SAFETYLINK
A DELTA PLUS GROUP COMPANY

FastFit

Walkways and Guardrails

Installation

FIGURE 1

CONTENTS

1 Warning

⚠ ***Improper Use, Installation or Maintenance may result in serious injury or death.***

⚠ ***SafetyLink's Height Safety Systems must only be installed as per our installation guides, to structures as specified in the installation manual for each product.***

⚠ ***All safety procedures must be complied with in accordance with the current safety code(s) of practice(s) for working at heights in your region. Ensure safety at all times by being attached to suitable anchor points and approved safety equipment or approved scaffolding.***

⚠ ***Installation is to be carried out by, or under the supervision of, a competent person.***

⚠ ***Do not carry out any modifications on this system without written permission by SafetyLink Pty Ltd.***

2 Specification

2.1 Description

SafetyLink Walkways are a modular access system for permanent installation in a wide variety of scenarios. SafetyLink Walkways are design to and when installed in accordance with this manual are compliant with AS 1657:2018.

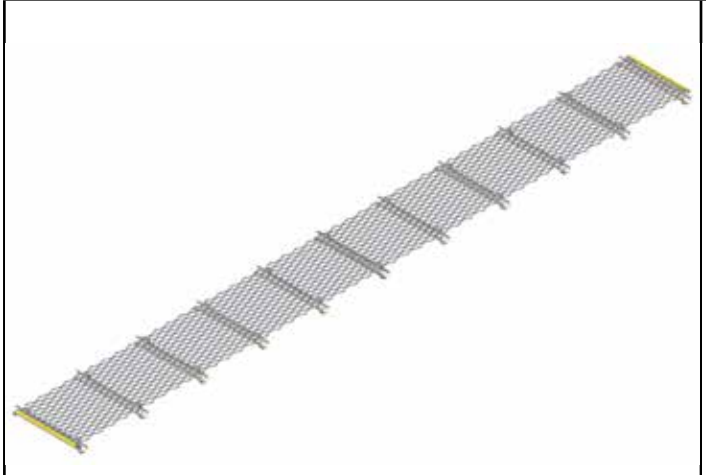
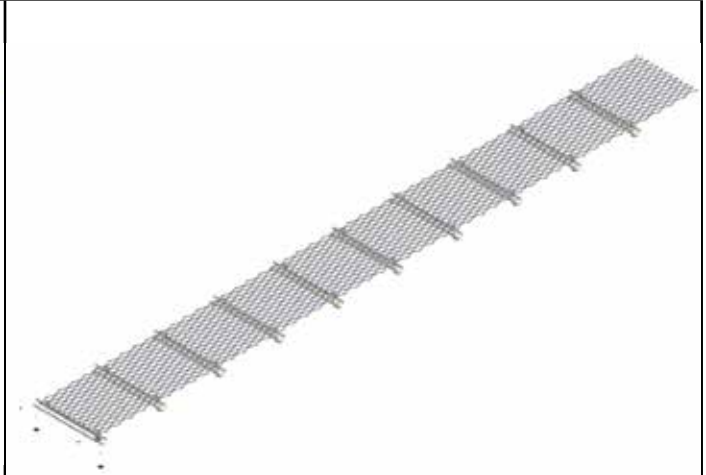
2.2 Material Specification

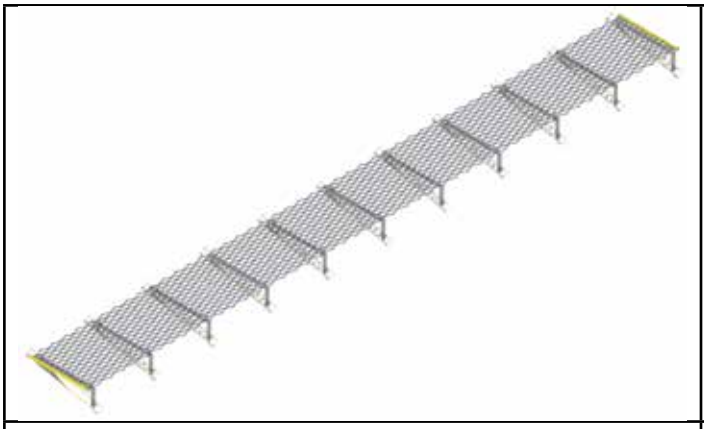
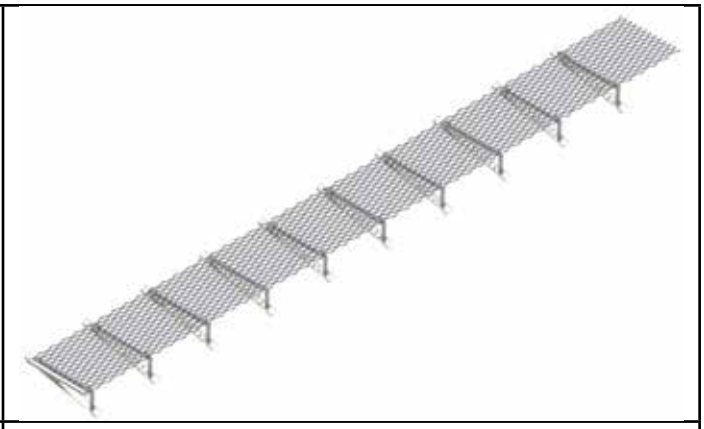
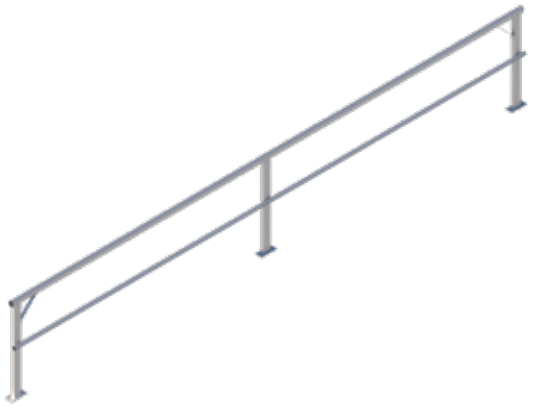
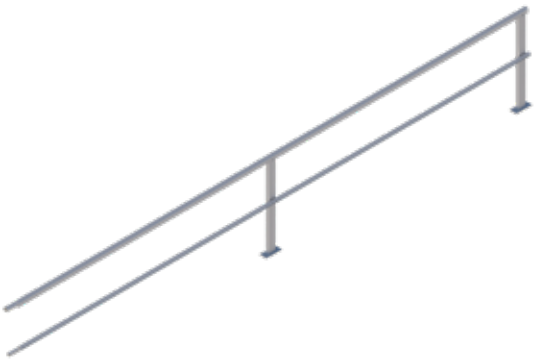
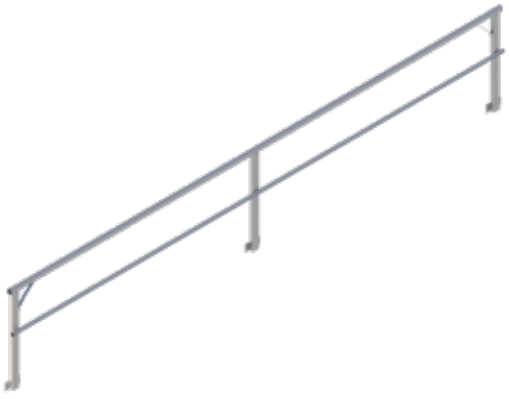
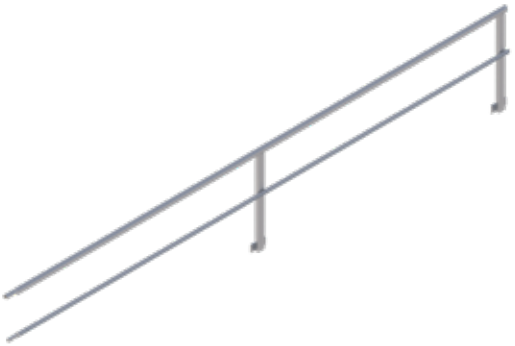
FIGURE 2

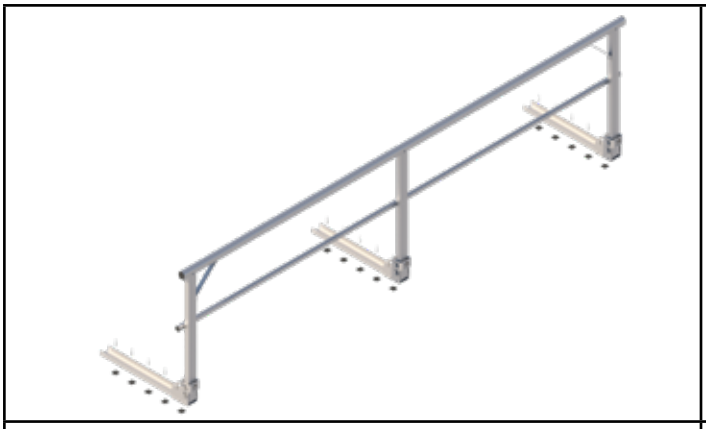
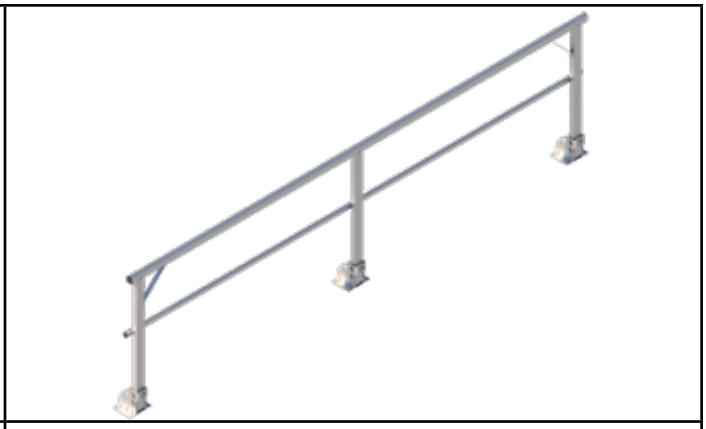
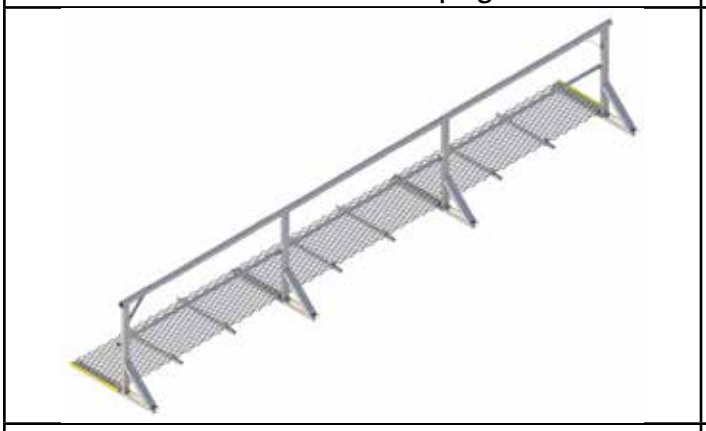
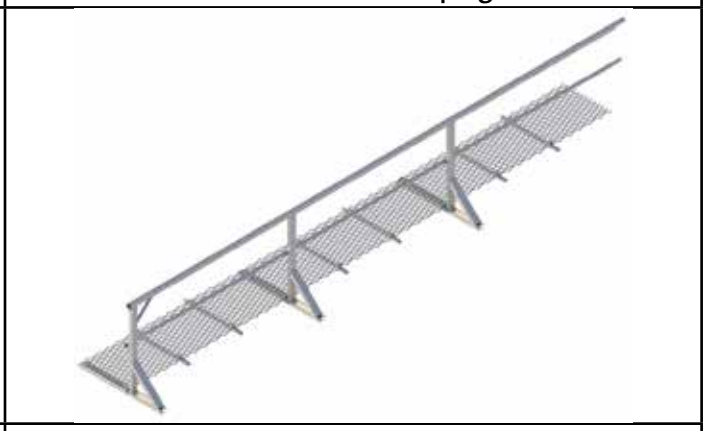
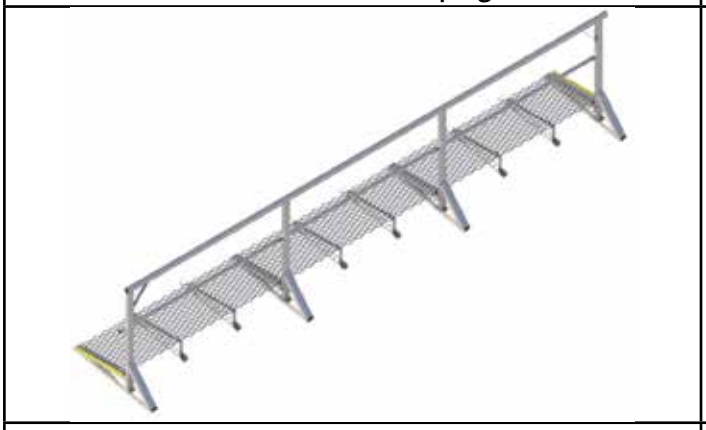
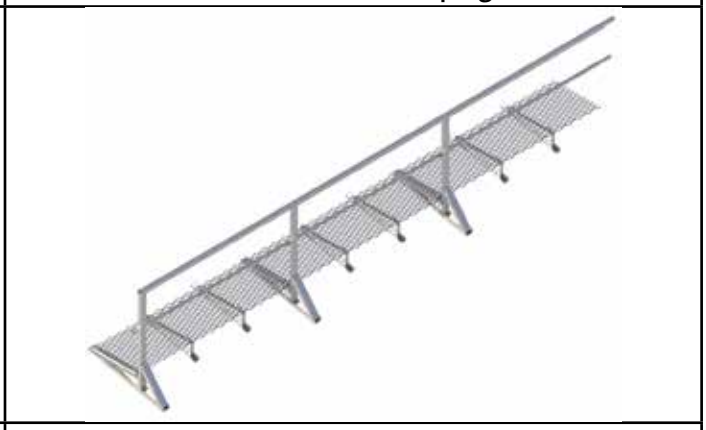
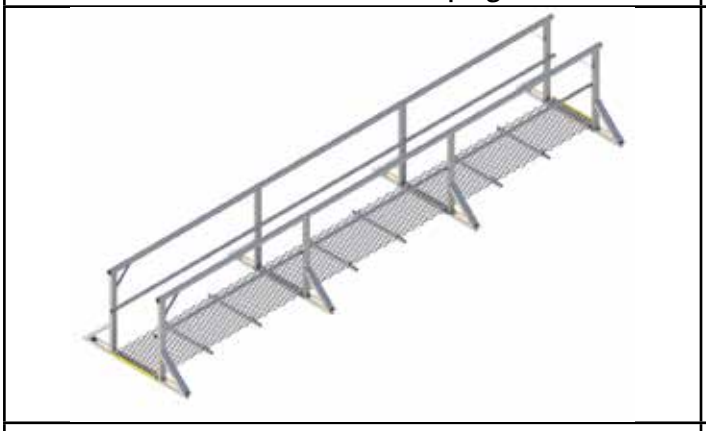
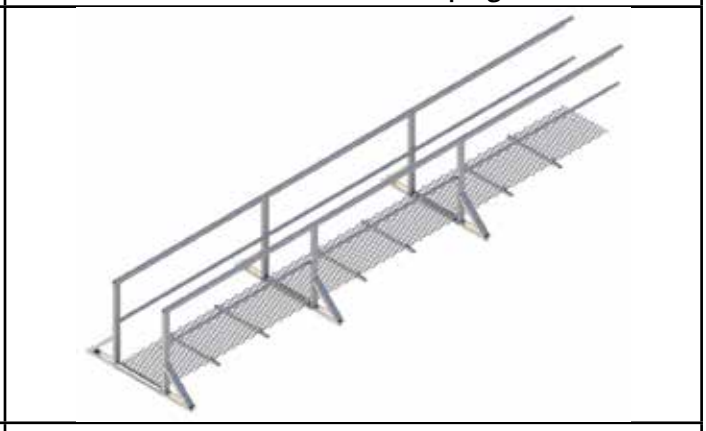
COMPONENT	DESCRIPTION
Mesh, Guardrails and supports	Aluminium 6000 series
Caps	Polyethylene
Fasteners	See Section 3.3

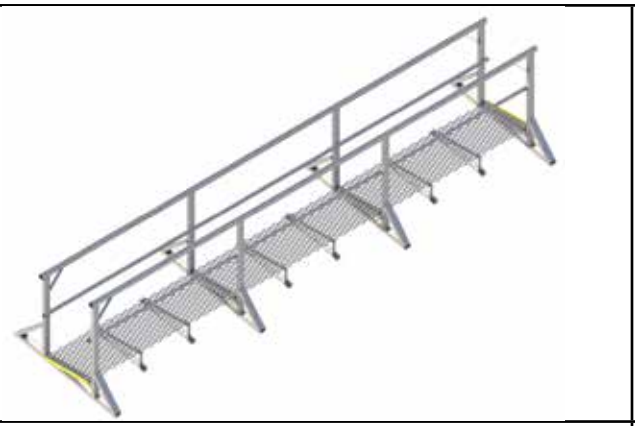
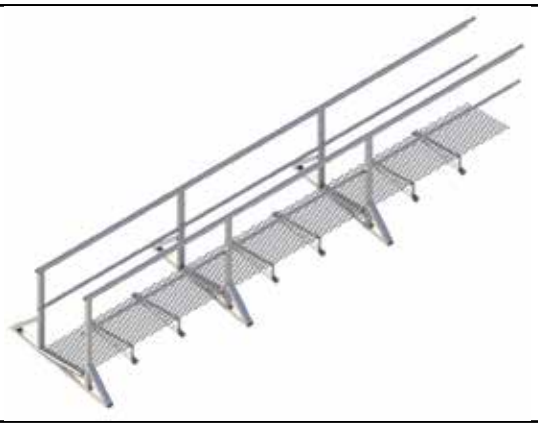
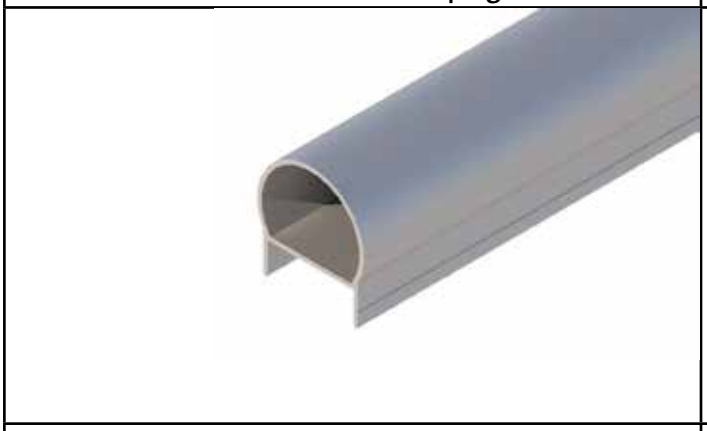
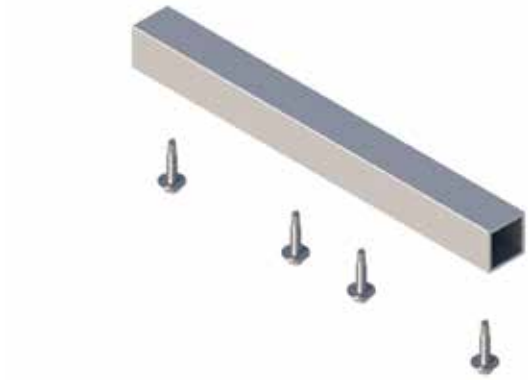
2.3 Components

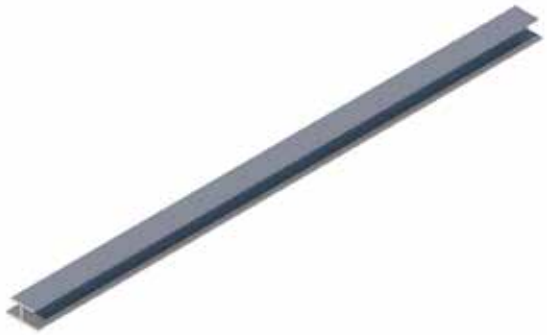
FIGURE 3

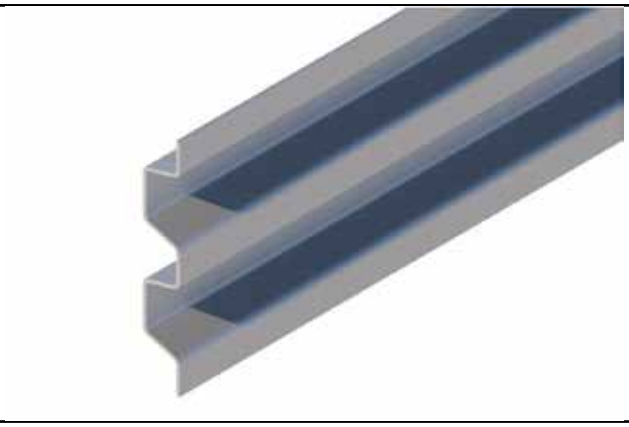
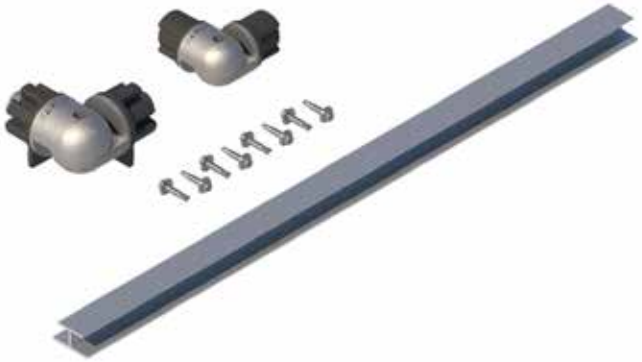
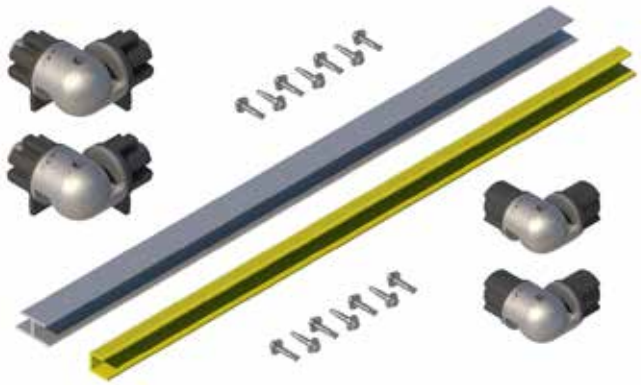
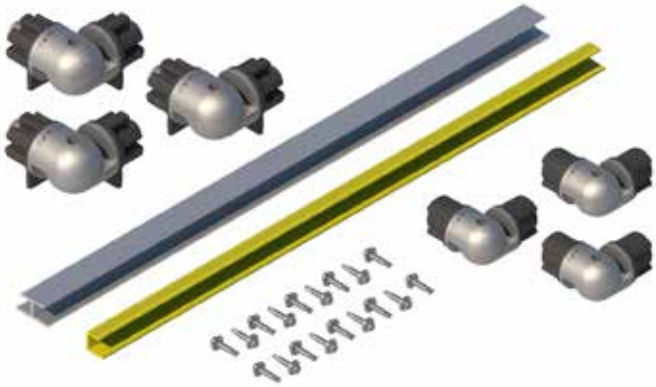
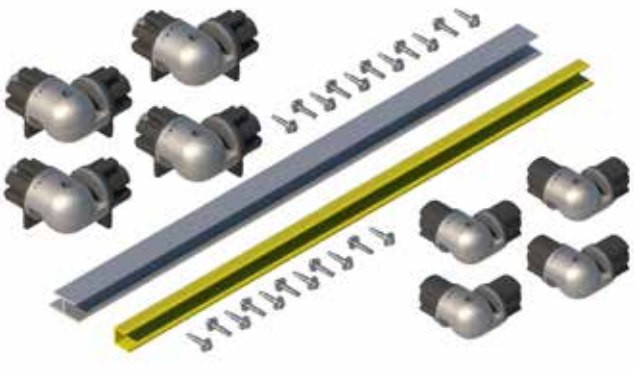
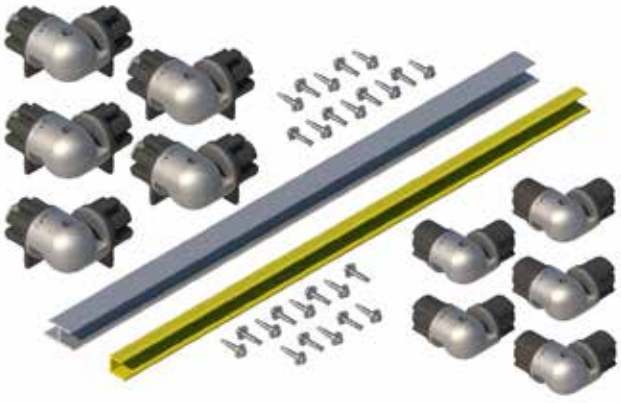
	
GUARDK101	GUARDK102
See Section 4.1 on page 21	See Section 4.1 on page 21

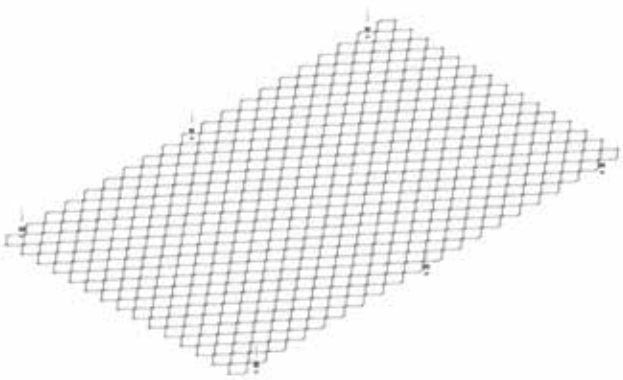
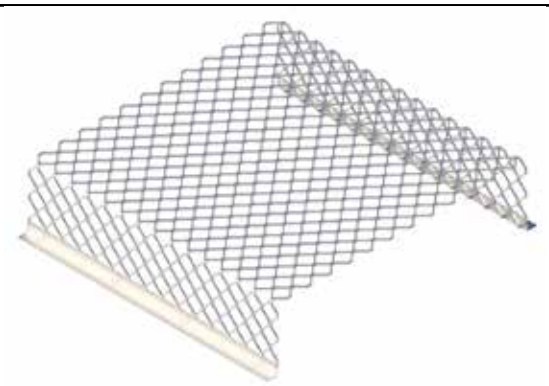
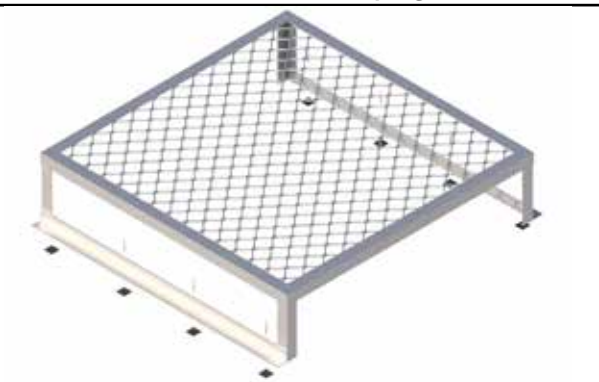
	
GUARDK111	GUARDK112
See Section 4.2 on page 22	See Section 4.2 on page 22
	
GUARDK141	GUARDK142
See Section 4.4 on page 24	See Section 4.4 on page 24
	
GUARDK121	GUARDK122
See Section 4.5 on page 25	See Section 4.5 on page 25
	
GUARDK131	GUARDK132
See Section 4.6 on page 26	See Section 4.6 on page 26

	
GUARDK192, GUARDK193, GUARDK194	GUARDK202, GUARDK203, GUARDK204
See Section 4.7 on page 27	See Section 4.8 on page 28
	
GUARDK151	GUARDK152
See Section 4.9 on page 29	See Section 4.9 on page 29
	
GUARDK161	GUARDK162
See Section 4.10 on page 30	See Section 4.10 on page 30
	
GUARDK171	GUARDK171
See Section 4.11 on page 31	See Section 4.11 on page 31

	
GUARDK181	GUARDK182
See Section 4.12 on page 32	See Section 4.12 on page 32
	
GUARD_HR	GUARD_KR
See Section 5.1 on page 33	See Section 5.1 on page 33
	
GUARD001.HR.SPL	GUARD001.KR.SPL
See Section 5.2 on page 33	See Section 5.2 on page 33
	
GUARD_HR.BRACE	GUARD_WALK.CHL.700
See Section 5.3 on page 34	See Section 5.4 on page 34

	
GUARD_JOIN.595	GUARD_END.Y.595
See Section 5.5 on page 35	See Section 5.6 on page 35
	
GUARD_END.595	GUARD_HR.ELBW
See Section 5.6 on page 35	See Section 5.7 on page 36
	
GUARD_KR.ELBW	GUARD_HR.CAP
See Section 5.7 on page 36	See Section 5.8 on page 36
	
GUARD_KR.CAP	GUARD_CLEAT.595
See Section 5.8 on page 36	See Section 5.9 on page 36

	
AL_RUB_RAIL	GUARD_TOE.JOIN
See Section 5.10 on page 37	See Section 5.11 on page 37
	
GUARD_TOE.CNR	GUARDK_CNR.01
See Section 5.12 on page 37	See Section 6.1 on page 38
	
GUARDK_CNR.02	GUARDK_CNR.03
See Section 6.2 on page 39	See Section 6.3 on page 41
	
GUARDK_CNR.04	GUARDK_CNR.05
See Section 6.4 on page 42	See Section 6.5 on page 43

	
GUARD_SKYL.XXX.XXXX	GUARD_SKYB.XXX.XXXX
See Section 8.1 on page 48	See Section 8.2 on page 49
	
GUARD_SKYF.1250.1250	GUARD001.HATCH_CON
See Section 8.3 on page 50	See Section 9.1 on page 51
	
GUARD001.HATCH_SM	GUARD_SKY.FIXINGS
See Section 9.2 on page 53	See Section 8.1 on page 48
	
See Section 10 on page 55	

3 Installation

3.1 System Design and Selection

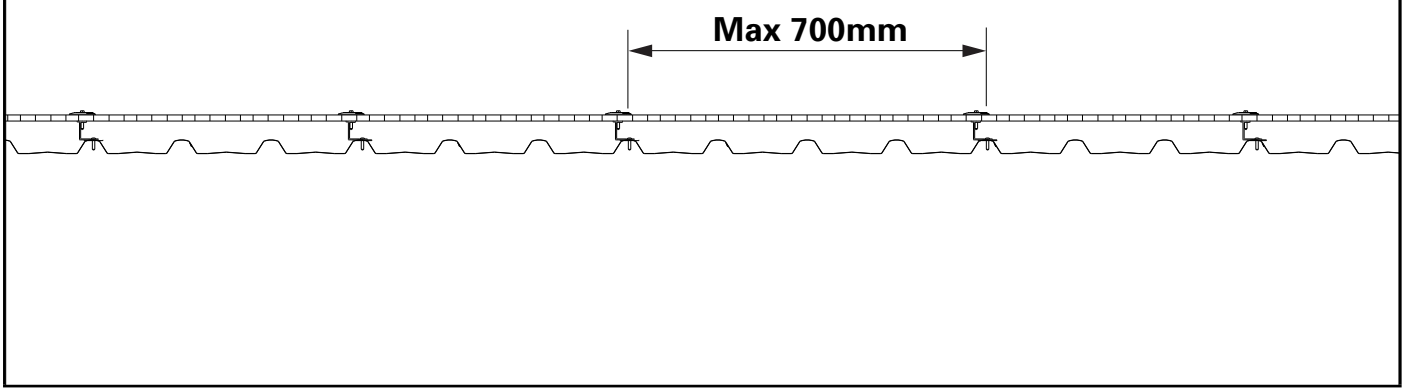
3.1.1 Location

Determining the best location for your access system can be difficult. SafetyLink recommends a risk assessment be conducted to accurately assess the key hazards of your particular work area. Hazards include but are not limited to; ingress and egress from the access system, machinery and vehicles use in the area, electrical conductivity and chemical agents.

3.1.2 Walkway Support Spacing

- The walkway mesh supports shall be spaced no greater that 700mm apart.

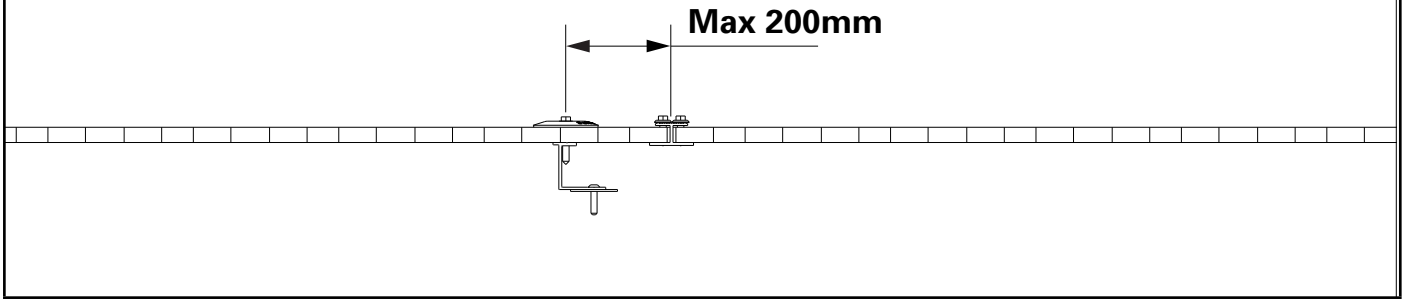
FIGURE 4



3.1.3 Mesh Join Location

- Joins in the walk way shall not be more than 200mm from a support.

FIGURE 5



3.1.4 Guardrail Stanchion Spacing

I Stanchion shall be spaced at a maximum of 2300mm. See Figure 6.

II For heavy duty stanchions GUARD001.WW.POST.02 and GUARD001.WW.POST.04 the maximum spacing shall be 3000mm. See Figure 7. These stanchions are found in kits, GUARDK121, GUARDK122, GUARDK131 and GUARDK132.

FIGURE 6

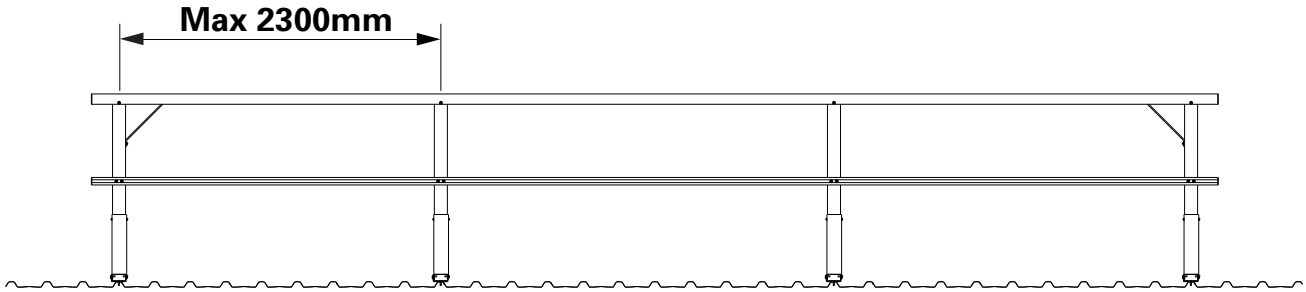
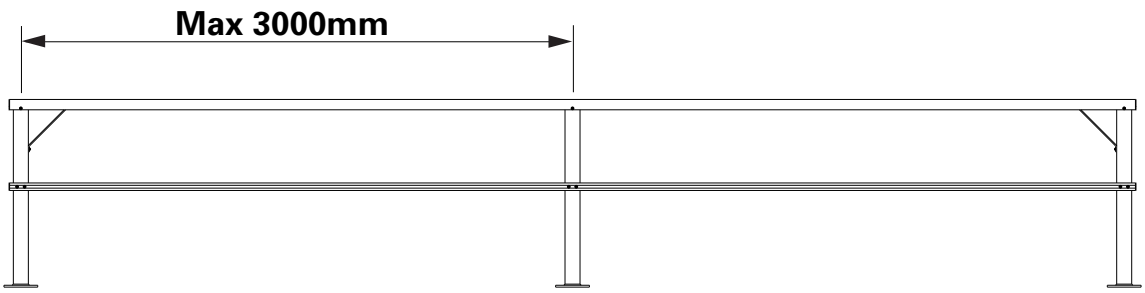


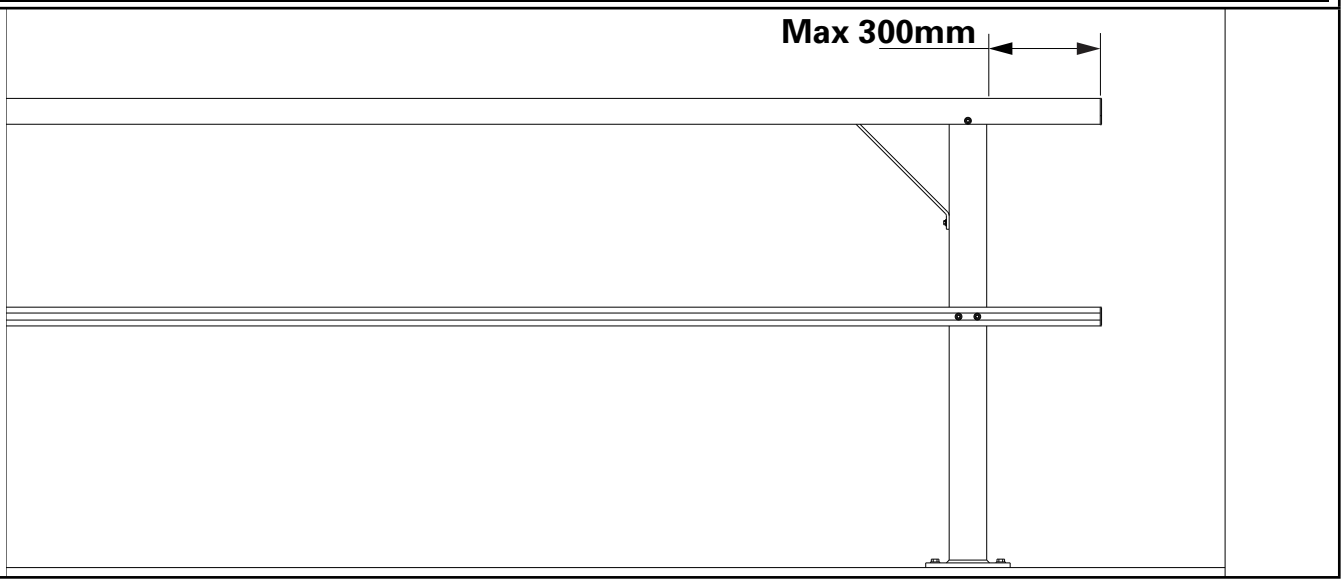
FIGURE 7



3.1.5 Guardrailing Over Hang

I At the end of the guardrail section, the rails shall not over hang a post more than 300mm.

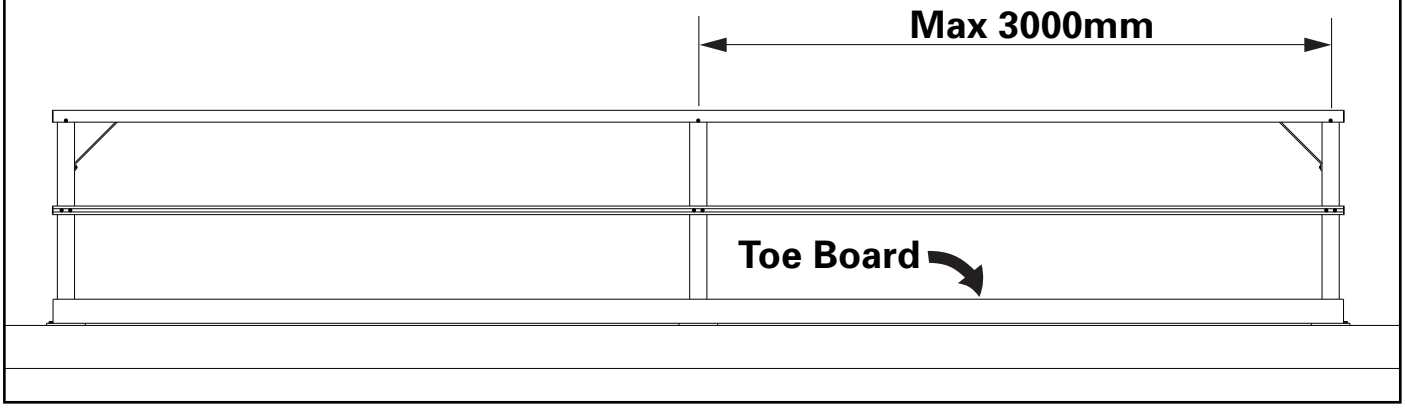
FIGURE 8



3.1.6 Toeboard Spacing

- The toe board shall be support at least every 3000mm.

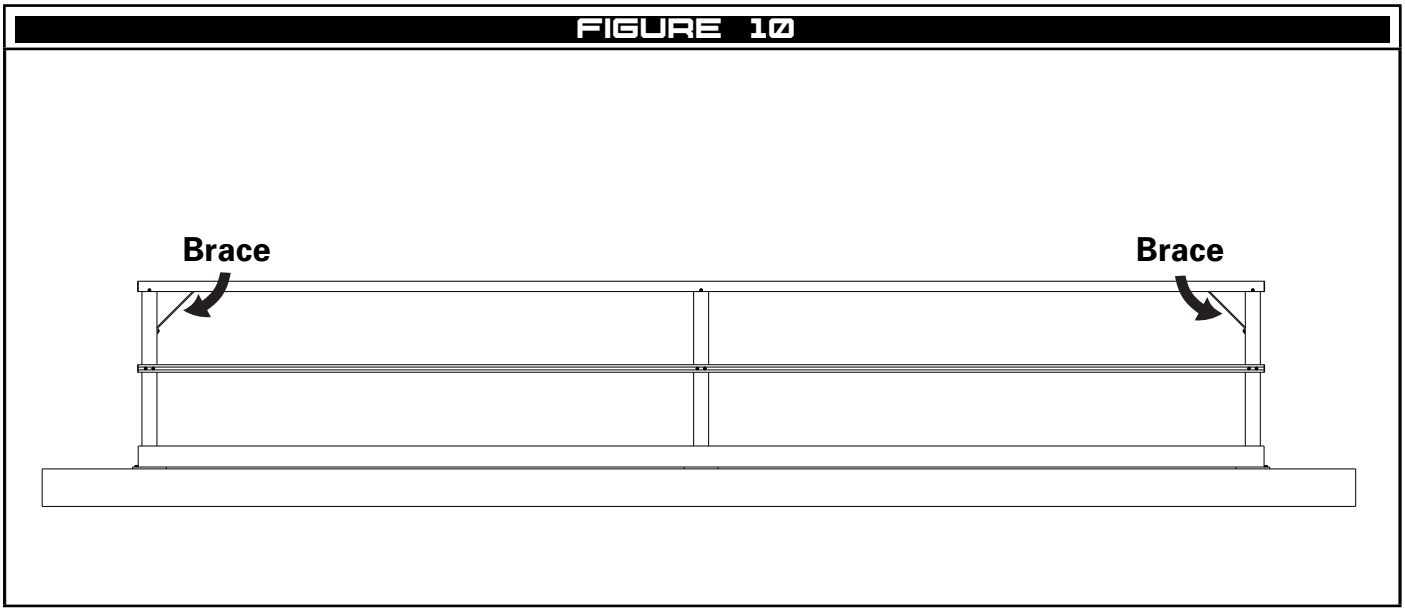
FIGURE 9



3.1.7 Bracing

- Each termination of the guardrail shall have a brace. Corner elbows do not require braces.

FIGURE 10



3.2 System Requirements

The following requirements are mandatory for Compliance with the AS1657:2018.

3.2.1 Guardrail Height

I The guardrail height shall be not less than 900mm above the surface of the walkway.

II If the guardrail is greater than 1065mm above the surface of the walkway, another intermediate rail shall be installed.

