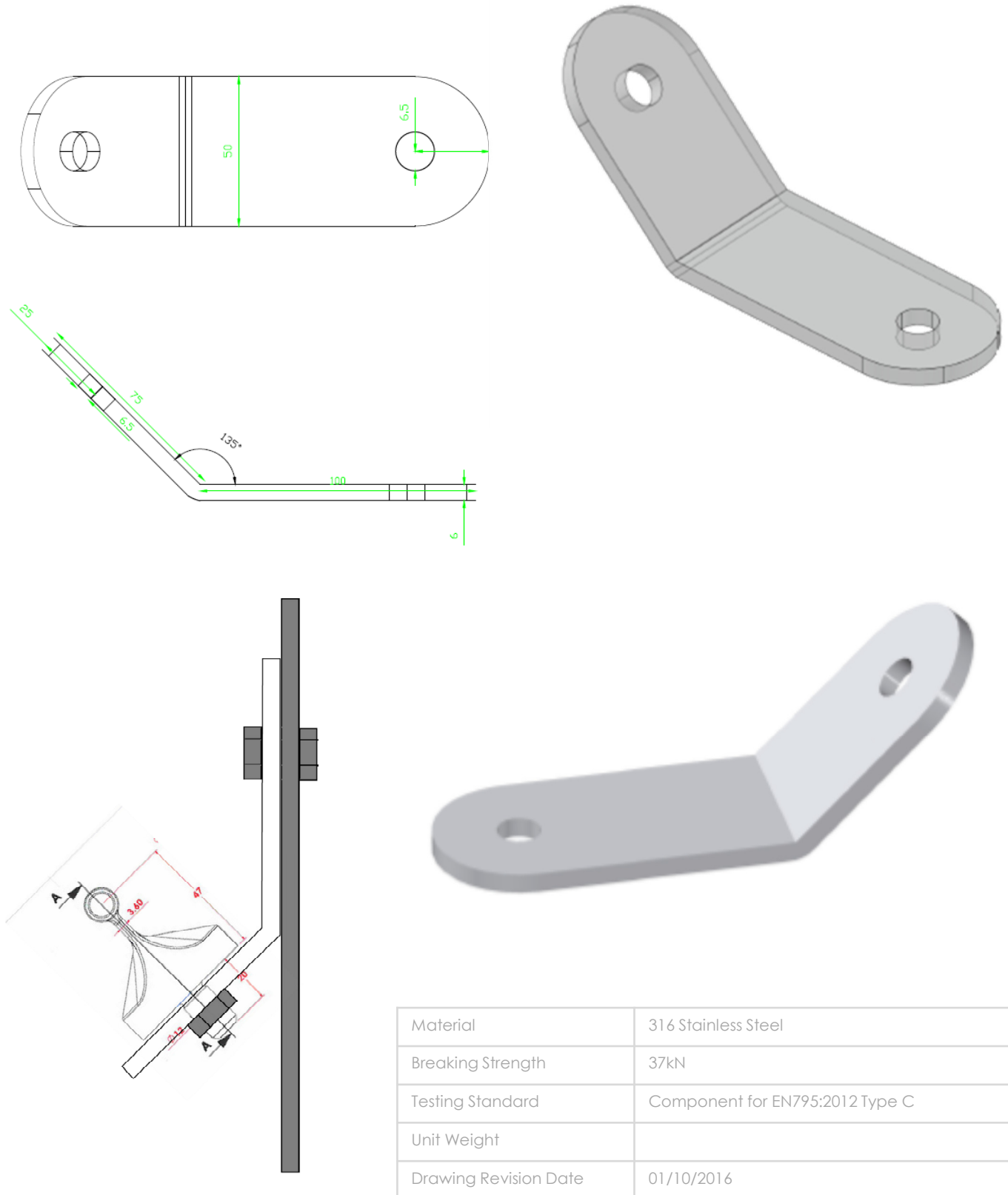


Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	
Drawing Revision Date	01/10/2016

RA-2015

Intermediate Wall Bracket

When mounting the Roof Angel system to a wall the intermediate brackets must be oriented in such a way as to allow the Roof Angel Traveller to bypass easily. The Intermediate Wall Bracket facilitates this angle.

