



SafetyLink®

*Innovative
Fall Protection*

FastFit

Ladders and Platforms

Installation

Figure 1



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

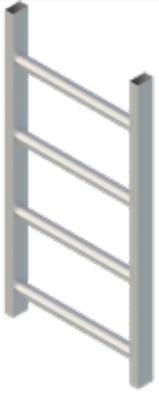
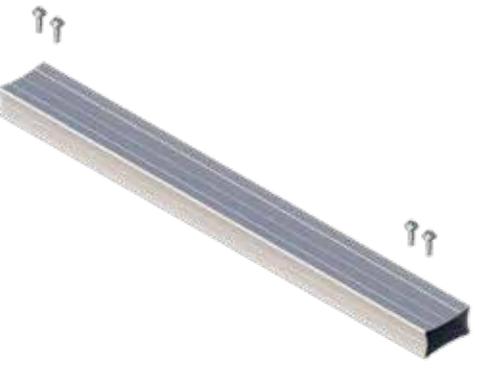
SafetyLink Ladders are a modular access system for permanent installation in a wide variety of scenarios. SafetyLink Ladders are design to and when installed in accordance with this manual are compliant with AS 1657:2018.

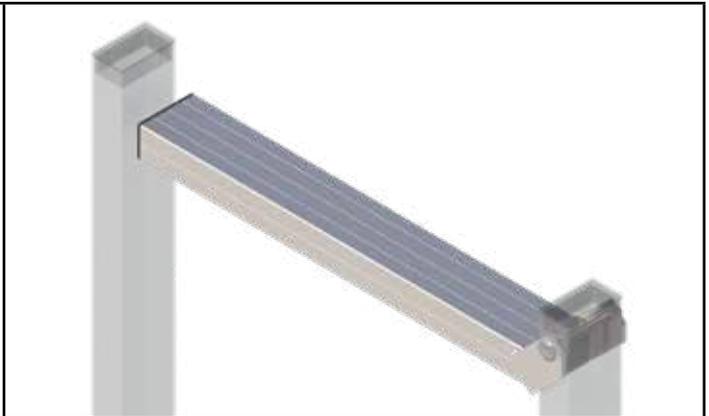
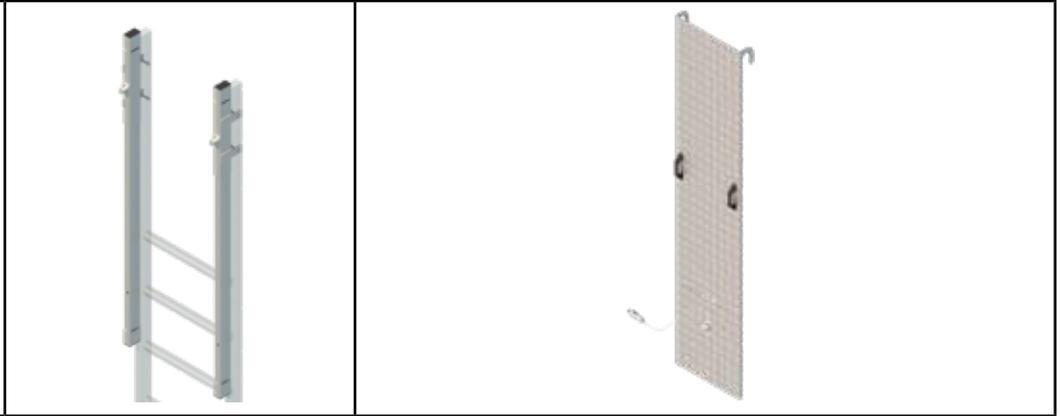
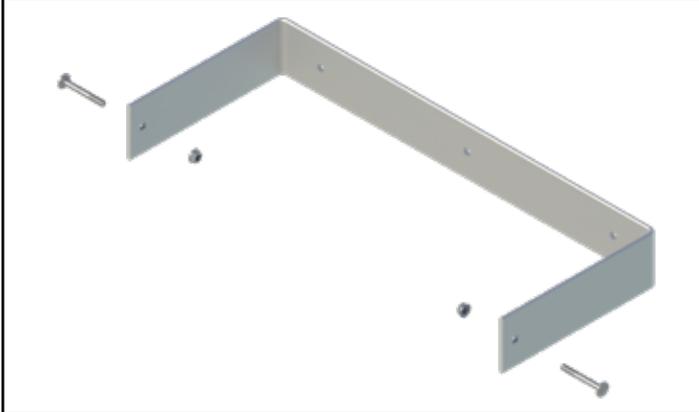
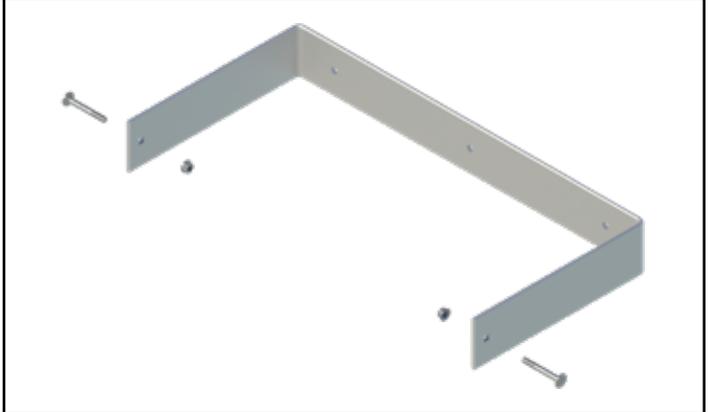
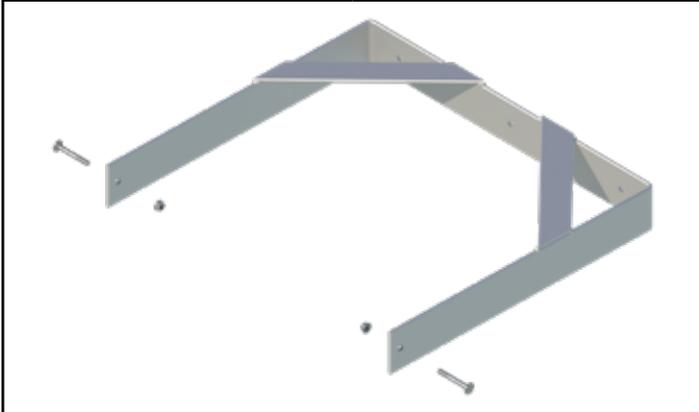
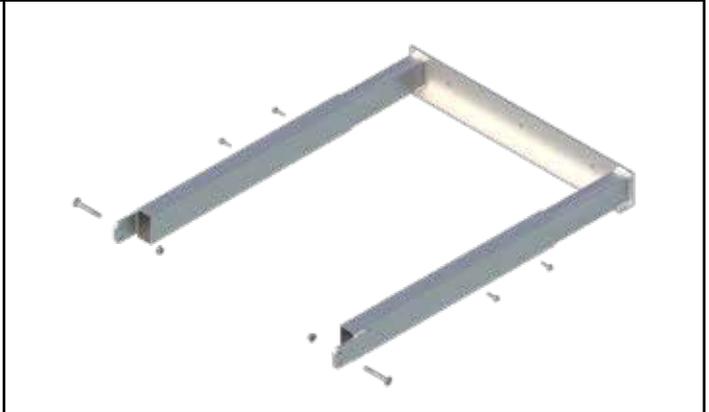
2.2 Material Specification