FIGURE 11

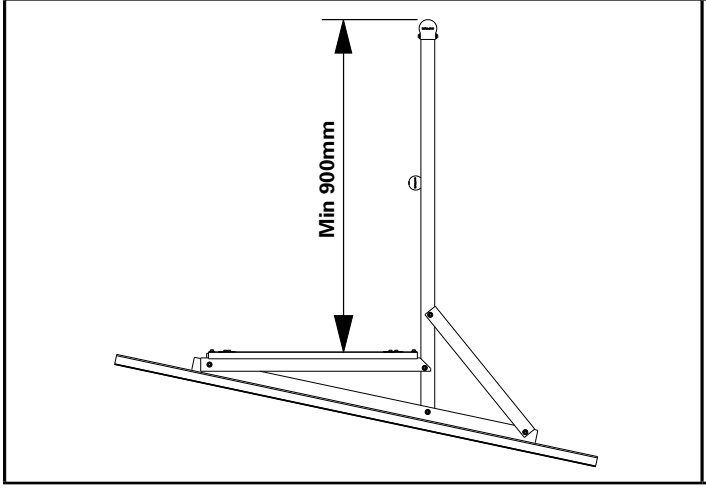
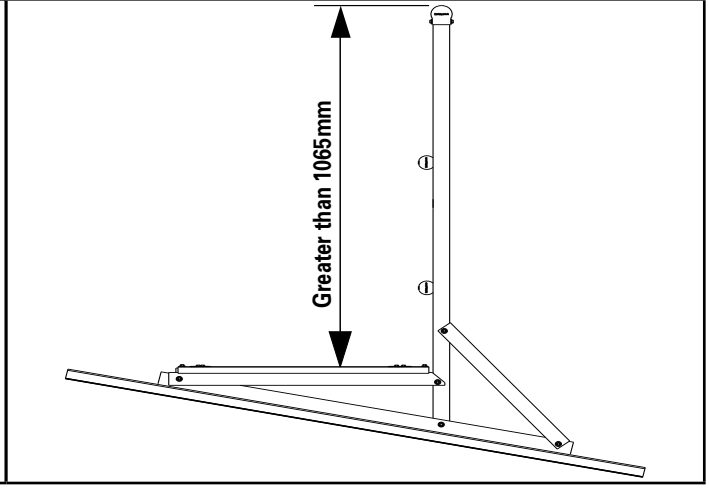


FIGURE 12



3.2.2 Walkway Width

I The walkway shall be at least 600mm wide

II The clearance between guardrail components shall be not less than 550mm

FIGURE 13

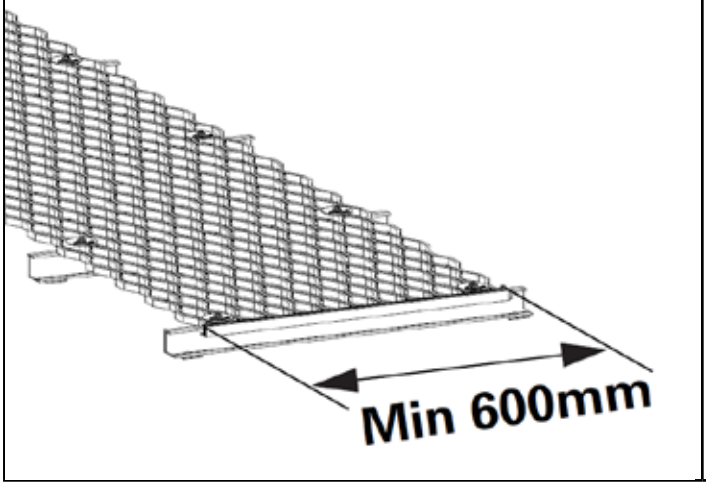
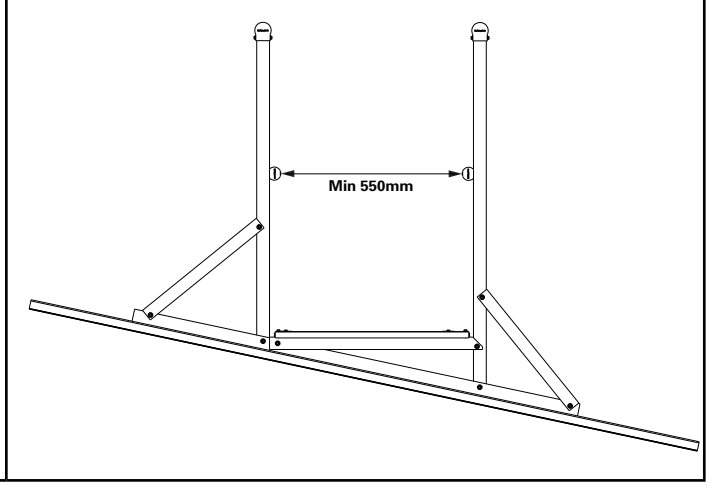


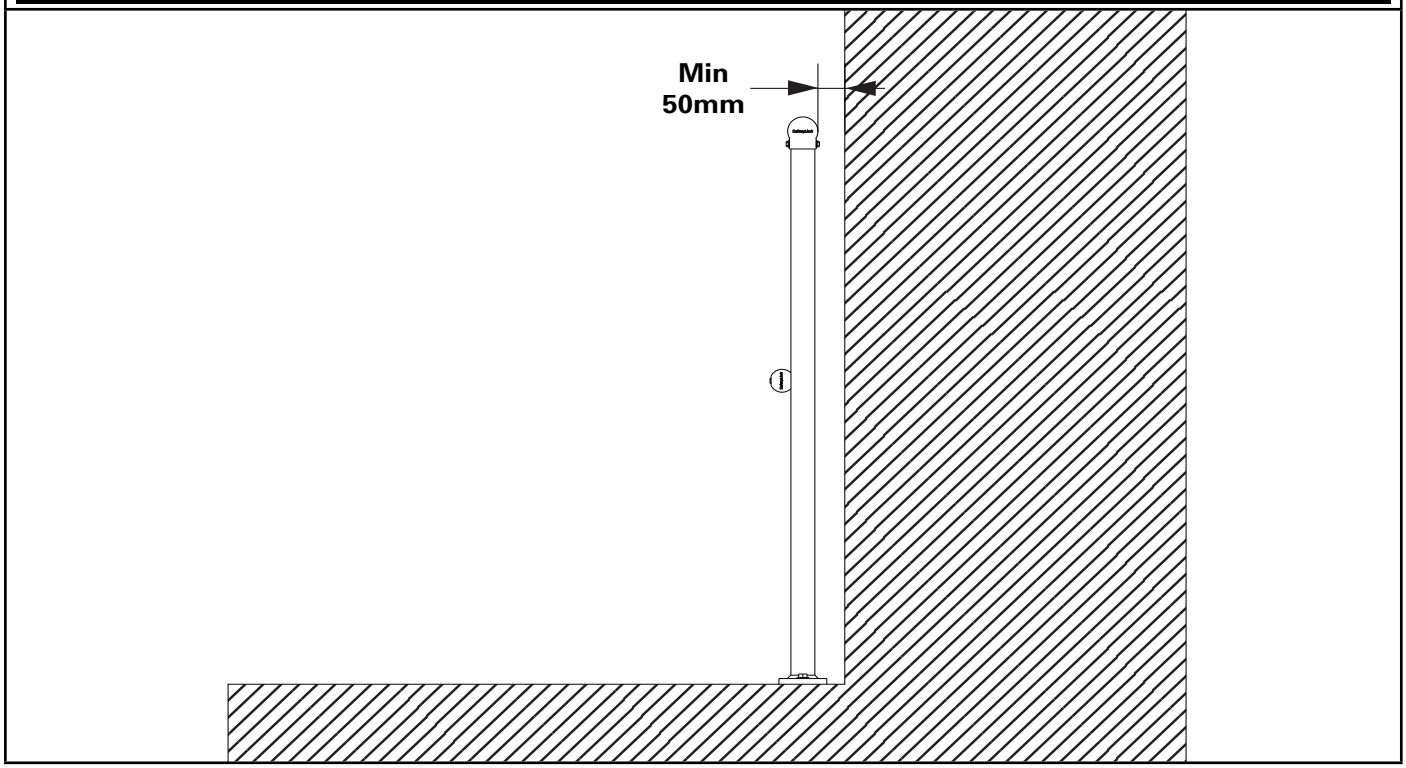
FIGURE 14



3.2.3 Hand Clearance

- There shall be a minimum of 50mm clearance around the handrail.

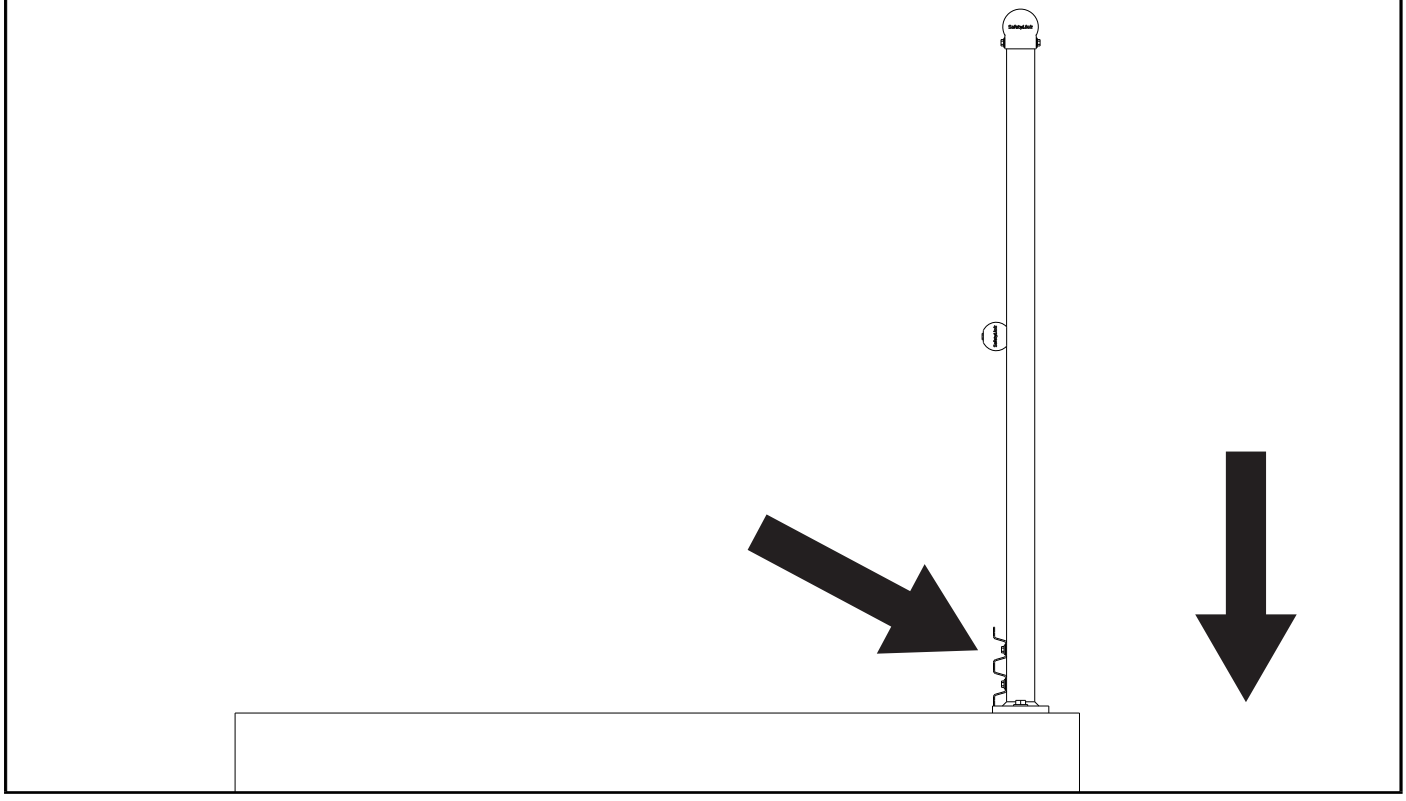
FIGURE 15



3.2.4 Toeboard

- Toeboards shall be installed on the edge of walkways where there is the risk that an object could fall to where people have access to the area below.

FIGURE 16



3.2.5 Rail Spacing

I The distance between the top and middle rail cannot be less then 450mm.

II The distance between the middle rail and the walkway surface cannot exceed 560mm.

III Where a toeboard is installed the distance from the middle rail to the toeboard shall not exceed 450mm.

FIGURE 17

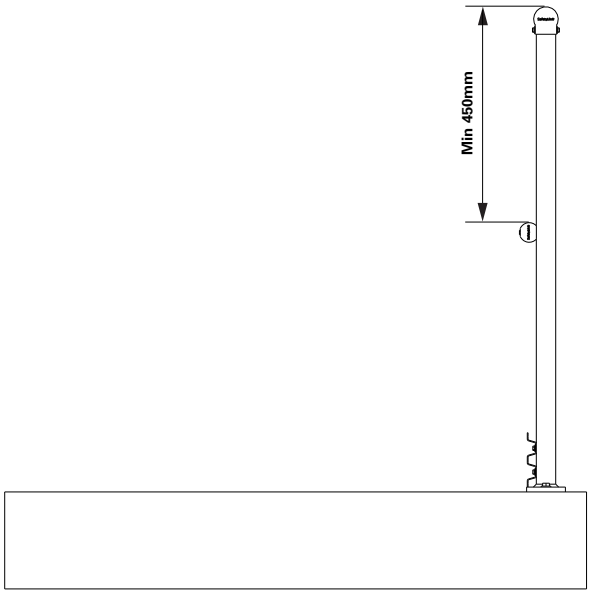


FIGURE 18

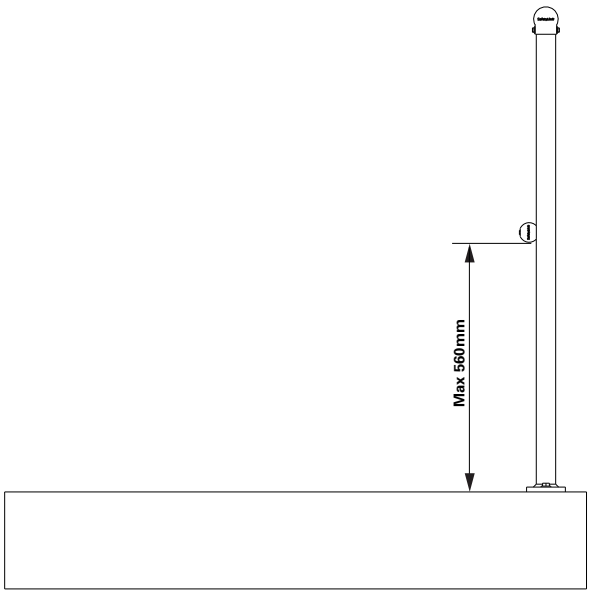
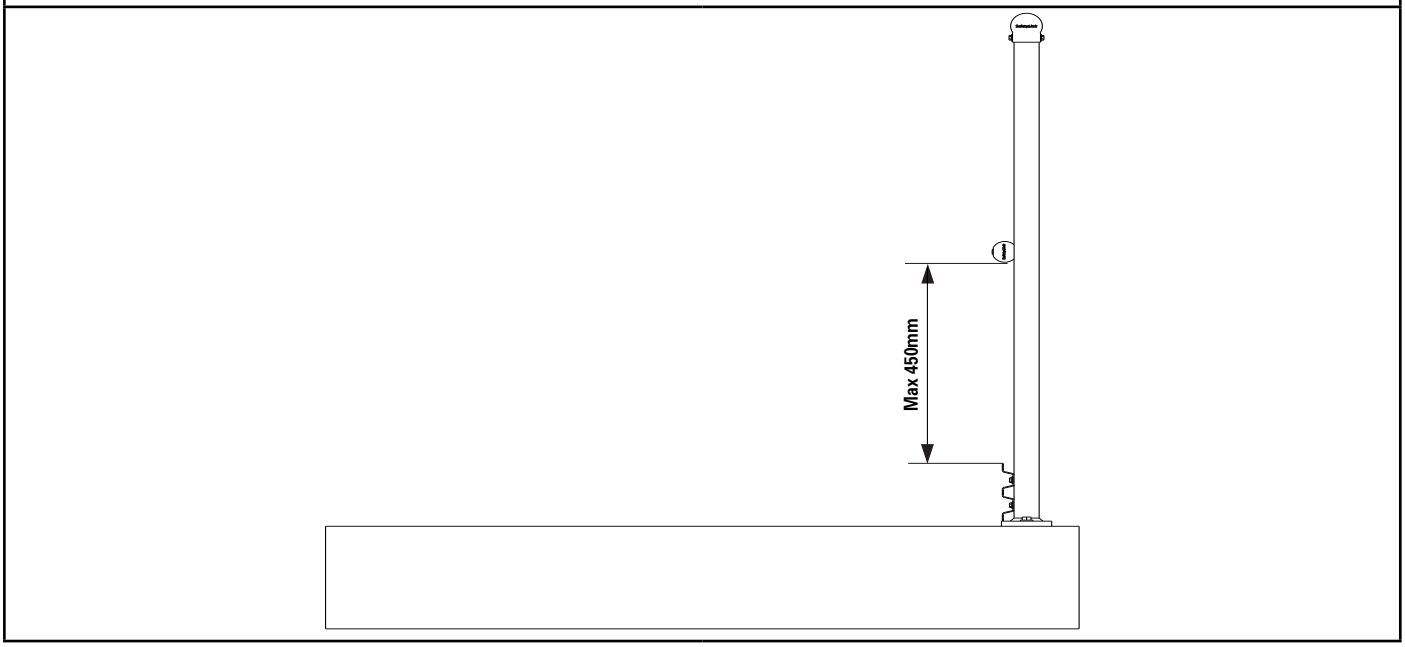


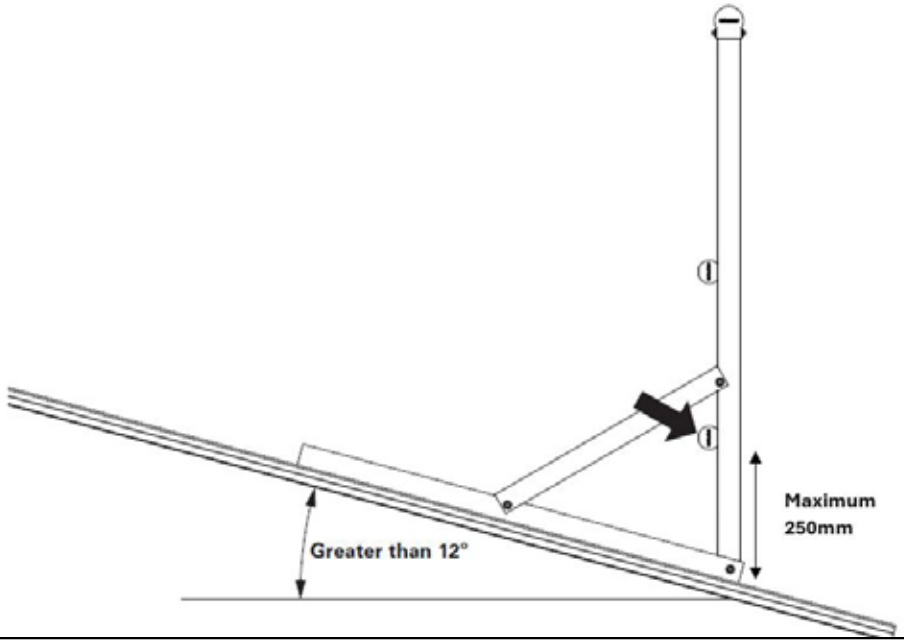
FIGURE 19



3.2.6 Guardrailing only

I Where guardrailing is installed on a sloped surface greater than 12° without a leveled walkway, a third rail is recommended to be installed (maximum height 250mm).

FIGURE 20



3.2.7 Platform Guardrailing

I Guardrailing is not required around a platform if the height to the lower walking surface is less than 300mm and the distance to an existing guardrail is more than 1000mm.

II Where the distance to an existing guardrail is less than 1000mm, the guardrail height must be increased by 300mm.

FIGURE 21

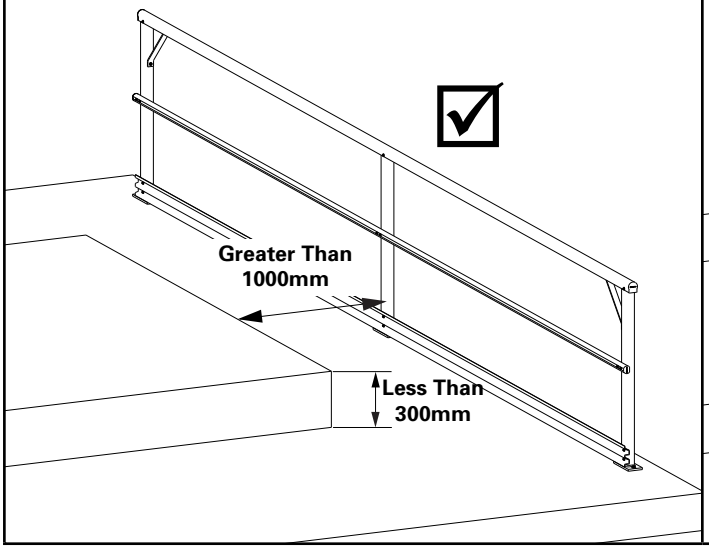
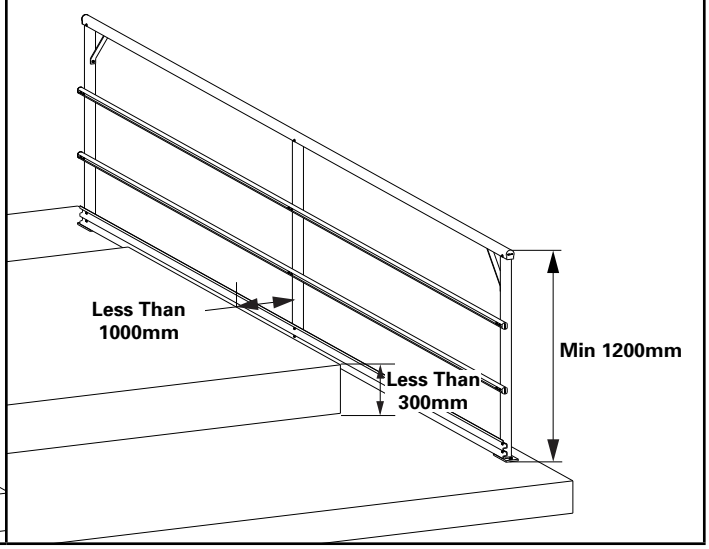


FIGURE 22



3.2.8 Walkway Cross Slope

I Across the walk way shall not exceed 7°.

☑ The preferred range is not greater than 3°.

II Where the cross slope of a walkway exceeds 12° a guardrail is required on the downside of the walkway.

FIGURE 23

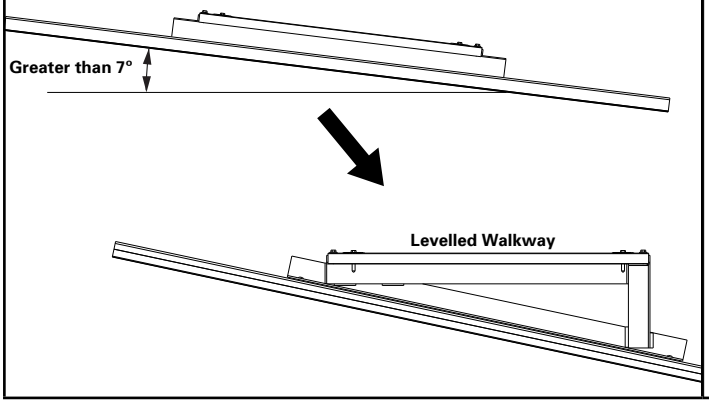
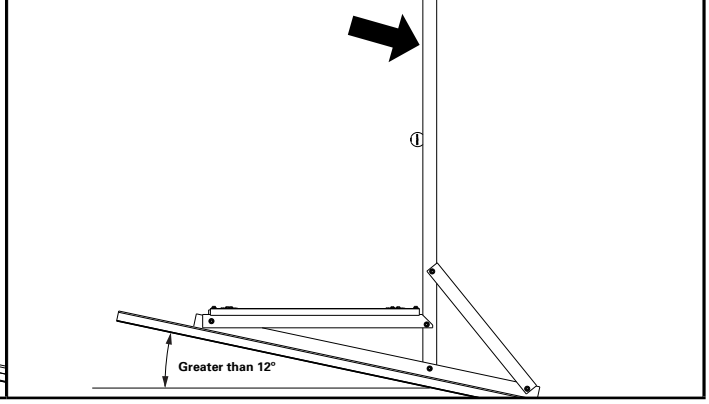


FIGURE 24



3.2.9 Walkway Direction of Travel Slope

I In the direction of travel shall not exceed 20°. See Figure 25. For angles over 20° See Section 10.

II Where the angle of the walkway exceeds 10° in the direction of travel cleat shall be installed. See Figure 26 and Figure 27.

III For roof angles exceeding 12°, a guardrail should be installed on both sides of the walkway. See Figure 28.

FIGURE 25

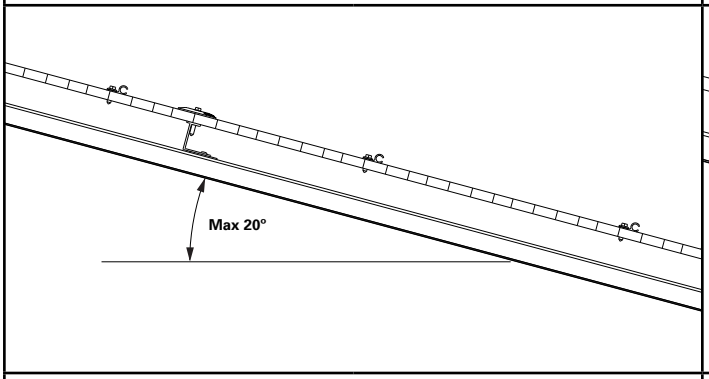


FIGURE 26

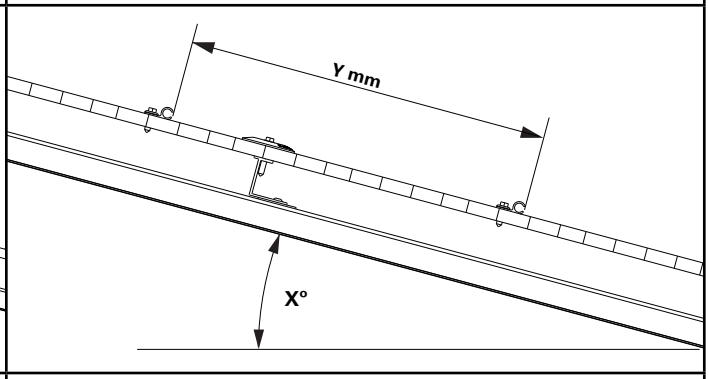
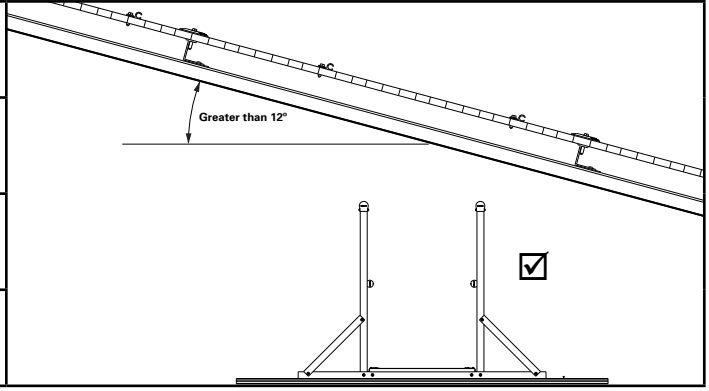


FIGURE 27

Slope Angle (X°)	Cleat Spacing (Ymm)
>10° and <15°	450mm
>15° and <18°	400mm
>18°	350mm

FIGURE 28



3.3 Fasteners

3.3.1 Cup Head Screws

All Walkway Fasteners are M8 cup head cap screws, stainless steel 316. All fasteners shall be tightened to 20Nm with a 13mm Socket, C or ring spanner.

3.3.2 Tek Screws

All supplied Tek Screws are 12 gauge hot dip galvanised hi tensile steel. All are to be installed with a 3/8" drive socket.

3.3.3 Rivets

All supplied rivets are Ø5mm aluminium trifold rivets. These can be installed with a manual riveting tool or a powered riveting tool.

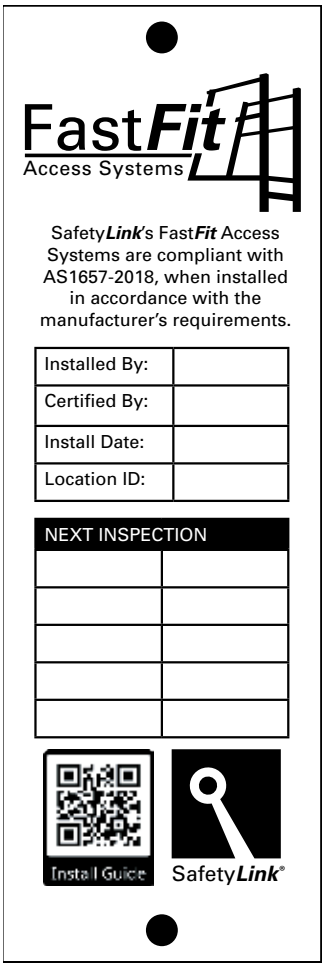
3.3.4 Clamps

For penetrationless fixings to a variety of roof type see Section 12.

3.3.5 Label

All systems shall be marked with the label shown in Figure 29. The label shall be filled out by the installer and fixed with 2 x trifold rivets.

FIGURE 29



3.3.6 SafetyLink Concrete Fastener

SafetyLink's M10 Concrete Stud CON-M10X130 is to be installed with chemical adhesive CON-CHEM-FISV.300.

1. Mark the location for the hole.

⚠ ***The location shall be no less than 150mm from any edge.***

⚠ ***The concrete shall measure not less than 150mm thick.***

⚠ ***The stud shall only be installed in crack free concrete 32MPa or greater.***

⚠ ***Consult a structural engineer if there is any doubt of the suitability of the structure.***

2. Set the drill depth to 95mm and drill a 12mm diameter hole.
3. Clean the hole, ensuring it is free of moisture and dust.
4. Inject the adhesive in to the hole as per the manufacturer's instruction.
5. Insert the stud to full depth, 35mm of the stud should remain above the surface. Wipe away any adhesive expelled from the hole.

⚠ ***Ensure enough adhesive was used, the adhesive should finish flush with the concrete.***

6. Once the adhesive is cured, install the spring washer and tighten the Donut to 20Nm.

3.3.7 Third Party Concrete Fasteners

Other suitable concrete fasteners are listed below. Fasteners of equivalent strength to that listed below may be used. All fasteners shall be installed in accordance with the manufacturer's requirements.

I Fischer FAZ II minimum M10 x 55 (Expansion Bolt)

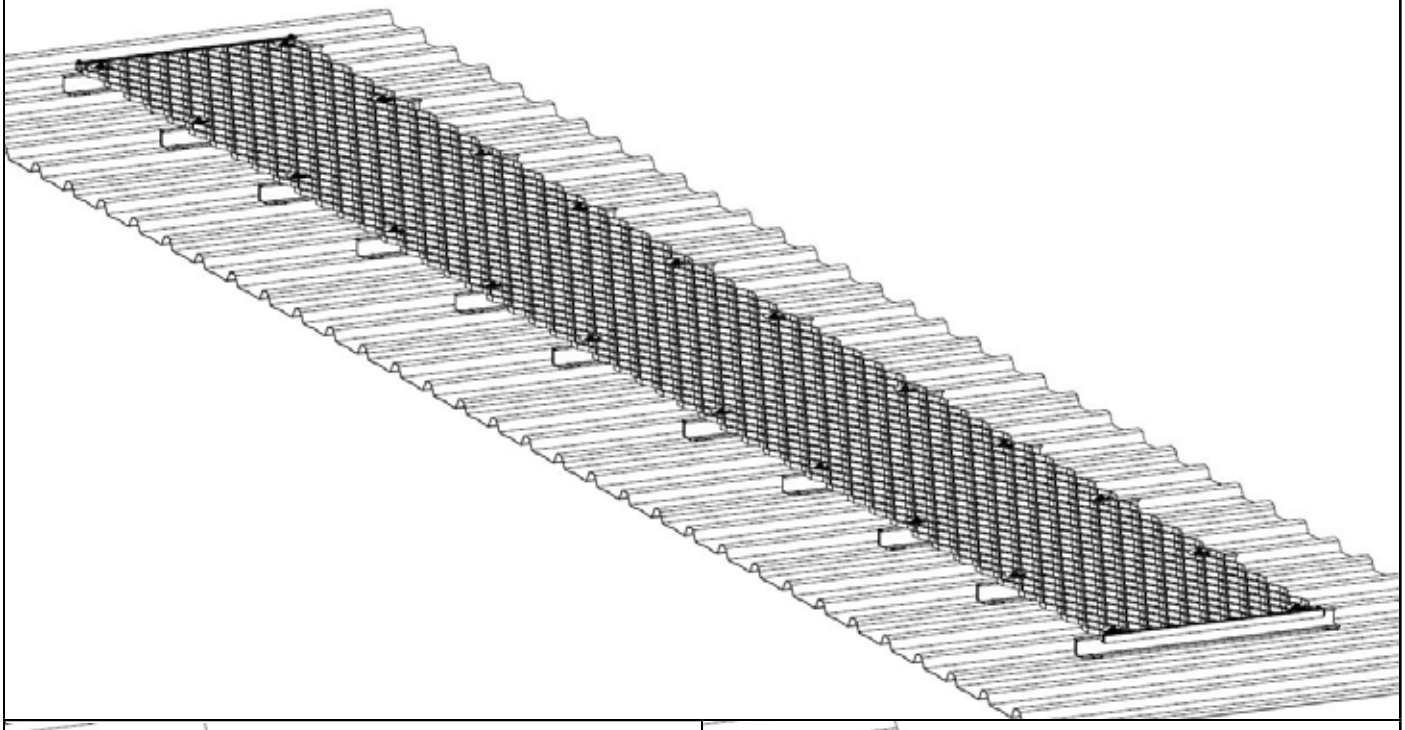
II Fischer FH II minimum M10 x 70 (Expansion Bolt)

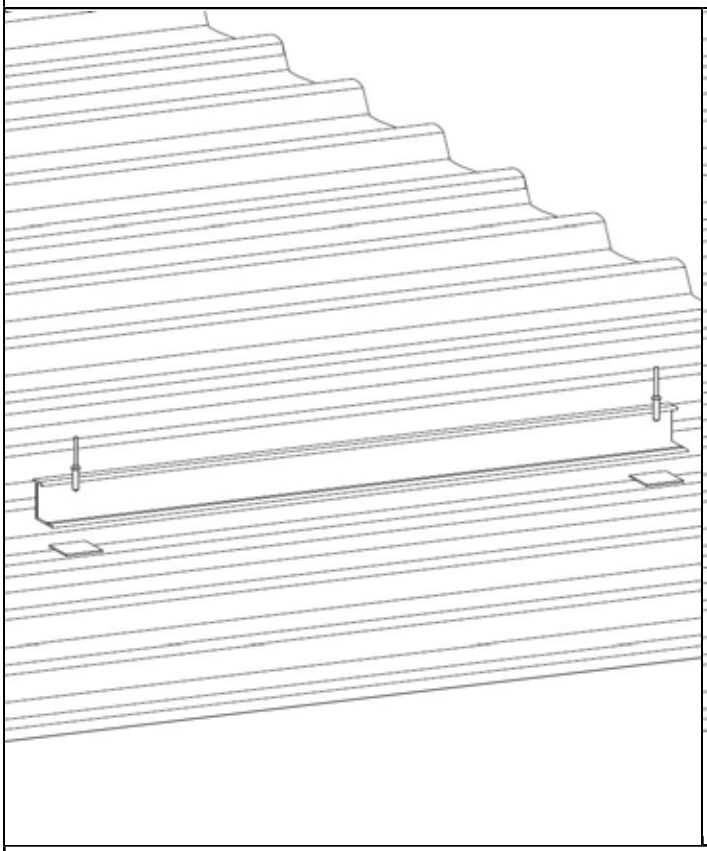
III Fischer ULTRACUT US FBS II minimum M10x85 (Concrete Screw)

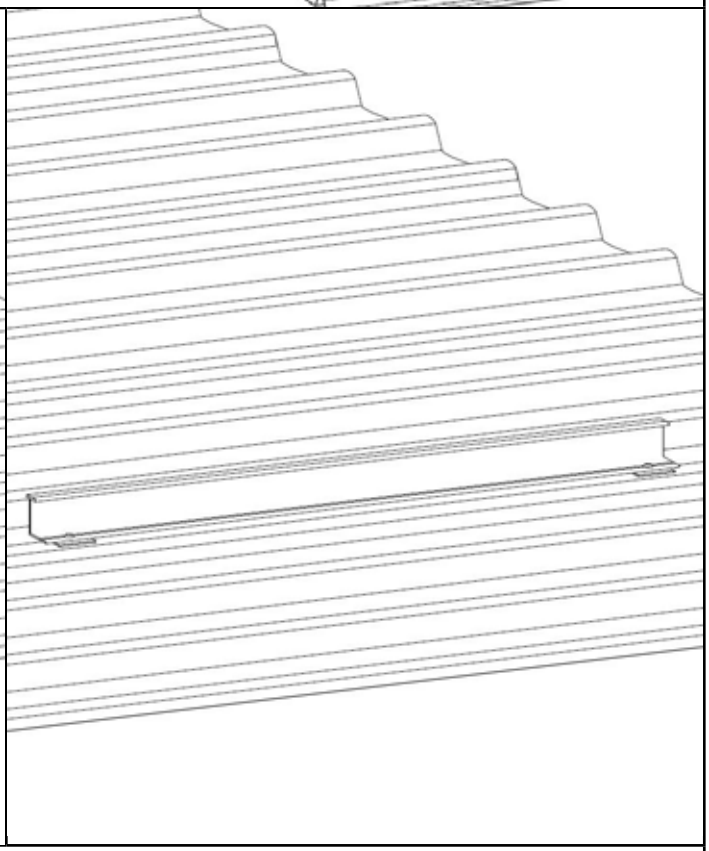
4 Walkway Support and Stanchions

4.1 Flat Walkway

FIGURE 30



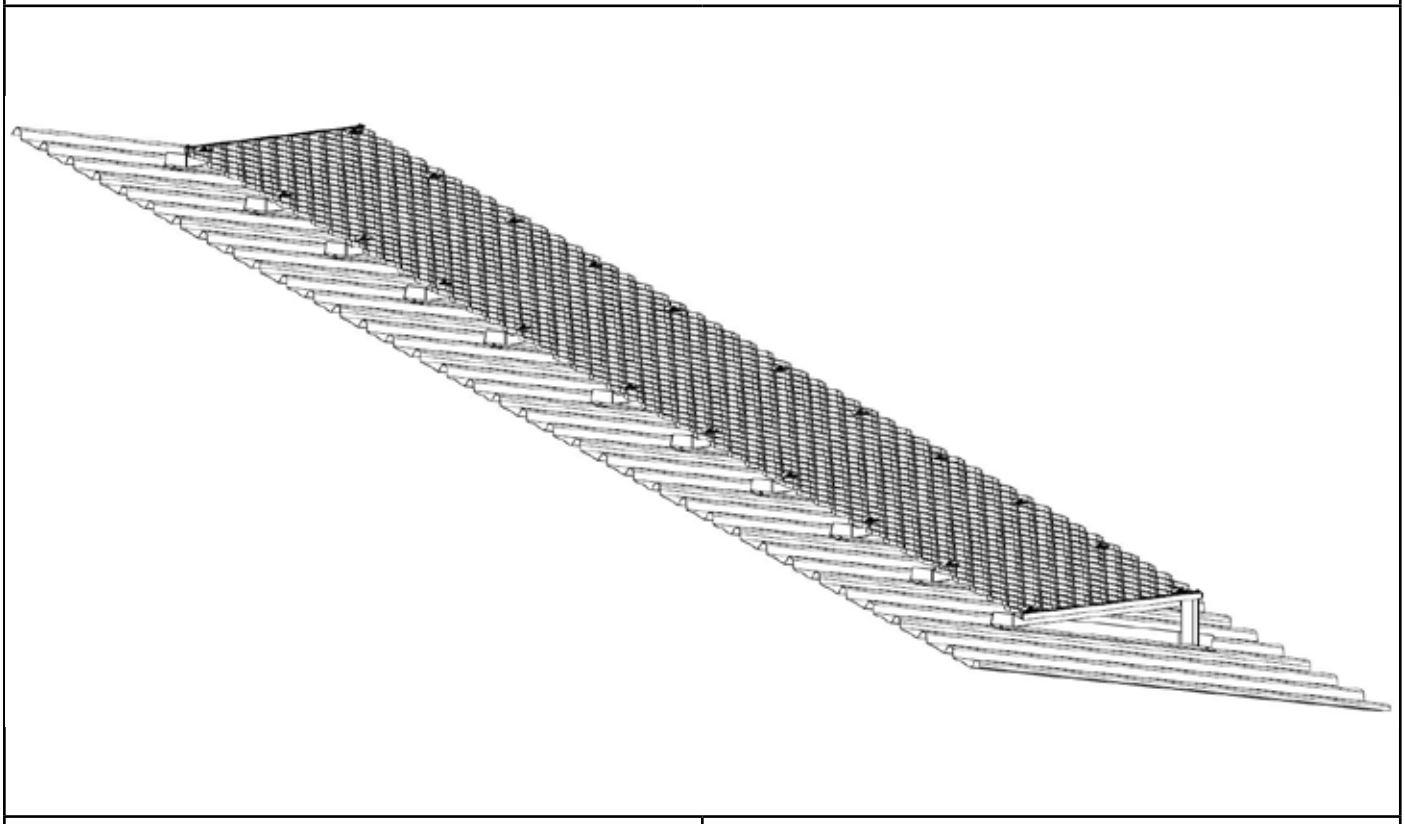


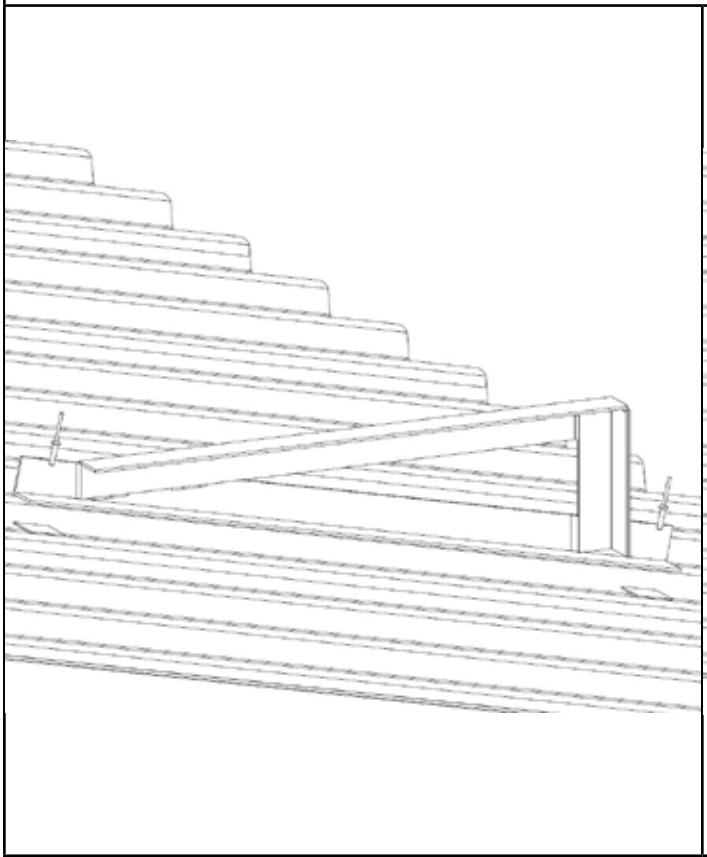


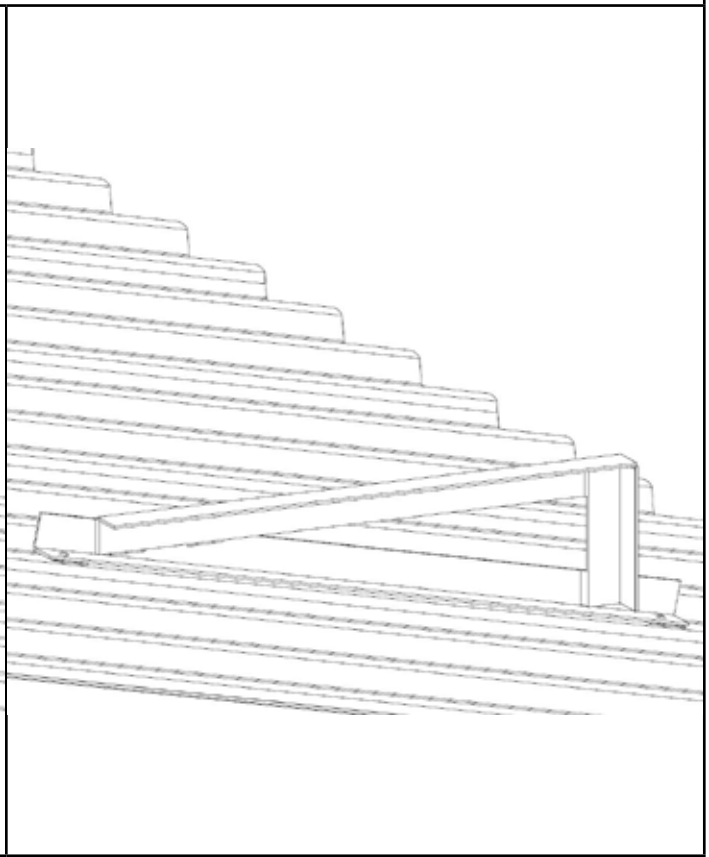
Fix the mesh support profile to the roof with 2x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing.

4.2 Levelled Walkway (Welded)

FIGURE 31



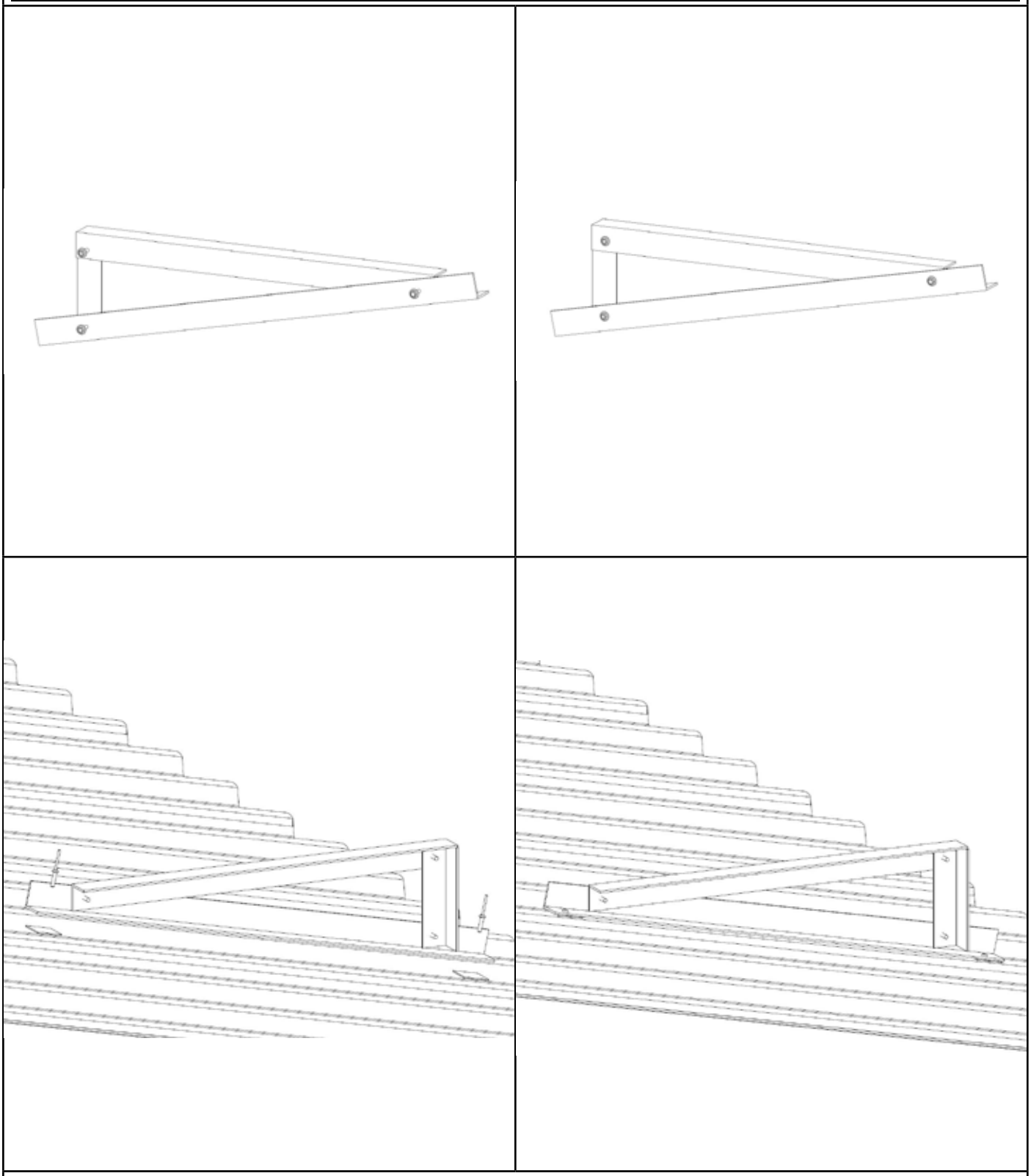




Fix the mesh levelled supports to the roof with 2x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing.