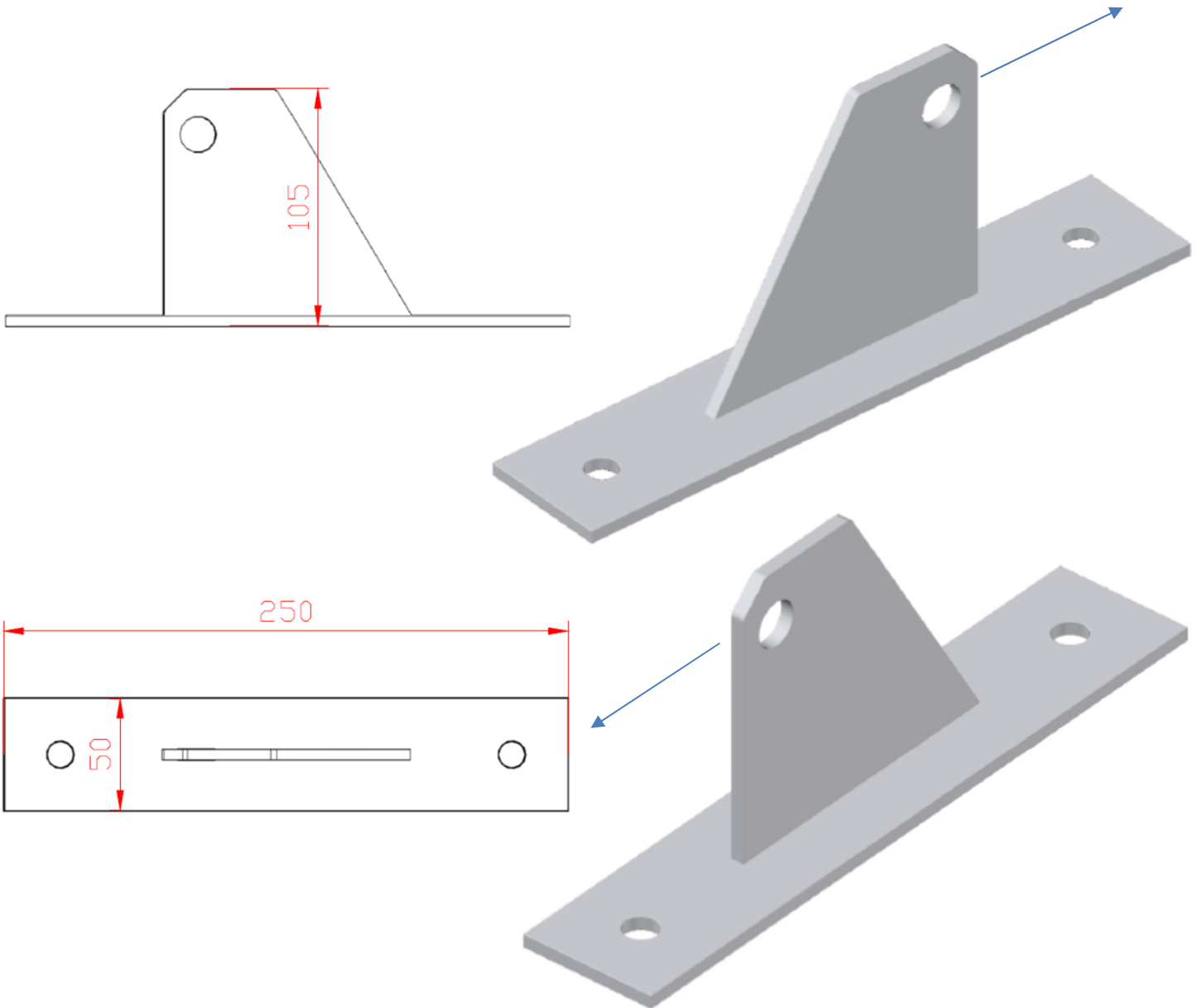


Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	
Drawing Revision Date	01/10/2016

RA-2016

Sharks Fin End Anchor

For use with a wall mount system the Sharks Fin End Anchor provides the termination for the system and attachment for the tensioner and fork units and is used in shear.