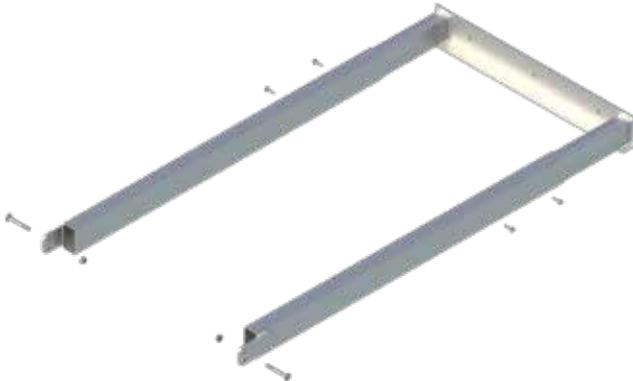
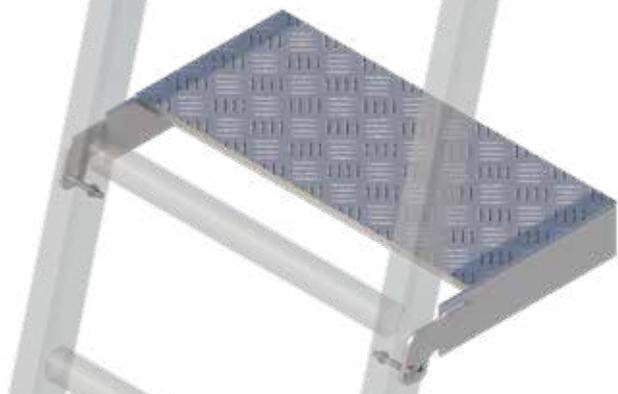
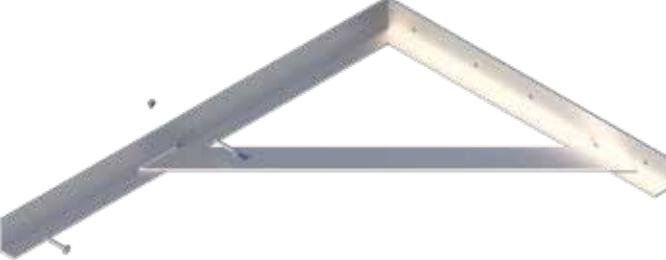
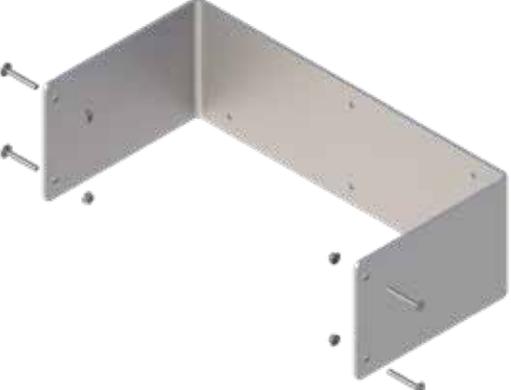
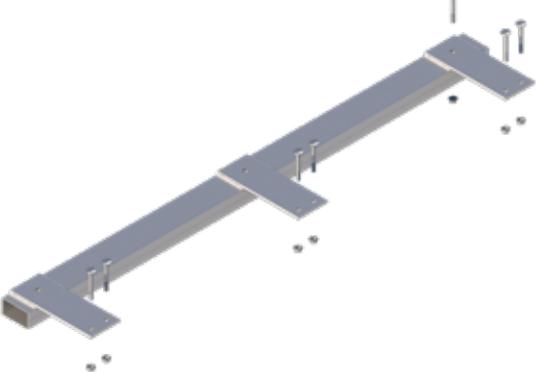
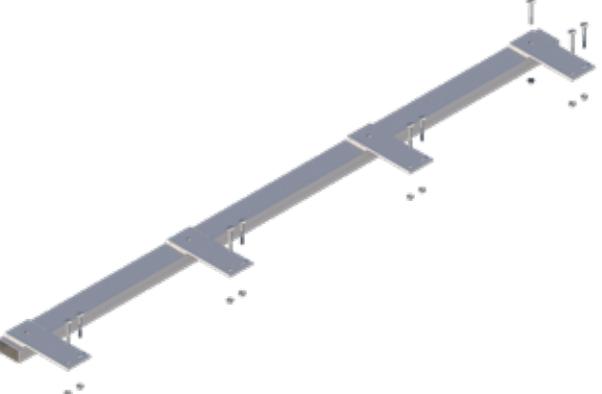
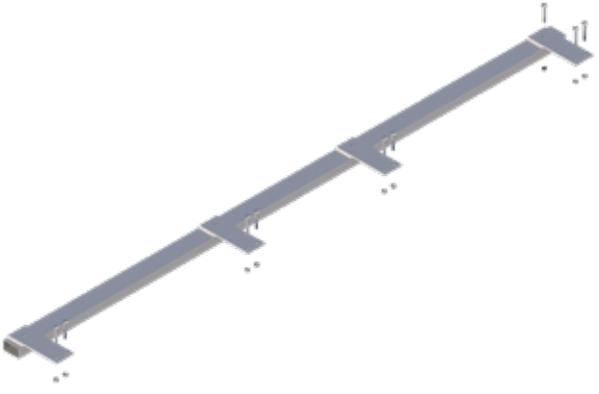
Figure 2	
COMPONENT	DESCRIPTION
Ladder, Platforms and Cages	Aluminium 6000 series
Caps	Polyethylene
Fasteners	See Section 3.3