4.3 Levelled Walkway (Screw Fix)

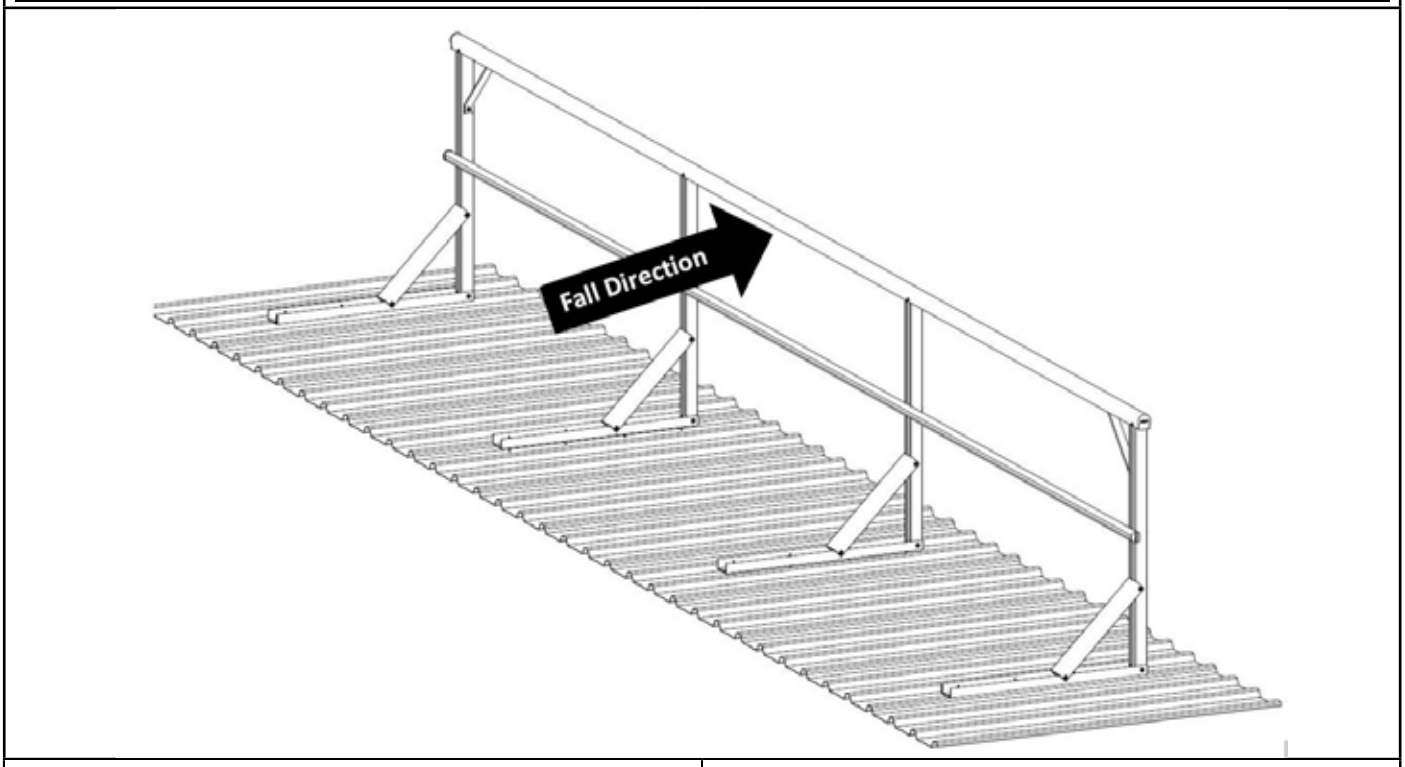
FIGURE 32

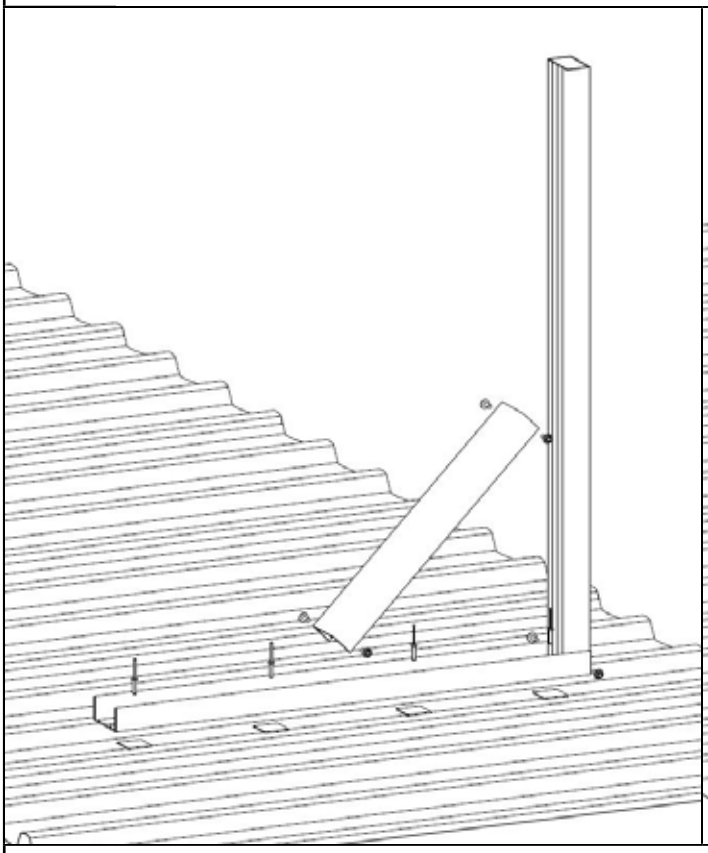


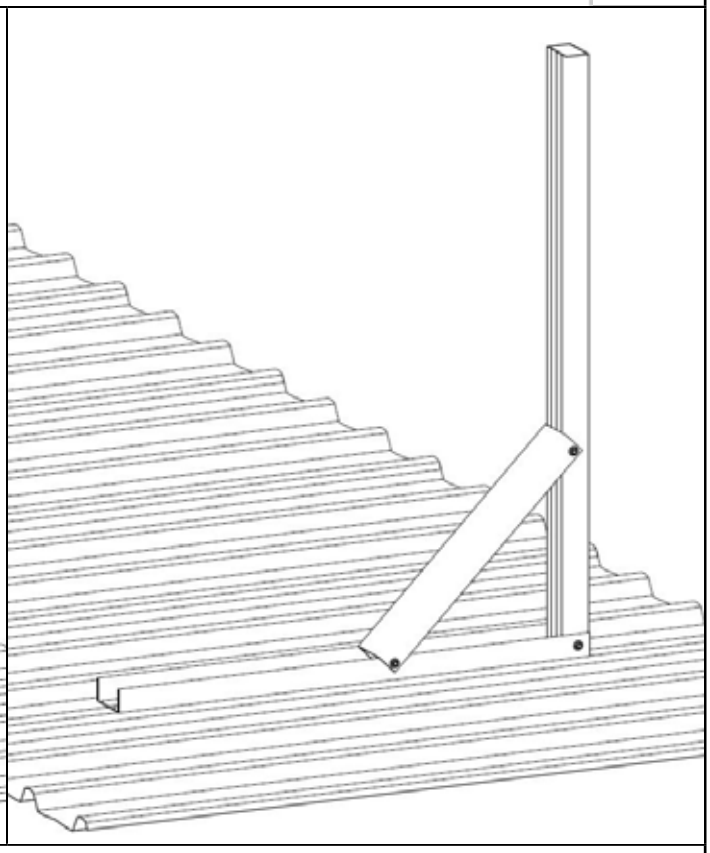
Fix the 3 pieces of angle together with 3x 20mm tek screws. Fix the mesh levelled supports to the roof with 2x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing.

4.4 Single Guardrail Roof Sheet

FIGURE 33



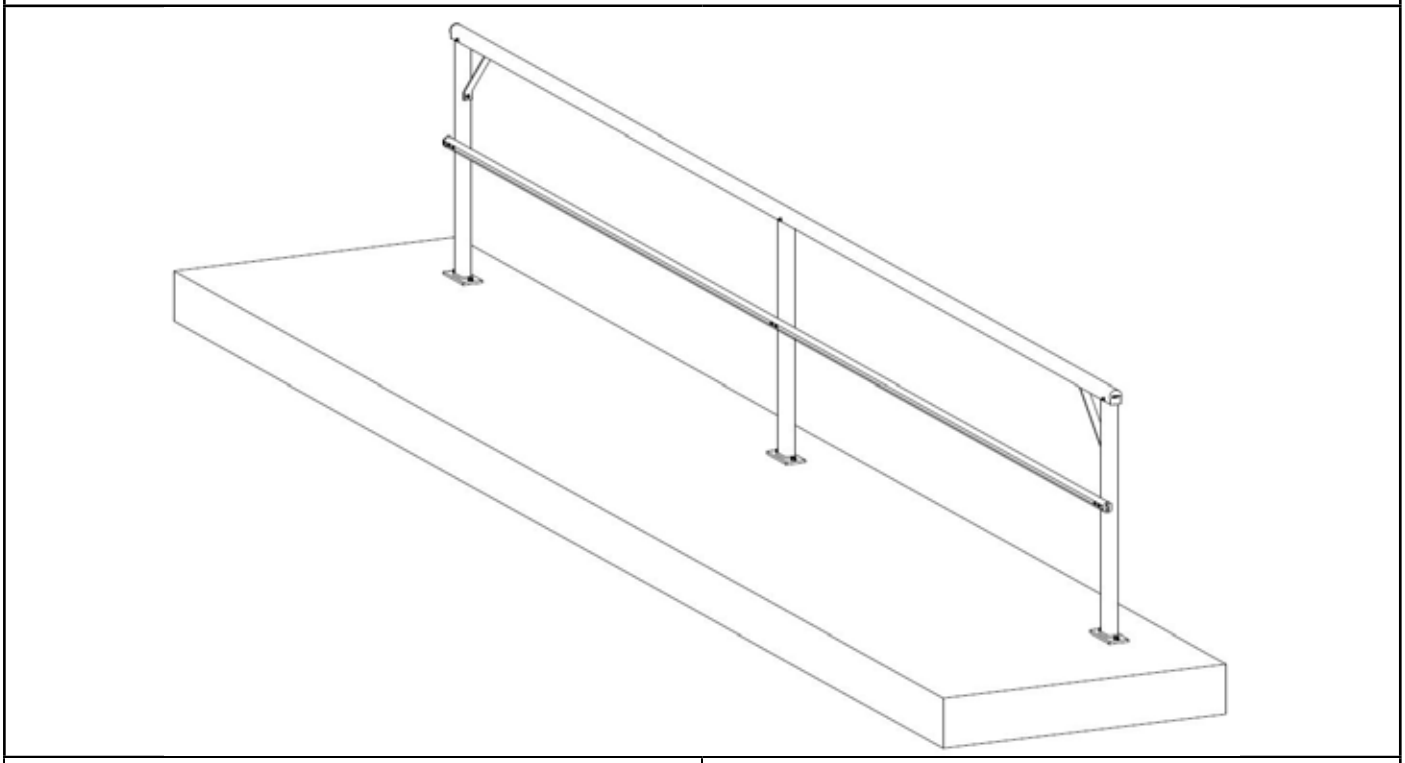


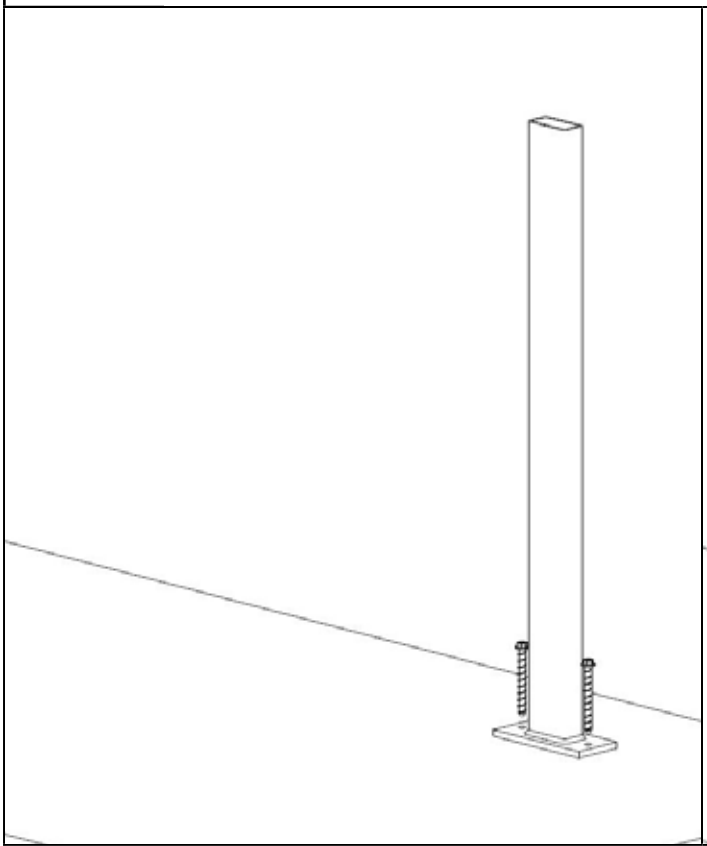


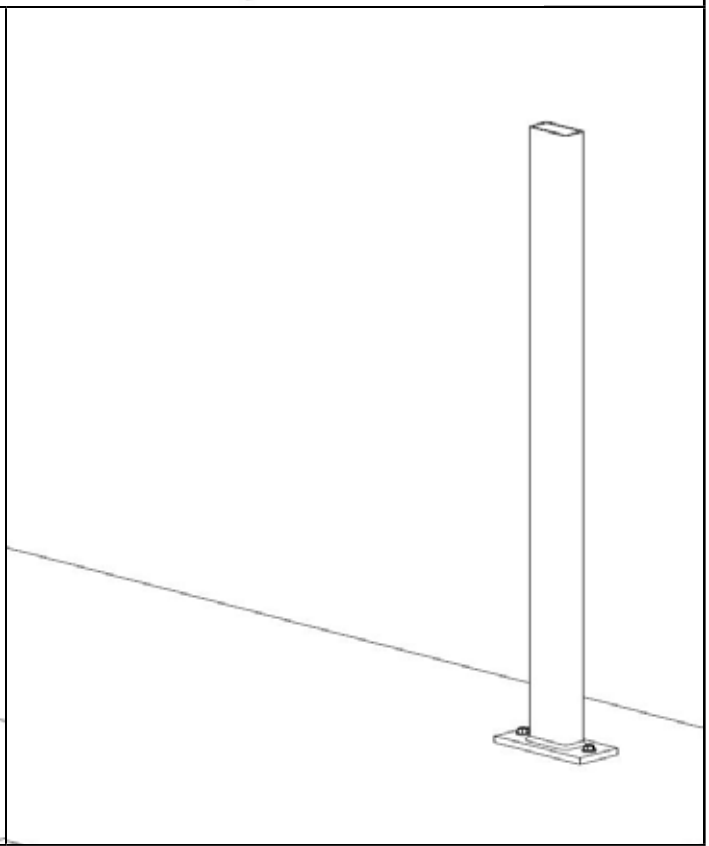
Fix the large piece of channel to the roof with 4x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing. With 2x 20mm tek screws fix the stanchion post to the channel. With 4x 20mm tek screws fix the cross brace to the stanchion post and the large channel.

4.5 Single Guardrail Concrete Base

FIGURE 34



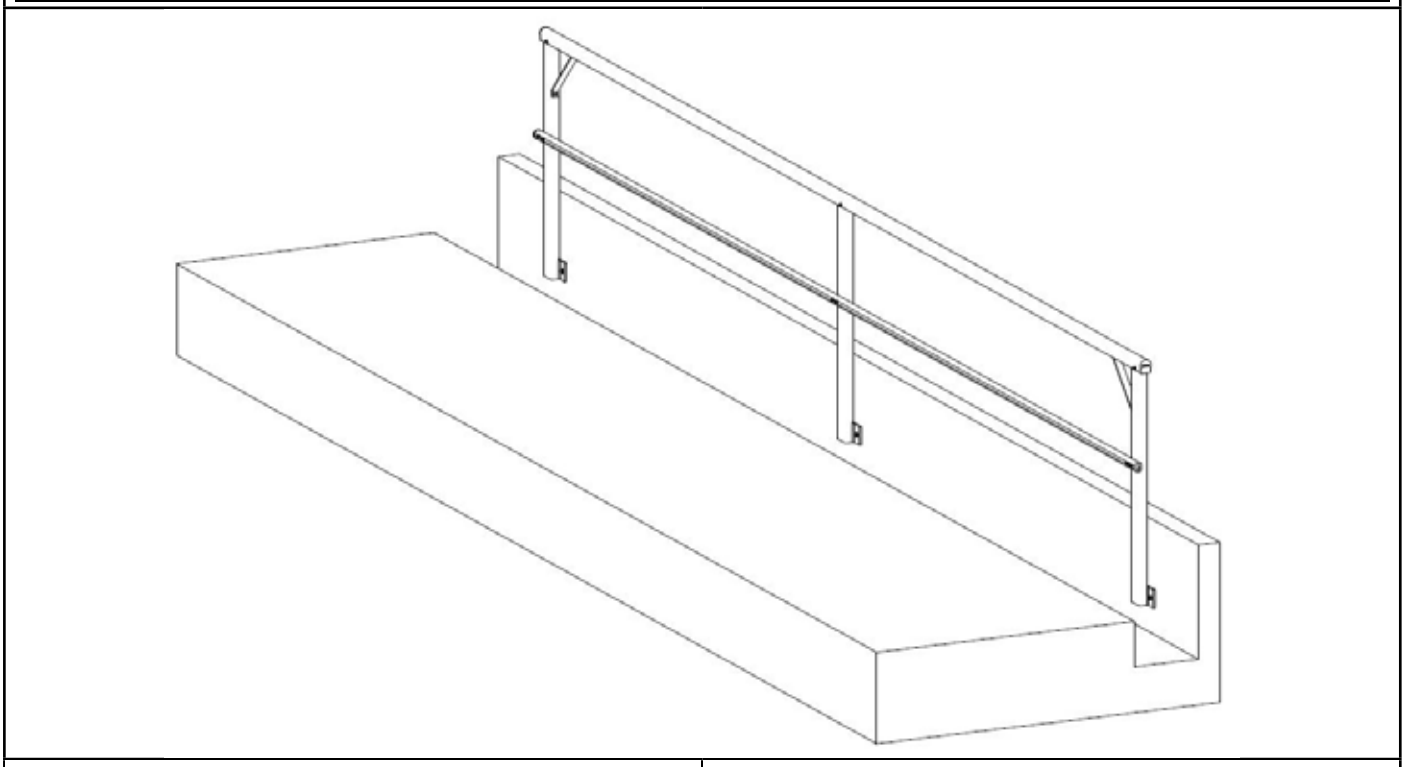


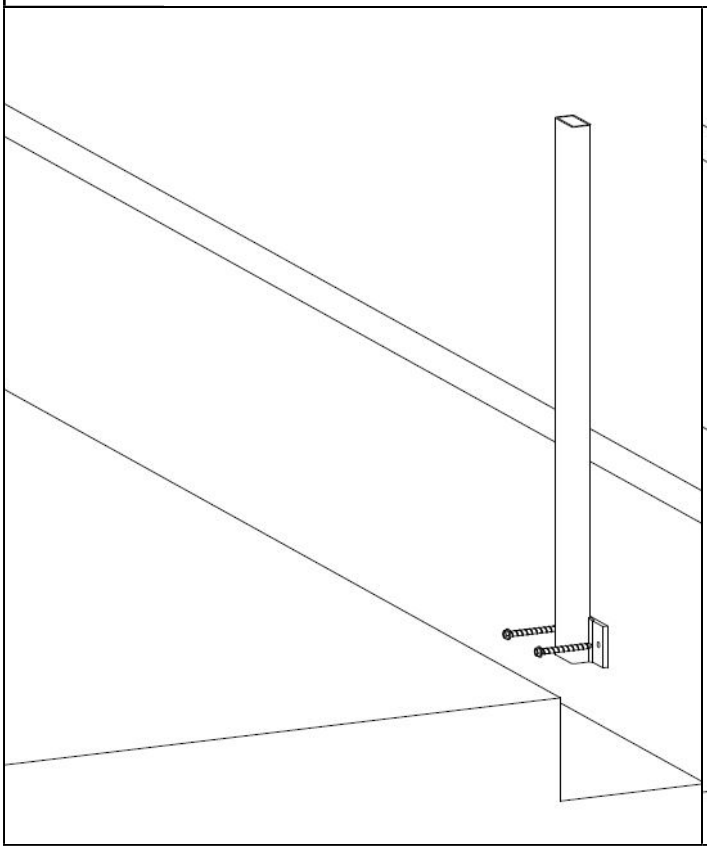


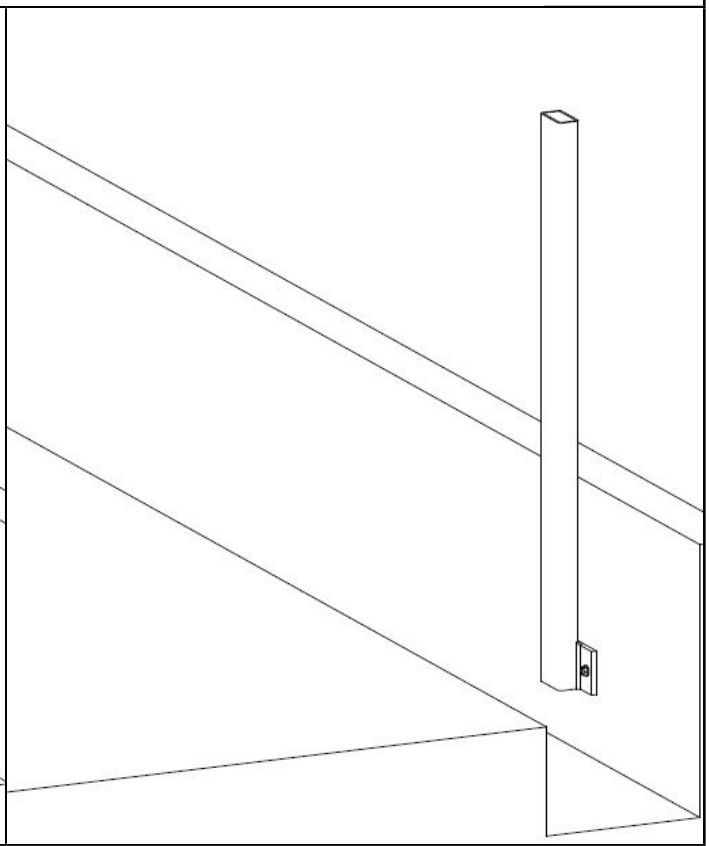
Fix the stanchion to the concrete with 2x fasteners from sections 3.3.6 or 3.3.7.

4.6 Single Guardrail Concrete Side

FIGURE 35



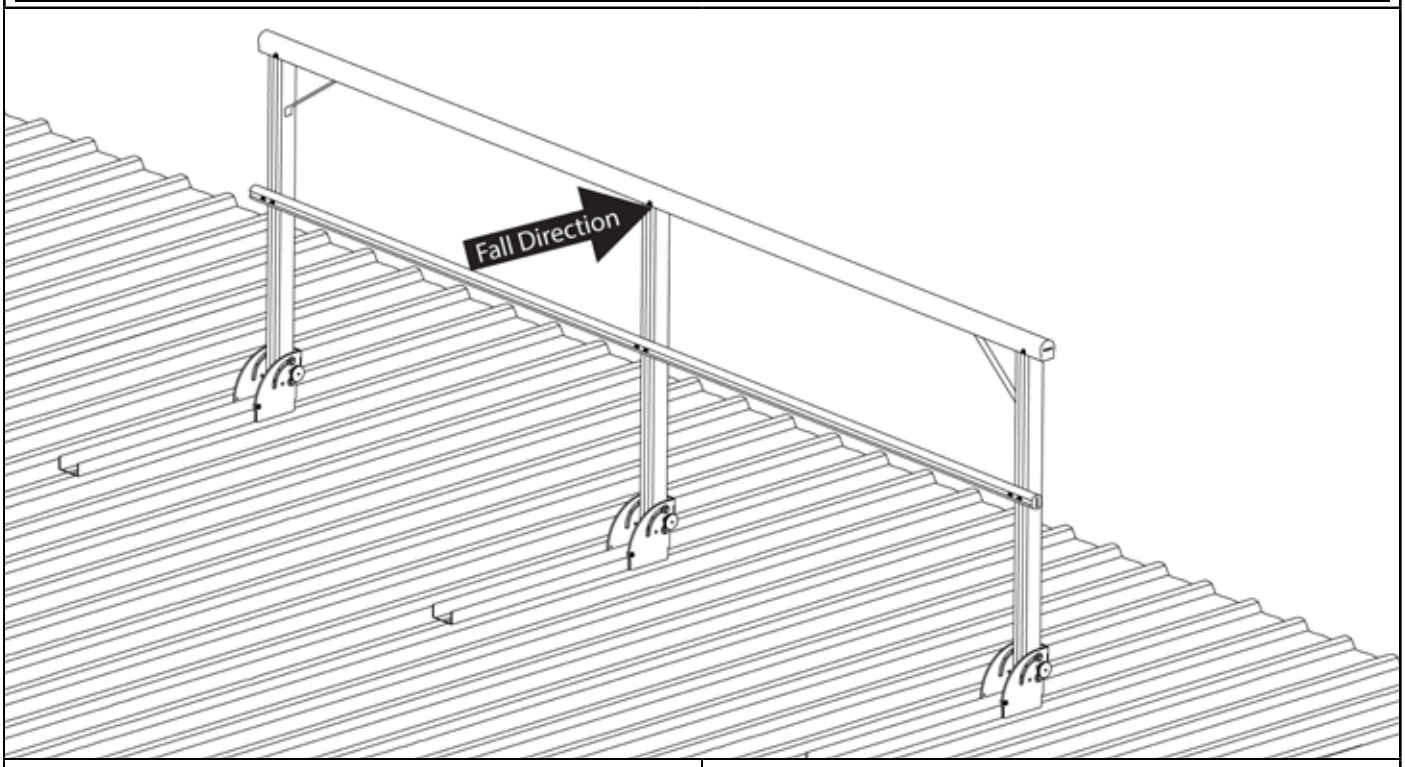


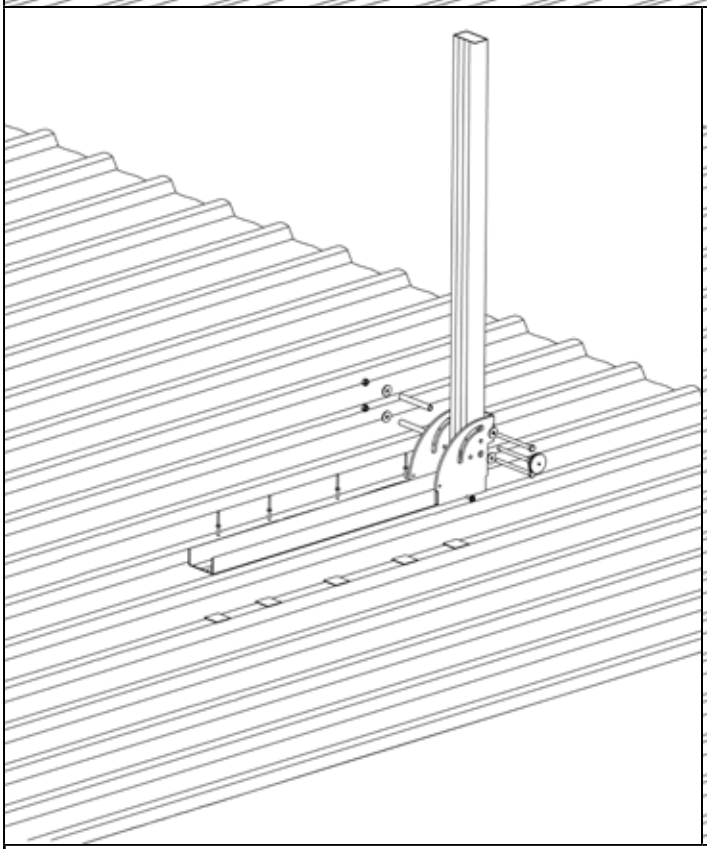


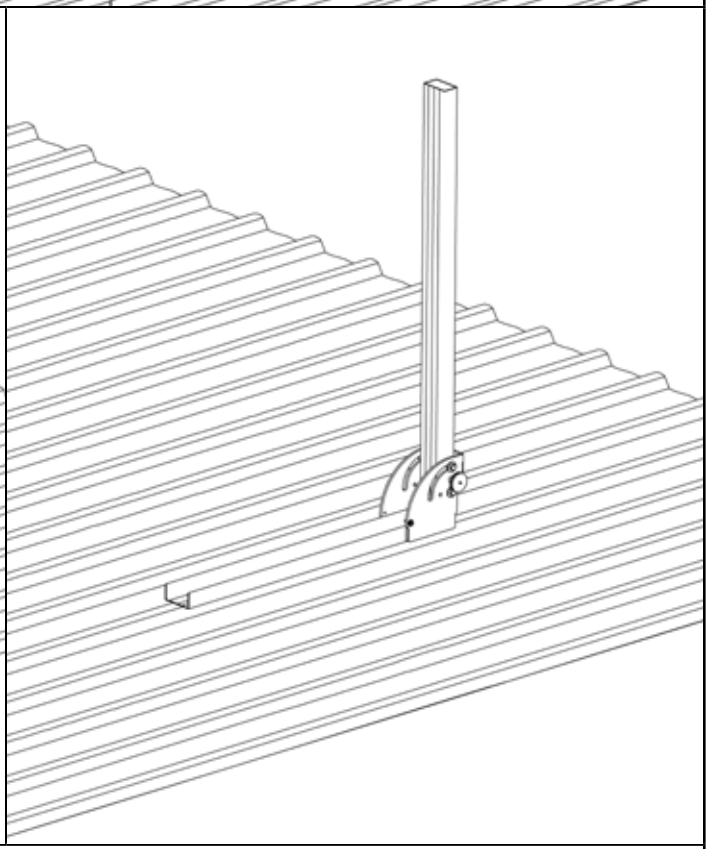
Fix the stanchion to the concrete with 2x fasteners from sections 3.3.6 or 3.3.7.

4.7 Fold Down Guardrail for Roof Sheeting

FIGURE 36





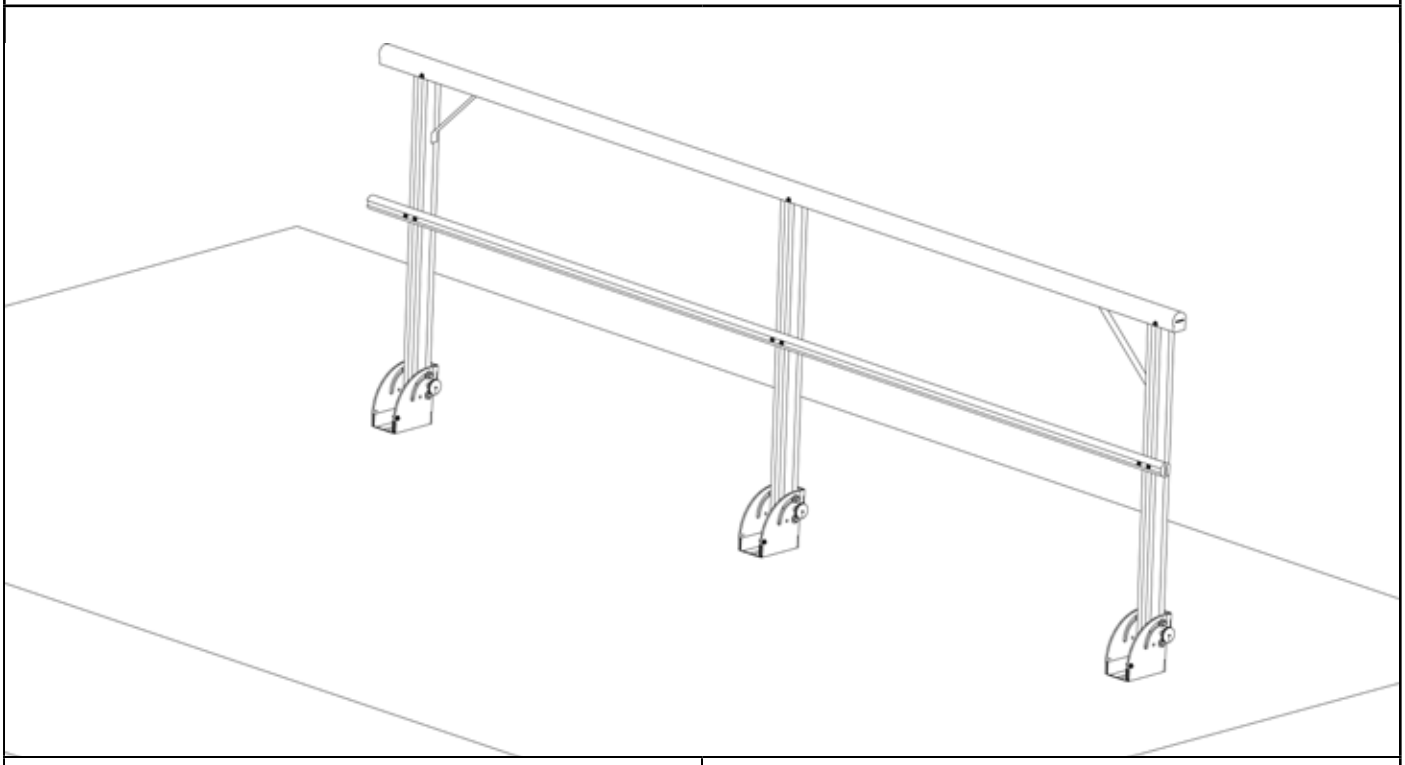


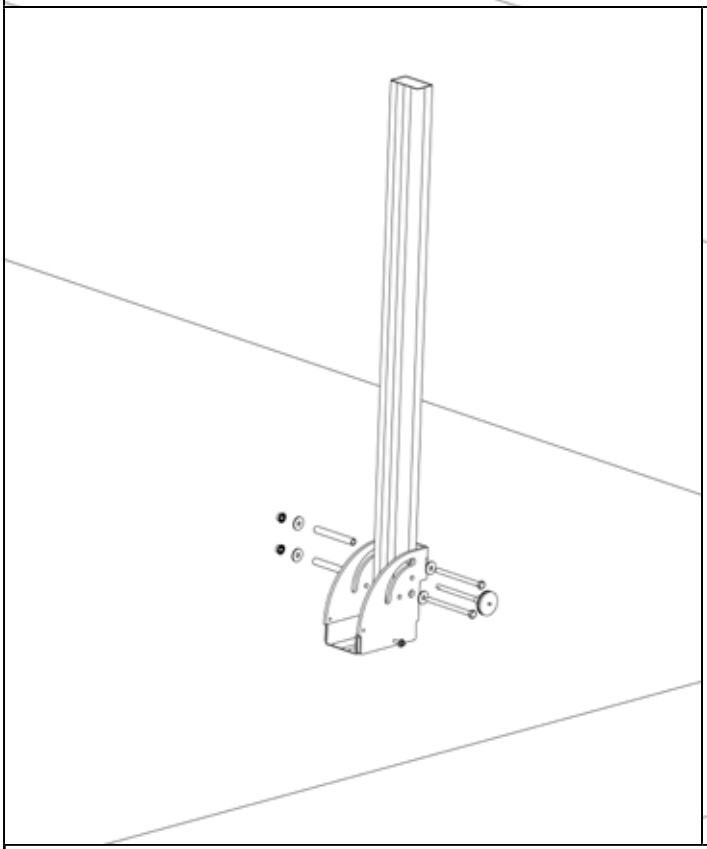
Fix the large piece of channel to the roof with 4x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing. With the supplied bolt, spacer, washers and nuts fasten the stanchion post to the support bracket.

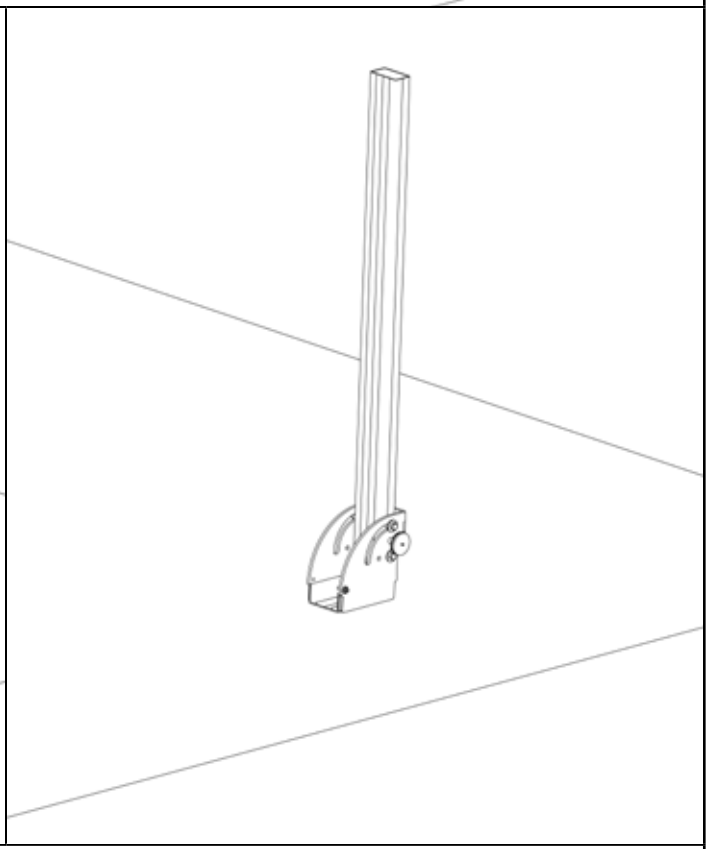
The guardrailing is locked in place (either up or down) by inserting the detent pin.

4.8 Fold Guardrail for Concrete

FIGURE 37





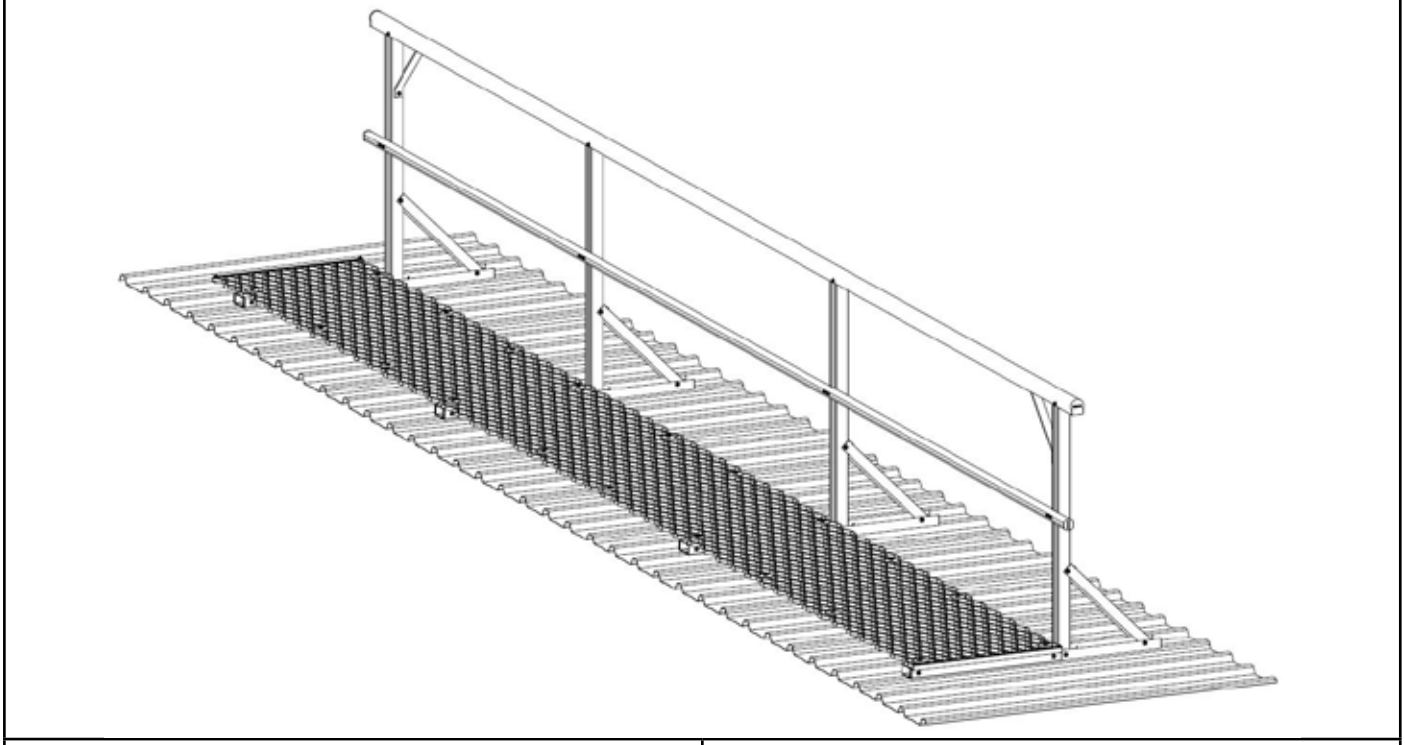


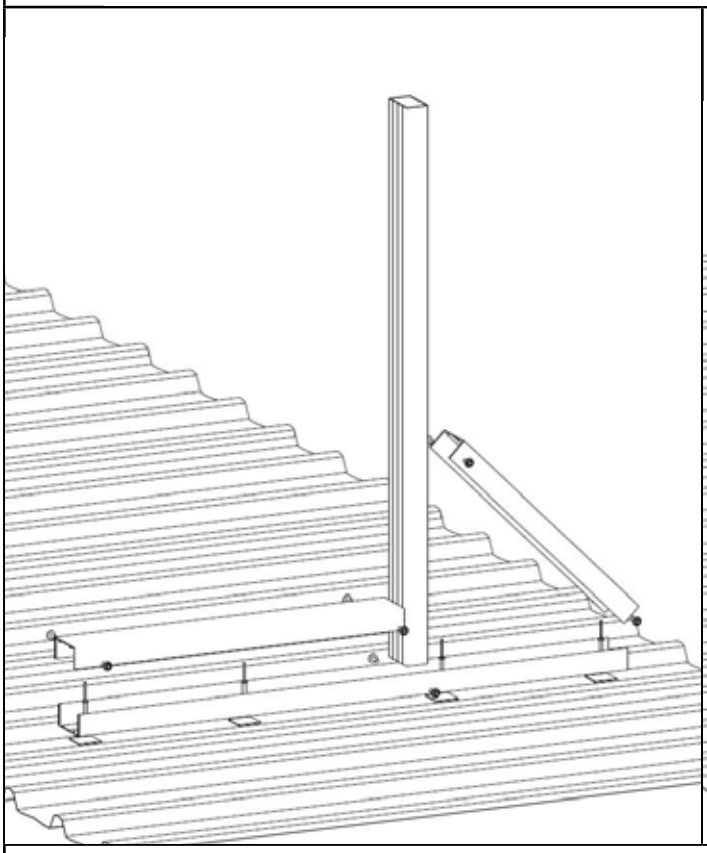
Fix the support bracket to the concrete with 2x fasteners from sections 3.3.6 or 3.3.7. With the supplied bolt, spacer, washers and nuts fasten the stanchion post to the support bracket.

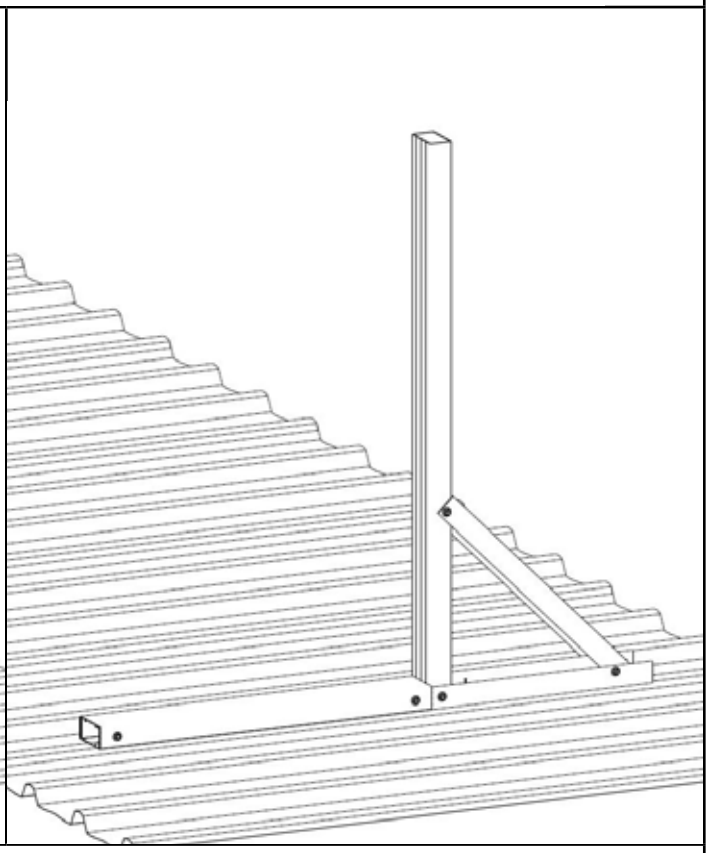
The guardrailing is locked in place (either up or down) by inserting the detent pin.