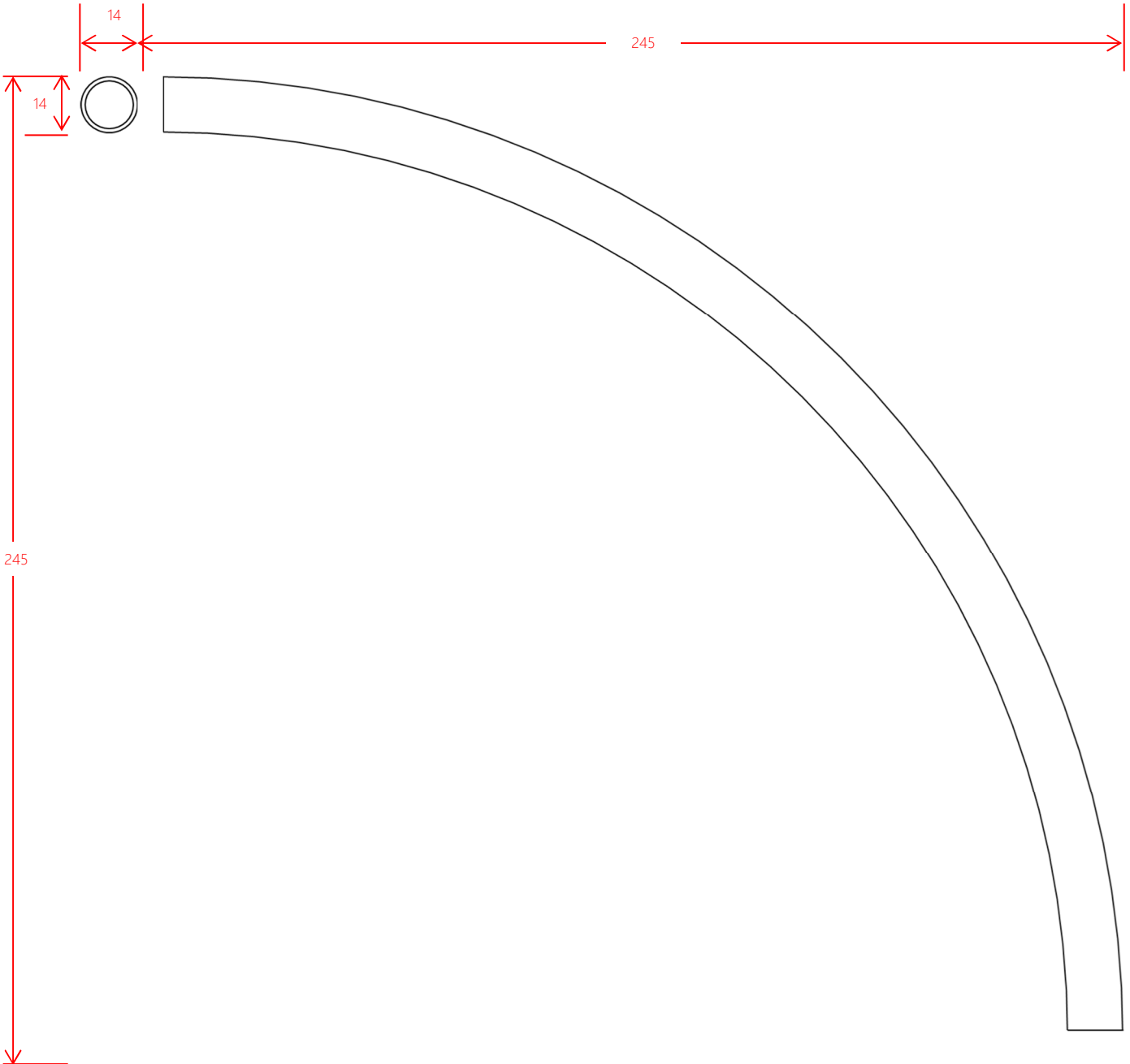


Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	
Drawing Revision Date	01/10/2016

RA-2005A

Corner Tube

When constructing a corner on a wall mounted system the RA-2026 can be used in conjunction with the RA-2003 Intermediate Bracket to produce a corner unit that is internal or external to the corner.