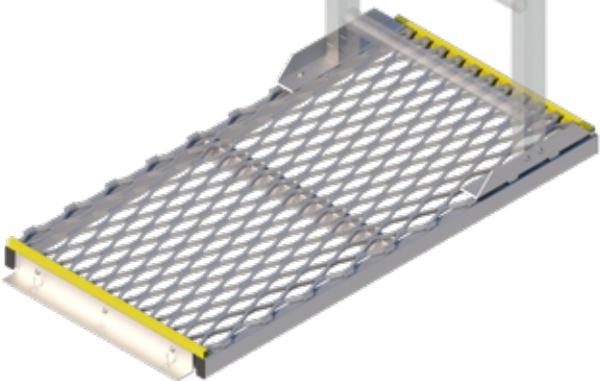
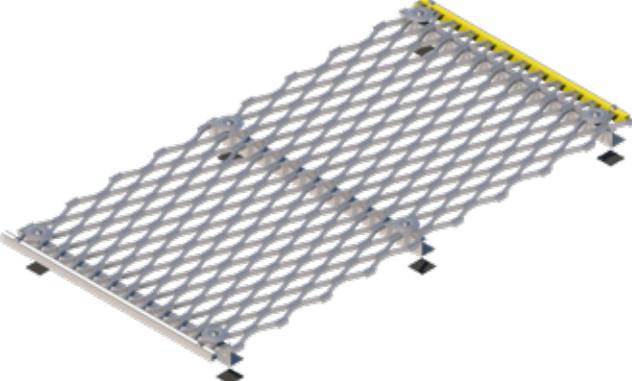
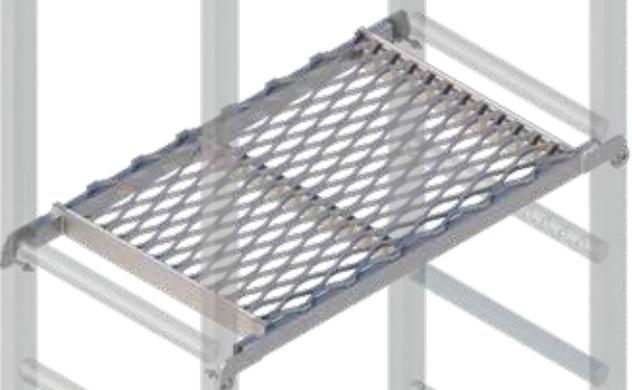
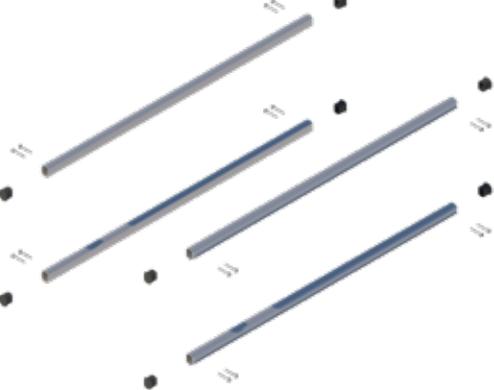
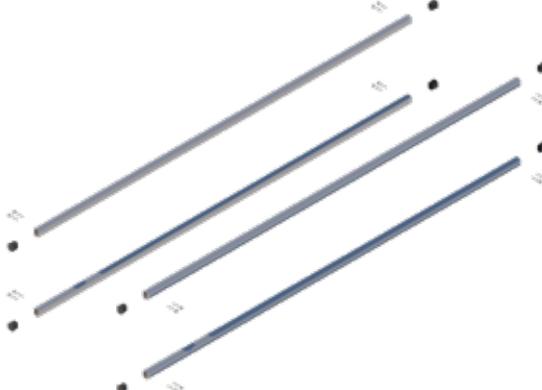
2.3 Components