4.9 Single Guardrail with Walkway

FIGURE 38



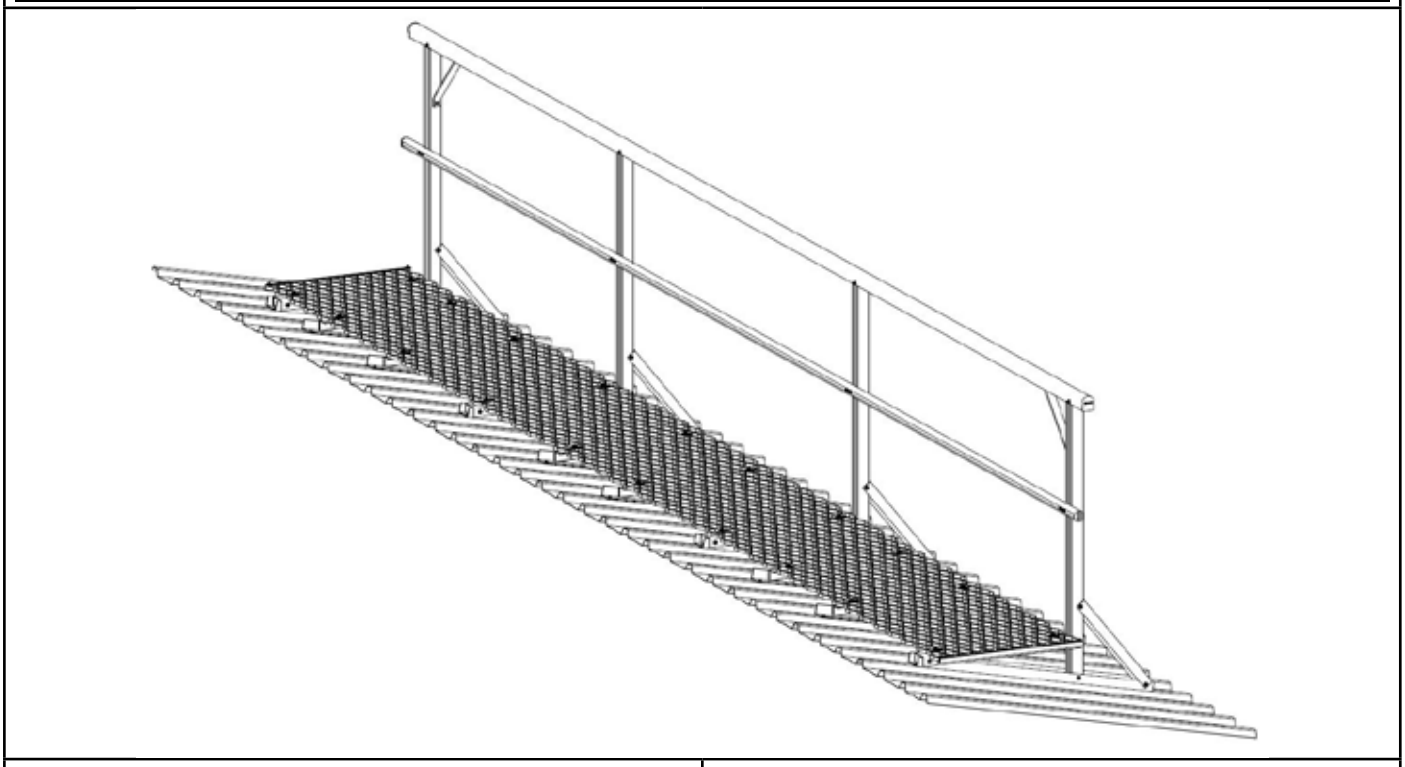


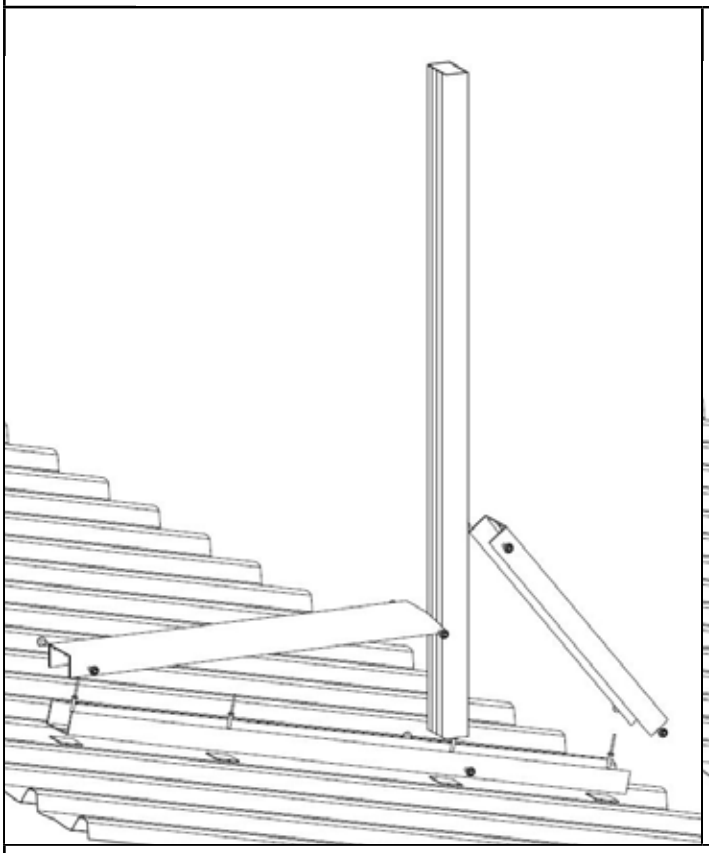


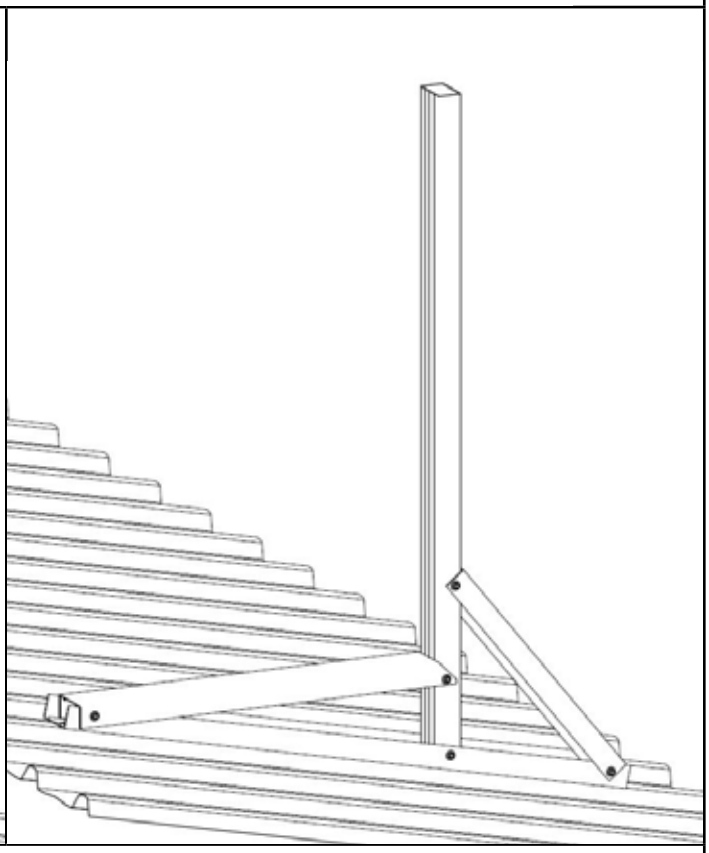
Fix the large piece of channel to the roof with 4x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing. With 2x 20mm tek screws fix the stanchion post to the channel. With 4x 20mm tek screws fix the cross brace to the stanchion post and the large channel. Finally fix the mesh support channel to the larger channel with 4x 20mm tek screws.

4.10 Single Guardrail with Levelled Walkway

FIGURE 39



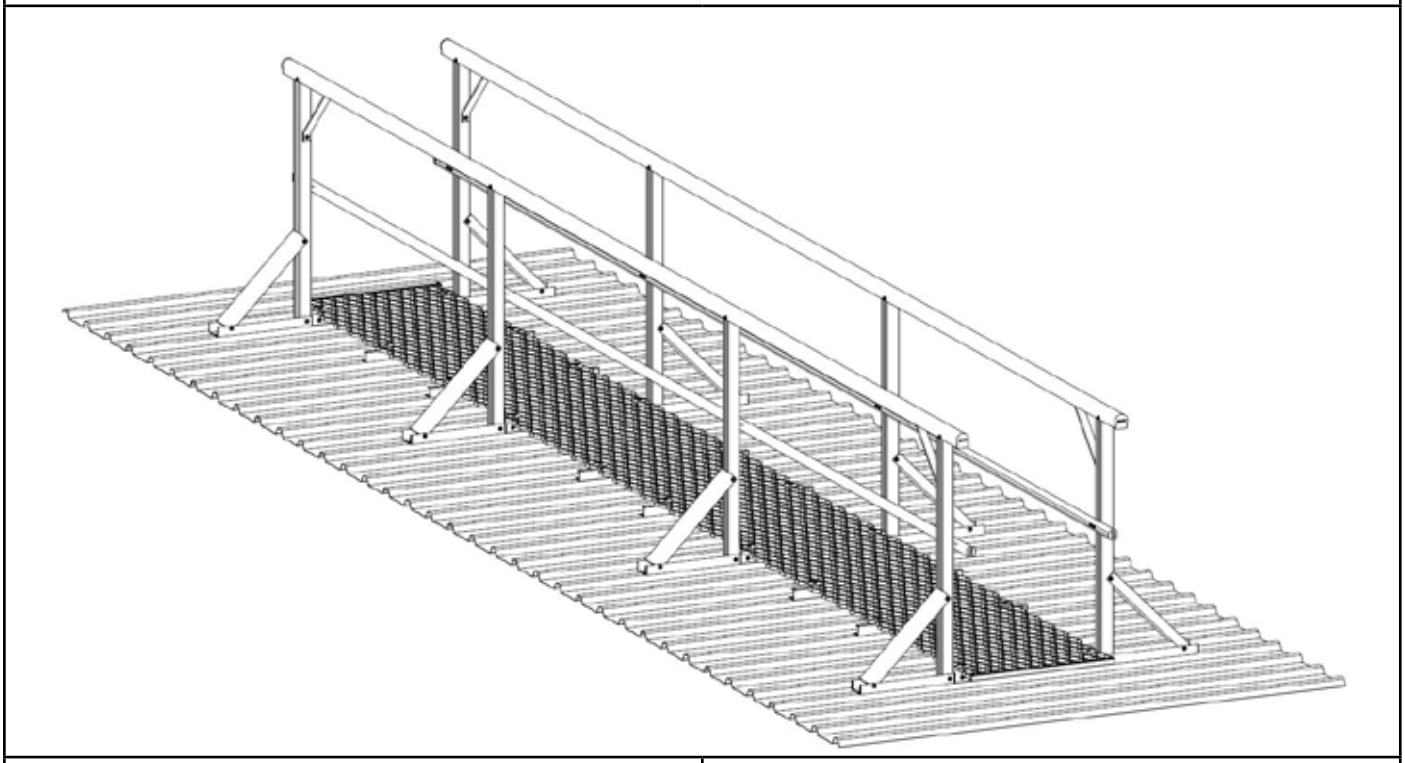


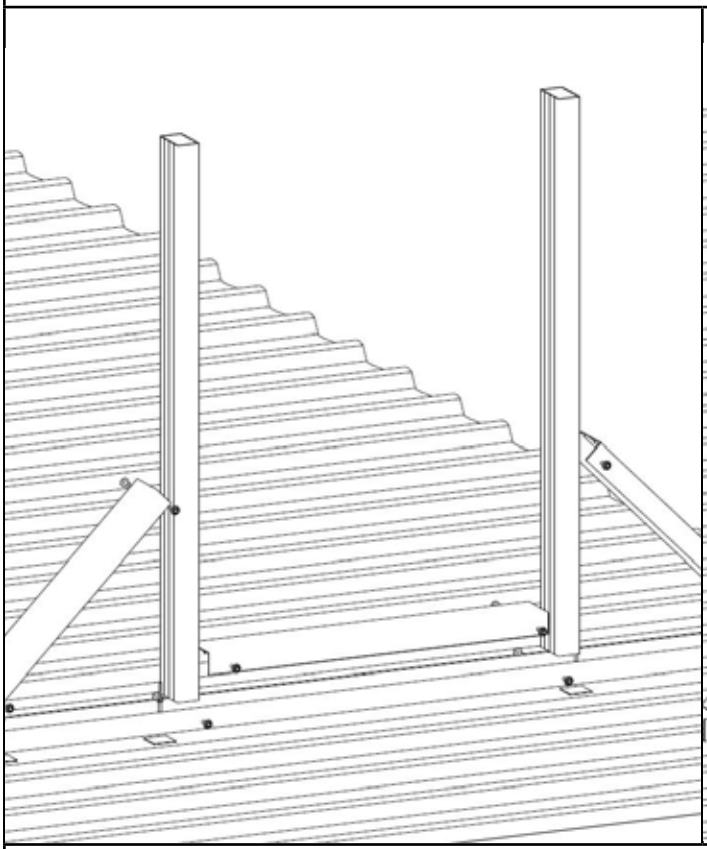


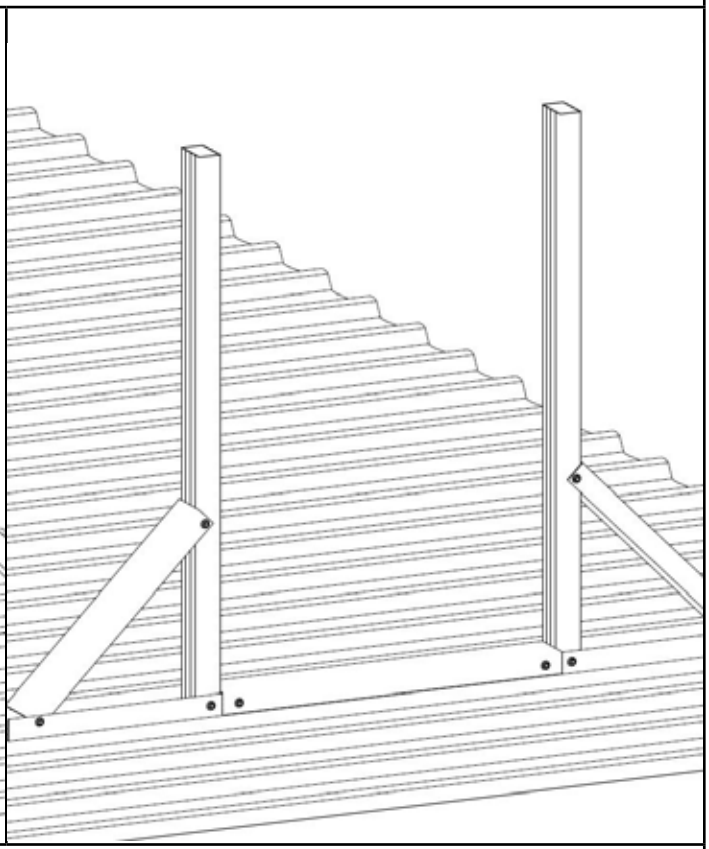
Fix the large piece of channel to the roof with 4x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing. With 2x 20mm tek screws fix the stanchion post to the channel. With 4x 20mm tek screws fix the cross brace to the stanchion post and the large channel. Finally fix the mesh support channel to the larger channel with 2x 20mm tek screws and to the stanchion post with 2x 20mm tek screws.

4.11 Twin Guardrail with Walkway

FIGURE 40



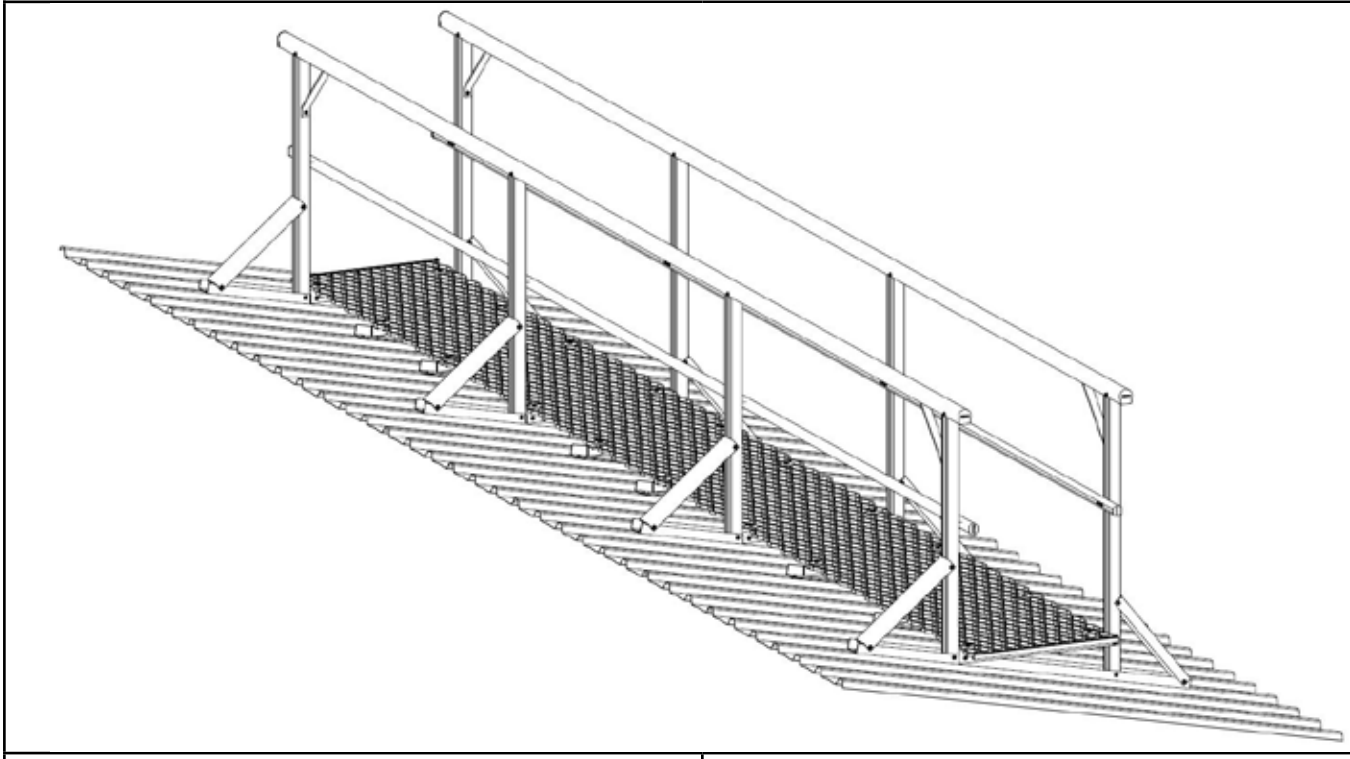


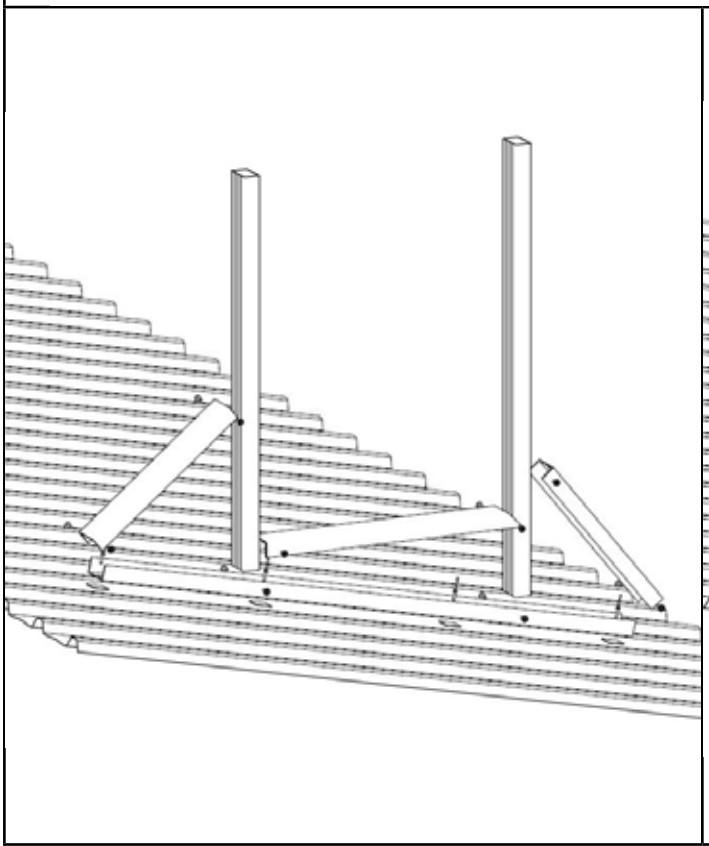


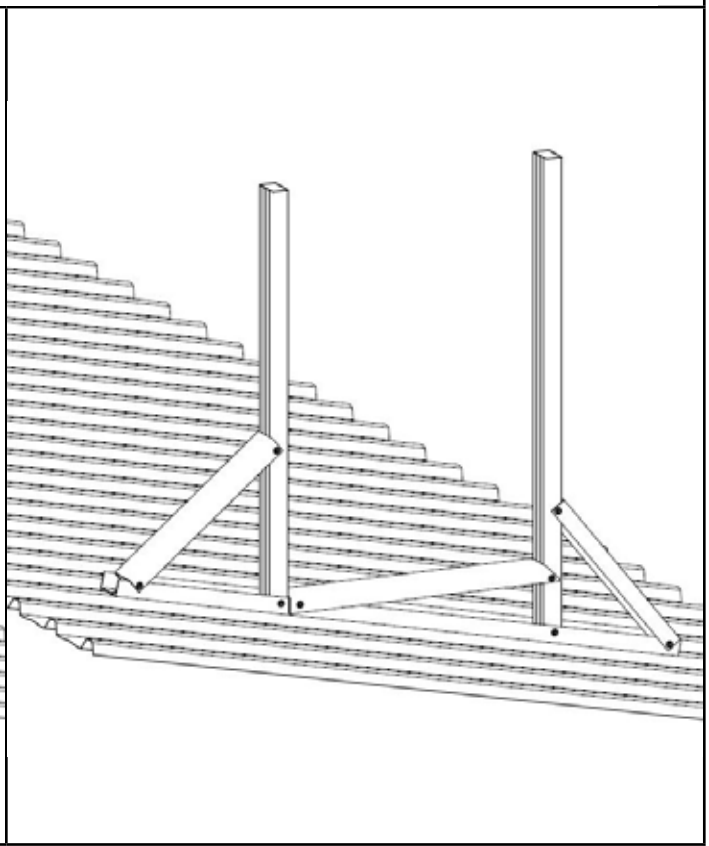
Fix the large piece of channel to the roof with 4x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing. With 2x 20mm tek screws fix each stanchion post to the channel. With 4x 20mm tek screws fix each cross brace to the stanchion post and the large channel. Finally fix the mesh support channel to the larger channel with 4x 20mm tek screws.

4.12 Twin Guardrail with Levelled Walkway

FIGURE 41





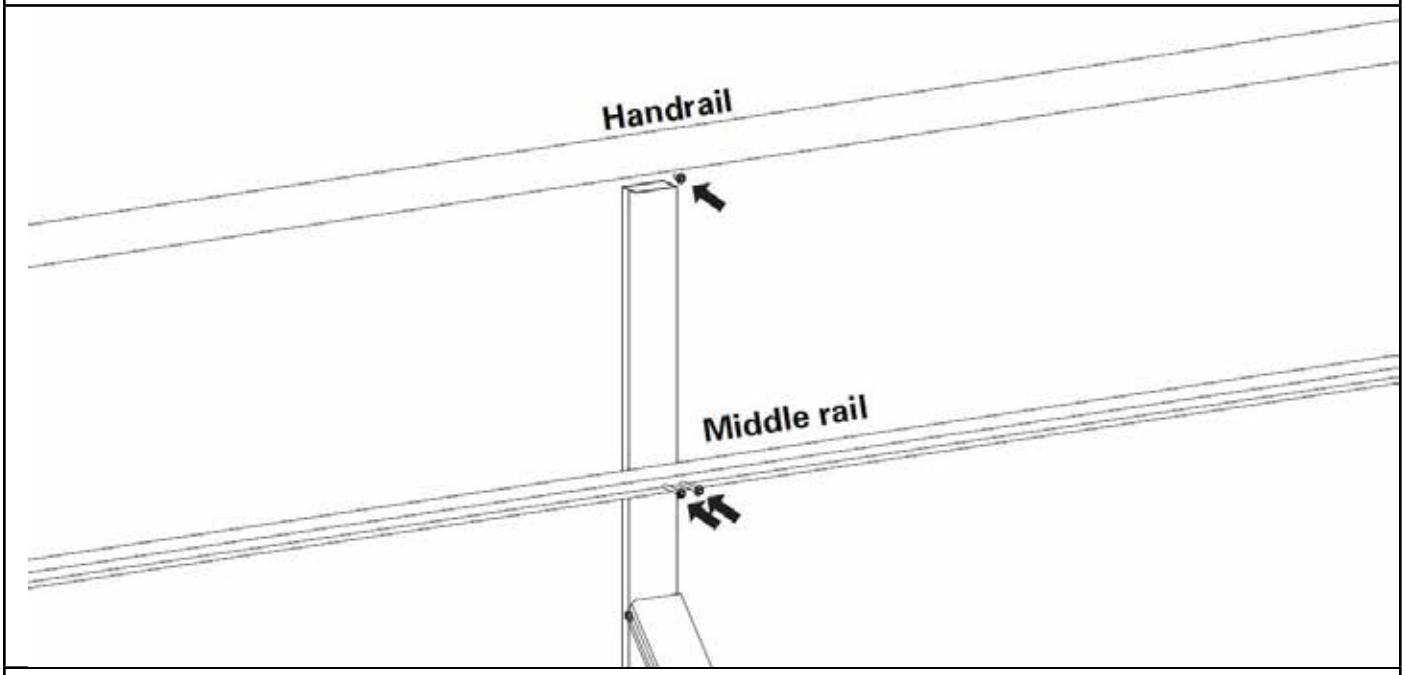


Fix the large piece of channel to the roof with 4x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing. With 2x 20mm tek screws fix each stanchion post to the channel. With 4x 20mm tek screws fix each cross brace to the stanchion post and the large channel. Finally fix the mesh support channel to the larger channel with 2x 20mm tek screws and to the stanchion post with 2x 20mm tek screws.

5 Component Assembly

5.1 Guardrails

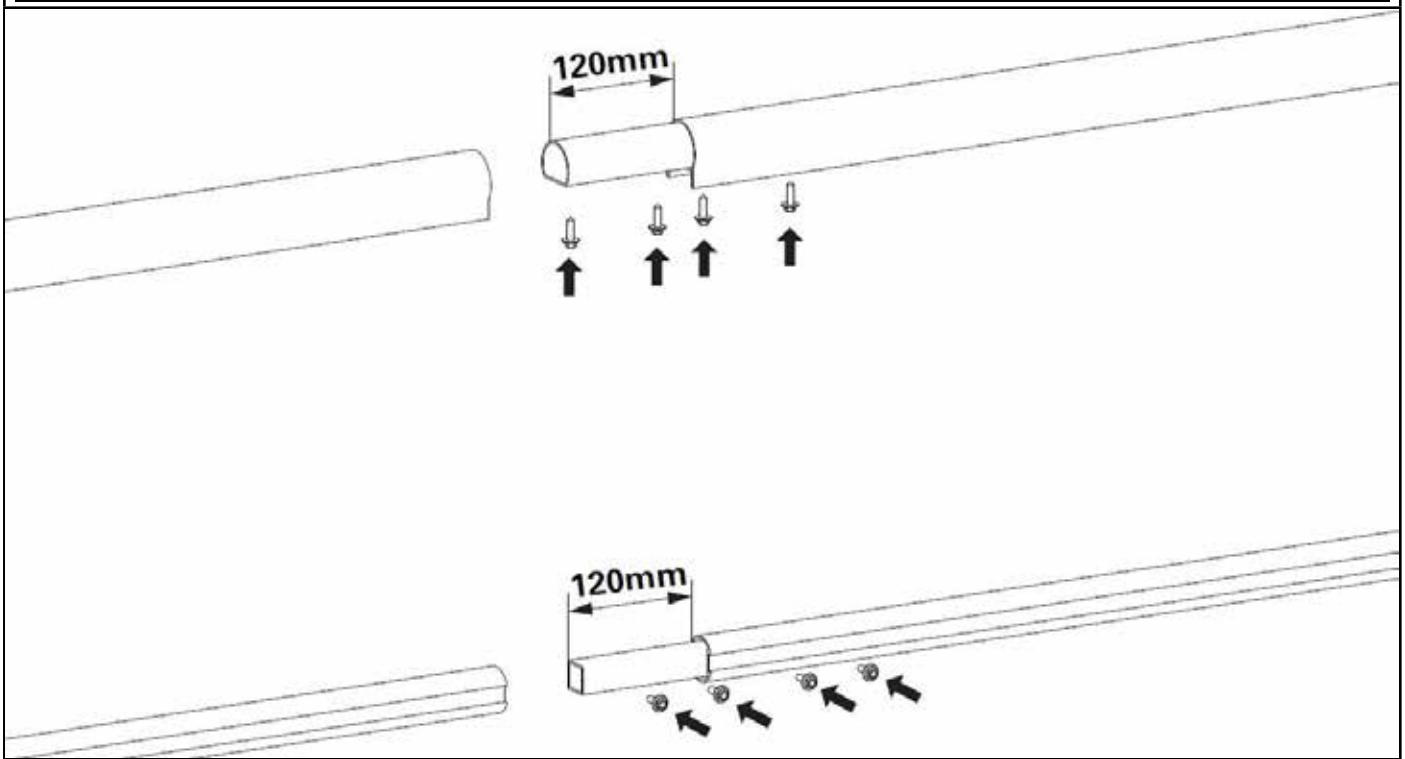
FIGURE 42



The handrail shall be fixed to each stanchion with 2x 20mm tek screws, one in each side of the stanchion. All middle rails shall be fixed with 2x 50mm tek screws in to each stanchion. The 2 tek screws shall be installed from the same side, through the centre of the middle rail.

5.2 Guardrail Joins

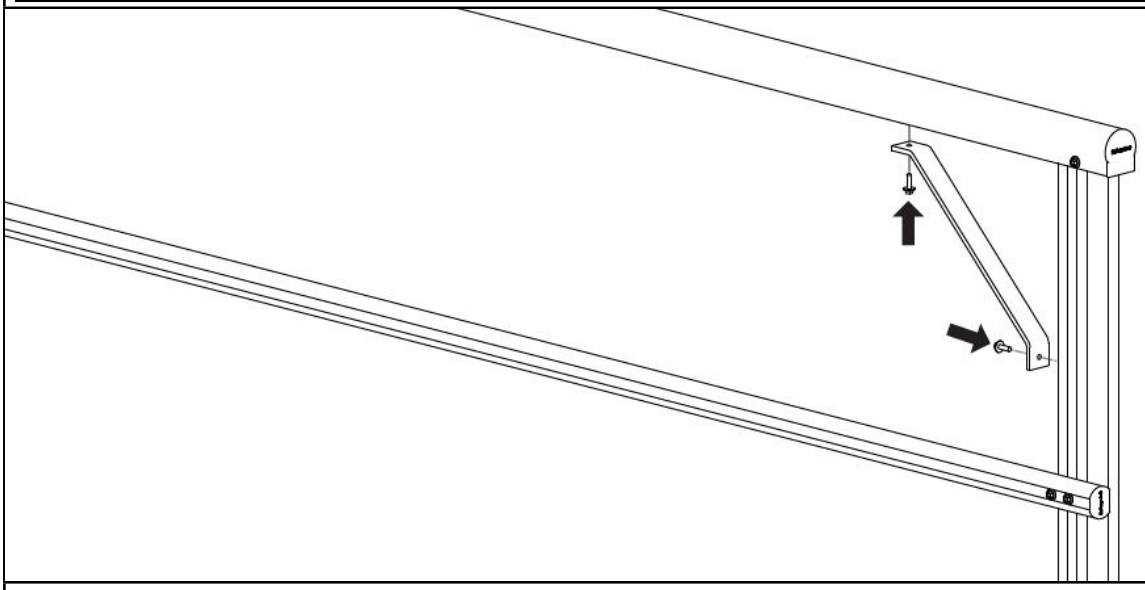
FIGURE 43



When joining handrails and middle rails, insert the appropriate slice piece half way in to the profile and fix with 2x 20mm tek screws. Slide the next length of rail over the exposed part of slice and fix with 2x 20mm tek screws. Handrail screws shall be installed from underneath. Middle rail screws shall be installed in the side.

5.3 Brace

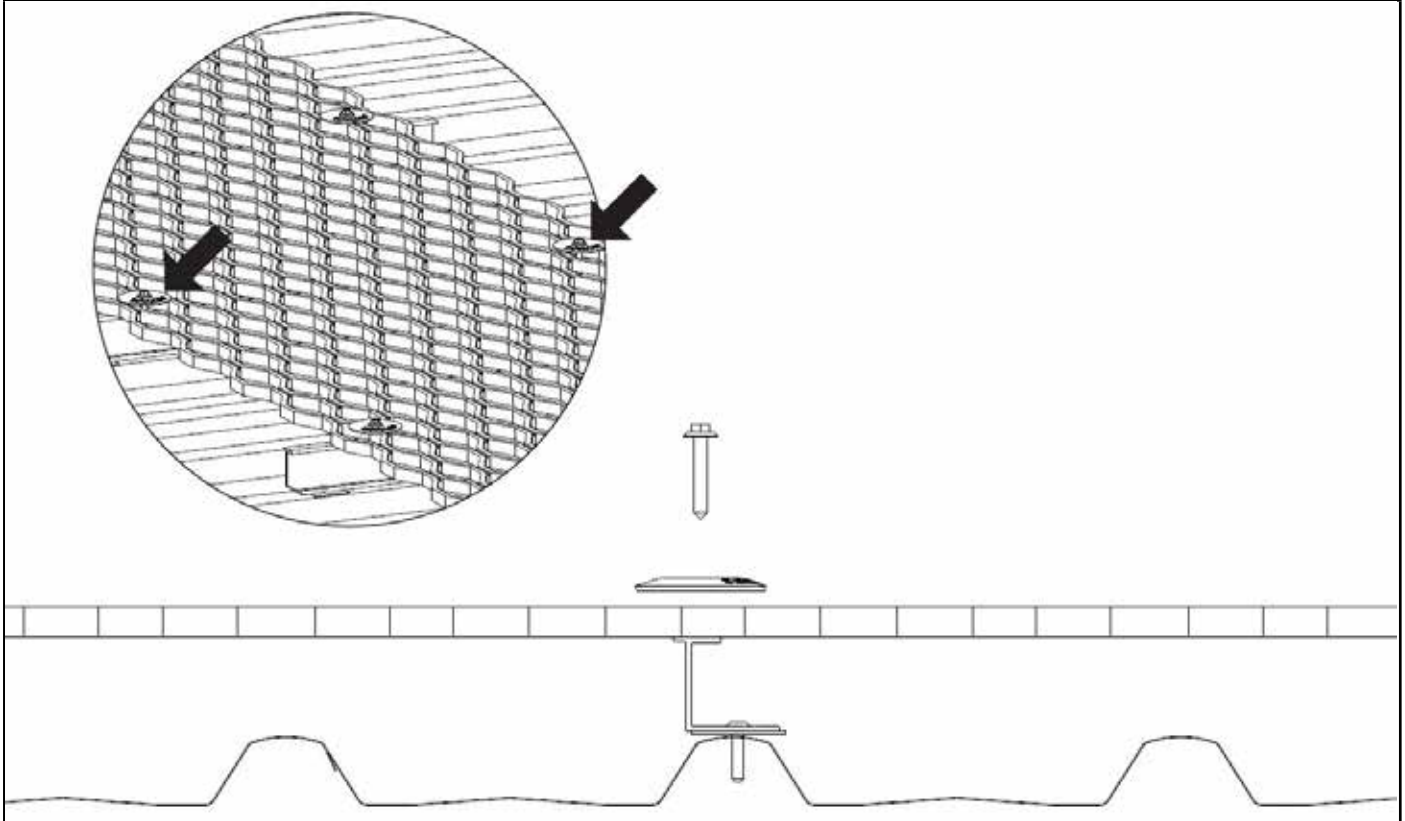
FIGURE 44



Braces shall be installed with 2x 20mm tek screws. One in to the handrail profile from underneath, the other in to the side of the stanchion. Braces shall be installed at the ends of the guardrail

5.4 Mesh Fastening

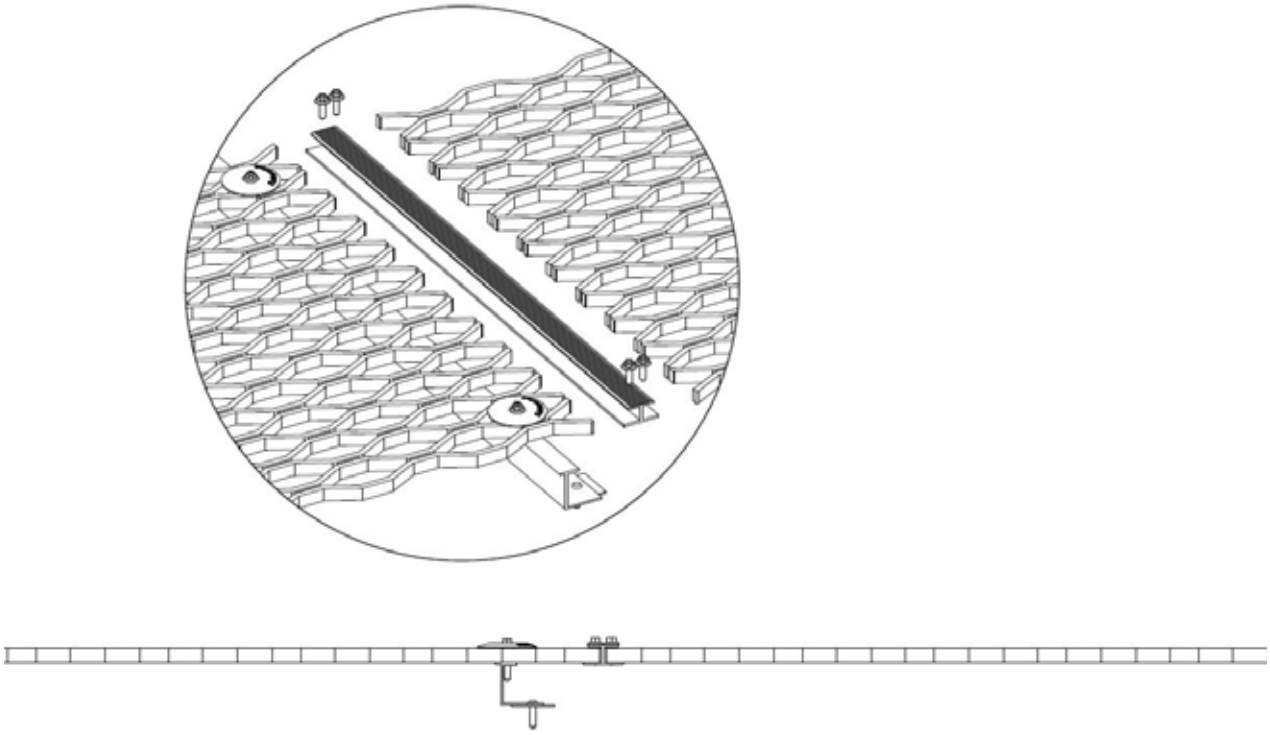
FIGURE 45



Walkway mesh shall be fixed with 2x 35mm tek screws in to each mesh support batten. Each screw shall be installed with a 50mm aluminium walkway mesh washer.

5.5 Mesh Joins

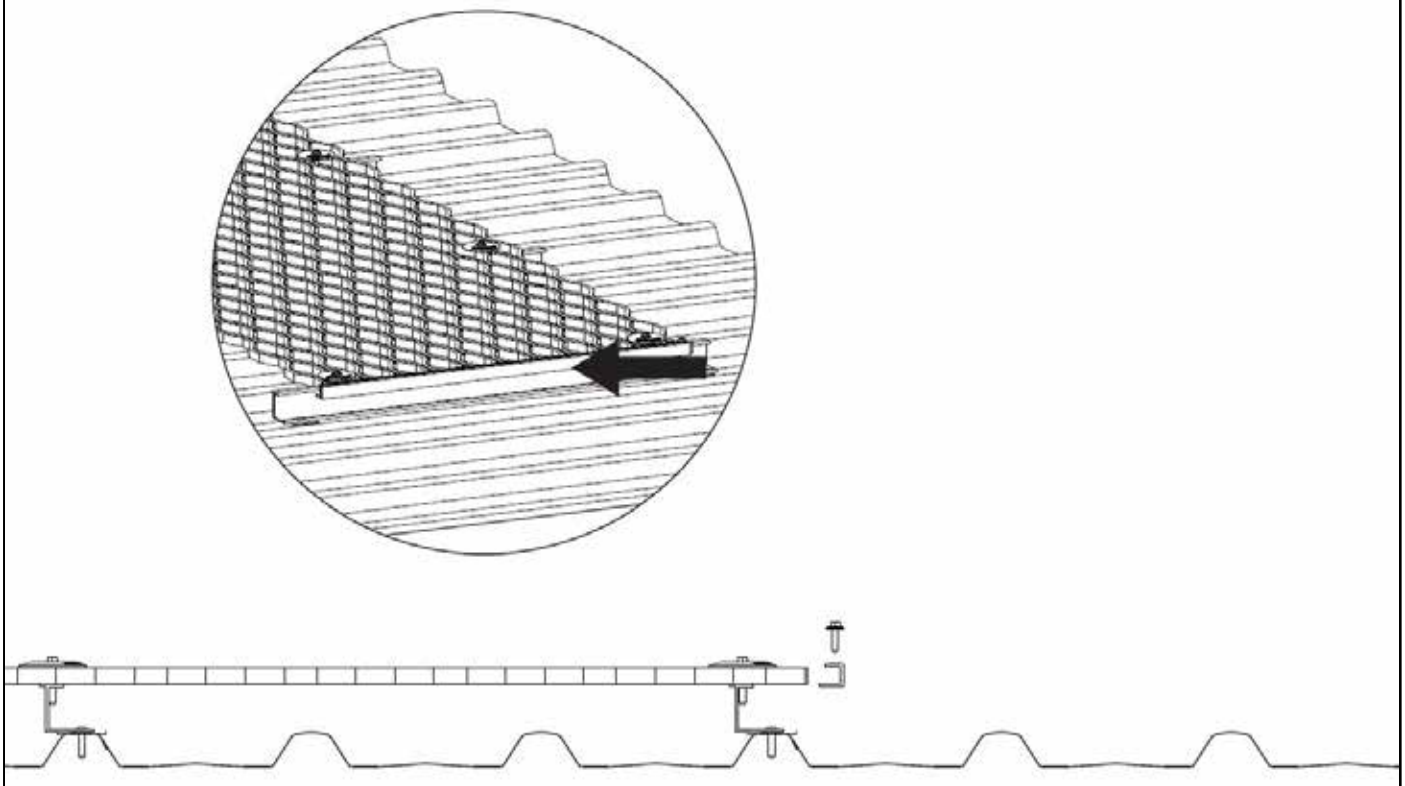
FIGURE 46



When joining 2 sheets of walkway mesh, the joiner bar shall be installed with 2x 20mm tek screws in to each piece of mesh.

5.6 Mesh Ends

FIGURE 47

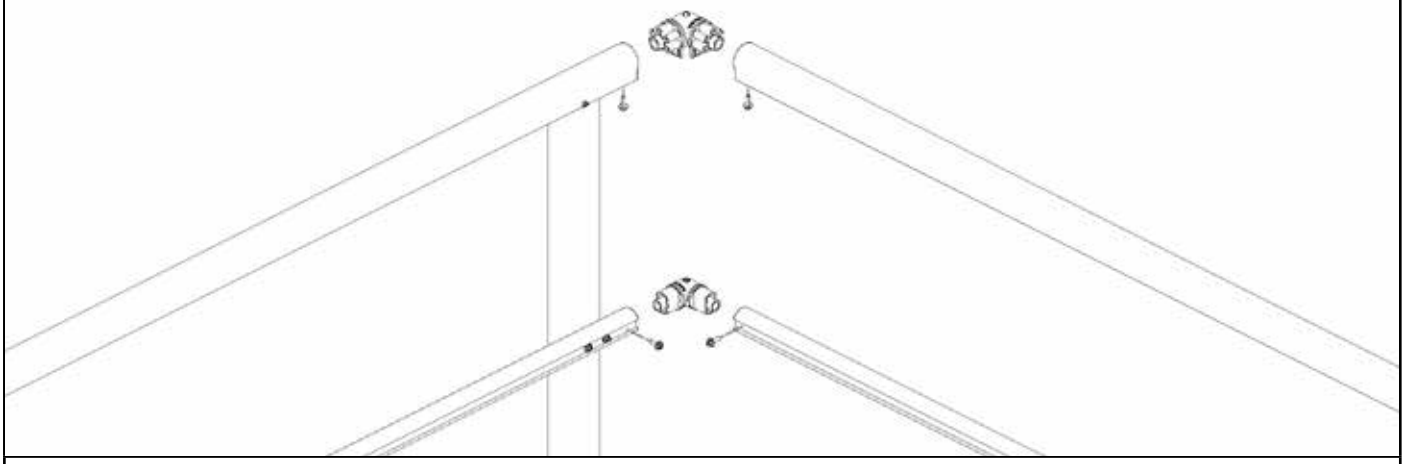


The end of a sheet of walkway mesh shall be cap with an end bar. The end bar shall be fix with 2x 20mm tek screws.

☑ If the end of the mesh represents a change in levels, the end bar shall be yellow.

5.7 Rail Corners

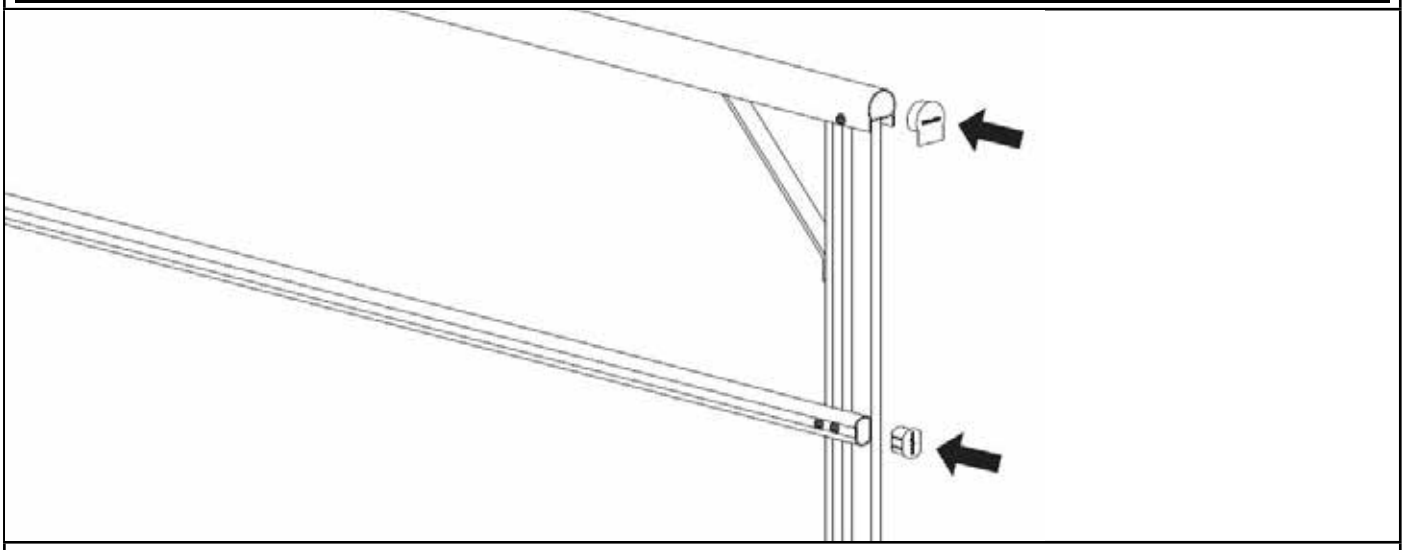
FIGURE 48



Install the rail corners with a 20mm tek screw in each side. Handrail screws shall be installed from underneath. Middle rail screws shall be installed in the side.