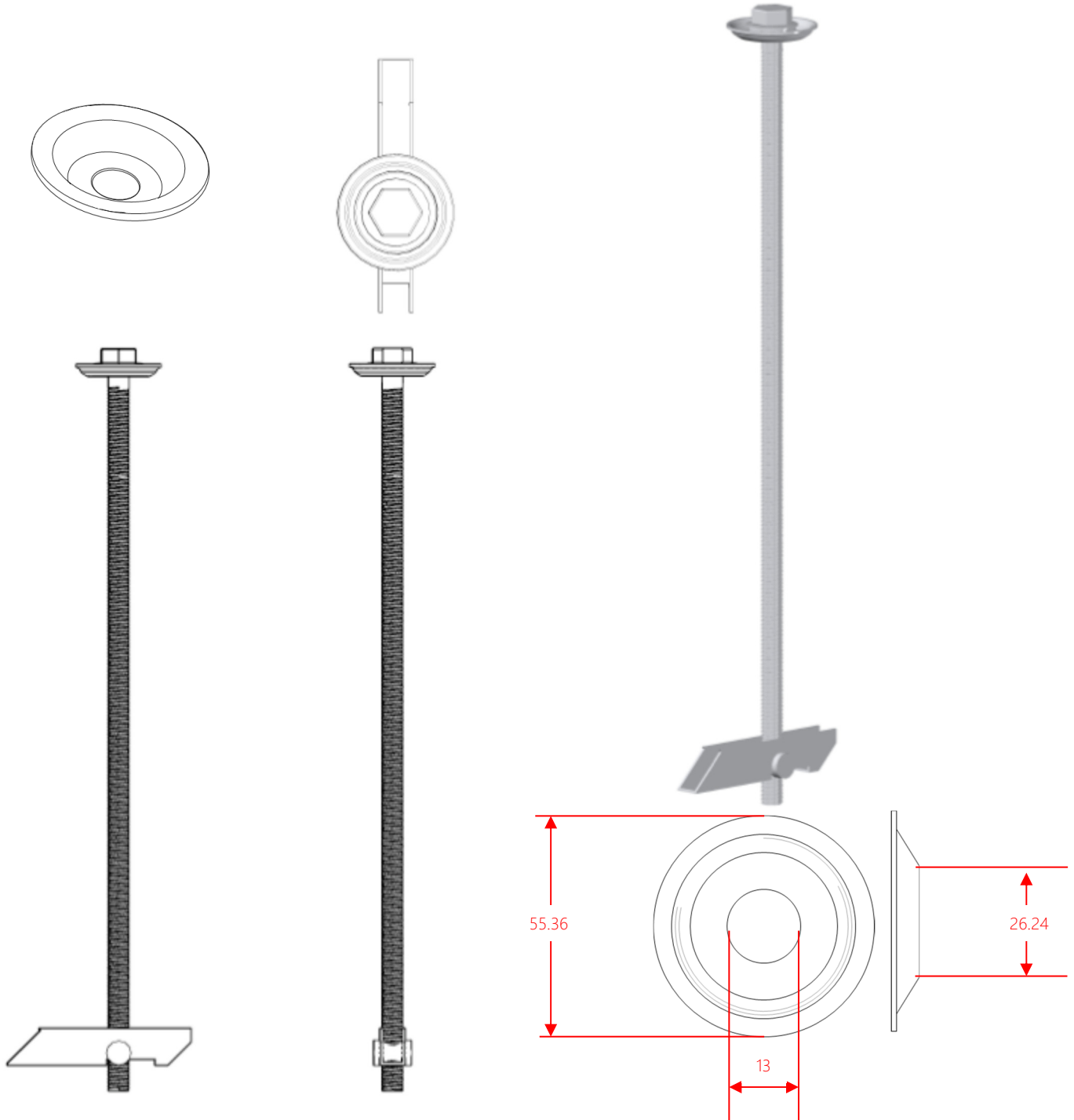


Material	316 Stainless Steel
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C
Unit Weight	
Drawing Revision Date	

RA-4001, RA-4002, RA-4003

Toggle Fixing Kit

For fixing to single ply membrane systems the toggle fixing kit comprises of 4 number toggles and cupped washers