Figure 3	
	
LADER002.LHD Section 4.1 on page 17	LADER002.SEC.8 Section 4.1 on page 17

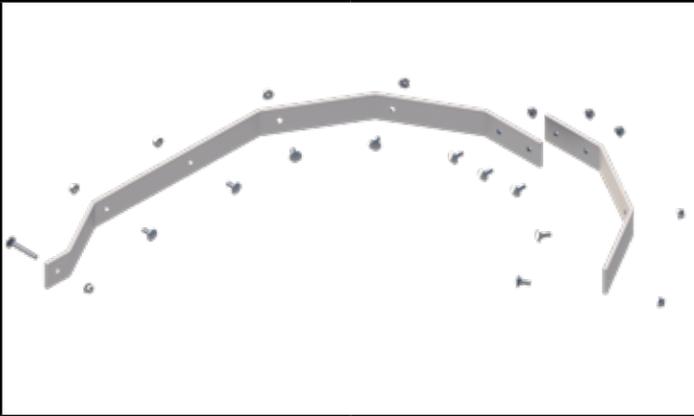
	
<p>LADER002.SEC.4 Section 4.1 on page 17</p>	<p>LADER002.BASEANGLE_2x350 Section 4.3 on page 18</p>
	
<p>LADER002.FOOT.75 Section 4.2 on page 17</p>	<p>LADER002.FOOT.90 Section 4.2 on page 17</p>
	
<p>LADER002.SPL Section 4.4 on page 19</p>	<p>LADER002.HR.75 Section 4.5 on page 19</p>
	
<p>LADER002.HR.90 Section 4.5 on page 19</p>	<p>GUARD001.GATE_485 Section 4.6 on page 20</p>

	
<p>GUARD001.GATE_700 Section 4.6 on page 20</p>	<p>LADER002.LHD.BAR Section 4.7 on page 20</p>
	
<p>LADER002.HR.RET Section 4.8 on page 21</p>	<p>LADER002.DOOR Section 4.9 on page 21</p>
	
<p>LADER002.BRK200 Section 5.1 on page 22</p>	<p>LADER002.BRK250 Section 5.1 on page 22</p>
	
<p>LADER002.BRK500 Section 5.1 on page 22</p>	<p>LADER002.BRKADJ.600-1000 Section 5.2 on page 22</p>

	
<p>LADER002.BRKADJ.800-1200 Section 5.2 on page 22</p>	<p>LADER002.BRK.LND75 Section 5.3 on page 23</p>
	
<p>LADER002.BRK.LND90 Section 5.3 on page 23</p>	<p>LADER002.BRK.SIDE Section 5.4 on page 23</p>
	
<p>LADER002.BRK.SPND Section 5.5 on page 24</p>	<p>LADER002.STF.1200 Section 5.6 on page 25</p>
	
<p>LADER002.STF.1800 Section 5.6 on page 25</p>	<p>LADER002.STF.2400 Section 5.6 on page 25</p>