5.8 Rail Caps

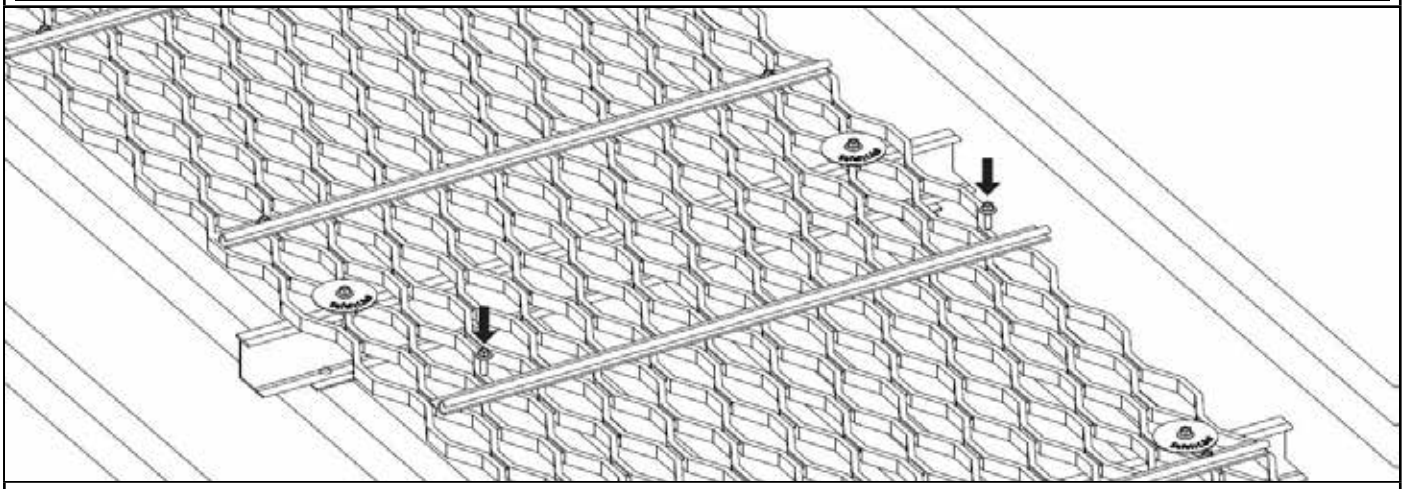
FIGURE 49



Install end caps with a rubber mallet.

5.9 Cleats

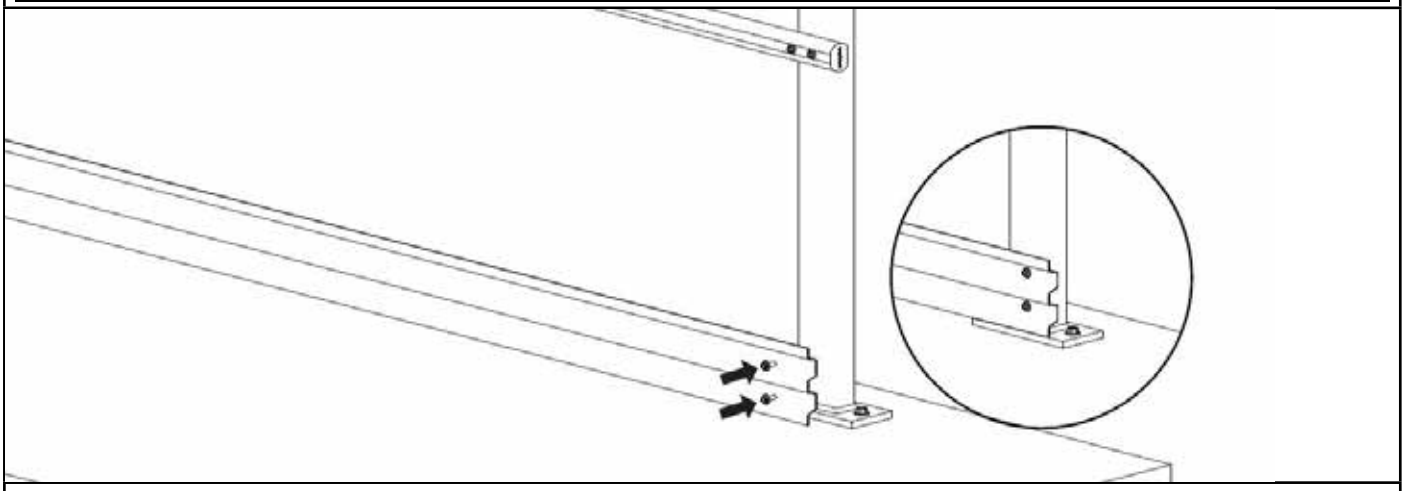
FIGURE 50



Cleats shall be fixed with 2x 20mm tek screws.

5.10 Toeboard

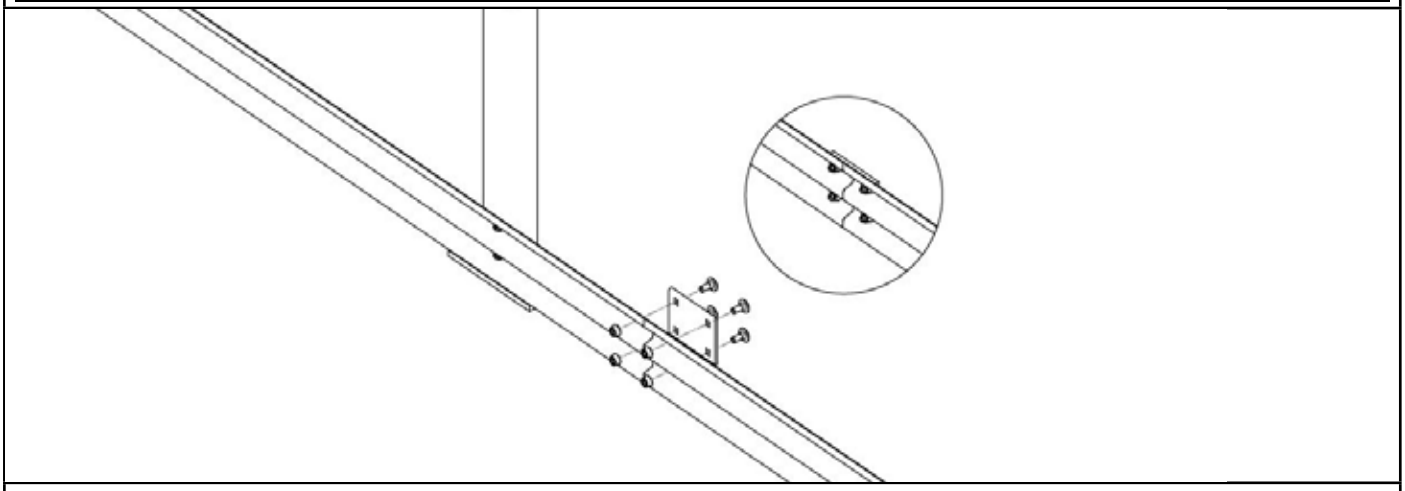
FIGURE 51



The toe board shall be fixed with 2x 20mm tek screws in to each stanchion.

5.11 Toeboard Join

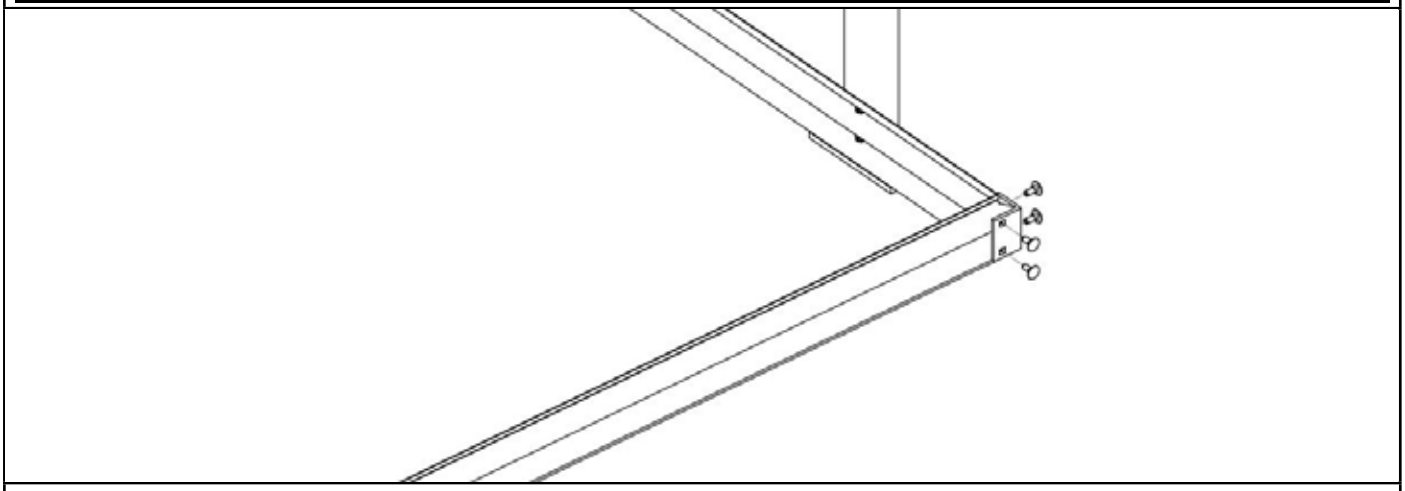
FIGURE 52



The toeboard shall be joined with a joiner plate and 4x M8x20 cup head screws.

5.12 Toeboard Corner

FIGURE 53



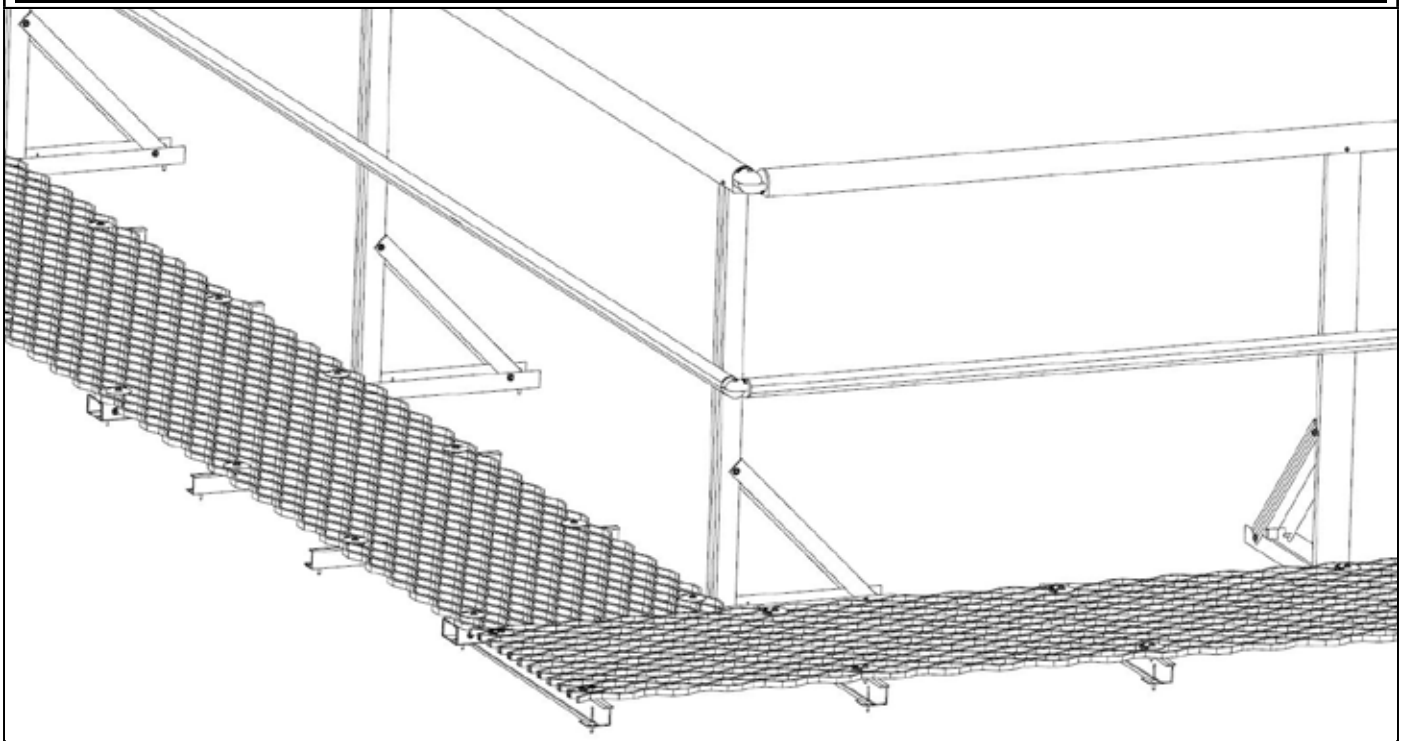
Toeboard corners shall be joined with a corner piece and 4x M8x20 cup head screws.

6 Corner Kits

6.1 Kit 1

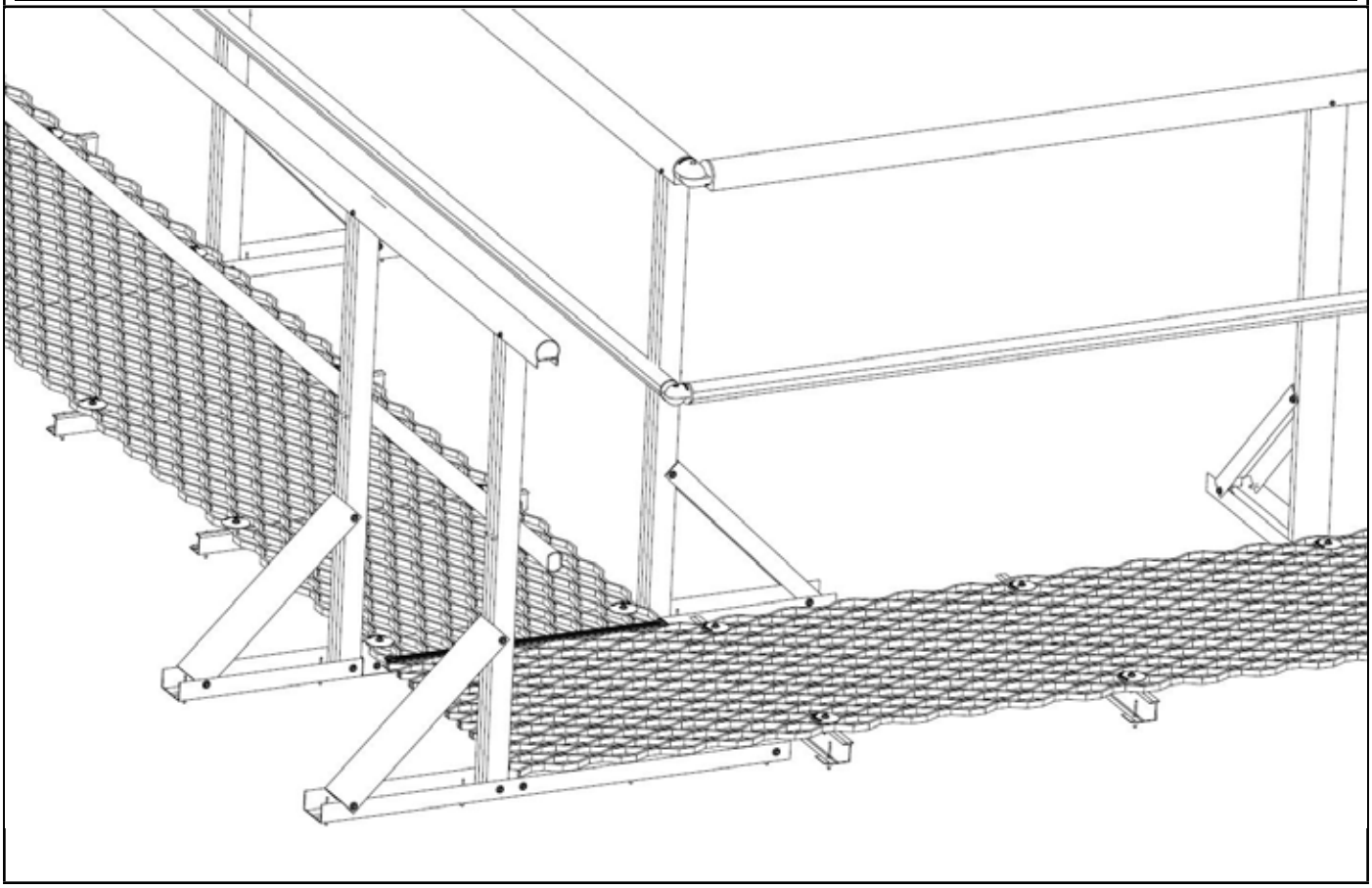
6.1.1 Single Guardrail Corner (Flat Roof)

FIGURE 54



6.1.2 Double Guardrail to Single Guardrail Corner (Flat Roof)

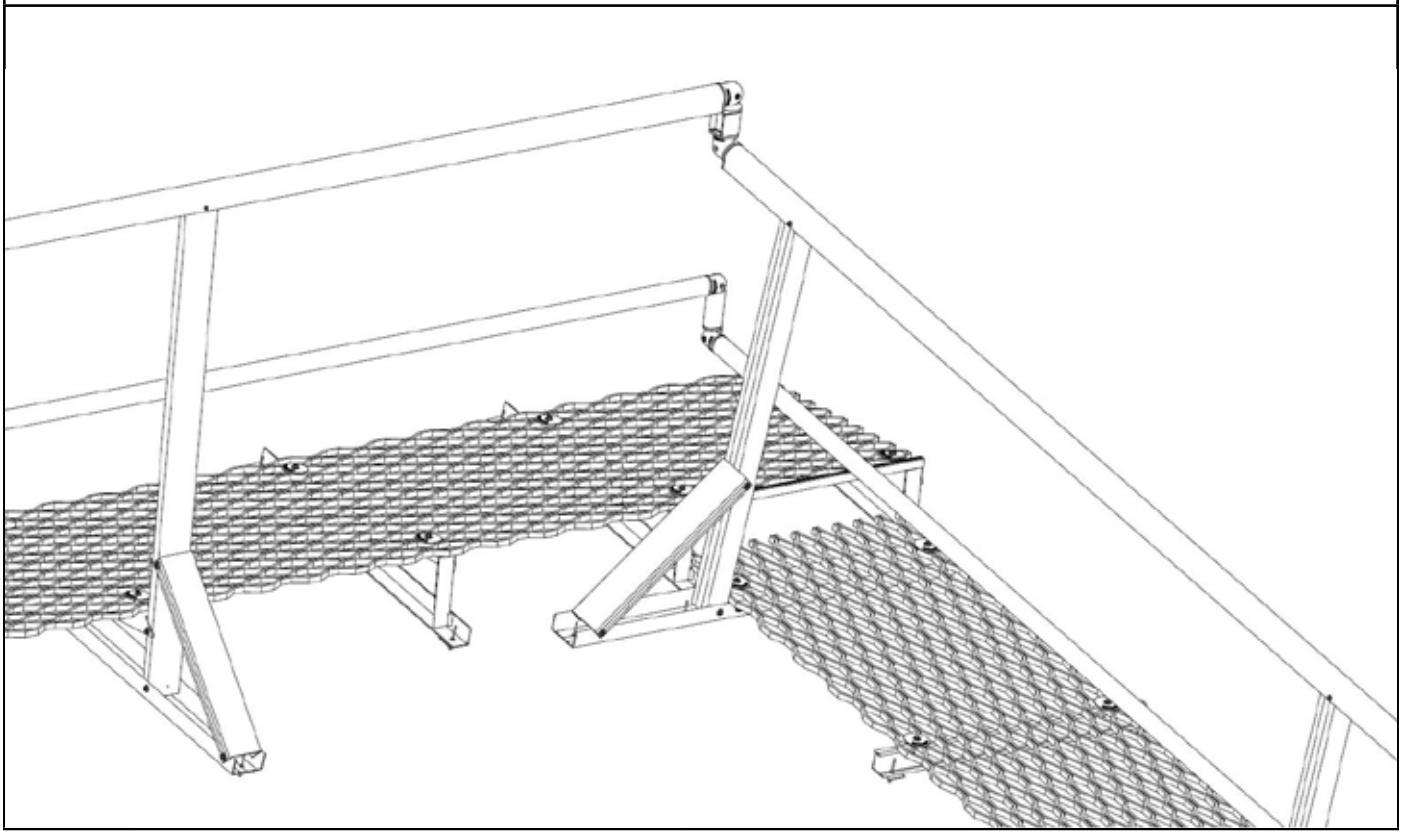
FIGURE 55



6.2 Kit 2

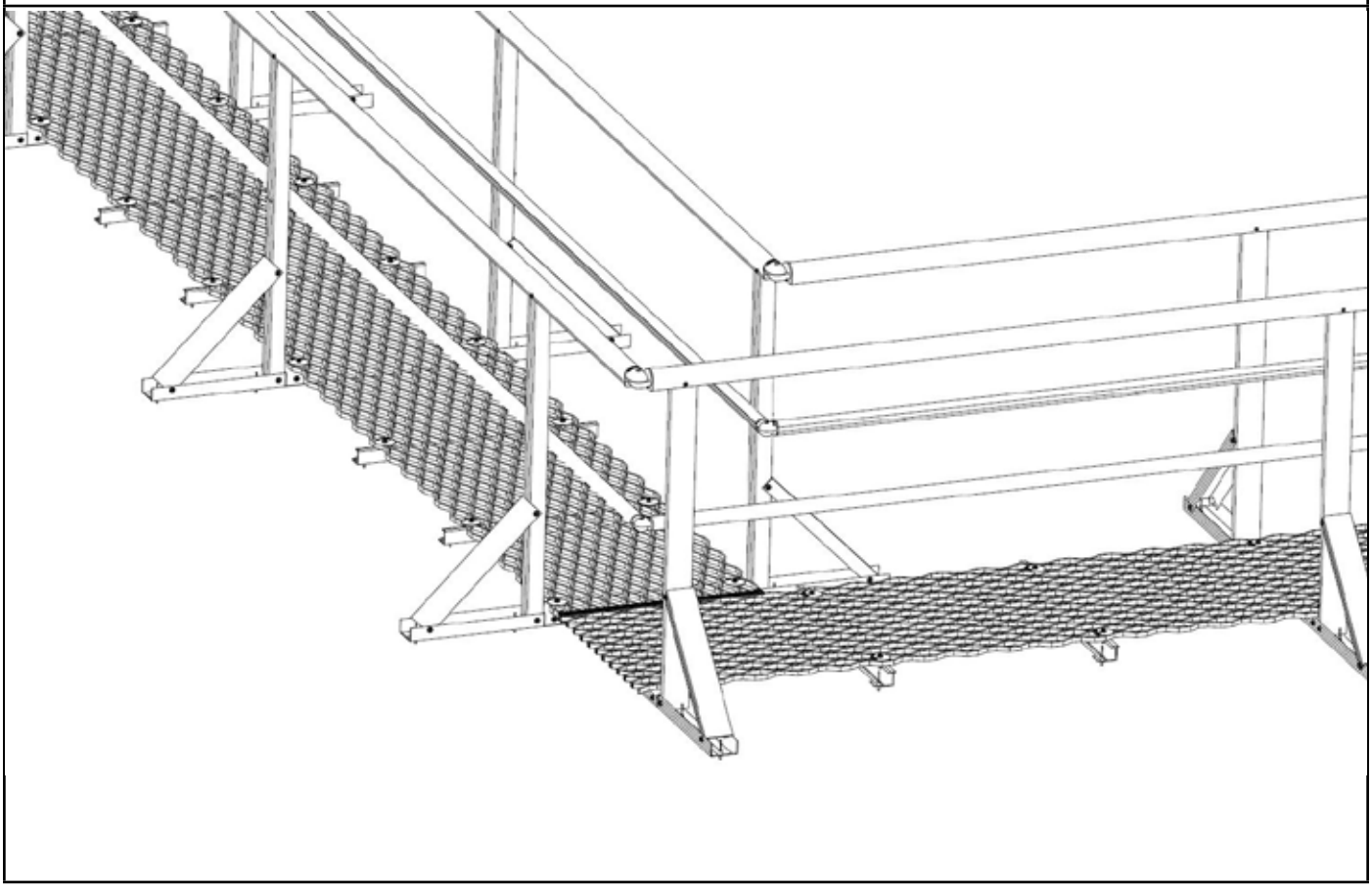
6.2.1 Single Guardrail Corner (Angled Roof)

FIGURE 56



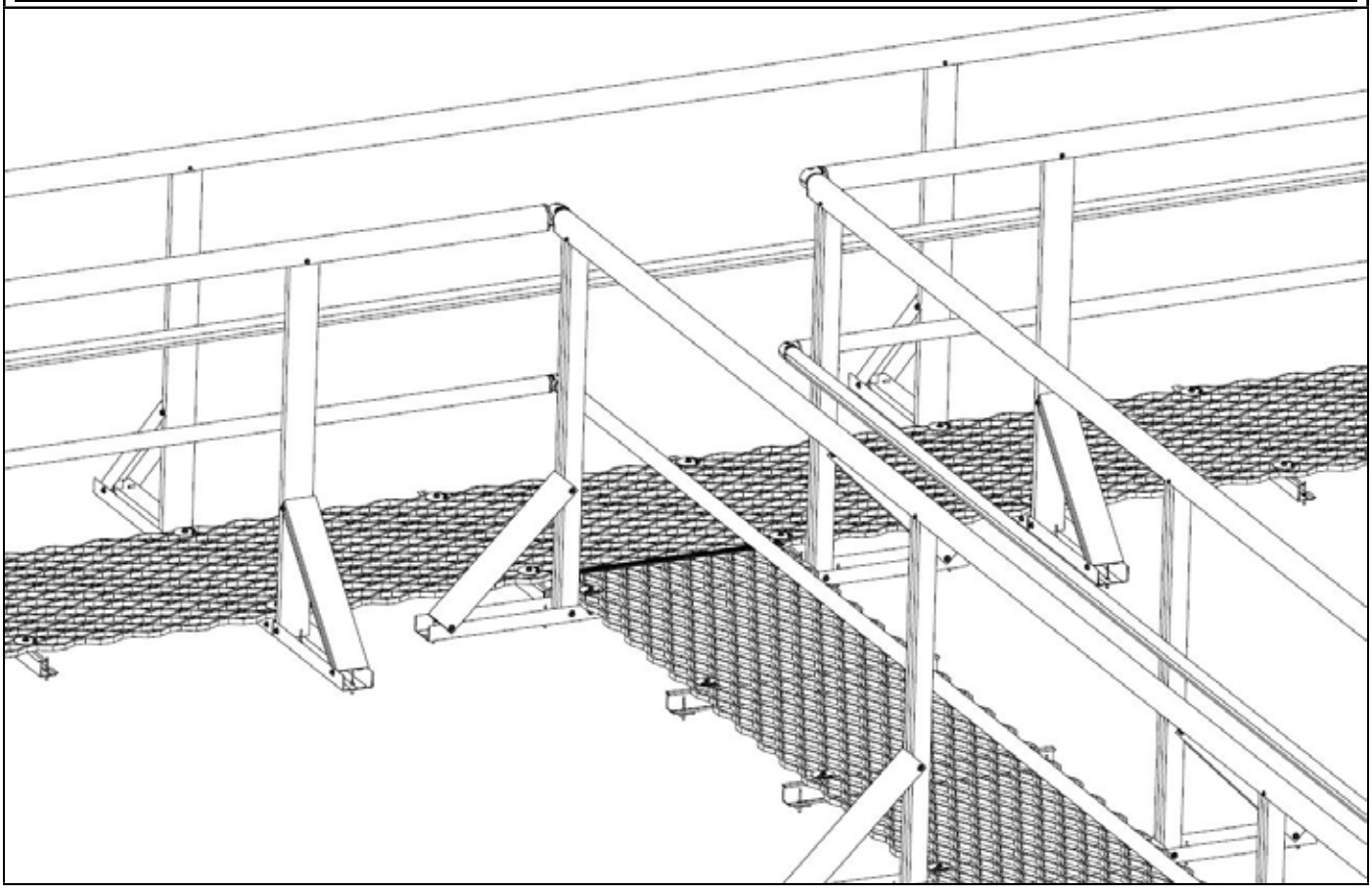
6.2.2 Double Guardrail Corner (Flat Roof)

FIGURE 57



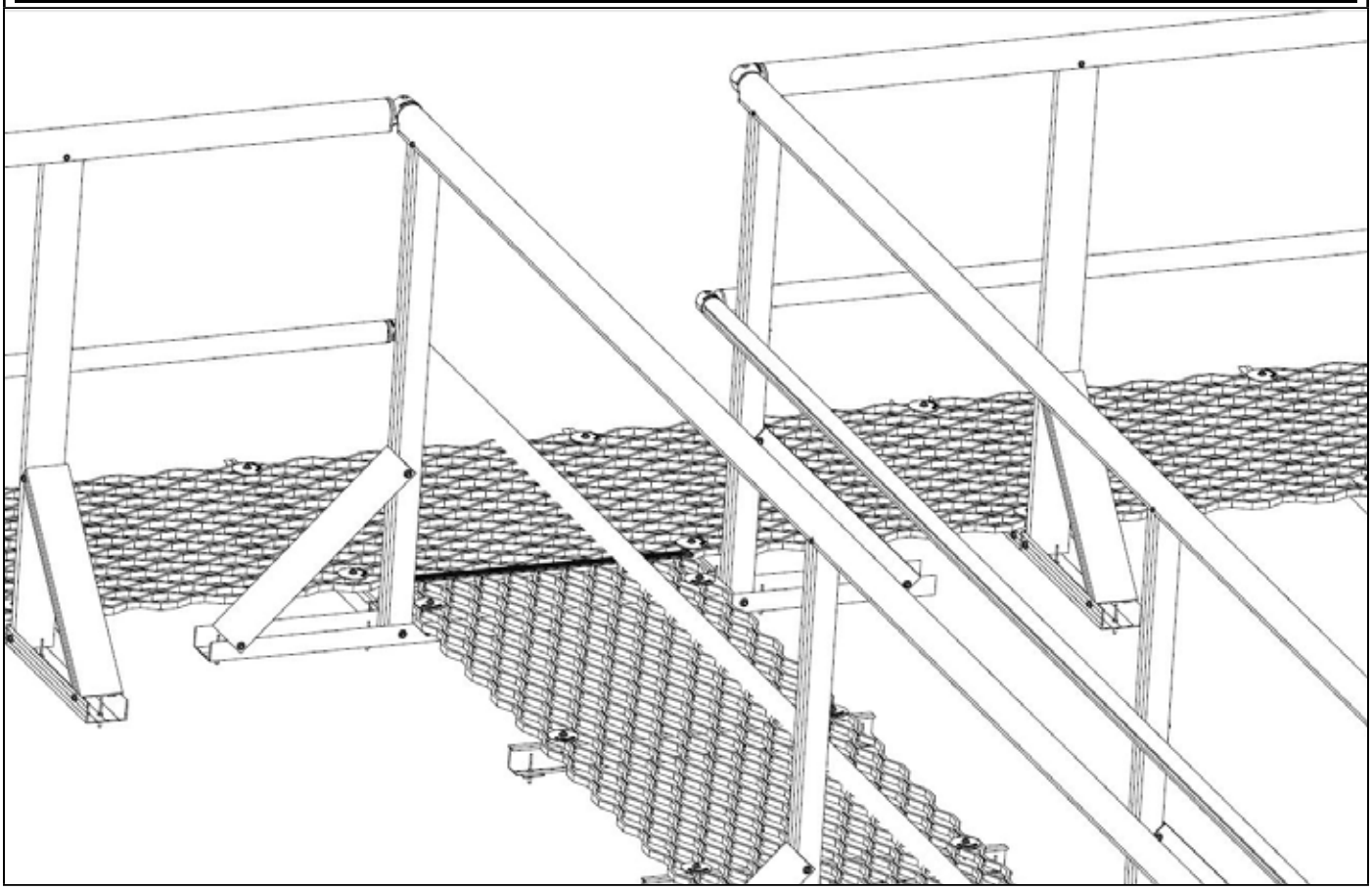
6.2.3 Double Guardrail T-Intersection (Flat Roof)

FIGURE 58



6.2.4 Double Guardrail to Single Guardrail T-Intersection (Flat Roof)

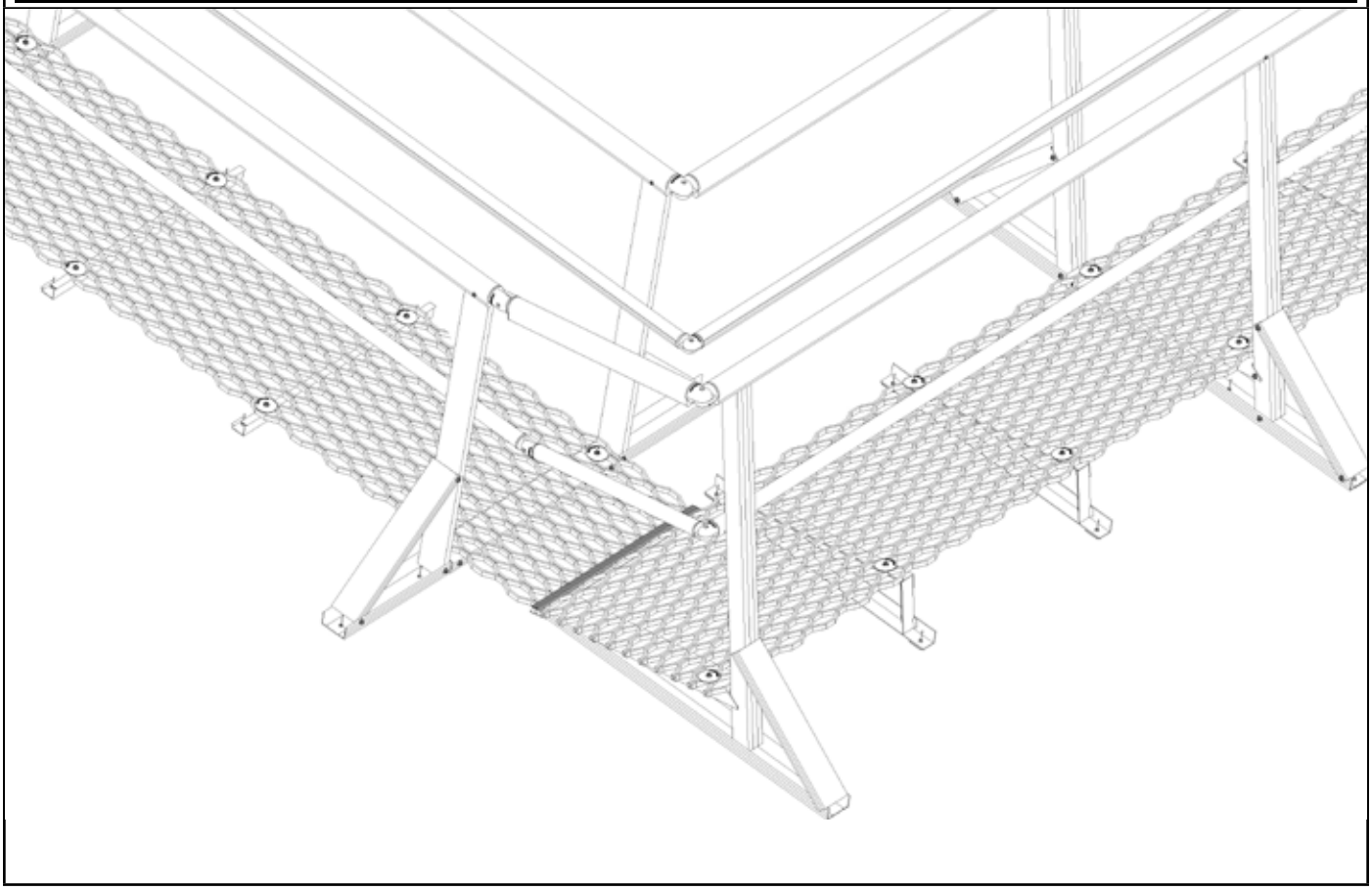
FIGURE 59



6.3 Kit 3

6.3.1 Double Guardrail Corner (Angled Roof)

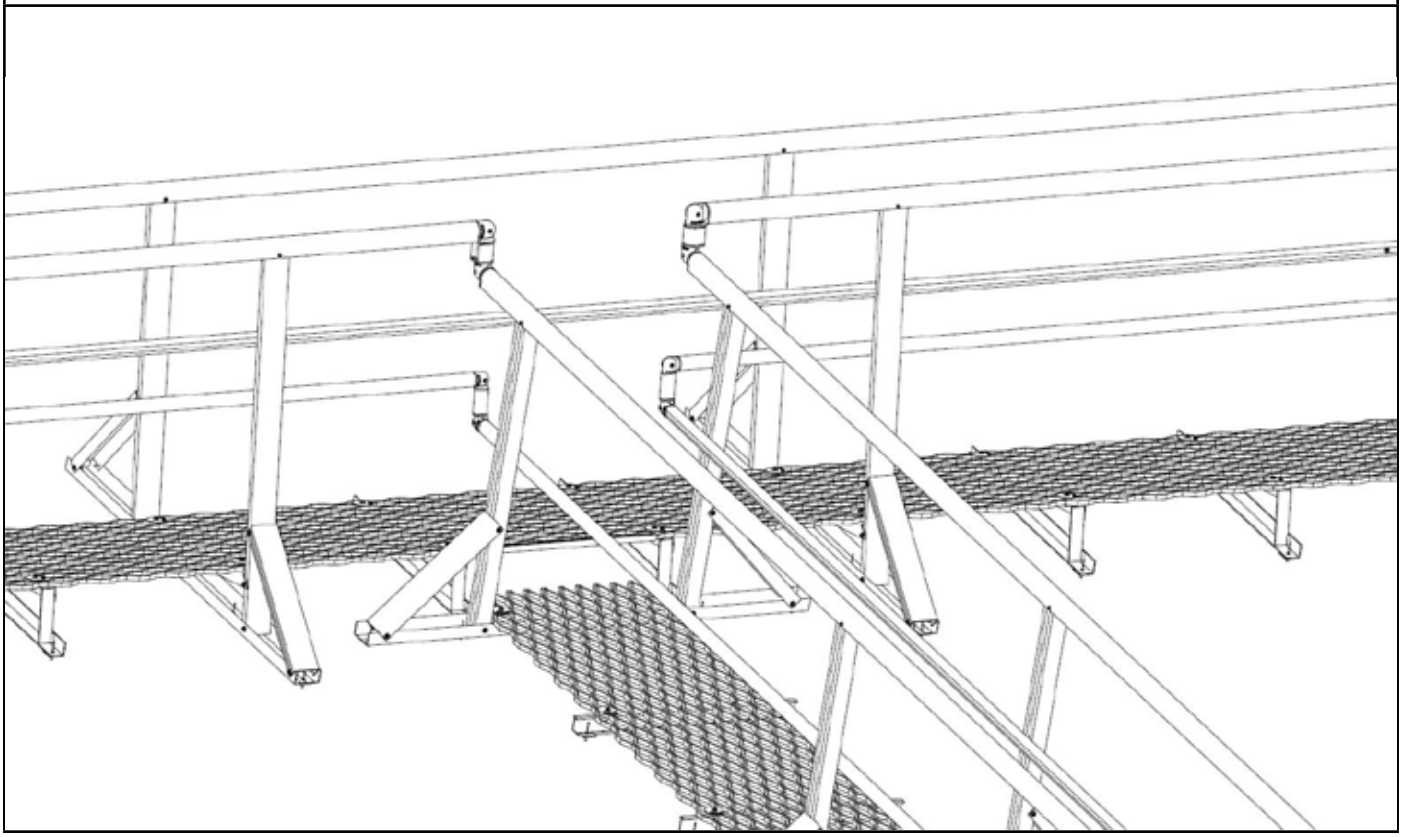
FIGURE 60



6.4 Kit 4

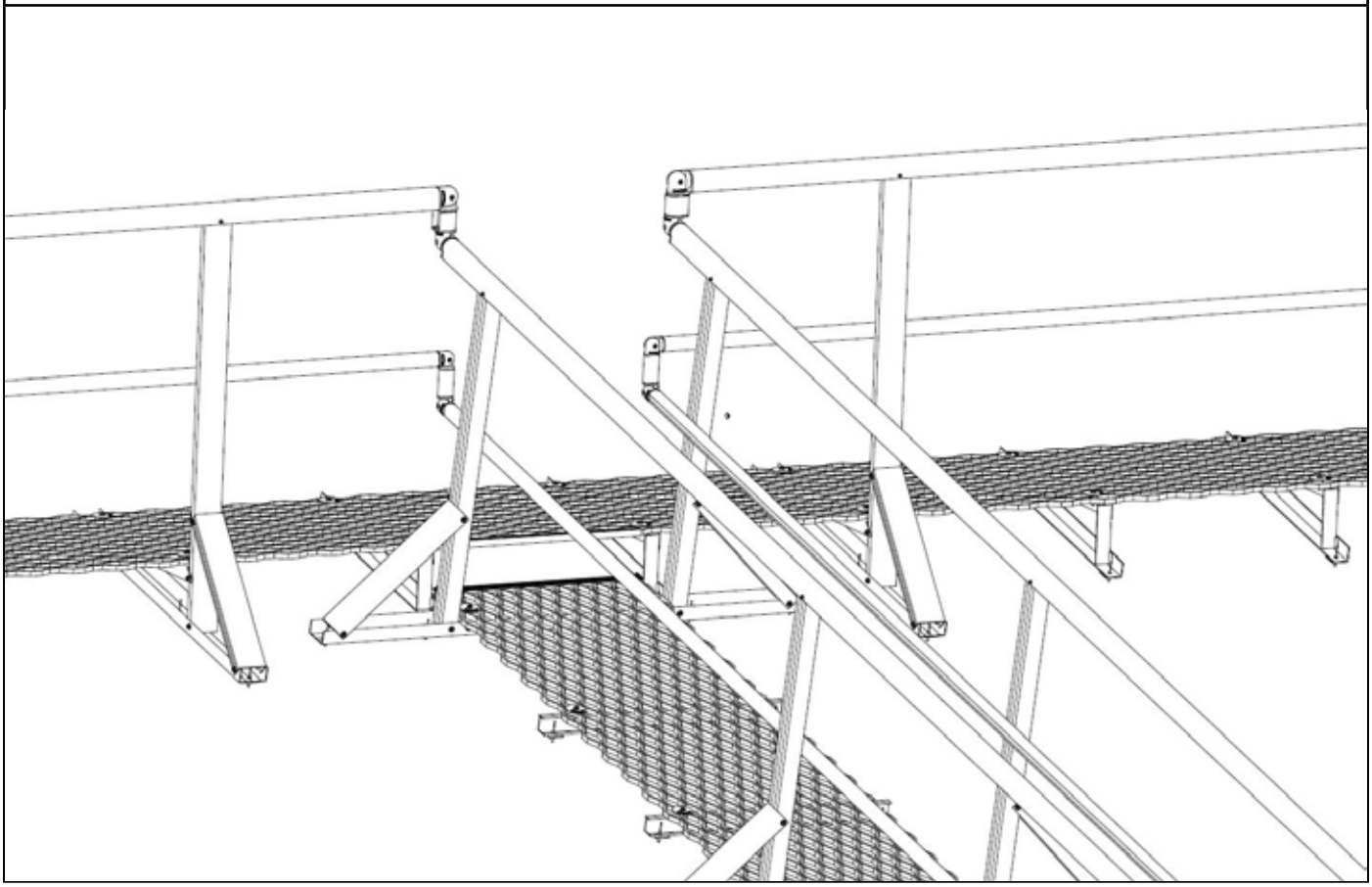
6.4.1 Double Guardrail T-Intersection (Angled Roof)