Toggle Fixings

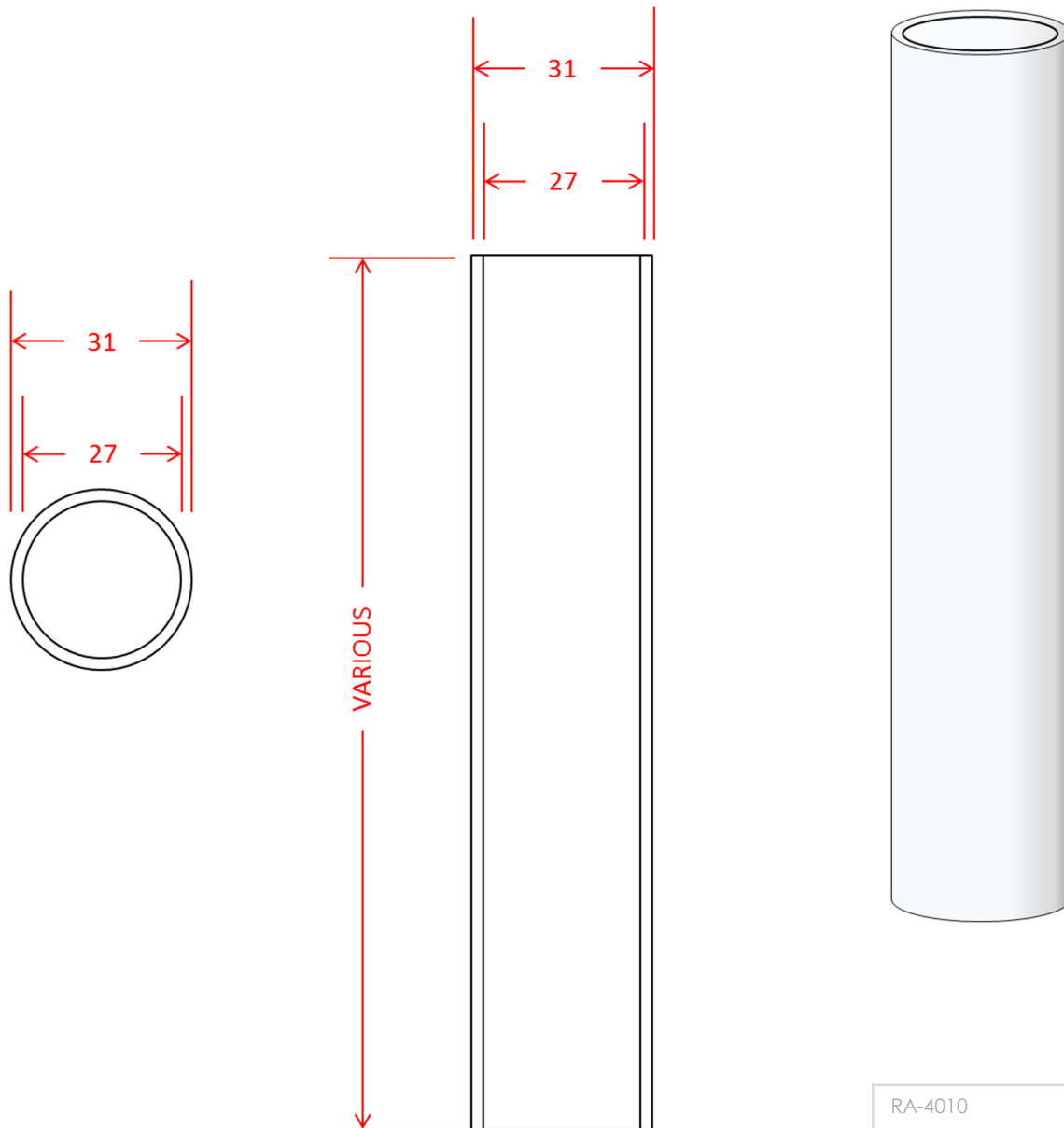
RA-4001	250mm
RA-4002	350mm
RA-4003	500mm

Material	Mild Steel, Zinc Plated
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	0.555kg
Drawing Revision Date	

RA-4010 - 4012

Compression Tubes

Compressions tubes are recommended for all toggle and through-insulation fixings. They are mandatory for all soft insulation installations and for roof build up using metal base deck.



RA-4010	170mm x 4
RA-4011	320mm x 4
RA-4012	450mm x 1

Material	PVC
Breaking Strength	37kN
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	0.880kg
Drawing Revision Date	