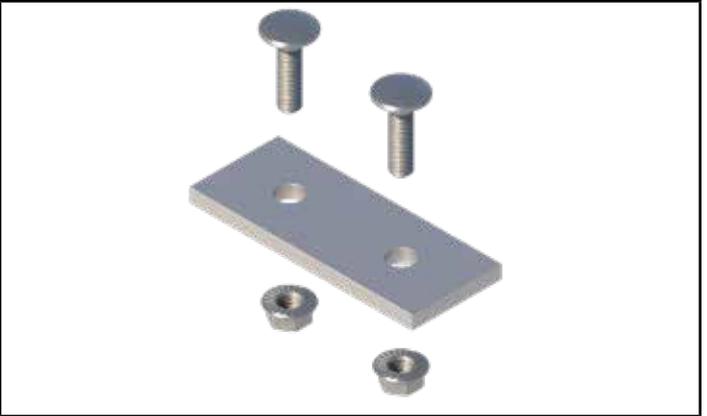
	
<p>LADER002.PLT.FOOT Section 6.1 on page 27</p>	<p>LADER002.PLT.WW Section 6.2 on page 28</p>
	
<p>LADER002.PLT.BASE Section 6.3 on page 29</p>	<p>LADER002.PLT.TOP Section 6.4 on page 30</p>
	
<p>LADER002.PLT.1M Section 6.5 on page 31</p>	<p>LADER002.HR.PRPT.1M Section 6.5 on page 31</p>
	
<p>LADER002.PLT.2M Section 6.5 on page 31</p>	<p>LADER002.HR.PRPT.2M Section 6.5 on page 31</p>

	
<p>LADER002.PLT.ADJ.2400</p>	<p>LADER002.PLT.WW.2400</p>
<p>Section 6.6 on page 33</p>	<p>Section 6.7 on page 35</p>
	
<p>LADER002.CAGE.1</p>	<p>LADER002.CAGE.2</p>
<p>Section 7.1 on page 37 and 7.4 on page 41</p>	<p>Section 7.1 on page 37 and 7.4 on page 41</p>
	
<p>LADER002.CAGE.3</p>	<p>LADER002.CAGE.4</p>
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<p>LADER002.CAGE.5</p>	<p>LADER002.CAGE.1.3</p>
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LADER002.CAGE.HOOP.03

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LADER002.CAGE.JOIN

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LADER002.CAGE.EXTN

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LADER002.PLT.TOP.32

Section 8.1 on page 44



LADER002.PLT.MID.S

Section 8.2 on page 46



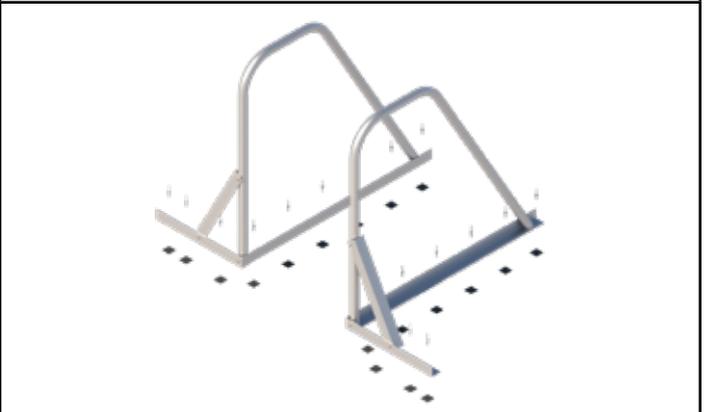
LADER002.PLT.MID.90

Section 8.3 on page 48



LADER002.PLT.FD

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GUARD001_Grab

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<p>GUARD001_Grab.GUTR Section 9.2 on page 50</p>	<p>GUARD001_Grab.PRPT Section 9.3 on page 52</p>
	
<p>LADER002.DOOR Section 4.9 on page 21</p>	<p>LADER002.CAGE.GATE Section 7.7 on page 43</p>

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 ladder system, machinery and vehicles use in the area, electrical conductivity and chemical agents.