FIGURE 61



6.4.2 Double Guardrail to Single Guardrail T-Intersection (Angled Roof)

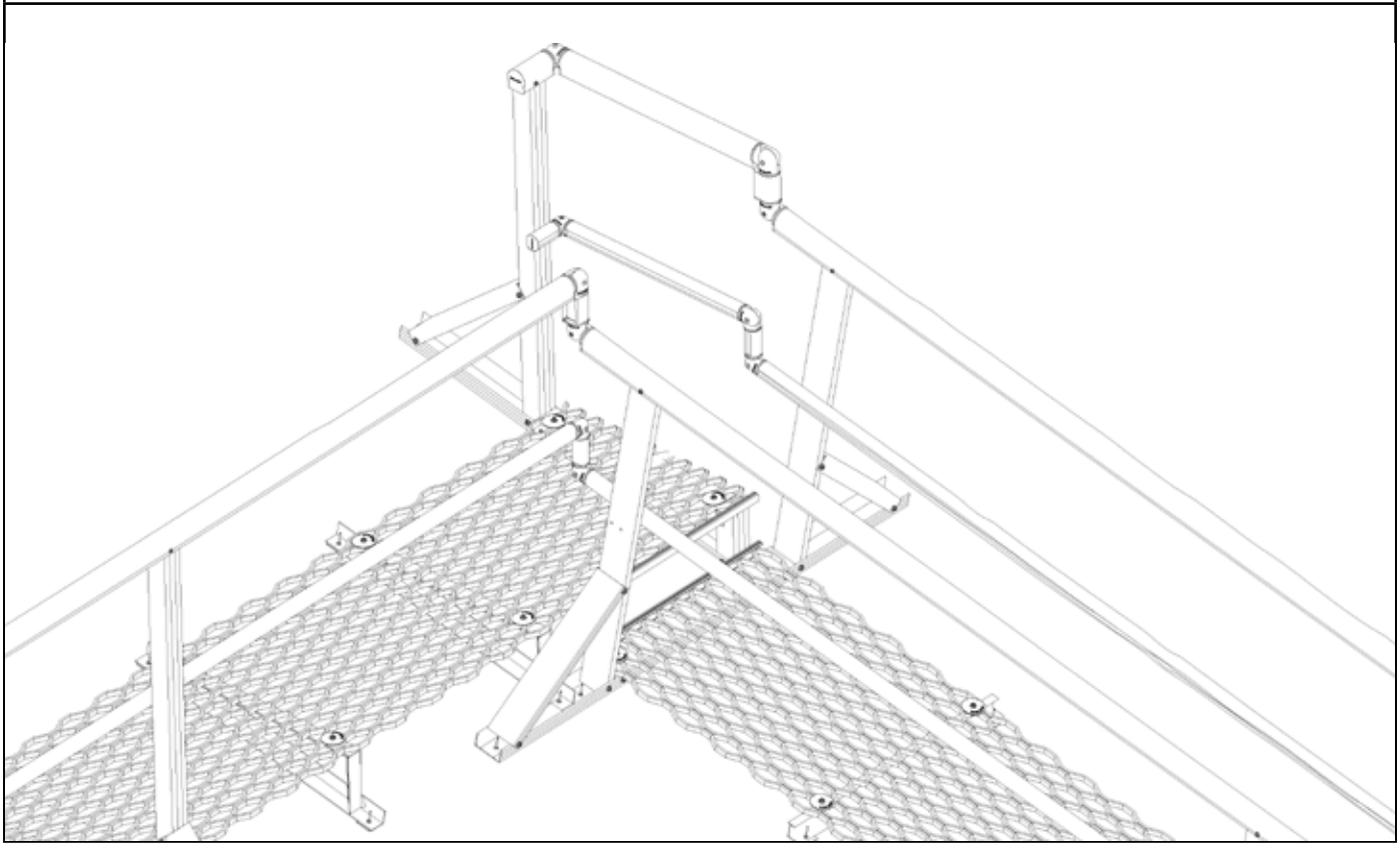
FIGURE 62



6.5 Kit 5

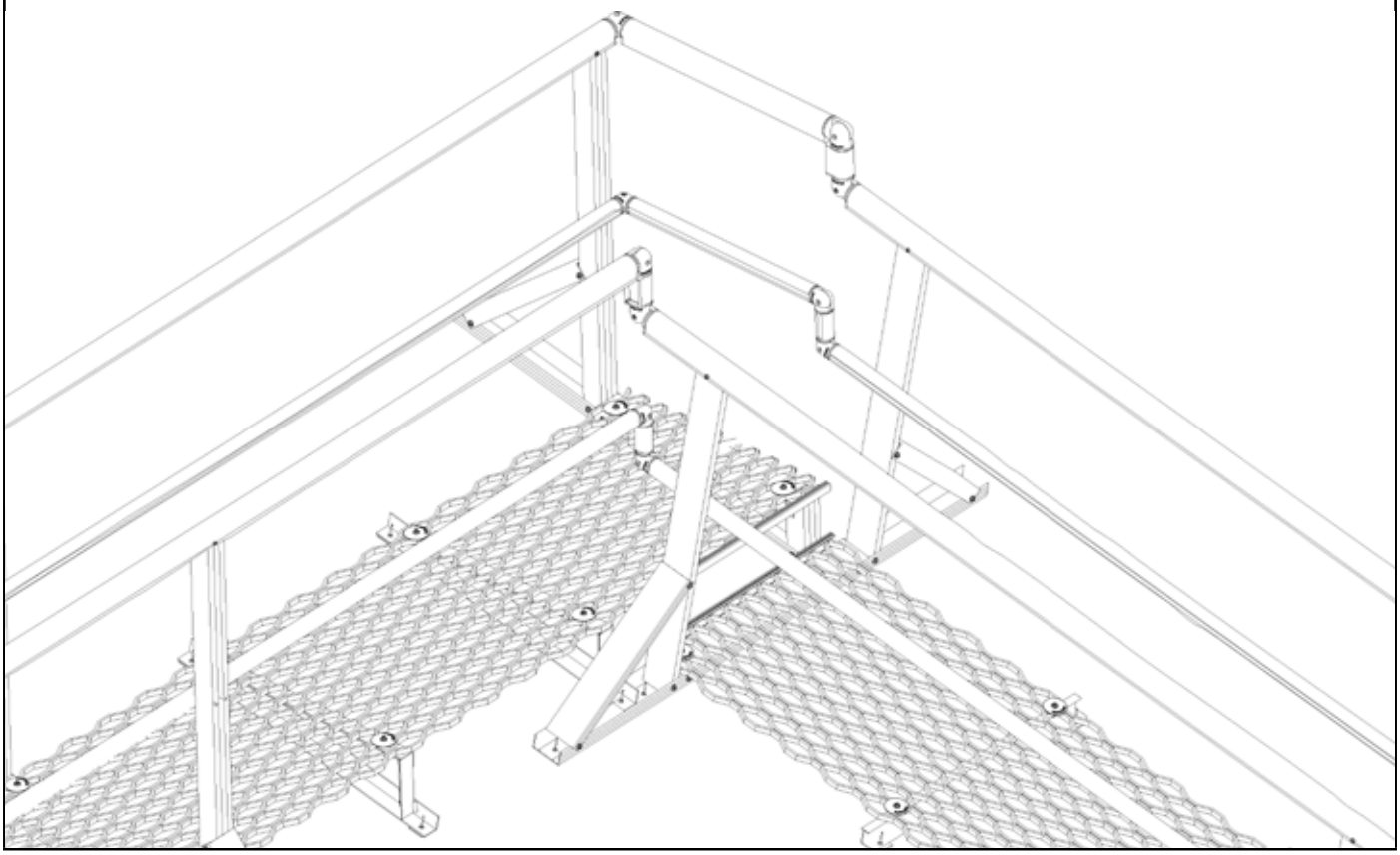
6.5.1 Double Guardrail to Single Guardrail Corner (Angled Roof)

FIGURE 63



6.5.2 Double Guardrail Corner (Angled Roof)

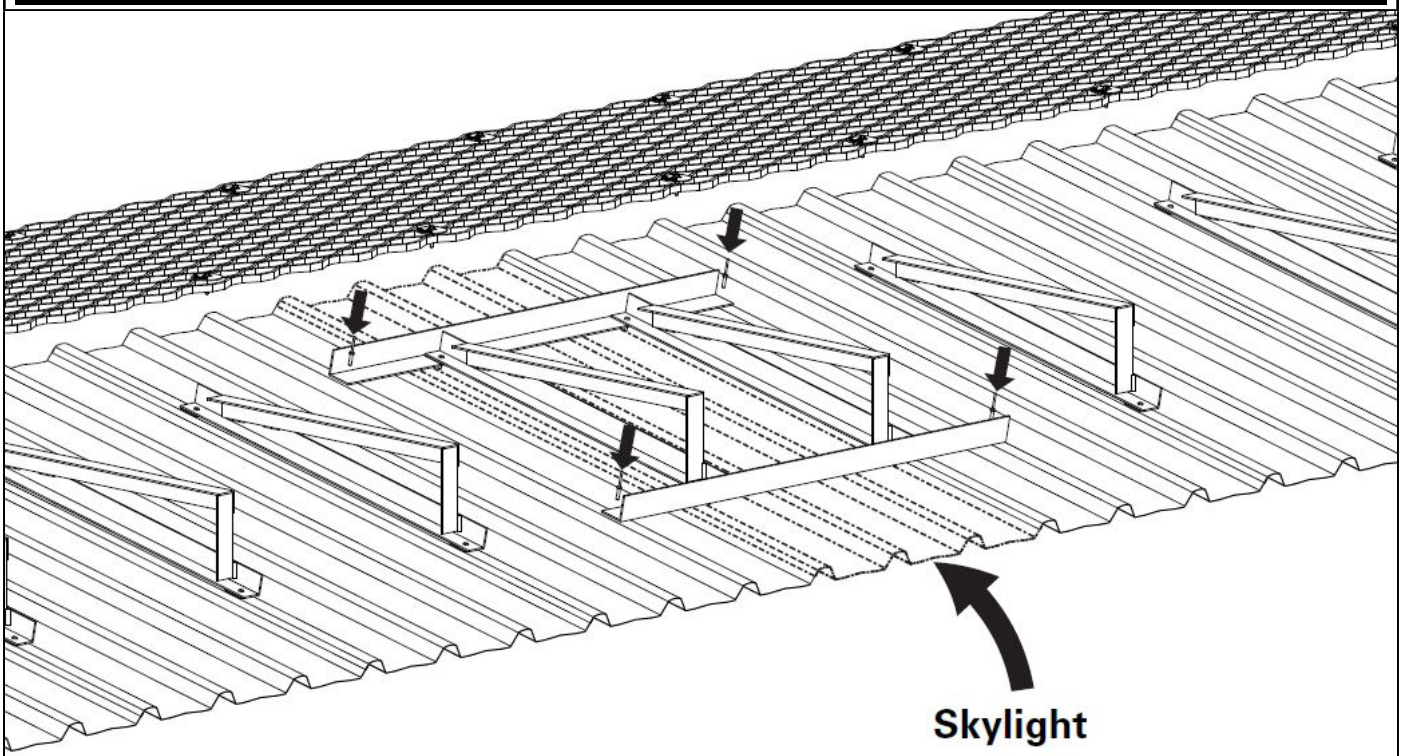
FIGURE 64



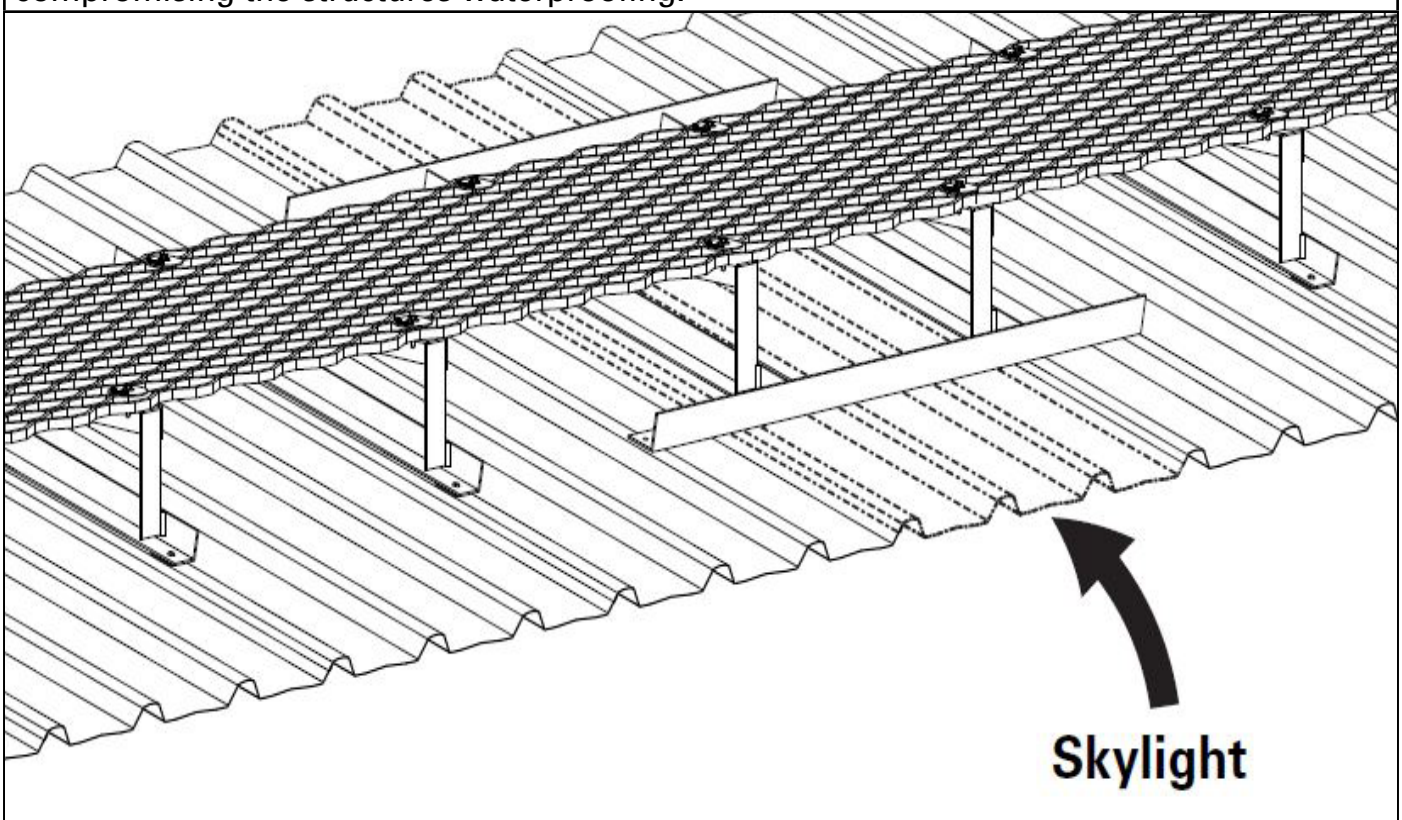
7 Skylight Bridging

7.1 Walkway Across Skylight with Angle

FIGURE 65



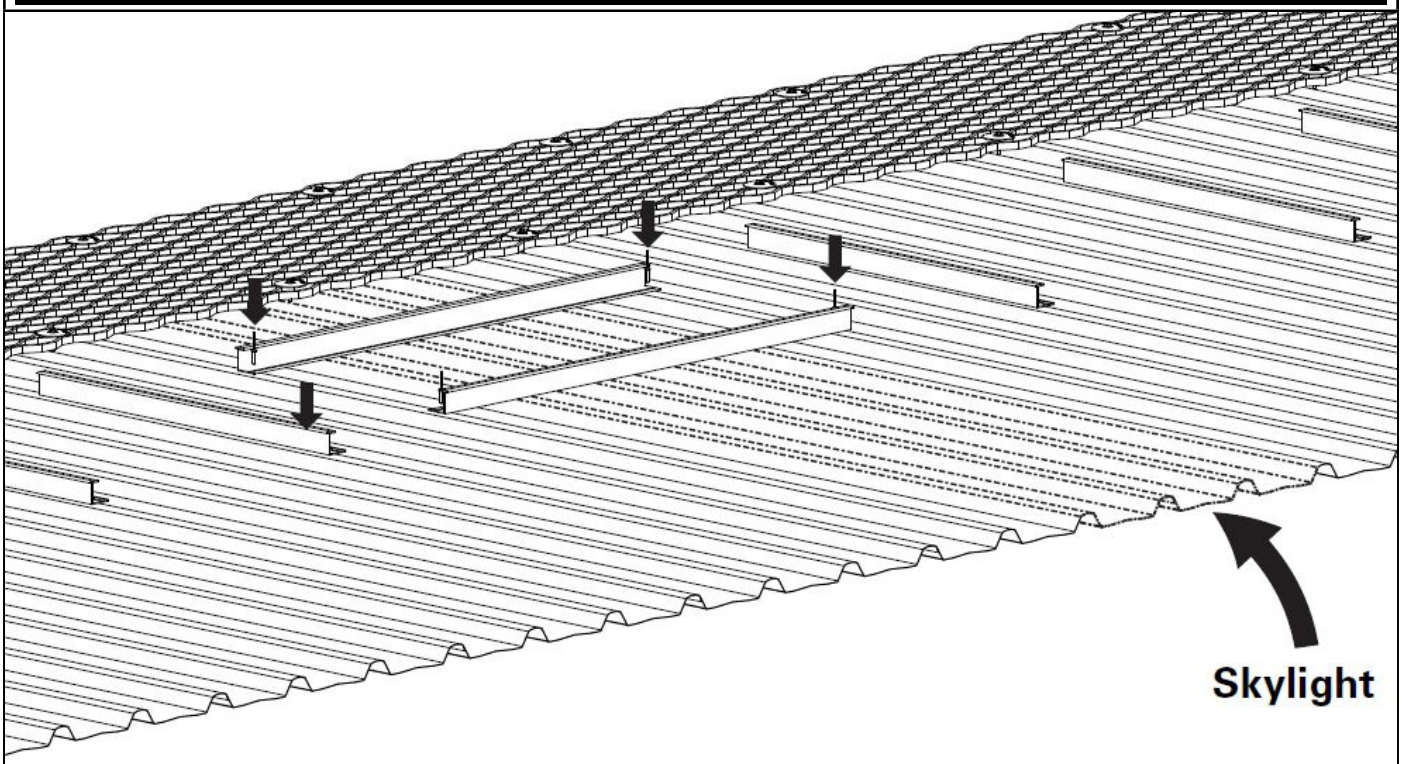
Each angle support shall be fixed with 2x 5mm trifold rivets. The rivets shall be installed in to the first crest beyond the skylight. Ensure that the foam tape is used to prevent compromising the structures waterproofing.



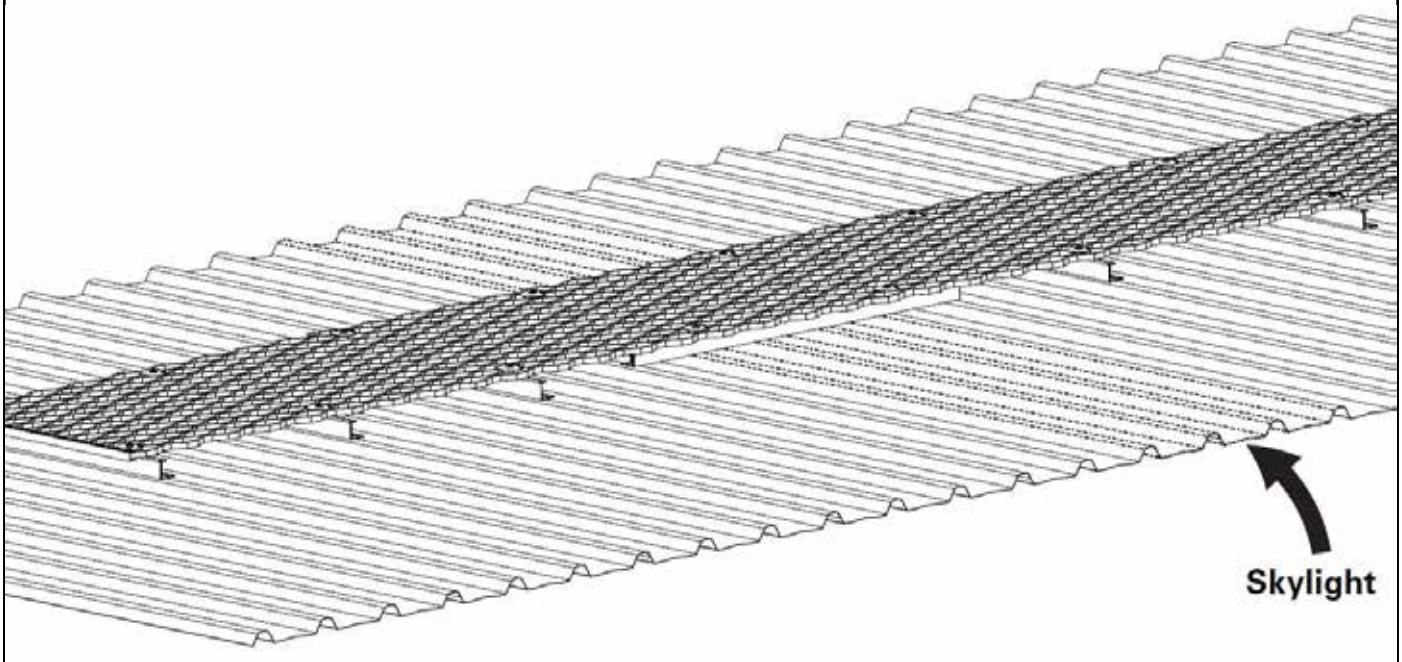
Stanchion shall not be installed on support angles.

7.2 Walkway Across Skylight with Walkway Battens

FIGURE 66



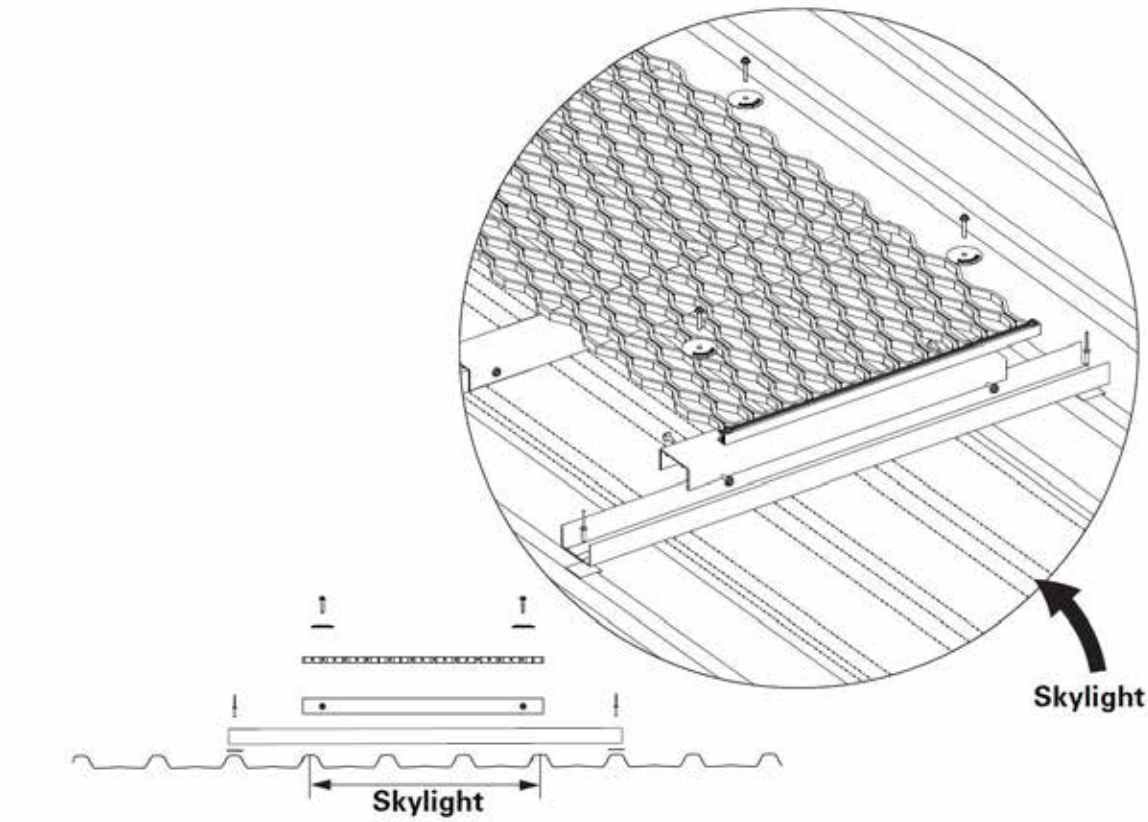
Each batten support shall be fixed with 2x 5mm trifold rivets. The rivets shall be installed in to the first crest beyond the skylight. Ensure that the foam tape is used to prevent compromising the structures waterproofing.



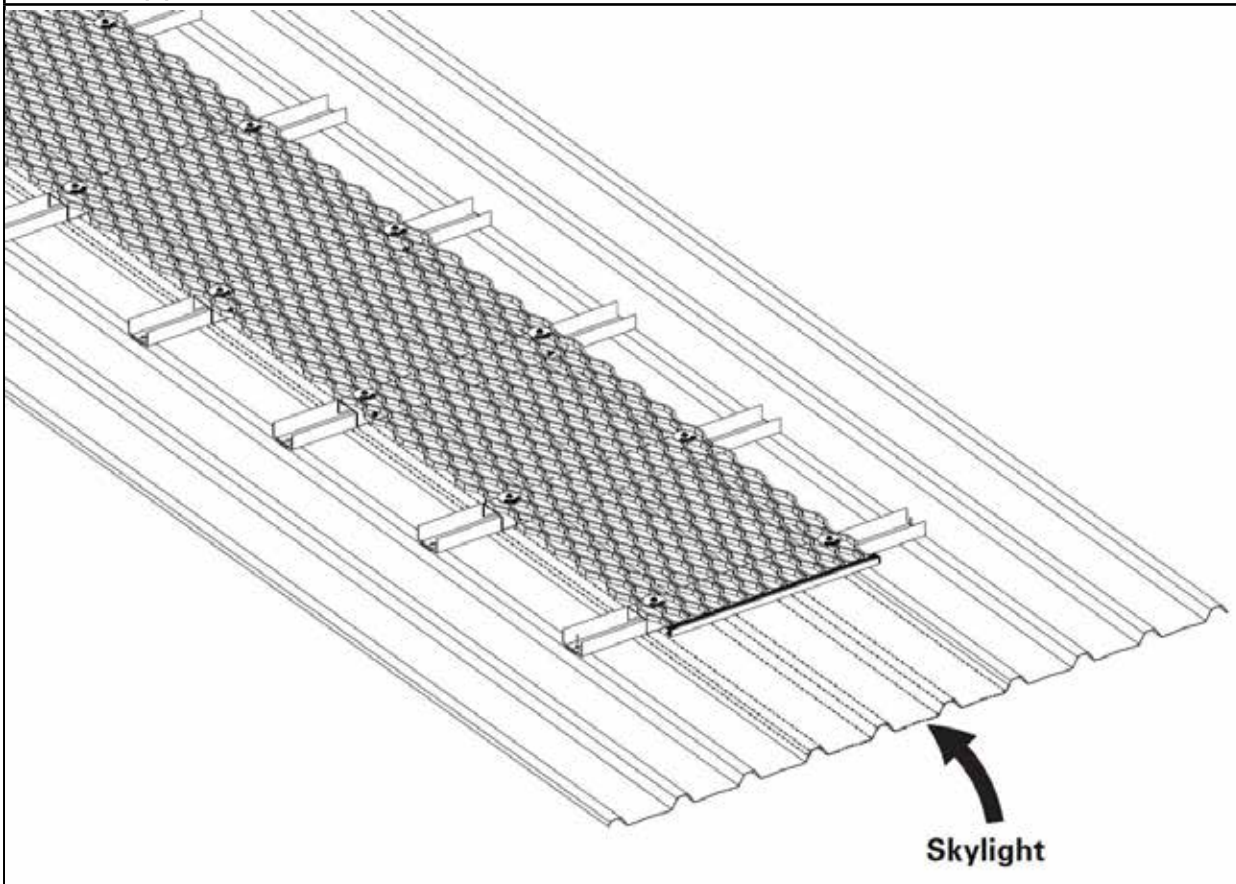
Stanchion shall not be installed on support battens.

7.3 Walkway Along Skylight with Channel Supports

FIGURE 67

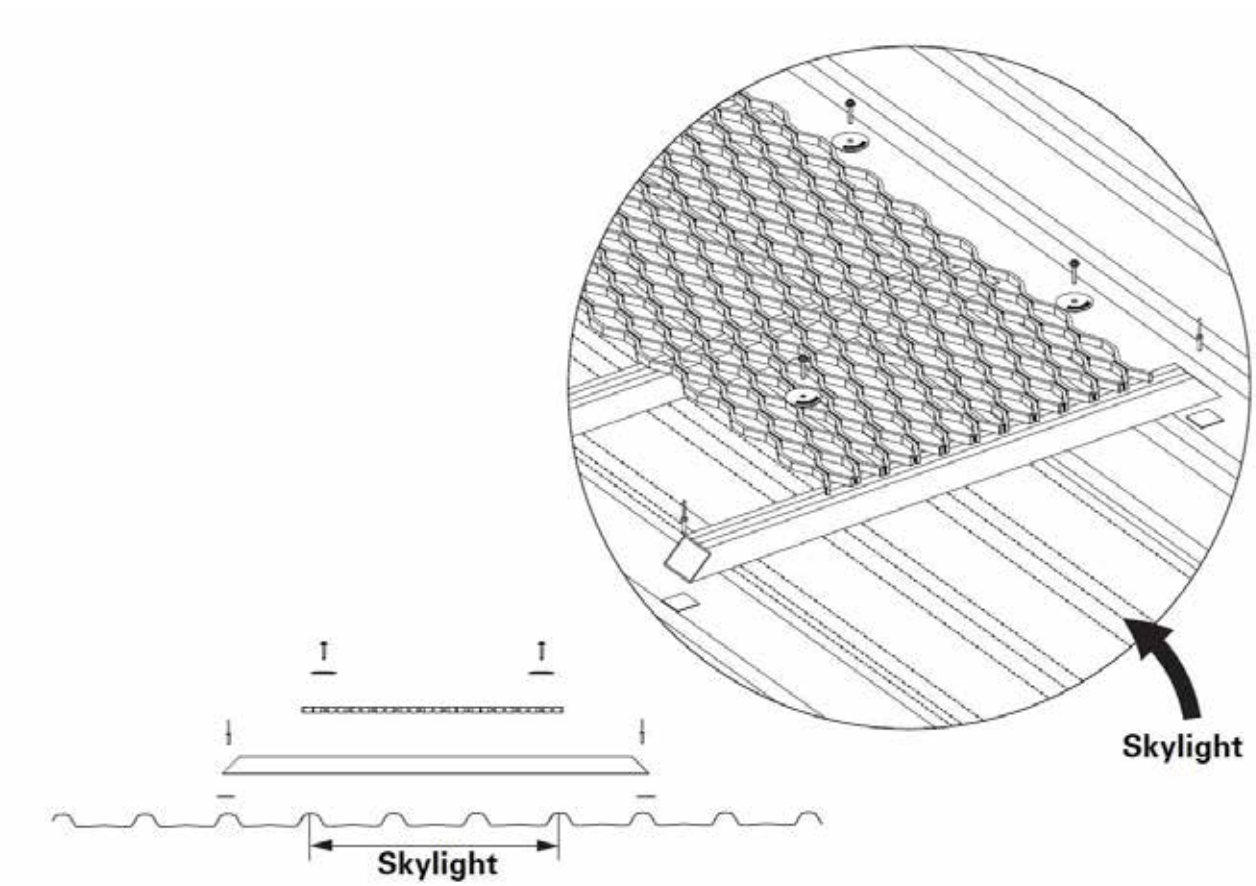


Each channel support shall be fixed with 2x 5mm trifold rivets. The rivets shall be installed in to the first crest beyond the skylight. Ensure that the foam tape is used to prevent compromising the structures waterproofing. Each support channel shall be capped with a mesh support channel fixed with 4x 20mm tek screws (GUARD_WALK.HDU.S).

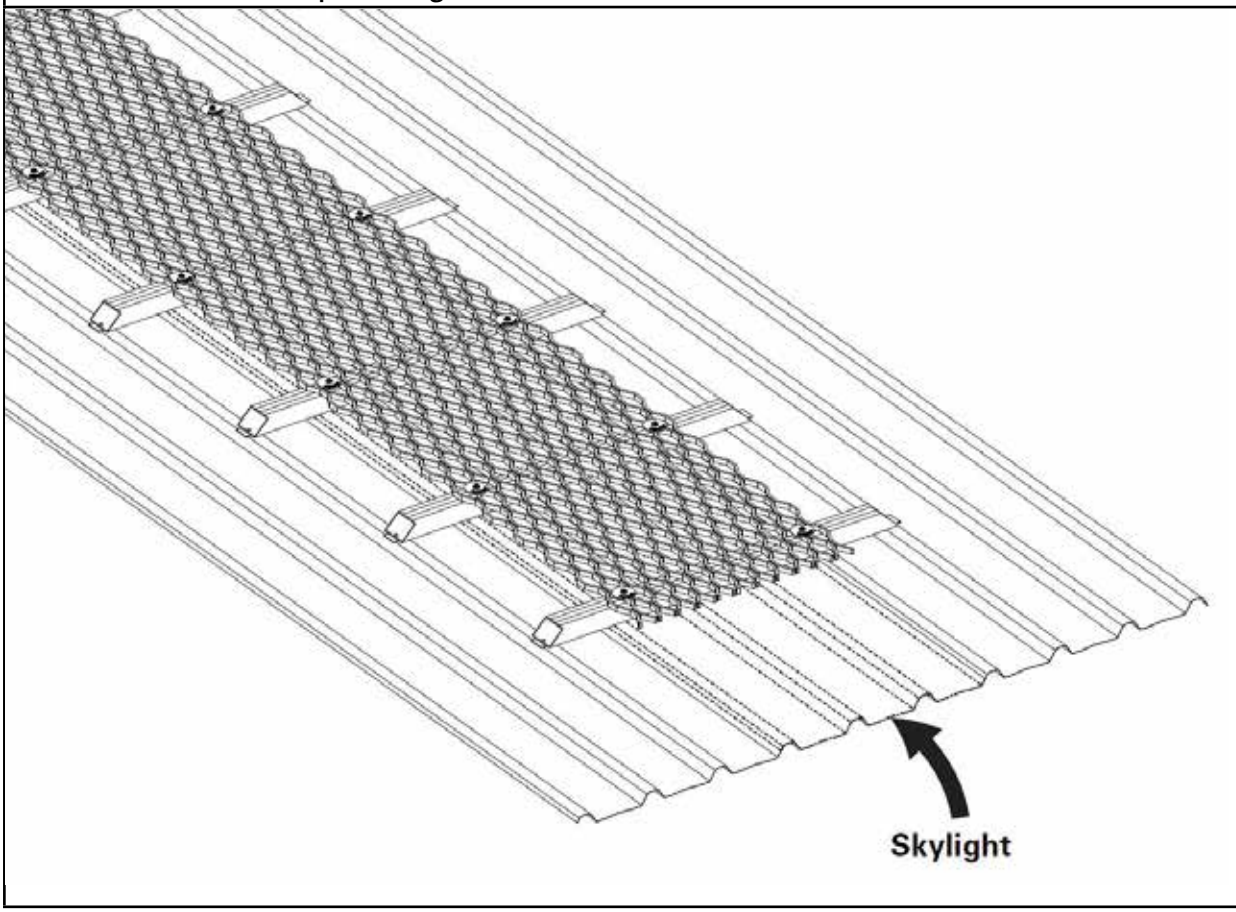


7.4 Walkway Along Skylight with RHS Supports

FIGURE 68



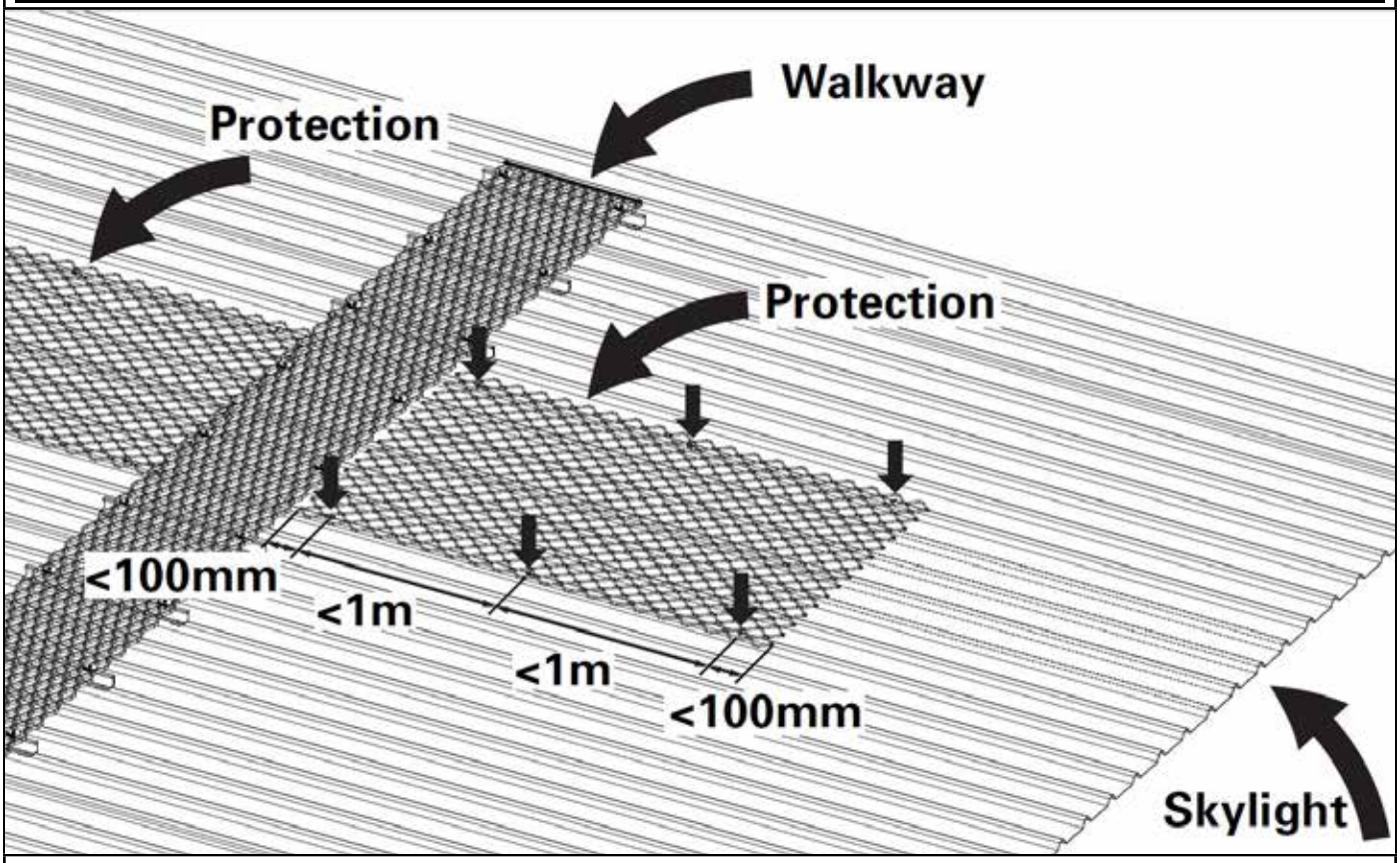
Each RHS support shall be fixed with 2x 5mm trifold rivets. The rivets shall be installed in to the first crest beyond the skylight. Ensure that the foam tape is used to prevent compromising the structures waterproofing (GUARD_WALK.HD.S).



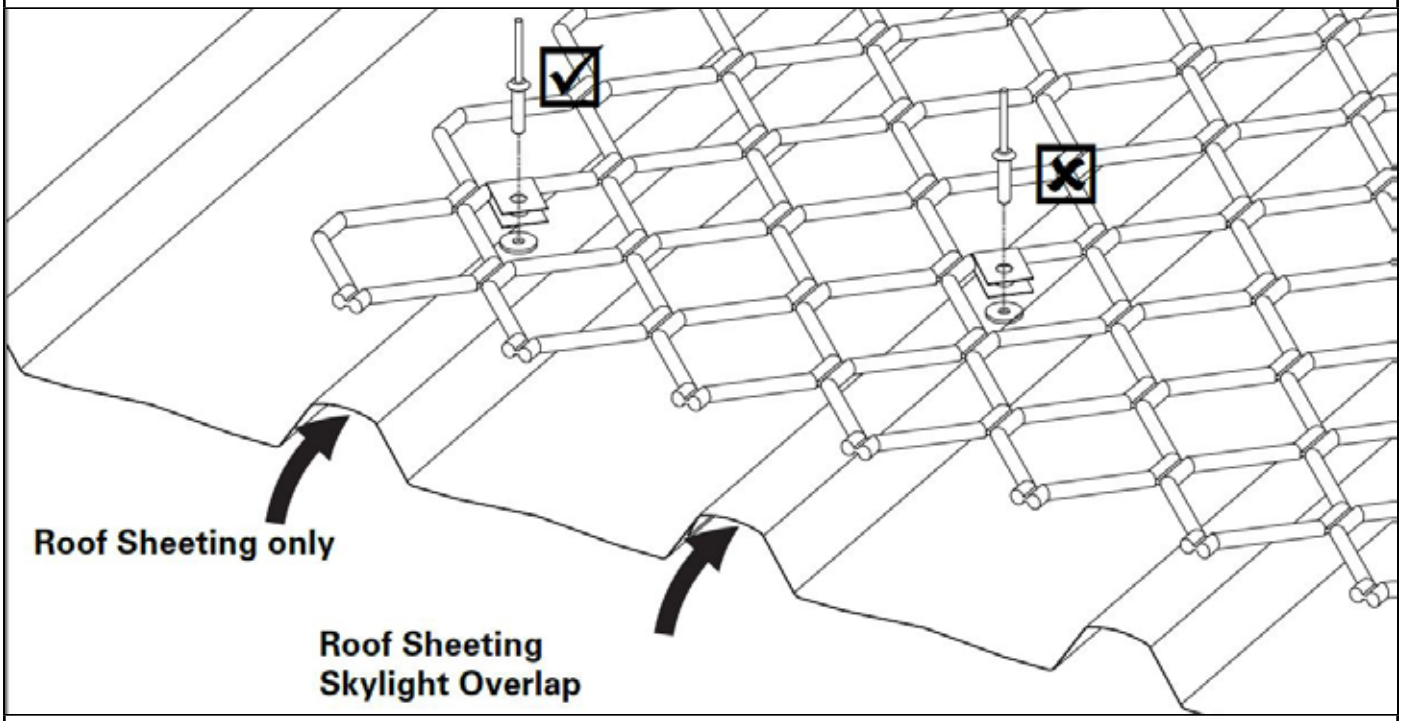
8 Skylight Protection

8.1 Flat

FIGURE 69



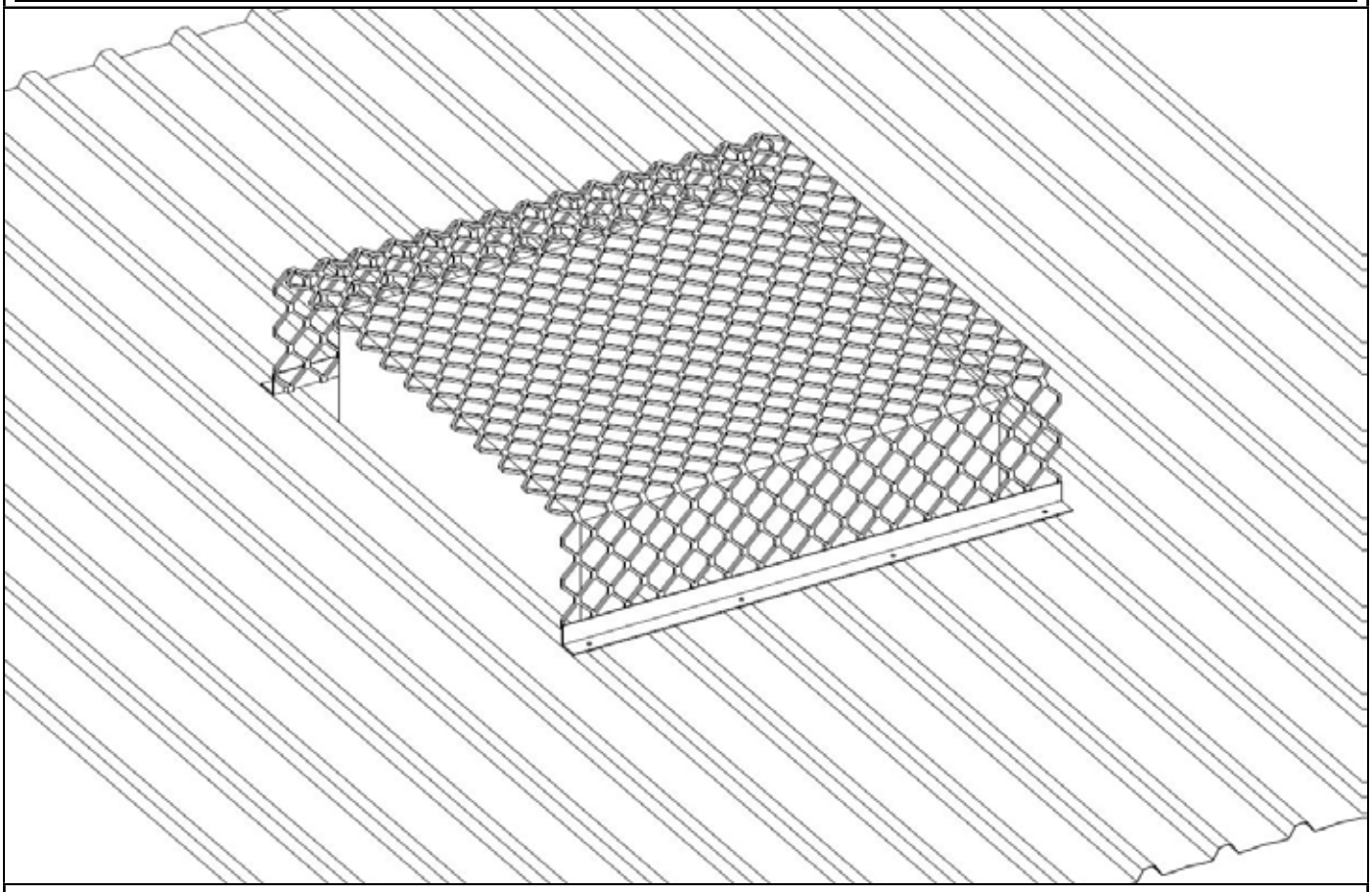
The spacing between fixings to the roof sheet shall not exceed 1m down each edge of the mesh. There shall also be a fixing on either edge not more than 100mm from the end of mesh.



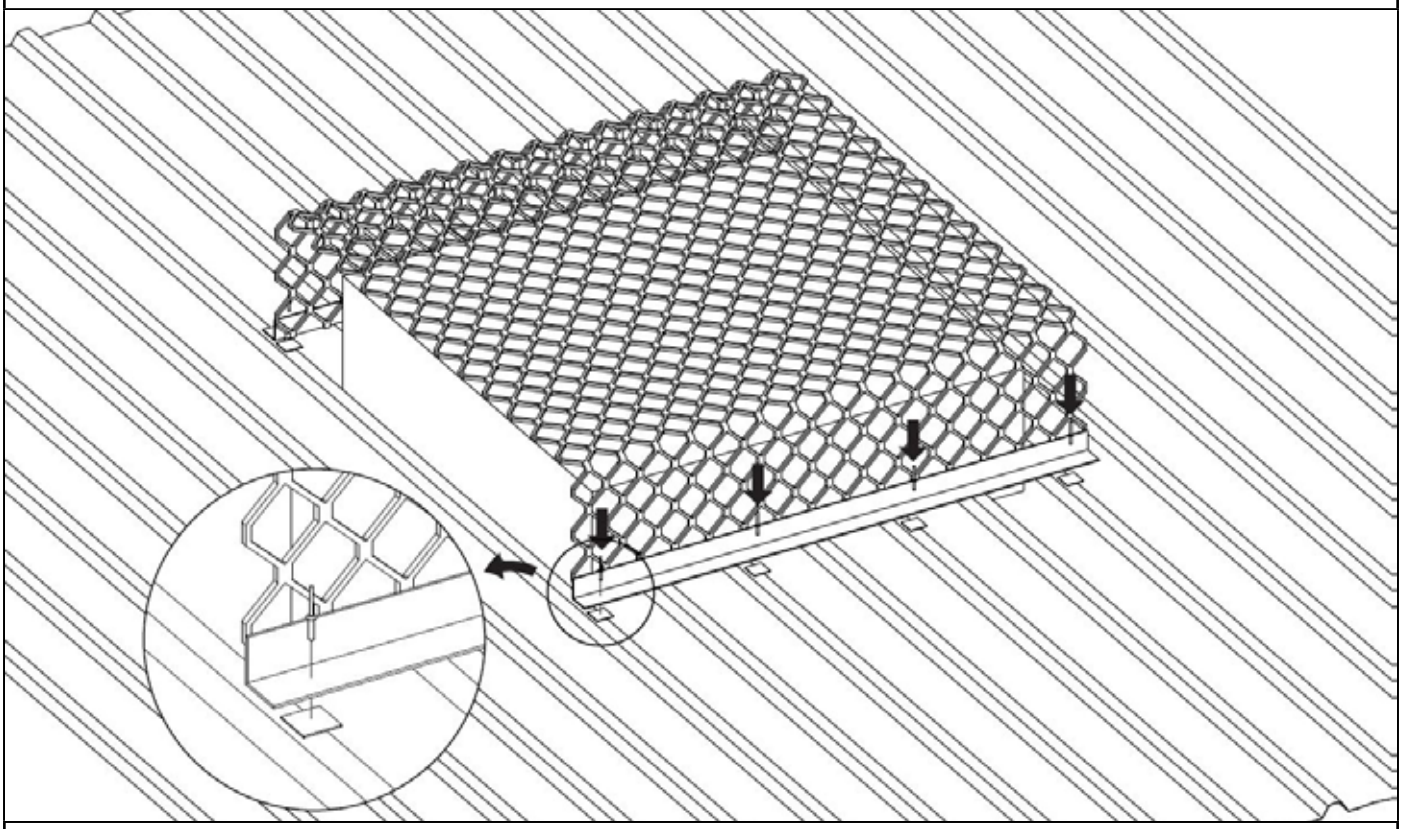
The protection shall be fixed to the roof sheeting with a 5mm trifold rivet and U-clip. Ensure the rubber washer is placed below the U-clip to prevent compromising the structures waterproofing. The rivets shall be installed in to the first crest beyond the skylight, not in to the roof sheeting skylight overlap crest.