RA-4005

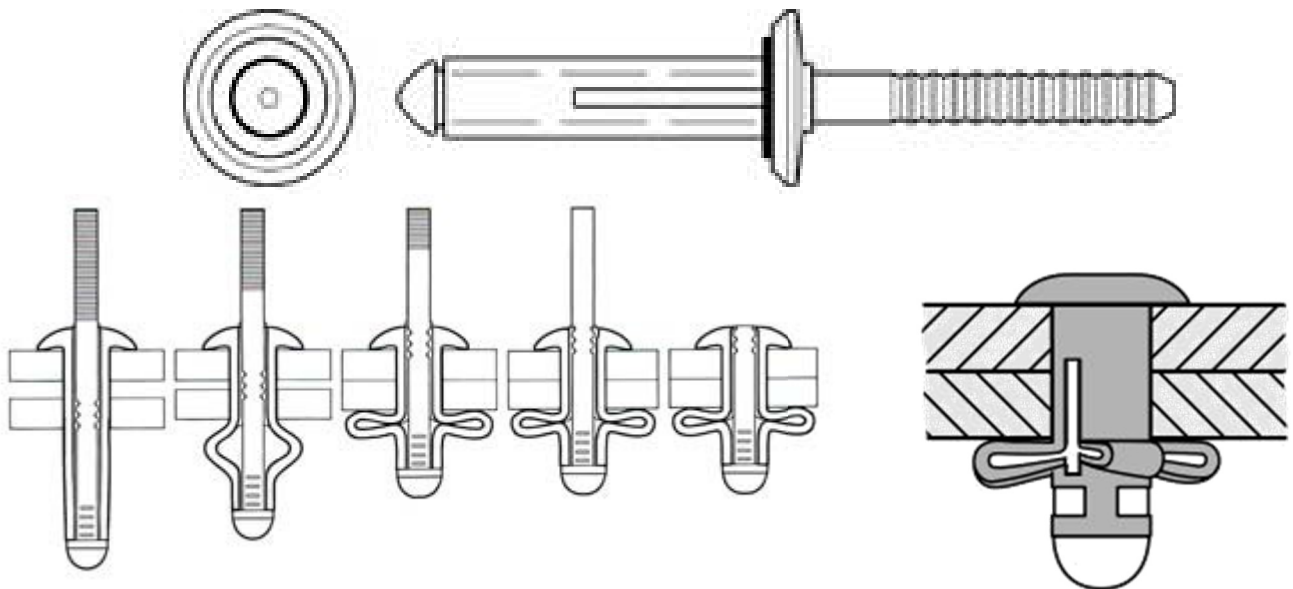
9mm Rivets (12 No)

For fixing to trapezoidal sheeting the bulb type rivet is used. When using the RA-2020 the base plate will be required to be drilled to suit but expanding the holes in the base plate.