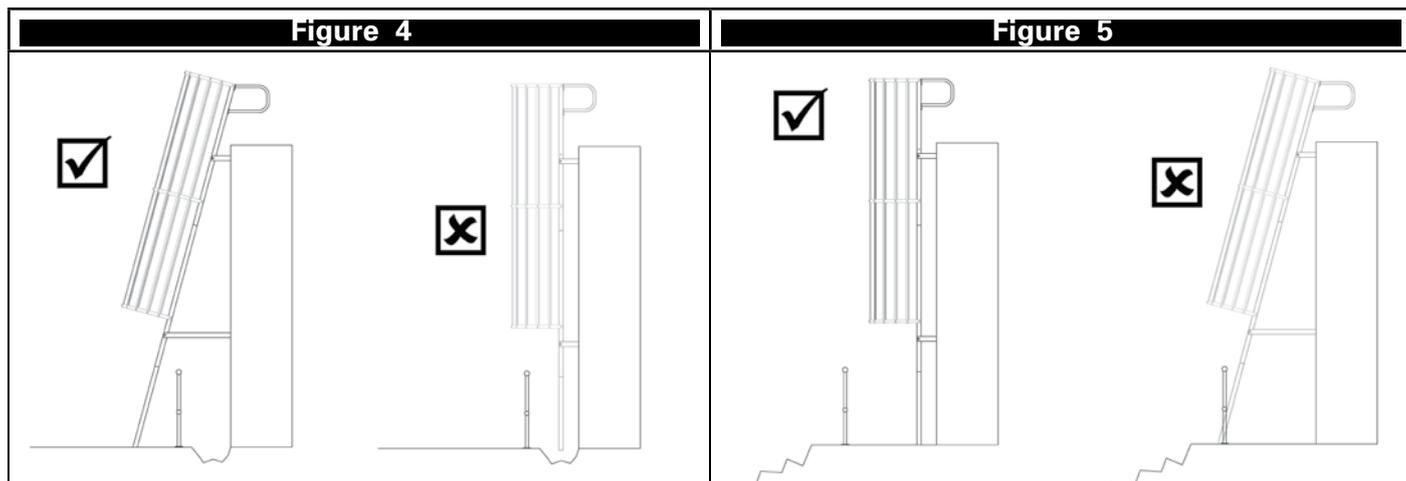
3.1.2 Ladder install angle

SafetyLink Ladders can be installed at either 75° or 90° depended on the locations requirements.

- ✓ It is important to use an angle measuring device to set the ladder at the correct pitch to ensure top platforms will align with the top rung.

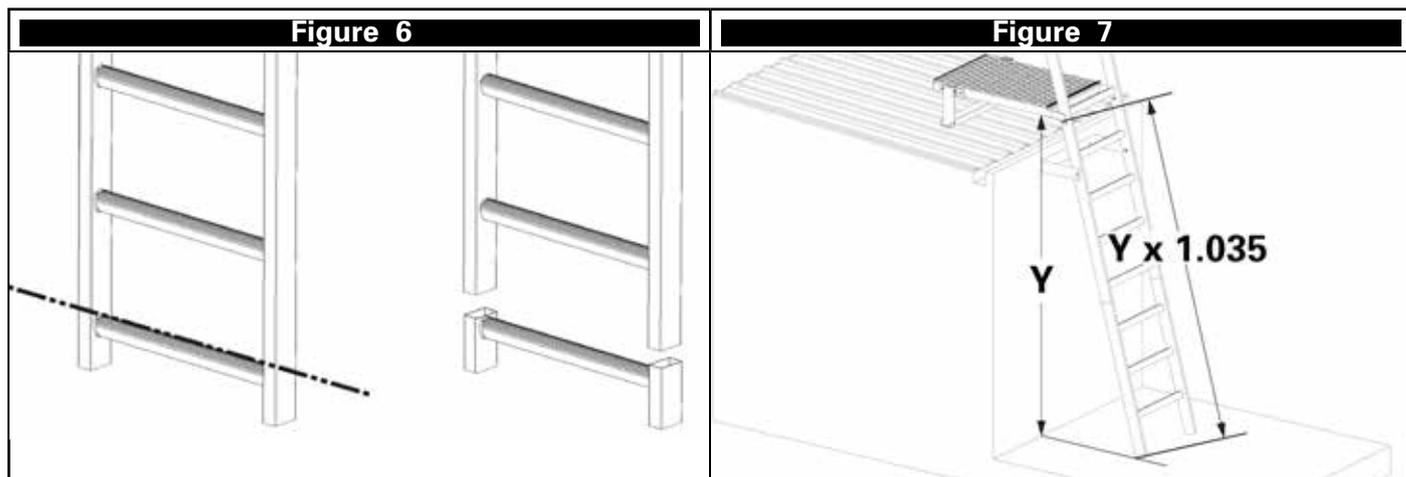
A 75° ladder may be installed to make the access system easier to climb, if space is not an issue, if the area directly below the top of the ladder is occupied by a hazard. See Figure 4.

A 90° ladder may be installed where space is limited, mounting bracket locations are limited or distant from the ladder, if the ladder is taller than 4m (note this is a guide). See Figure 5.



3.1.3 Cutting

Before cutting any ladder sections, SafetyLink recommends all sections are assembled, accurate measurements are taken and only the bottom of the ladder is cut to suit your installation, see Figure 6. When measuring for 75° ladders the formula below can be used, see Figure 7.