8.2 Raised

FIGURE 70



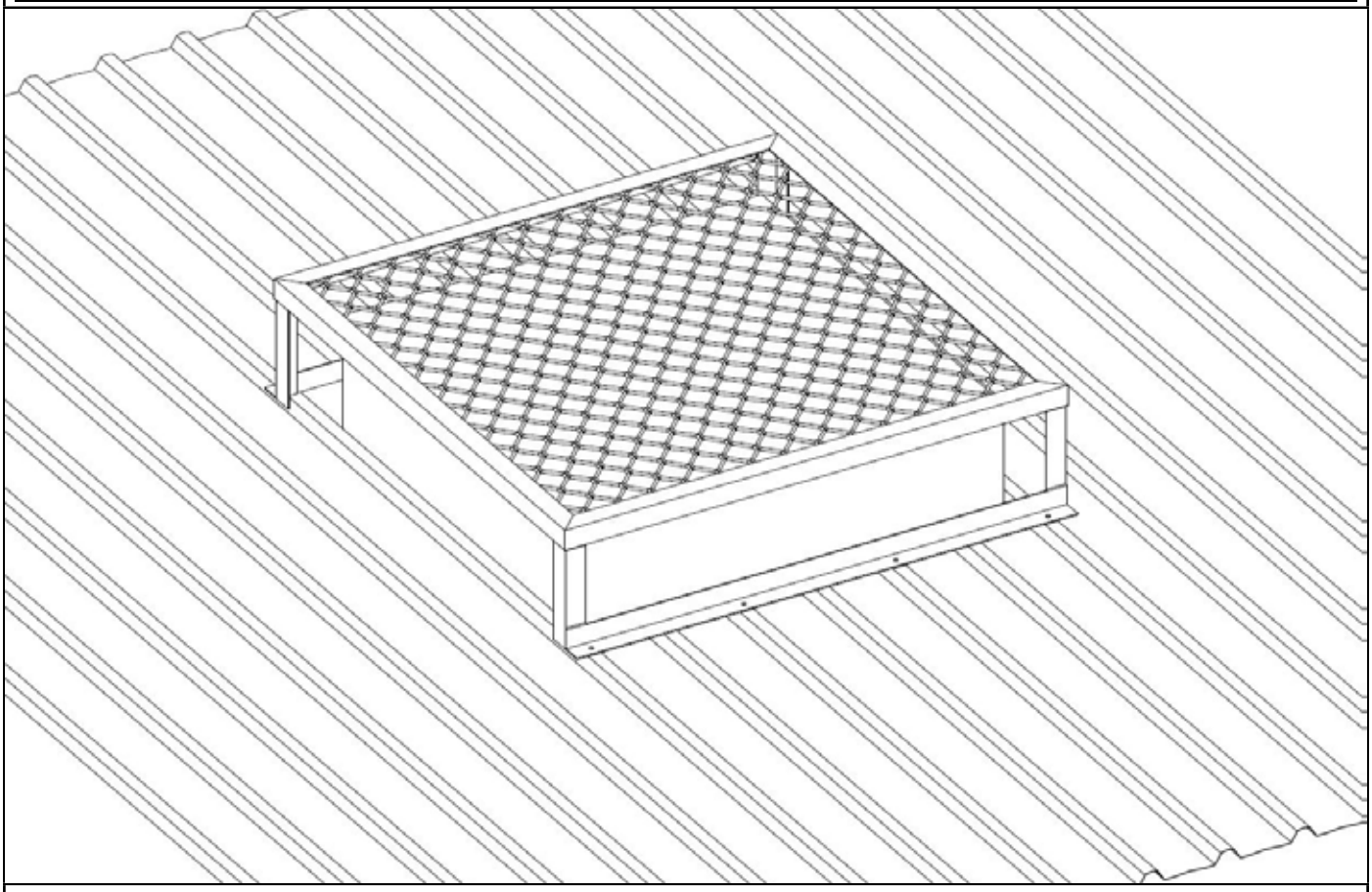
Position the protector over the skylight.



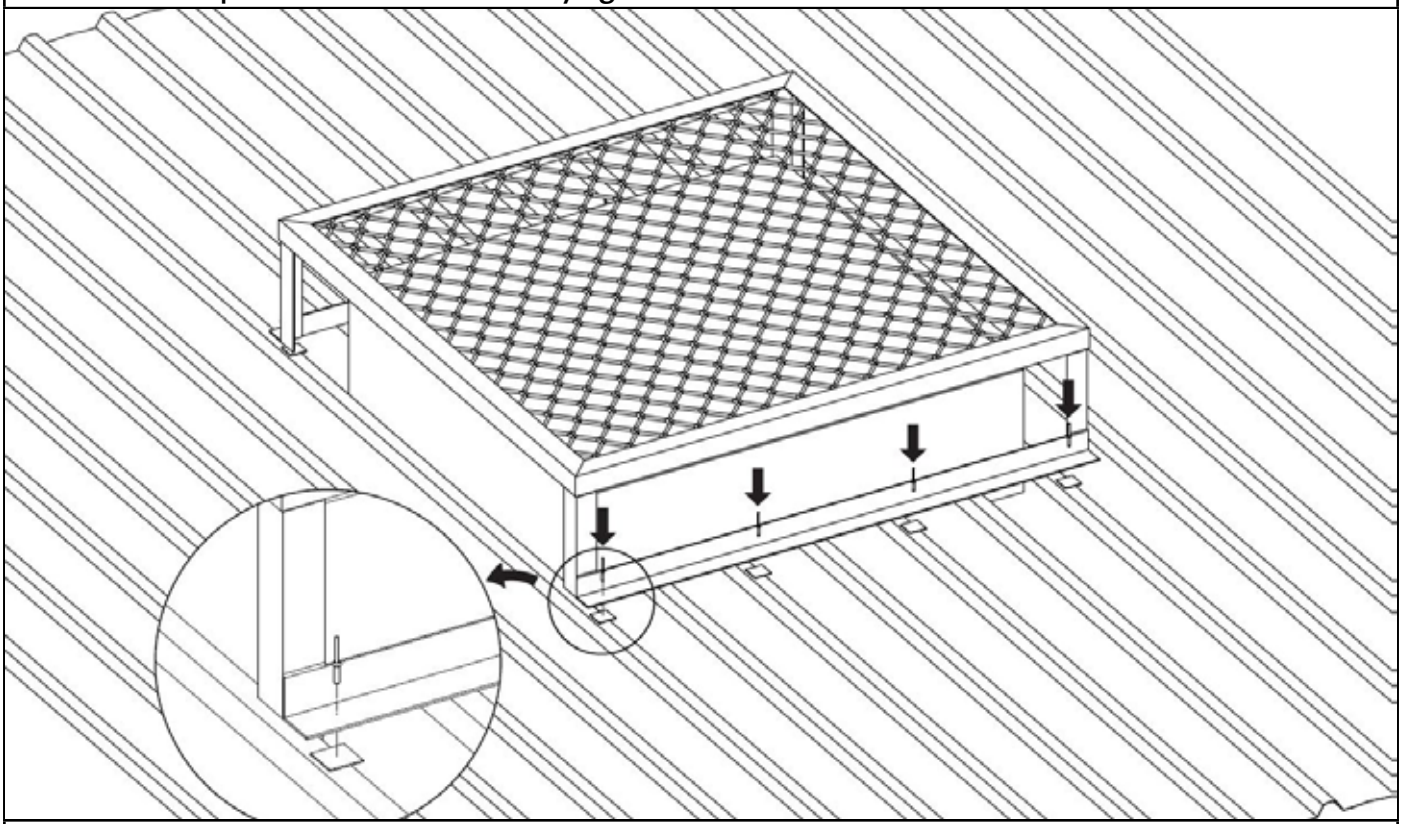
Each aside of the protector shall be fixed with 4x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing.

8.3 Frame

FIGURE 71



Position the protector over the skylight.

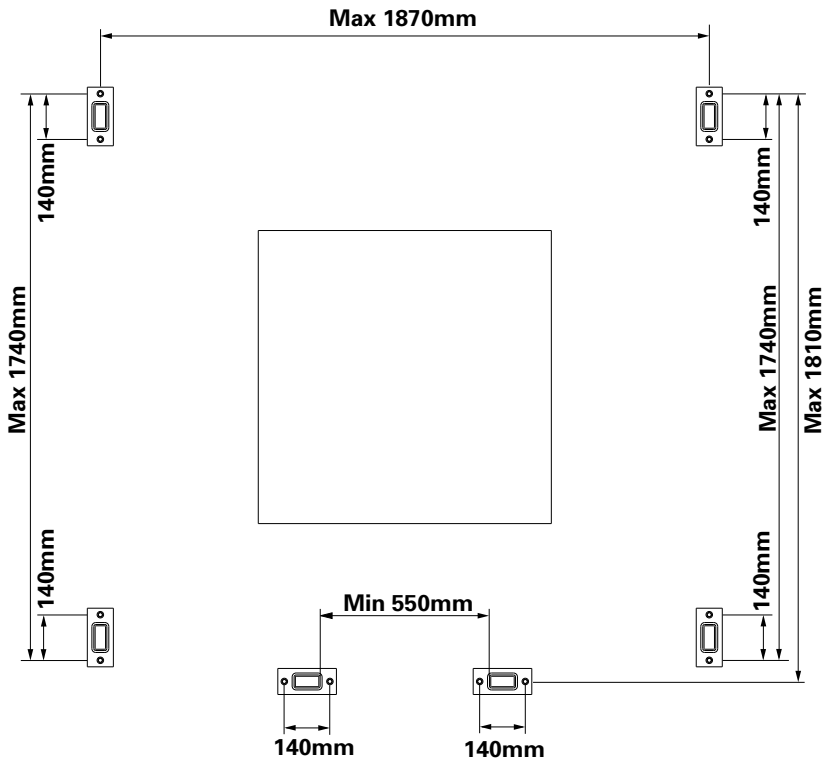


Each side of the protector shall be fixed with 4x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing.

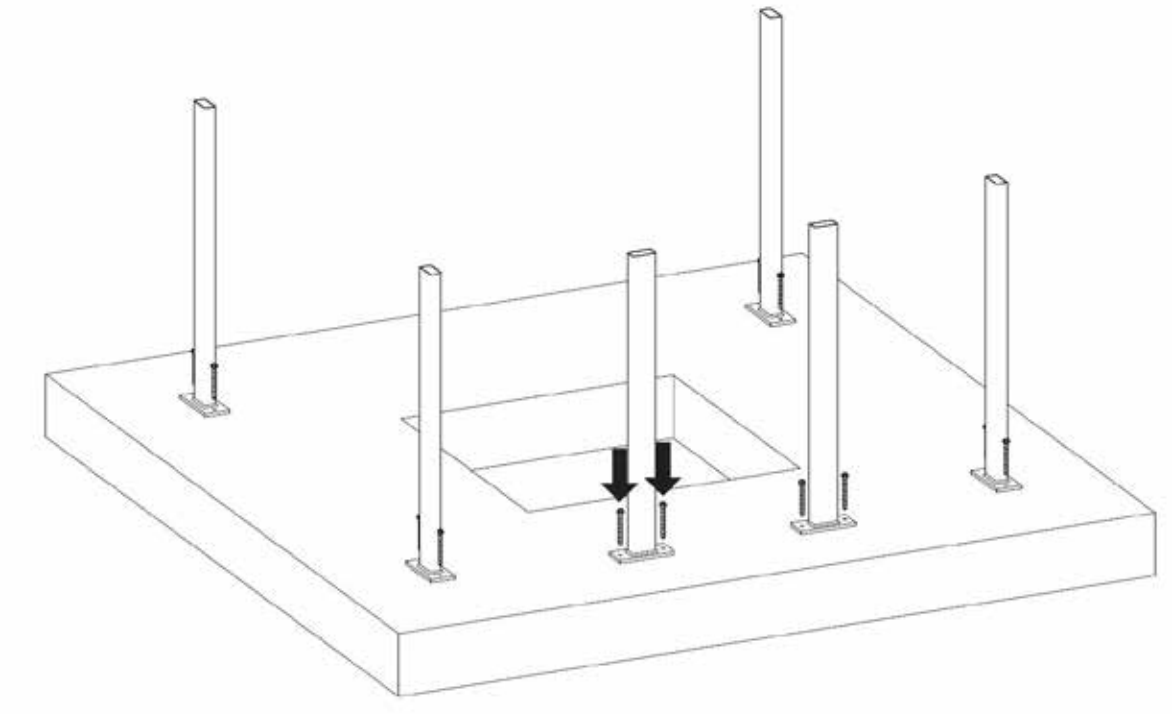
9 Hatch Kits

9.1 Concrete

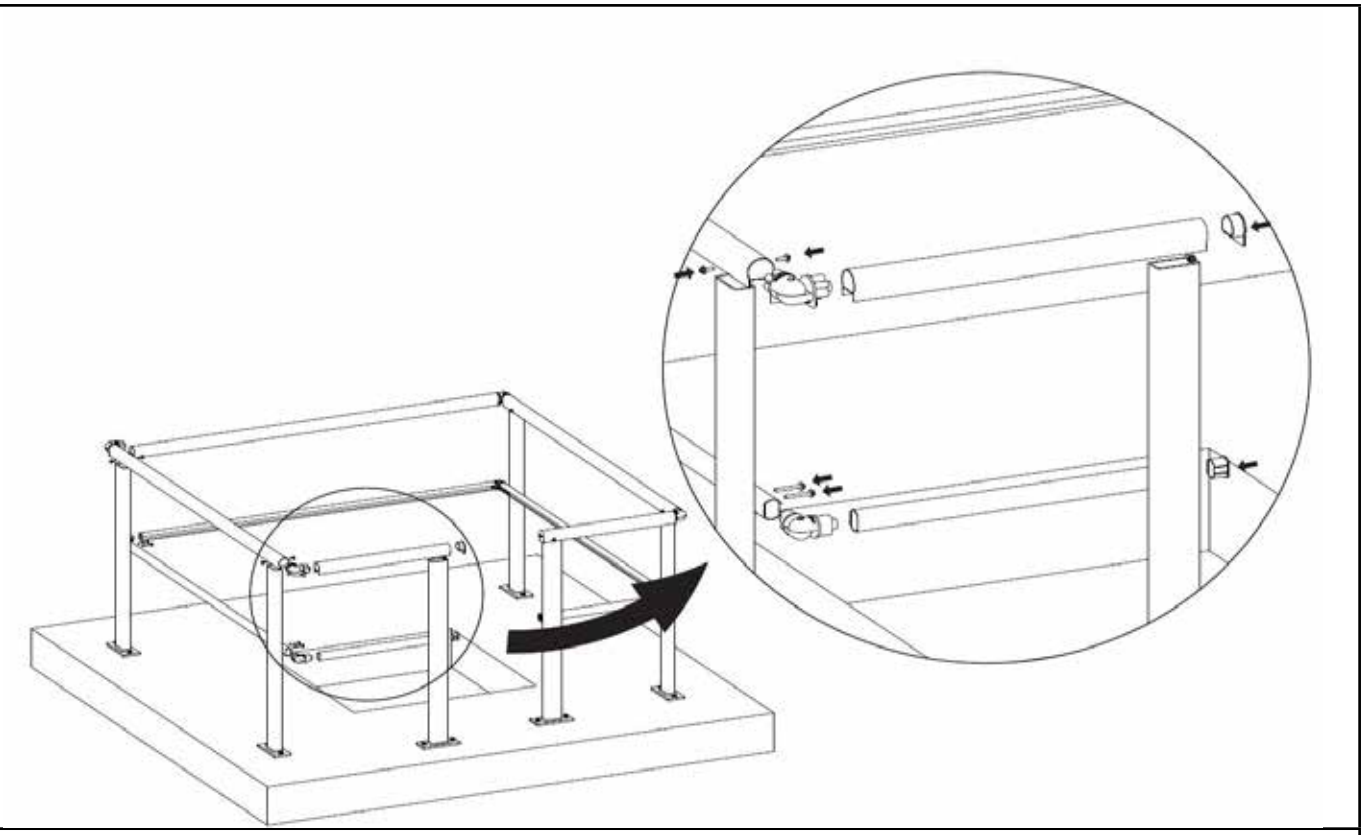
FIGURE 72



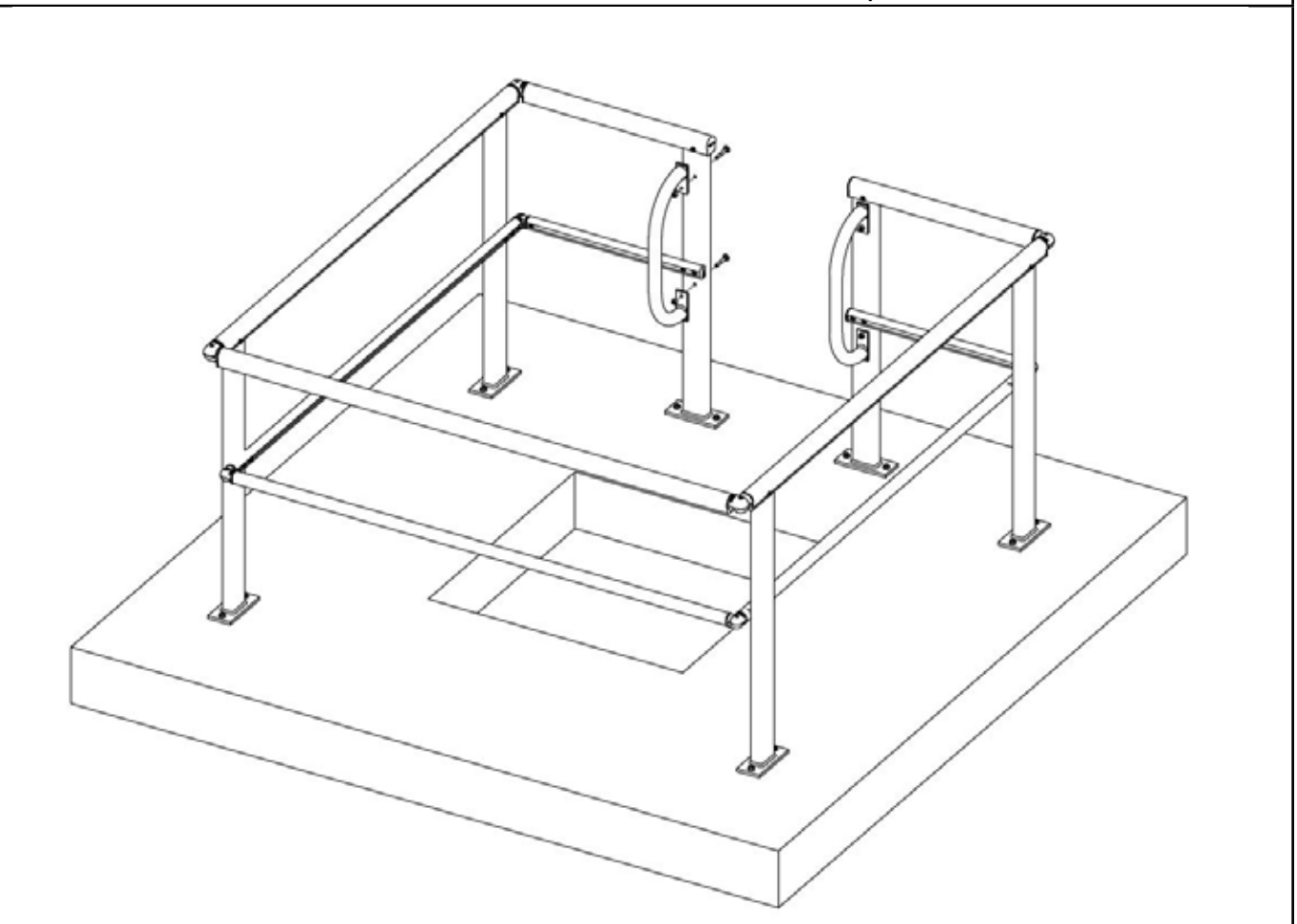
The above dimensions represent the maximum dimension of the supplied item. The hatch can be cut in either direction to suit different installations.



Each stanchion shall be fixed with 2x fasteners from sections 3.3.6 or 3.3.7.



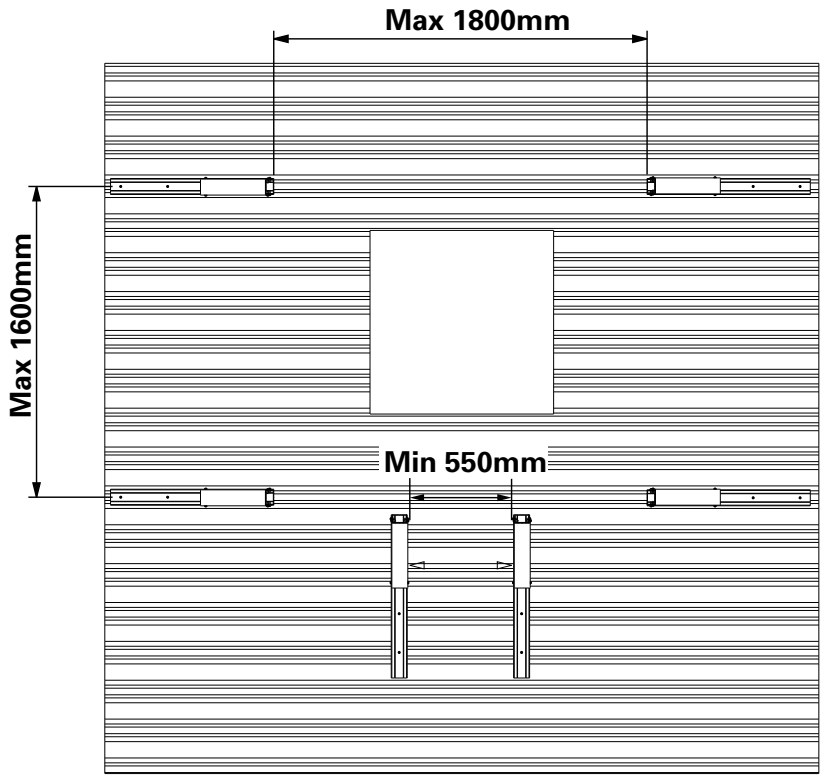
Fix the handrail, middle rail and corners. Install the rail end caps.



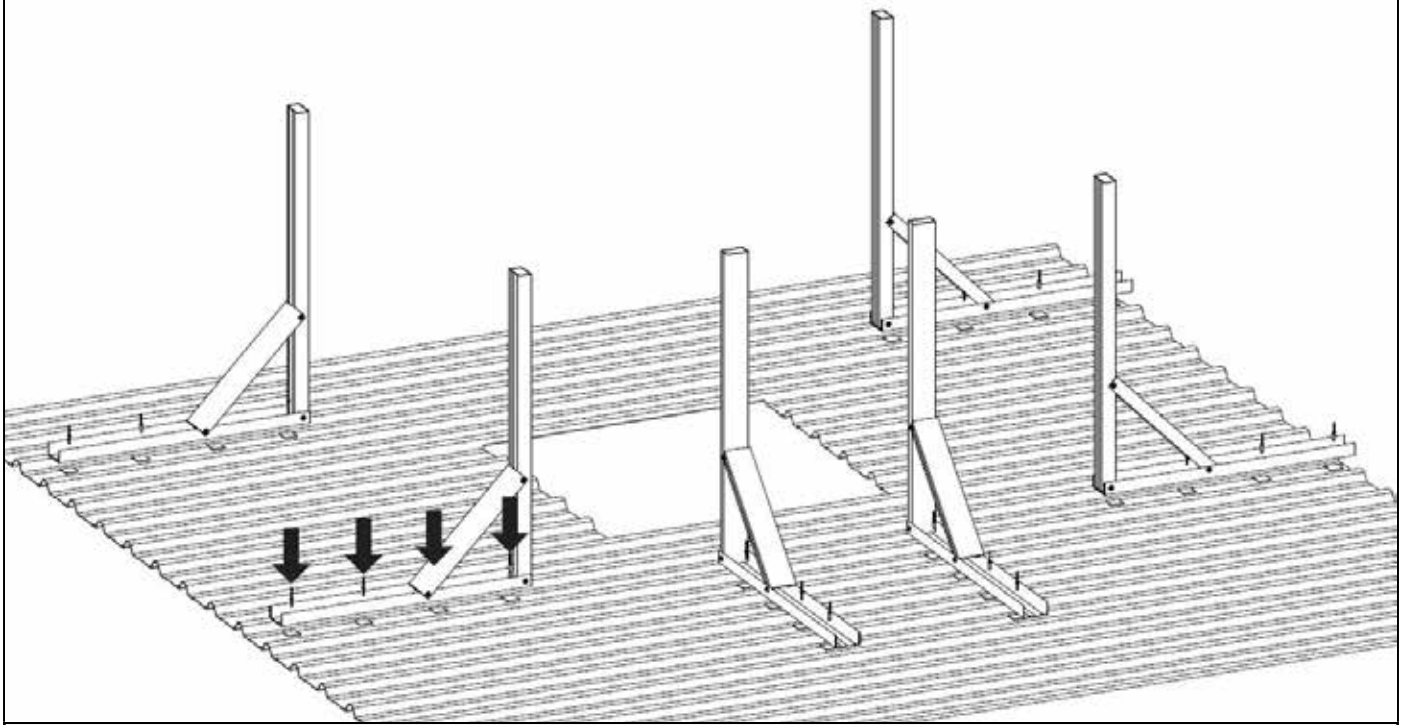
Fix each grab rail with 2x M8x60mm cup head bolt.

9.2 Roof Sheeting

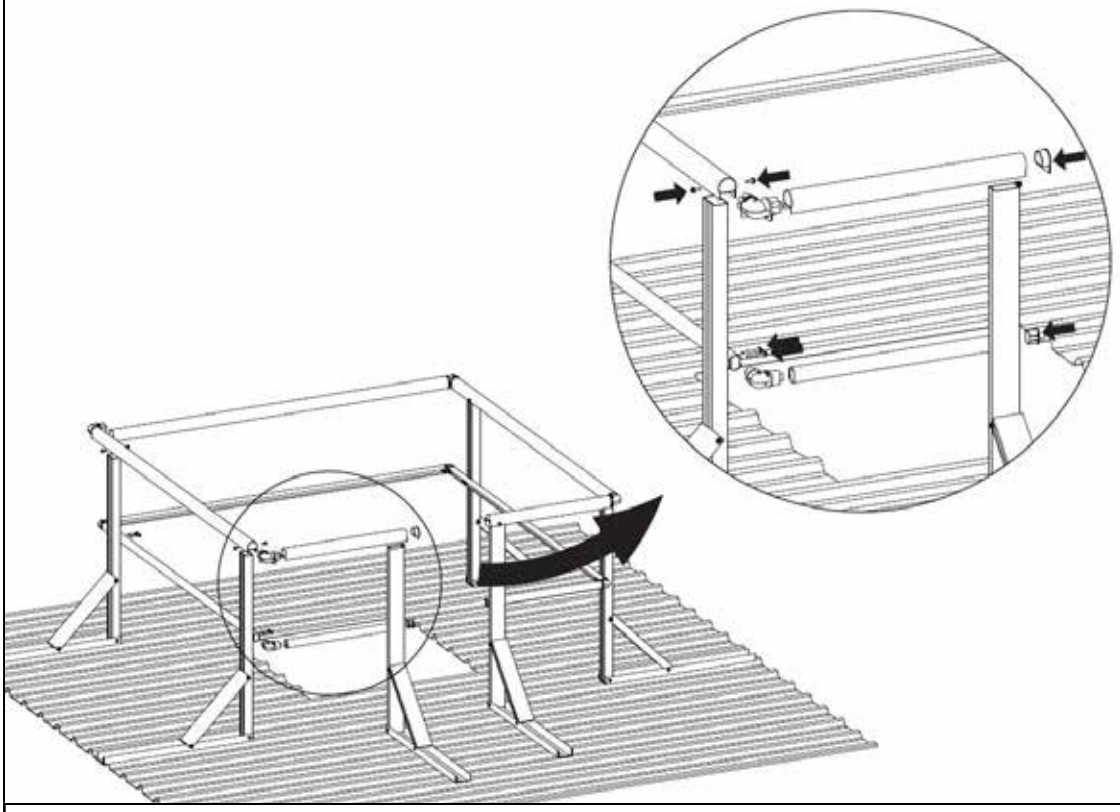
FIGURE 73



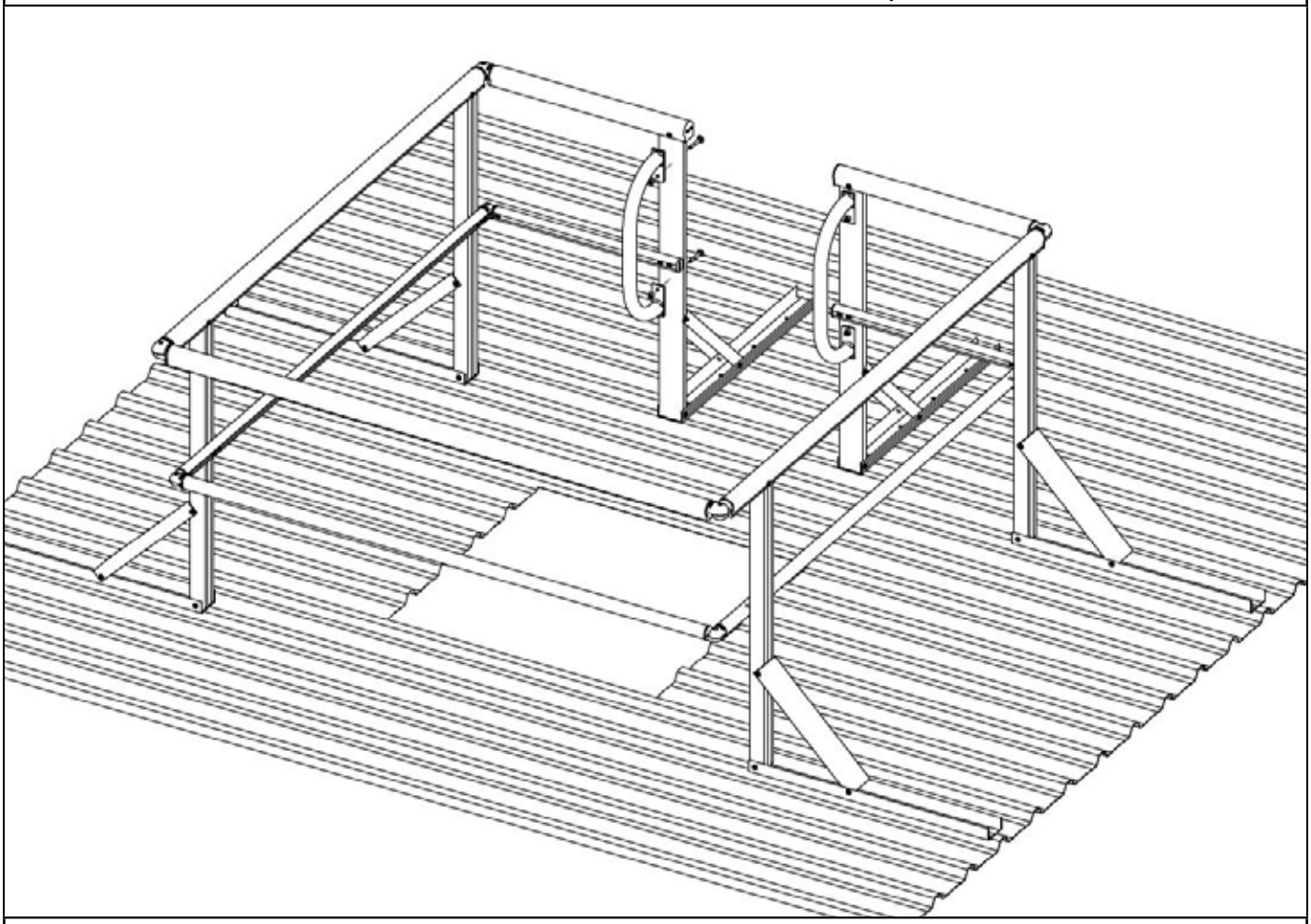
The above dimensions represent the maximum dimension of the supplied item. The hatch can be cut in either direction to suit different installations.



Each stanchion shall be fixed with 4x 5mm trifold rivet. Ensure that the foam tape is used to prevent compromising the structures waterproofing.



Fix the handrail, middle rail and corners. Install the rail end caps.

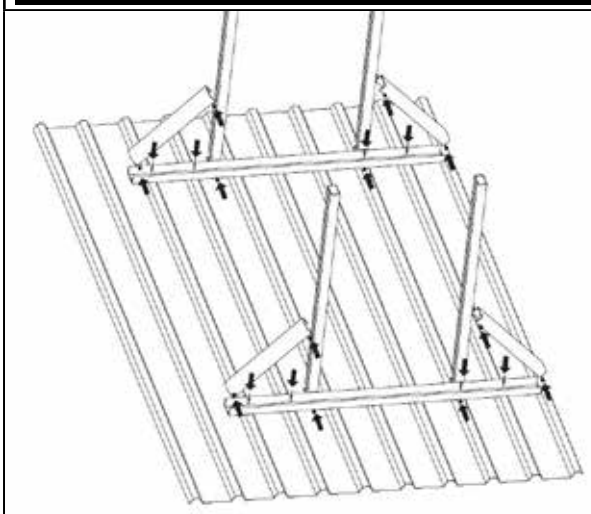


Fix each grab rail with 2x M8x60mm cup head bolt.

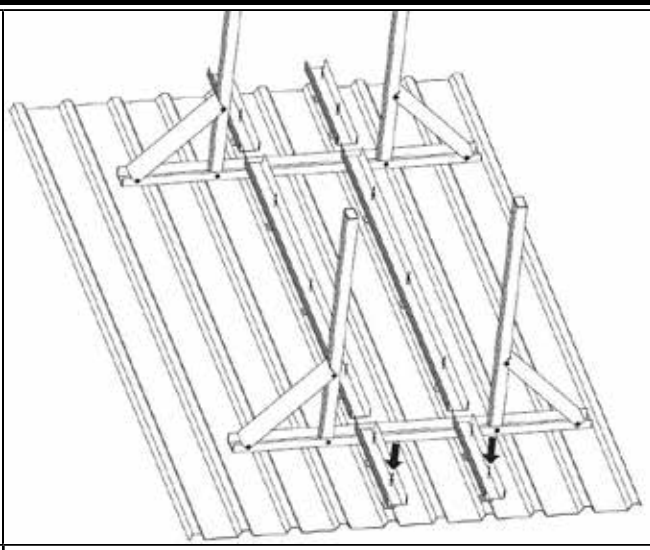
10 Roof Stairs

10.1 Installation

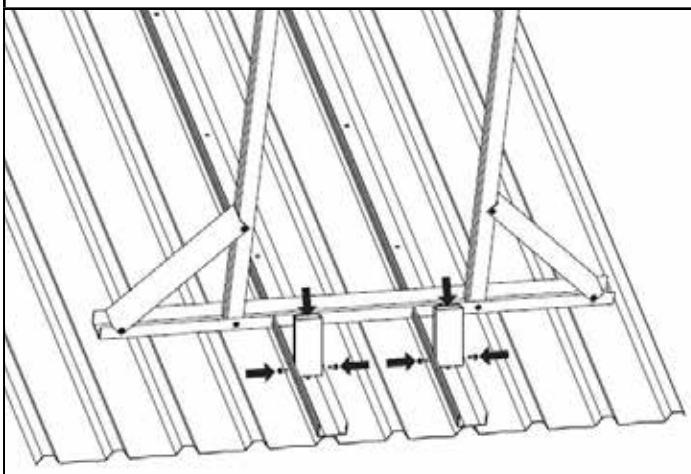
FIGURE 74



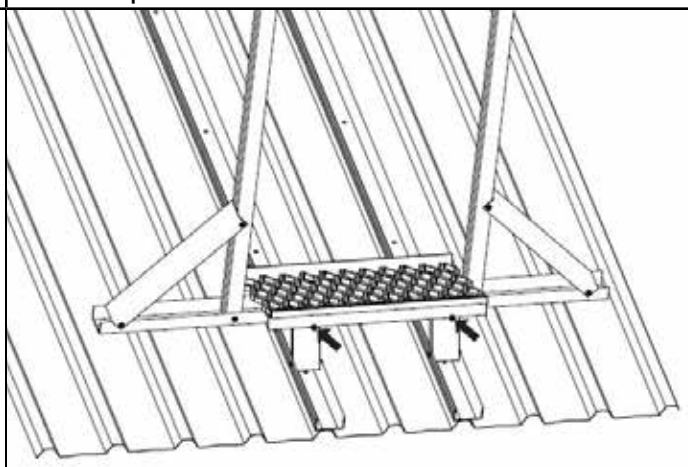
1. Assemble the guardrail post kits as per Section 4.11 and fix to the roof using 5mm rivets. Ensure the distance between the post kits is as specified in Section 3.1.4.



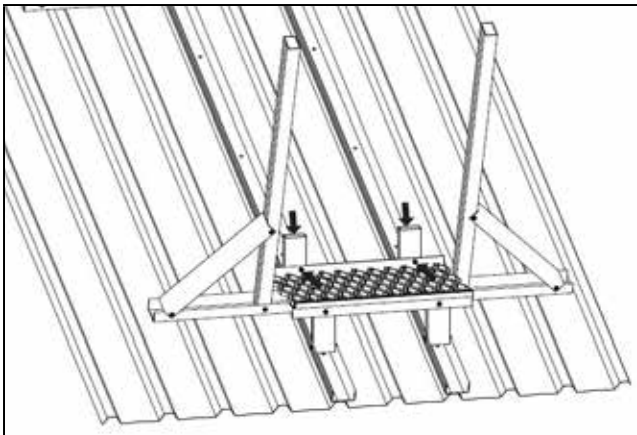
2. Measure the distance between the post kits and cut the supplied channel to length. Small sections of channel may need to be cut for the ends of the stairway, depending on the install location. Fix the channels to the roof using 5mm tri-fold rivets and foam tape. Fixings shall be no greater then 600mm apart.



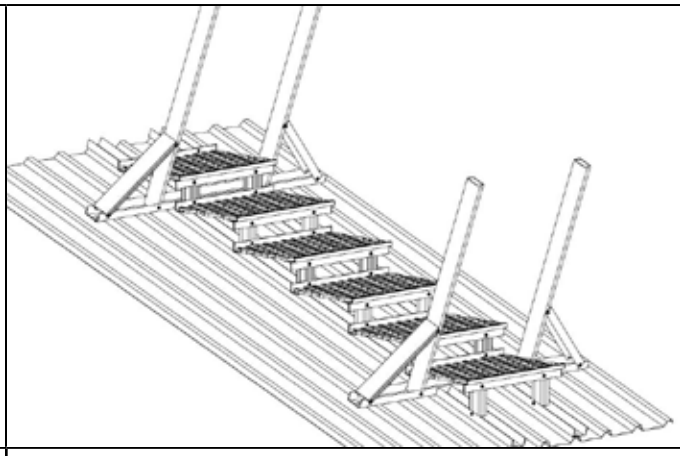
3. Starting at the base of the stairway, fix the RHS into the base channel using 4x 20mm tek screws. Ensure that the RHS is vertical.



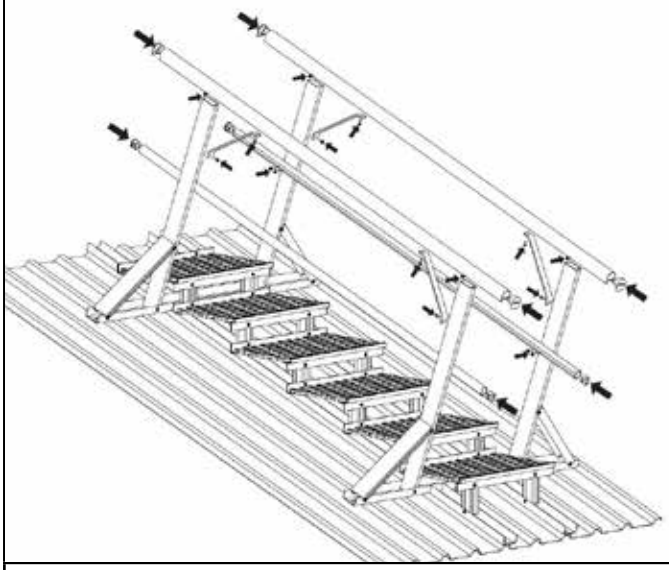
4. Rest the front of the step (with yellow bar) on the RHS and fix with 2x 20mm tek screws.



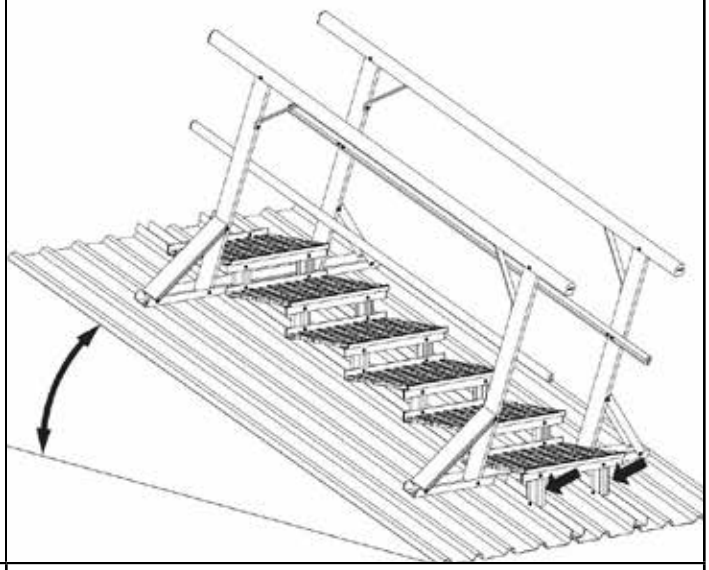
5. Fix the next 2 RHS sections to the back side of the step and to the base channel.



6. Repeat steps 4 and 5 until stairway is complete.



7. Assemble handrail and kneerail to the posts. Ensure that handrail braces are used on either end of the guardrail.



8. In some cases where the pitch of the roof cannot be determined prior to ordering, the RHS uprights will need to be cut on site. Figure 75 should be used as a guide.

FIGURE 75

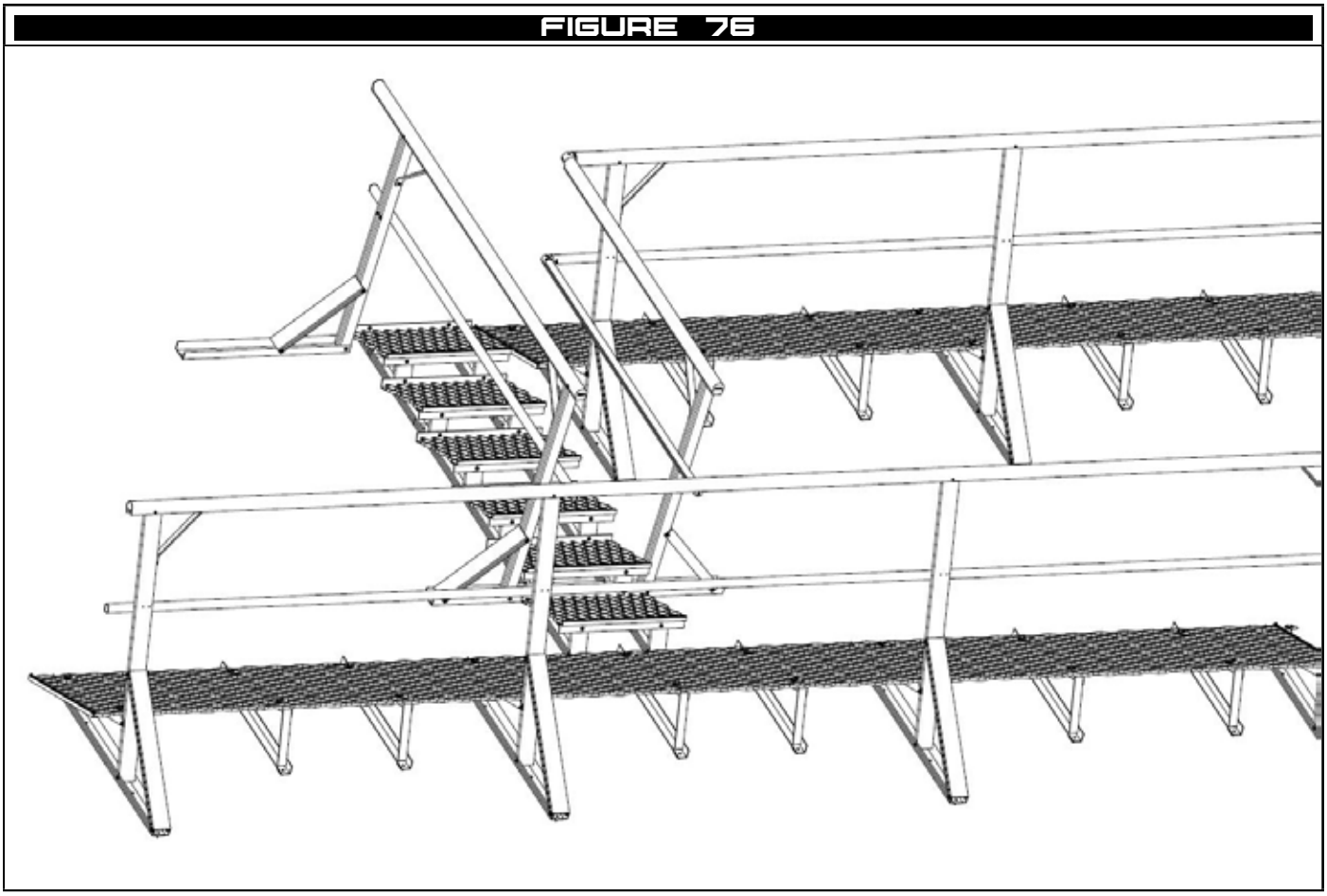
Angle	Cut Length (mm)	Angle	Cut Length (mm)
21	156	34	208
22	163	35	215
23	170	36	175
24	176	37	181
25	183	38	186
26	190	39	192
27	164	40	198
28	170	41	205
29	176	42	211
30	182	43	218
31	189	44	225
32	195	45	232
33	202		

10.2 Joining Walkway

When joining walkway to the lower end of walkway stairs, the walkway shall be placed below the final step. Ensure the first rise (walkway to stair) is equal to the other stair rises.