Installed using a rivet machine

- i. Gesipa HN 2-BT Machine with
 - i. 16/32 BT Nose Piece
 - ii. 715 1527 Jaws

RV6605/9/6W BULB-TITE

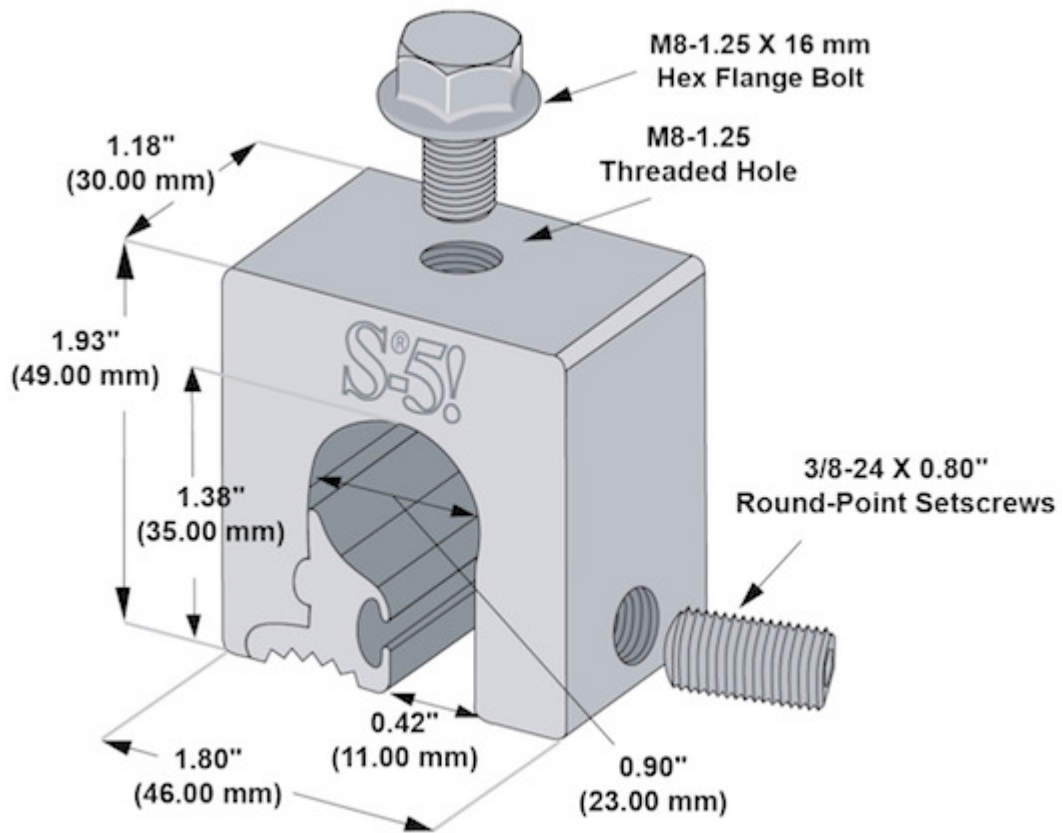


Material	Aluminium
Breaking Strength	
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	0.260kg
Drawing Revision Date	

RA-4006

S-5! Z-Mini Bulb Type Seam Clamp

For attachment to Bulb Type Seams

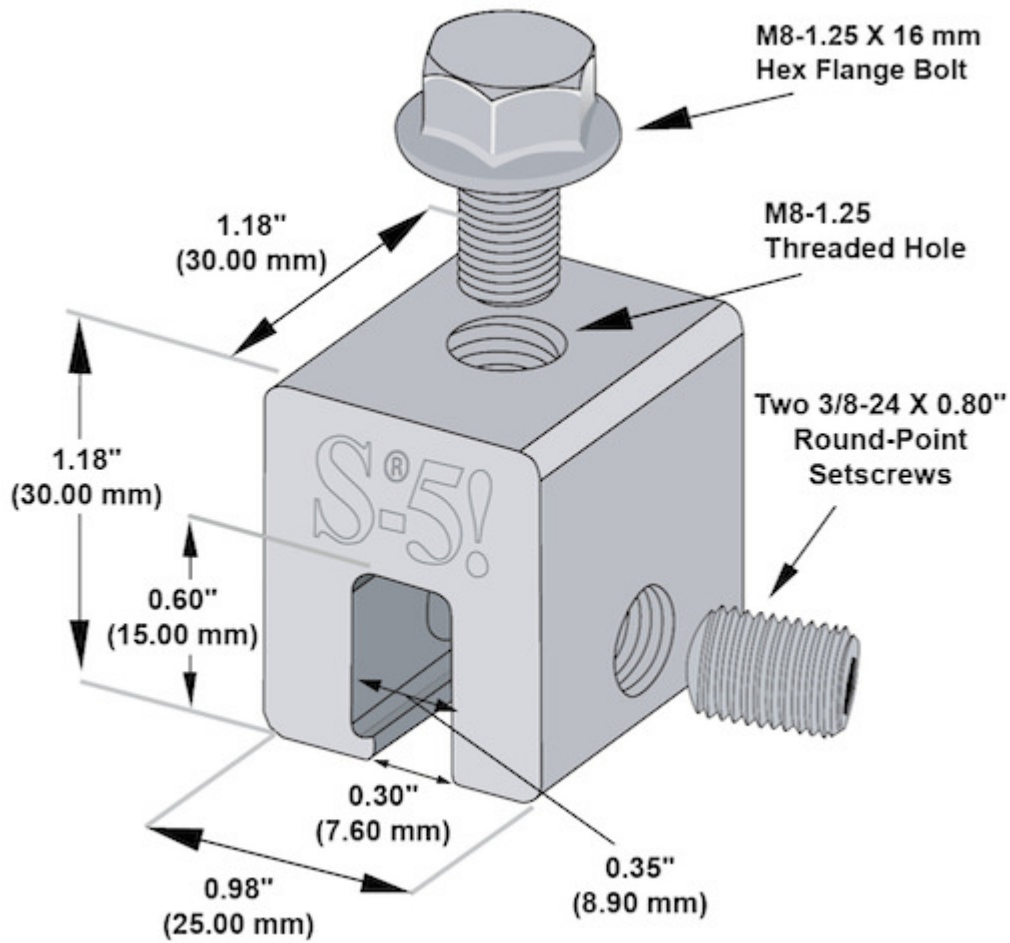


Material	316 Stainless Steel, Aluminium
Breaking Strength	
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	0.553kg
Drawing Revision Date	

RA-4007

S-5! E-Mini Rolled Type Seam Clamp

For attachment to Rolled Type Seams



Material	316 Stainless Steel, Aluminium
Breaking Strength	
Testing Standard	Component for EN795:2012 Type C & A
Unit Weight	
Drawing Revision Date	



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