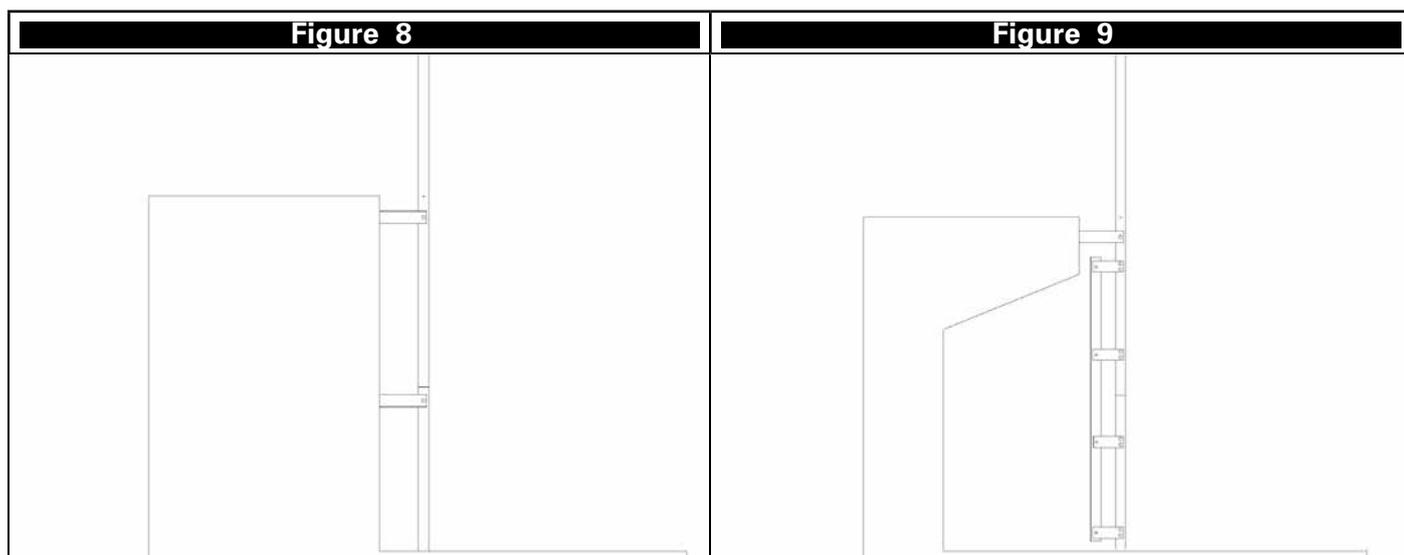


3.1.4 Ladder brackets or Stiffeners

When assessing if ladder brackets or stiffeners should be used on your installation it is important to consider the following;

Ladder bracket should be used when the installation is close to a wall or structure that will allow for fixing to be installed. The maximum ladder bracket reach is 1200mm. Figure 8 demonstrates a suitable ladder bracket installation.

Ladder Stiffeners should be used if a building has very large eaves or a facade has a large overhang that brings the ladder out away from any structure to fix to. Figure 9 demonstrates a suitable situation for installing ladder stiffeners.



The following stiffeners should be used for the unsupported sections of ladder in Figure 10.

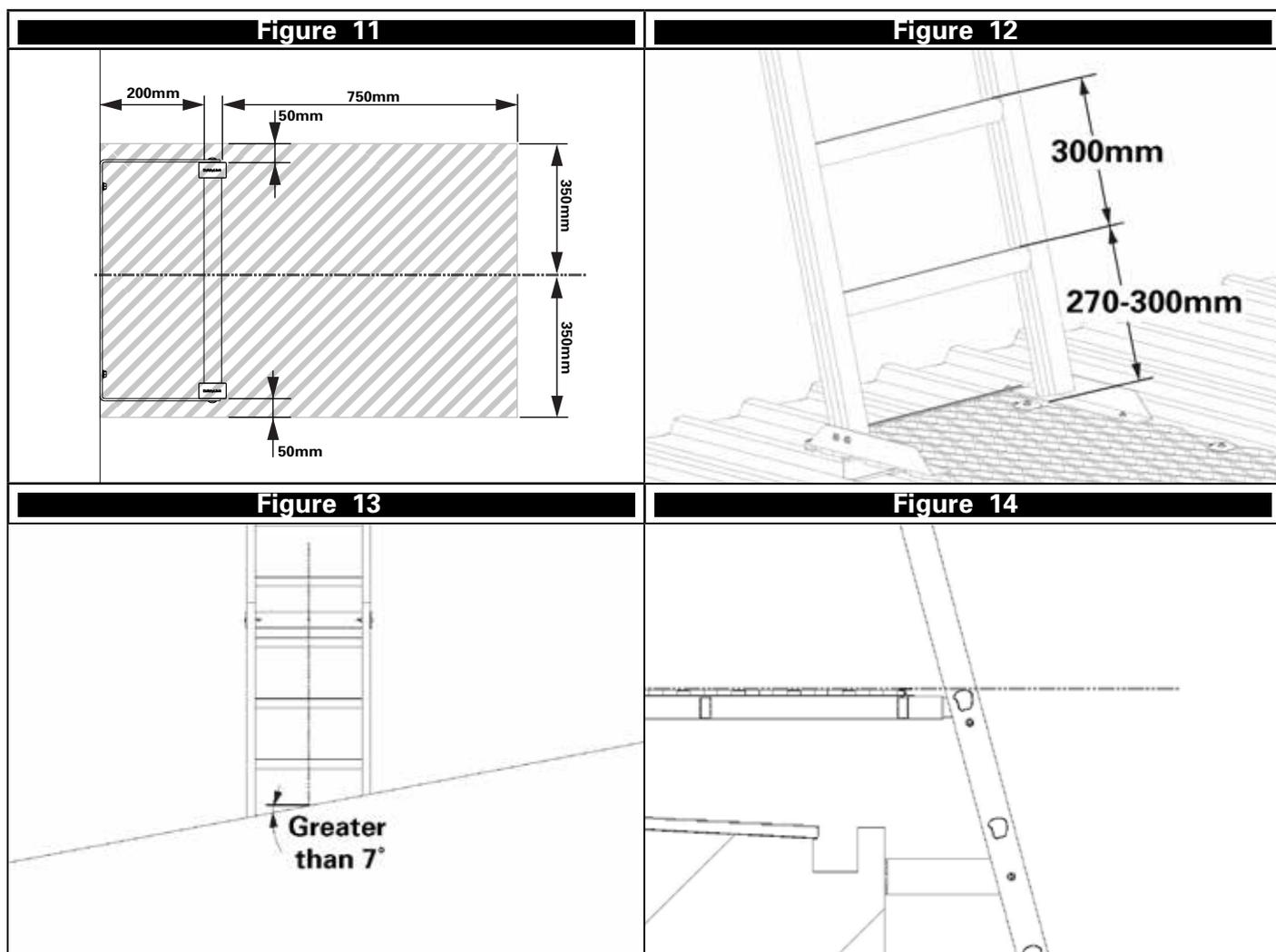
Figure 10			
LENGTH OF UNSUPPORTED SECTION	STIFFENER 1200	STIFFENER 1800	STIFFENER 2400
Up to 3m	-	-	1
Up to 3.6m	1	1	-
Up to 4.8m	-	1	1