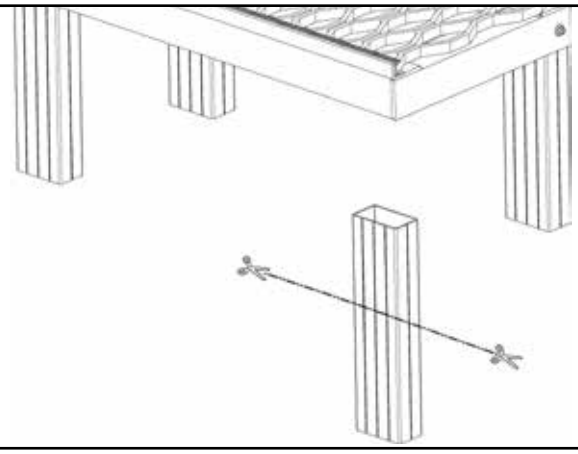
When joining walkway to the upper end of walkway stairs, the walkway shall be placed to either side level with the top step. This will ensure the final rise in the set is accurate.

FIGURE 76



11 Steps

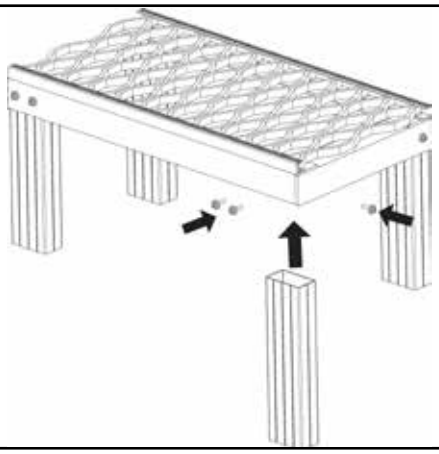
FIGURE 77



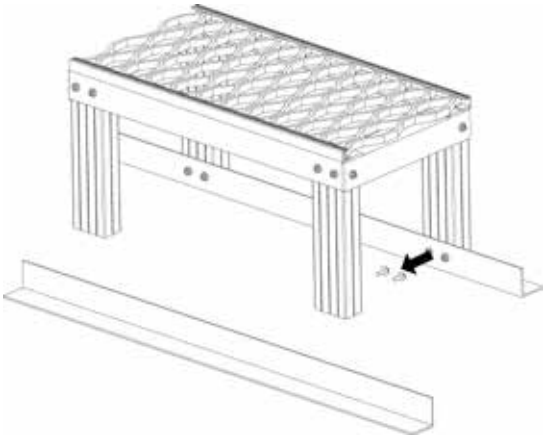
1. If required cut the legs to the desired length

⚠ ***The step height shall not be greater than 300mm.***

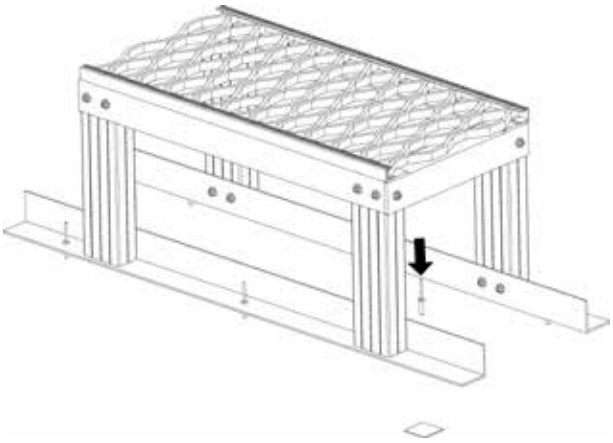
⚠ ***Step shall be level as per Section 3.2.8 and 3.2.9.***



2. Place the four legs in the internal corners of the step platform, ensure that the long edge of the legs are facing the front edge of the platform. Install two 20mm tek screws on the front edge and one into the side of the platform into the legs.

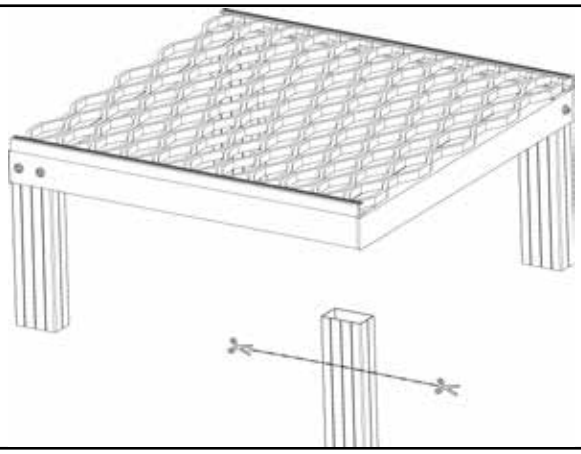


3. Install two lengths of angle on the bottom of the legs. Ensuring that each length of angle crosses the front two and back two legs respectively. Place two 20mm tek screws through the lengths of angle into each leg.



4. Place three rivets and three foam squares along both lengths of angle.

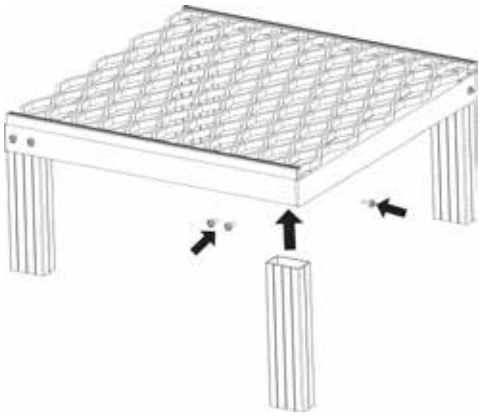
FIGURE 78



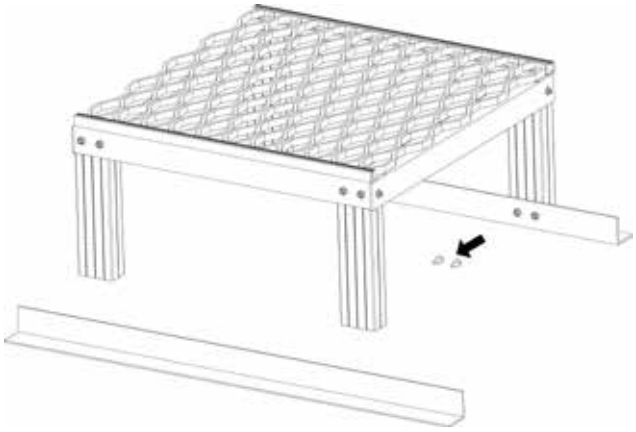
1. If required cut the legs to the desired length

⚠ ***The step height shall not be greater than 300mm.***

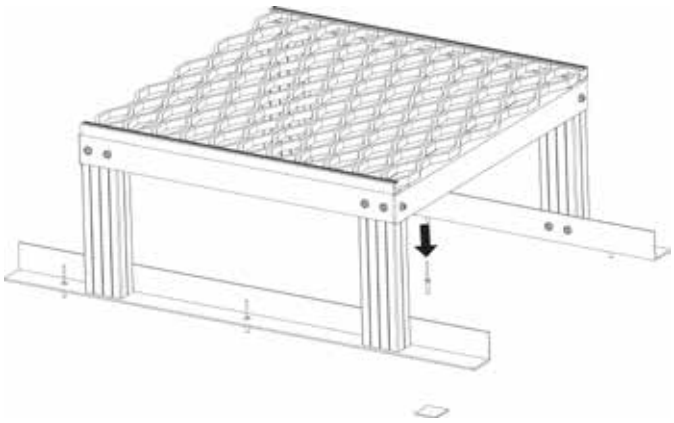
⚠ ***Step shall be level as per Section 3.2.8 and 3.2.9.***



2. Place the four legs in the internal corners of the step platform, ensure that the long edge of the legs are facing the front edge of the platform. Install two 20mm tek screws on the front edge and one into the side of the platform into the legs.

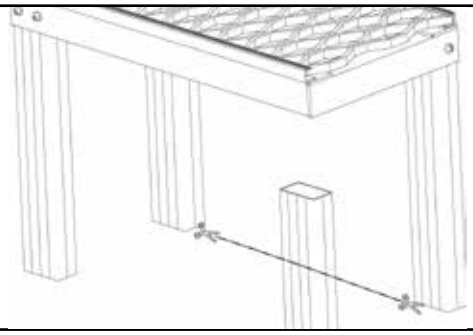


3. Install two lengths of angle on the bottom of the legs. Ensuring that each length of angle crosses the front two and back two legs respectively. Place two 20mm tek screws through the lengths of angle into each leg.



4. Place three rivets and three foam squares along both lengths of angle.

FIGURE 79

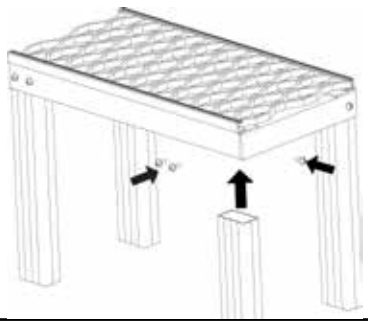


1. If required cut the legs to the desired length

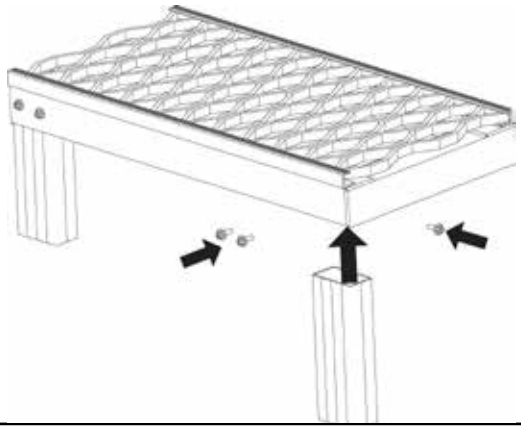
⚠ ***The height of the top step shall not be greater than 450mm***

⚠ ***Each rise shall be equal to within 5mm.***

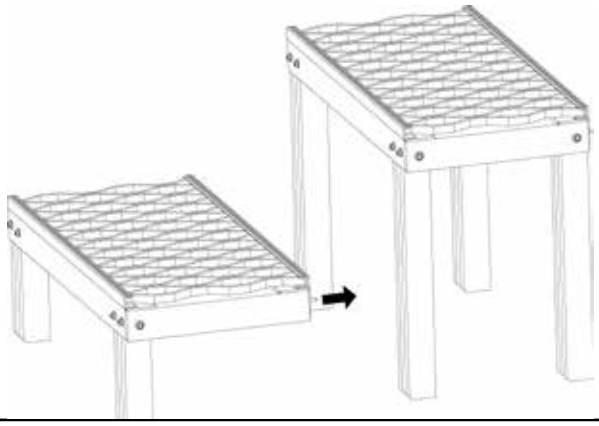
⚠ ***Step shall be level as per Section 3.2.8 and 3.2.9.***



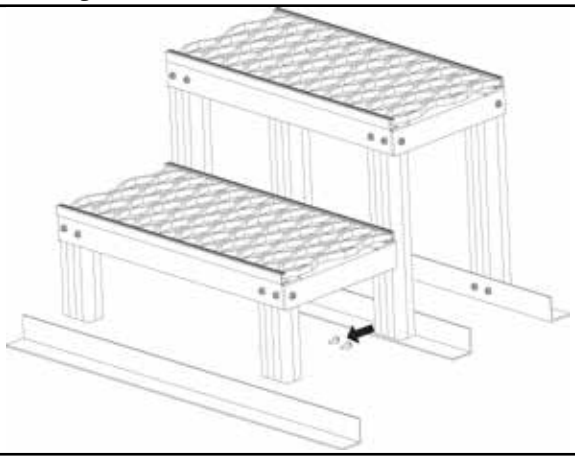
2. Place the four longer legs in the internal corners of the step platform, ensure that the long edge of the legs are facing the front edge of the platform. Install two 20mm tek screws on the front edge and one into the side of the platform into the legs.



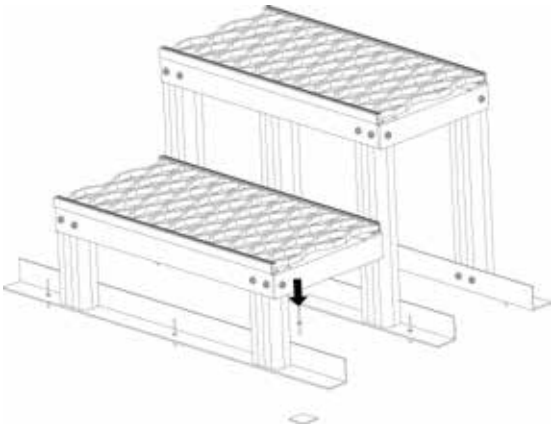
3. Place the two shorter legs in the internal corners of the step platform, ensure that the long edge of the legs are facing the front edge of the platform. Install two 20mm tek screws on the front edge and one into the side of the platform into the legs.



4. Screw the step platform assemblies together with a 20mm tek screw through the lower step platform in to the front two legs of the top step platform.

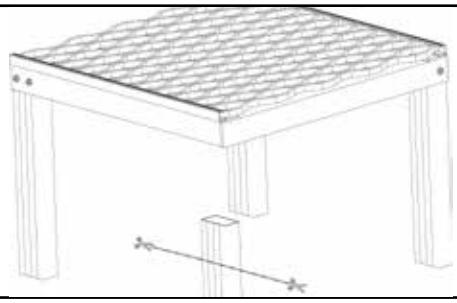


5. Install three lengths of angle on the bottom of the legs. Ensuring that each length of angle crosses the pairs of legs. Place two 20mm tek screws through the lengths of angle into each leg.



6. Place three rivets and three foam squares along each length of angle.

FIGURE 80

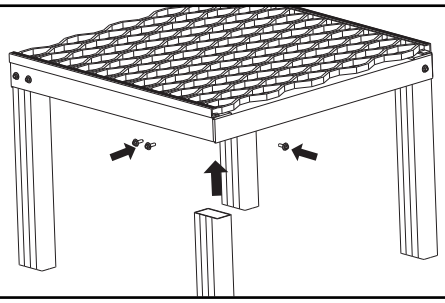


1. If required cut the legs to the desired length

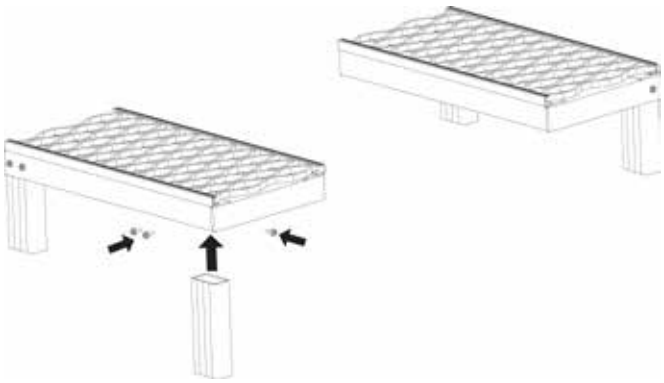
⚠ ***The height of the top step shall not be greater than 450mm***

⚠ ***Each rise shall be equal to within 5mm.***

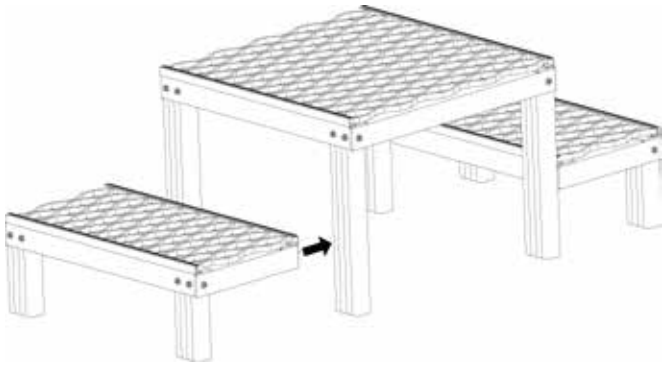
⚠ ***Step shall be level as per Section 3.2.8 and 3.2.9.***



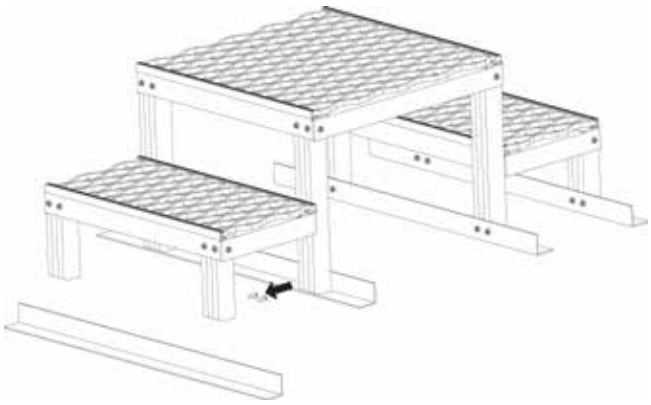
2. Place the four longer legs in the internal corners of the step platform, ensure that the long edge of the legs are facing the front edge of the platform. Install two 20mm tek screws on the front edge and one into the side of the platform into the legs.



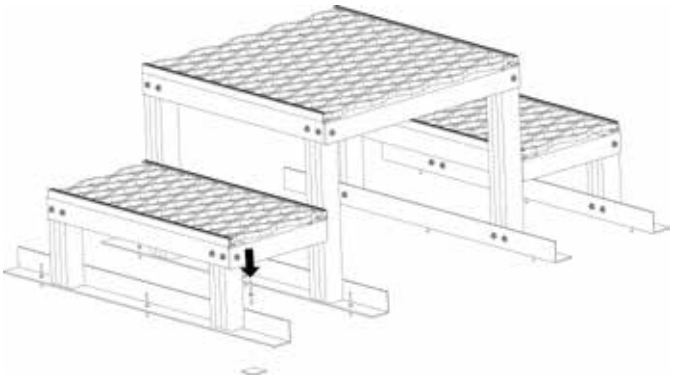
3. Place the two shorter legs in the internal corners of the step platform, ensure that the long edge of the legs are facing the front edge of the platform. Install two 20mm tek screws on the front edge and one into the side of the platform into the legs. Repeat for second step platform.



4. Screw the step platform assemblies together with a 20mm tek screw through the lower step platform in to the front two legs of the top step platform. Repeat for the second step platform.



5. Install four lengths of angle on the bottom of the legs. Ensuring that each length of angle crosses the pairs of legs. Place two 20mm tek screws through the lengths of angle into each leg.



6. Place three rivets and three foam squares along each length of angle.

12 Clamp Fixings

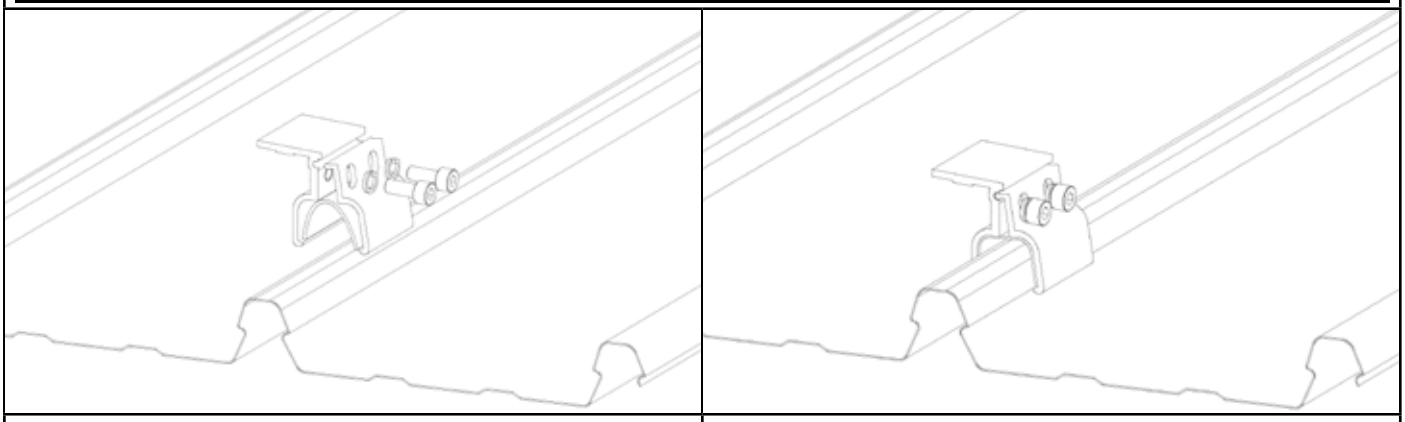
12.1 General

12.1.1 All Clamp fasteners shall be tightened to 15Nm with a 6mm hex key

12.2 Clamps

12.2.1 Kliplok 700

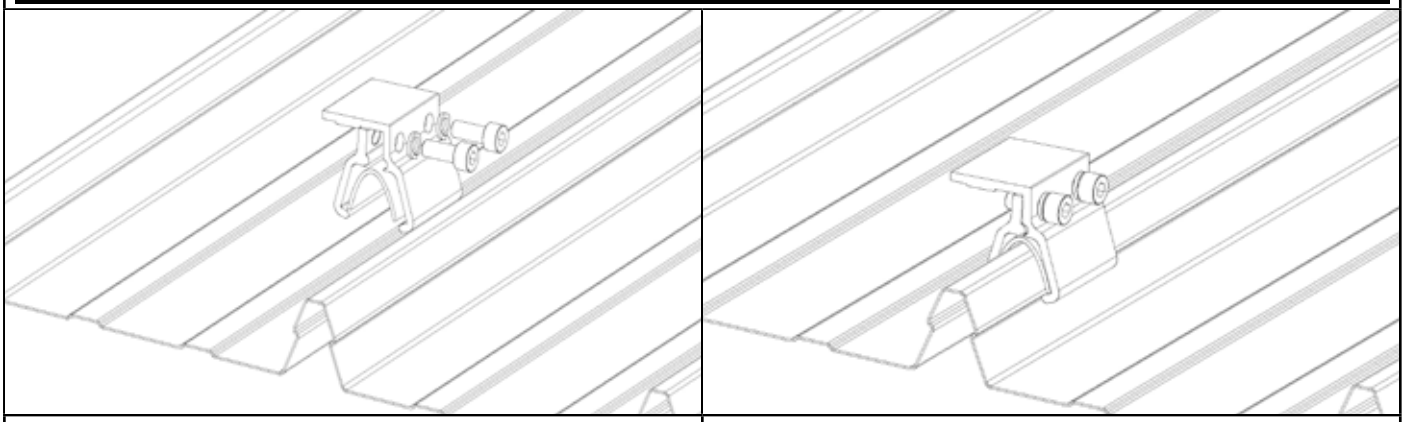
FIGURE 81



1.	2.

12.2.2 Kliplok 406

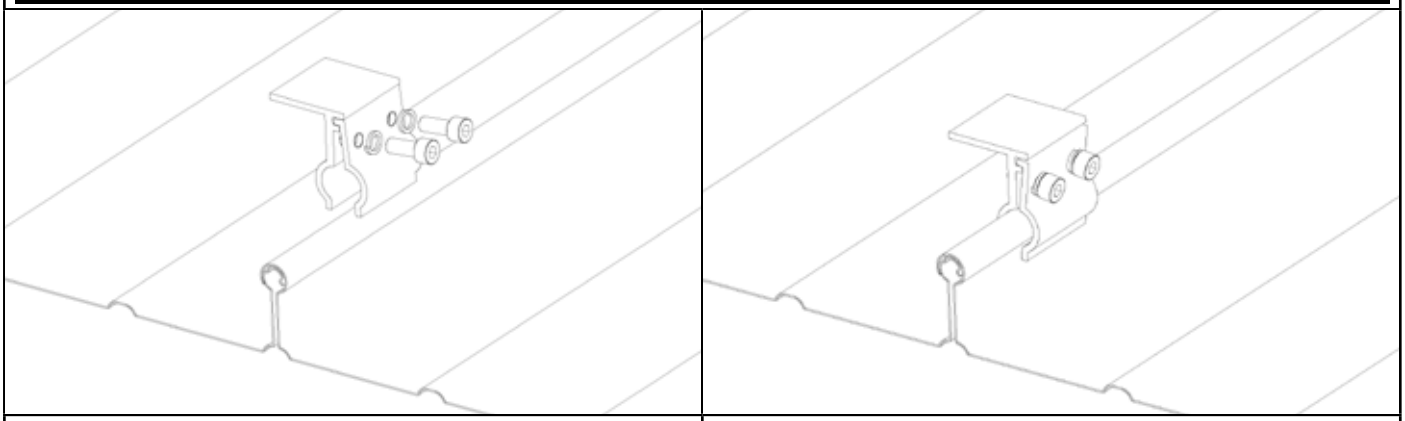
FIGURE 82



1.	2.

12.2.3 KingZip and KalZip

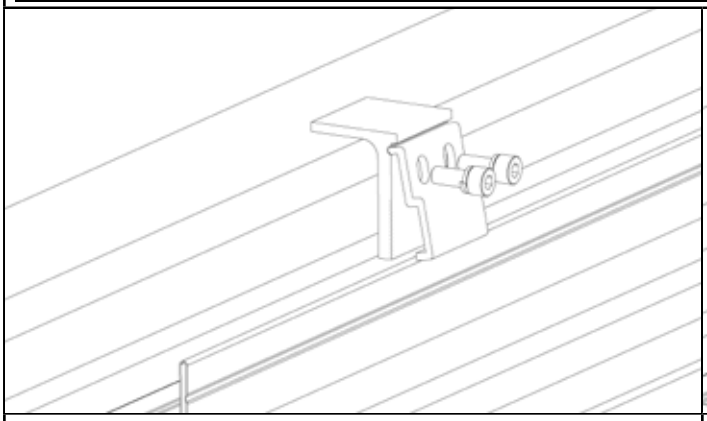
FIGURE 83



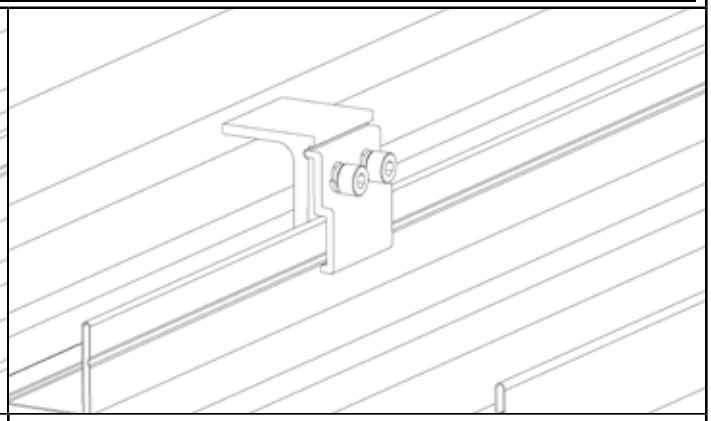
1.	2.

12.2.4 Standing Seam

FIGURE 84



1.



2.

12.3 Installations

12.3.1 Walkway Across Seams

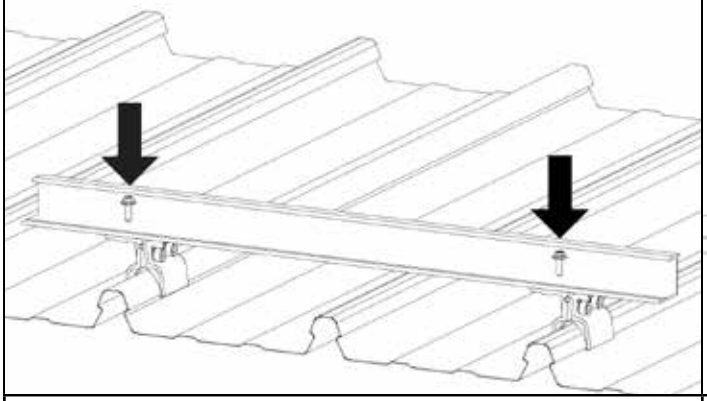
FIGURE 85

1. After positioing the clamps, install the walkway batten with 2x 20mm tek screws.

⚠ ***The distance between clamps shall not be less than 400mm.***

12.3.2 Walkway Along Seams

FIGURE 86

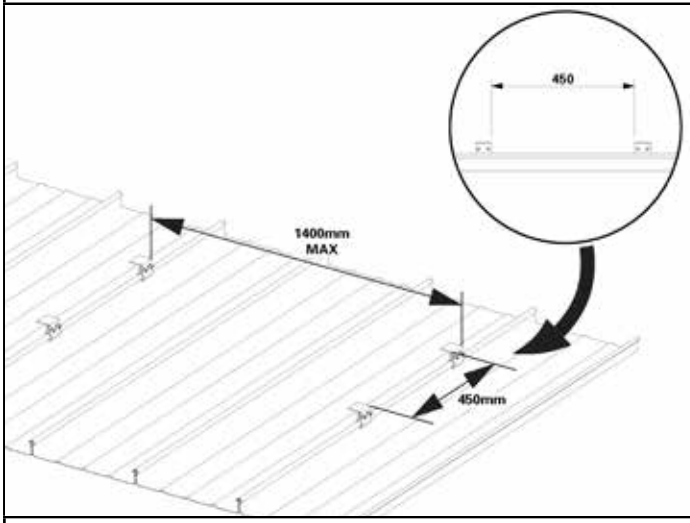


1. After positioing the clamps, install the walkway batten with 2x 20mm tek screws.

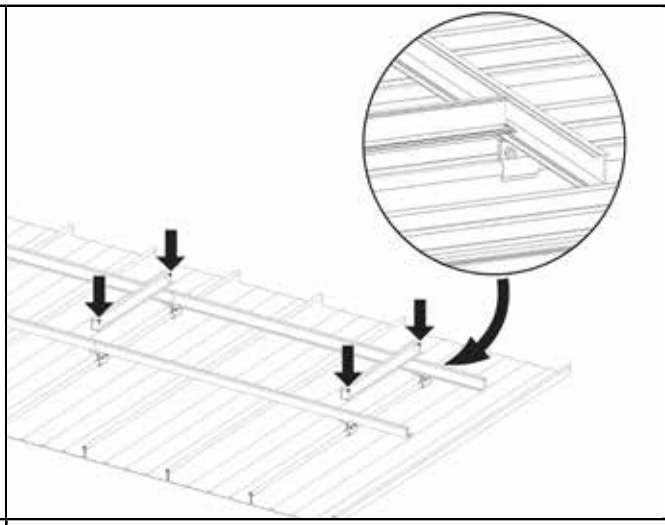
⚠ ***The distance between clamps shall not be less than 400mm.***

12.3.3 Walkway Long Span

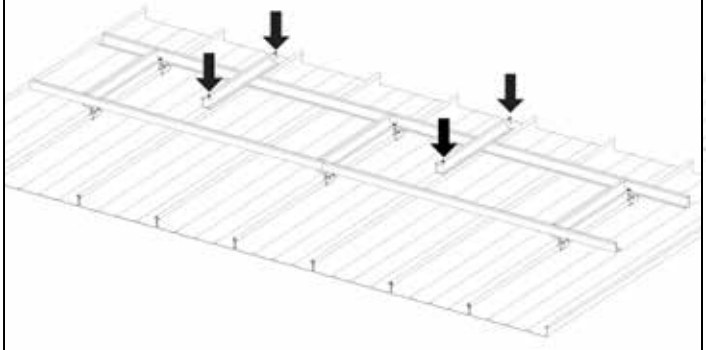
FIGURE 87



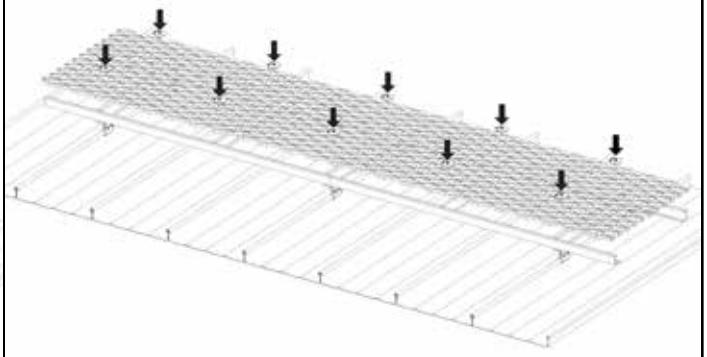
1. Install 2 clamps on one seam spaced at 450mm apart. In the direction of travel, clamps shall be installed on seams at spacings of no greater than 1400mm.



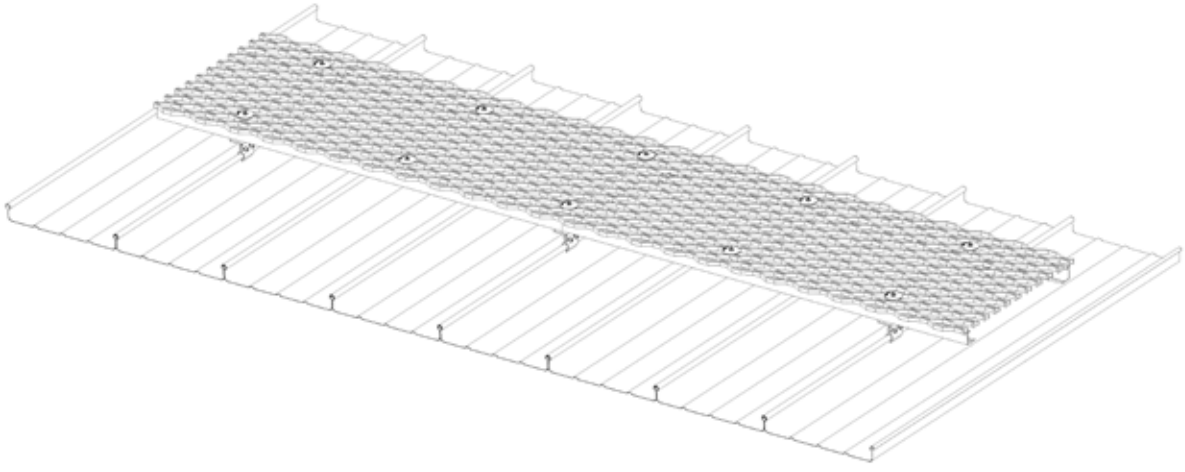
2. Rest the long lengths of the walkway batten on top of the clamps in the direction of the walkway. It is preferred that the end of the battens terminate on top of a clamp. A 500mm cross batten should be fixed at each clamp location through the side batten and clamp



3. 500mm cross battens should be installed with 20mm tek screws at the midspan between clamp locations (approximately 600mm).

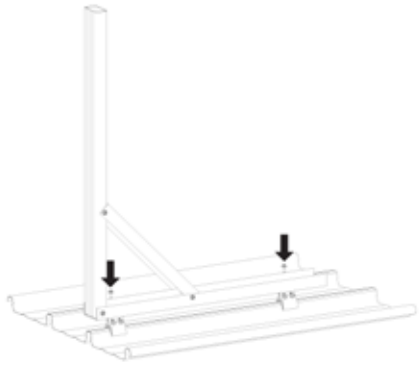


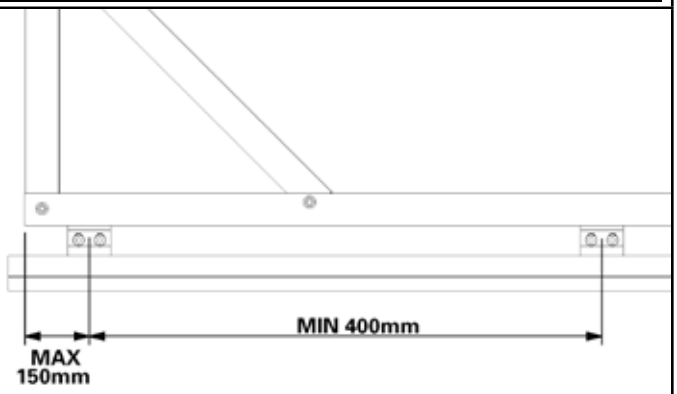
4. Install the walkway onto the battens.



12.3.4 Single Guardrail

FIGURE 88





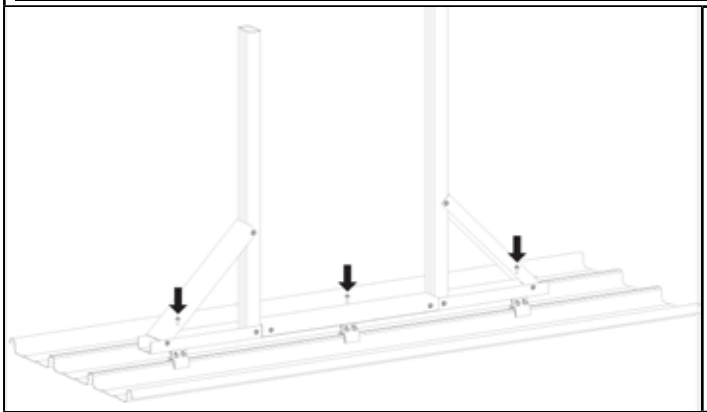
1. After positioing the clamps, install the guardrail assembly with 2x 20mm tek screws.

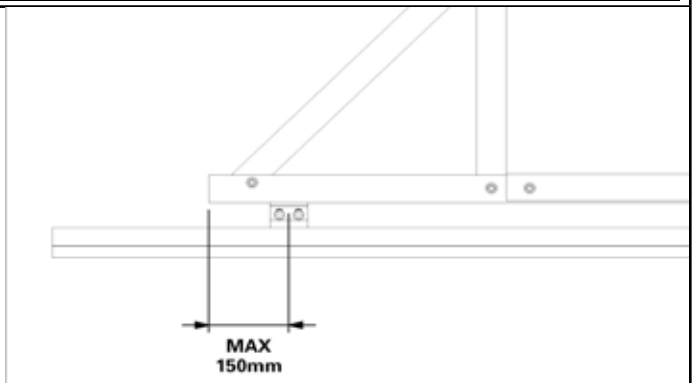
⚠ ***The distance between clamps shall not be less then 400mm.***

⚠ ***The distance between any clamp and the end of the guardrail assembly shall not exceed 150mm.***

12.3.5 Double Guardrail

FIGURE 89





1. After positioing the clamps, install the guardrail assembly with 3x 20mm tek screws.

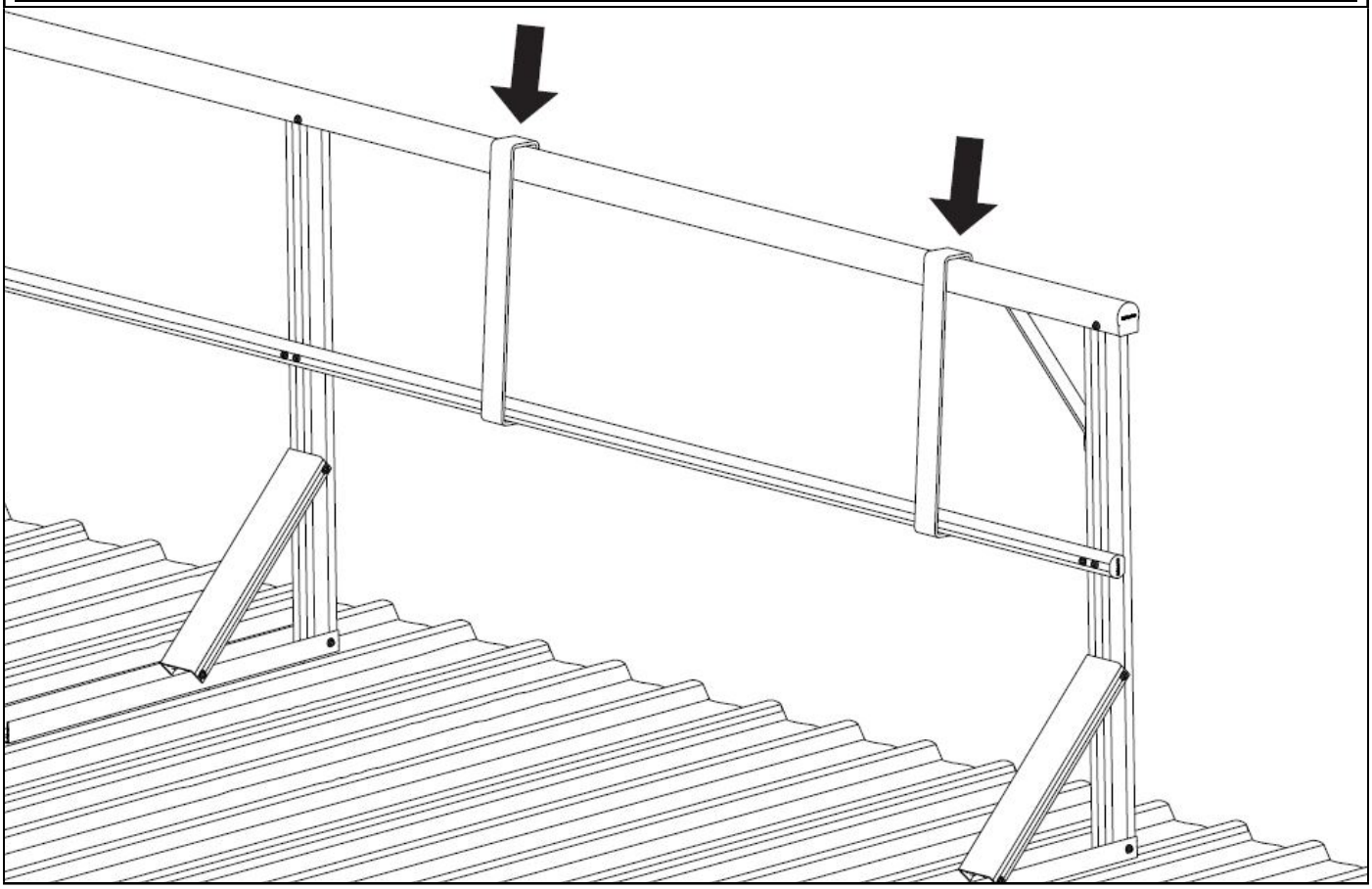
⚠ ***The distance between any clamp and the end of the guardrail assembly shall not exceed 150mm.***

13 Tools

13.1 Middle Rail Spacer

The Middle Rail Spacer tool can be used to hang the middle rail from the handrail whilst it is being fixed to ensure the requirements of Section 3.2.5 are met.

FIGURE 90



14 Inspection

14.1 Inspection Period

All FastFit access systems shall be inspected every 12 months by a competent height safety installer.

INSPECTION RECORD			
Product Code		Date of Manufacture	
Serial or Batch No.		Date of Install	
Inspector		Date of Inspection	

PROCEDURE	INSPECTION	USER	COMPETENT PERSON
SEE SECTION 3.1 ON PAGE 11	Check the requirement of the applicable section have been met.	☐	☐
	Comments:		
SEE SECTION 3.2 ON PAGE 14	Check the requirement of the applicable section have been met.	☐	☐
	Comments:		
SEE SECTION 3.3 ON PAGE 19	Check the requirement of the applicable section have been met.	☐	☐
	Comments:		
SEE SECTIONS 4 - 9	Inspect the applicable installation procedure has been followed for each components of the system.	☐	☐
	Comments:		
SEE SECTION 3.3.4 ON PAGE 19	Inspect the system has been labelled and the label is legible.	☐	☐
	Comments:		

WARRANTIES

EXTRACT: SAFETYLINK PTY LTD STANDARD TERMS AND CONDITIONS

1.1 To the extent permitted by law all implied conditions, warranties and undertakings are expressly excluded.

1.2 Except as provided in this clause the Company shall not be liable for any loss or damage, whether direct or indirect (including consequential losses or damage) arising out of any breach of contract by the Company or any negligence of the Company, its employees or agents.

1.3 Should the Company be liable for a breach of a guarantee, condition or warranty implied by the Australian Consumer Law (not being a guarantee, condition or warranty implied by sections 51, 52 and 53 of that Law) then its liability for a breach of any such condition or warranty express or implied shall be limited, at its option, to any one or more of the following.

A in case of Goods

I the replacement of the Goods or the supply of equivalent Goods.

II the repair of the goods,

III the payment of the cost of replacing the Goods or acquiring equivalent Goods.

IV the payment of the cost of having the Goods repaired. Provided that any such Goods are returned to the Company by the Purchaser at the Purchaser's expense.

B in the case of services

I the supply of the services again,

II the payment of the cost of having the services supplies again.

1.4 The Company is not liable for the costs of recovery of the Goods from the field, loss of use of the Goods, loss of time, inconvenience, incidental or consequential loss or damage, nor for any other loss or damage other than as stated above, whether ordinary or exemplary, caused either directly or indirectly by use of the Goods.

1.5 The Company warrants that at the time of shipment, Products manufactured by it will be free from defects in material and workmanship. In the absence of a modified written warranty, the Company agrees to making good any such defects by repairing the same or at the Company's option by replacement, for a period of (1) one year from the date of shipment. This limited warranty applies provided that:

a defects have arising solely from faulty materials or workmanship;

b the Products have not received maltreatment, inattention or interference;

c the Products have been installed in accordance with the Company's Installation Handbooks using only products supplied by the Company;

d accessories used with the Products are manufactured by or approved by the Company

e the Products are maintained in accordance with Australian Standard 1891.4 (section 9).

f you notify any claim under this warranty to SafetyLink in writing to the address below no later than 14 days after the event or occurrence concerning the produce giving rise to the claim and you pay all costs related to your claim.

This warranty does not apply to any defects or other malfunctions caused to the Goods by accident, neglect, vandalism, misuse, alteration, modification or unusual physical, environment or electrical stress.

Please note that the benefits to the purchaser (as a consumer) given by this warranty are in addition to your other rights and remedies under the Australian Consumer Law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

1.6 If any goods are not manufactured by the Company, the guarantee of the manufacturer thereof shall be accepted by the Purchaser as the only express warranty given in respect of the goods.

1.7 Except as provided in this clause 11, all express and implied warranties, guarantees and conditions under statute or general law as the merchantability, description, quality, suitability or fitness of the Products for any purpose or as to design, assembly, installation, materials or workmanship or otherwise are hereby expressly excluded (to the extent to which they may be excluded by law).

PLEASE SEE SAFETYLINK PTY LTD FULL STANDARD TERMS OF CONDITIONS OF SALE FOR FURTHER REFERENCE.

SafetyLink®

Innovative
Fall Protection

bsi ISO 9001 Quality Management Systems CERTIFIED
FS 707792

SafetyLink Pty Ltd | ABN 83 081 777 371 | www.safetylink.com
Head Office: 54 Bonville Ave, Thornton, 2322, NSW, Australia
+61 2 4964 1068 | 1300 789 545
Asia-Pacific/The Americas | info@safetylink.com
Europe/Africa/Middle East | europe.sales@safetylink.com
Northern Europe | uk.sales@safetylink.com