3.2 System Requirements

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

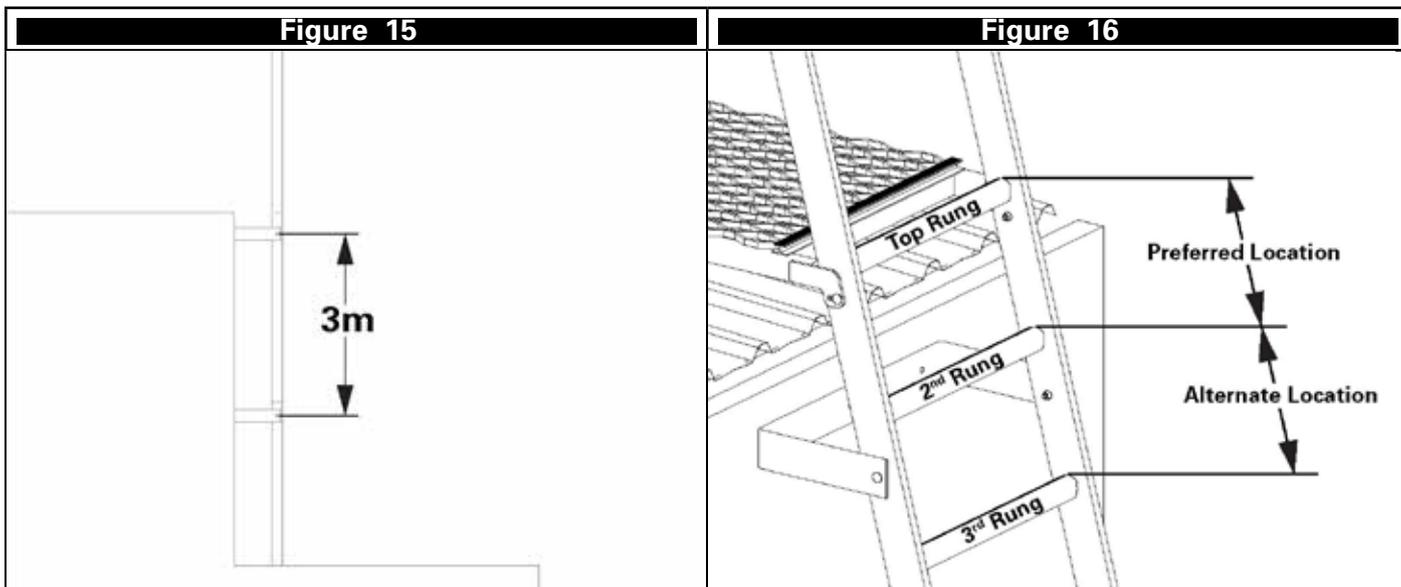
3.2.1 Ladders

- I As a minimum, the following clearance shall be adhered to. Note, the clearance applies only to permanent objects that are not part of the ladder installation. See Figure 11.
 - ✓ 200mm behind the back edge of the rung
 - ✓ 750mm horizontally in front of the rung
 - ✓ 350mm either side of the centreline of the ladder
 - ✓ 50mm either side of the stiles
- II The bottom rung distance to the ground, landing or platform shall be at least 90% of the standard rung spacing. See Figure 12.
- III The base of a ladder shall not terminate on to ground that is on a cross slope of 7°. If the cross slope is greater than 7°, a platform should be installed. See Figure 13.
- IV The top rung shall be the same height as the top landing. See Figure 14.



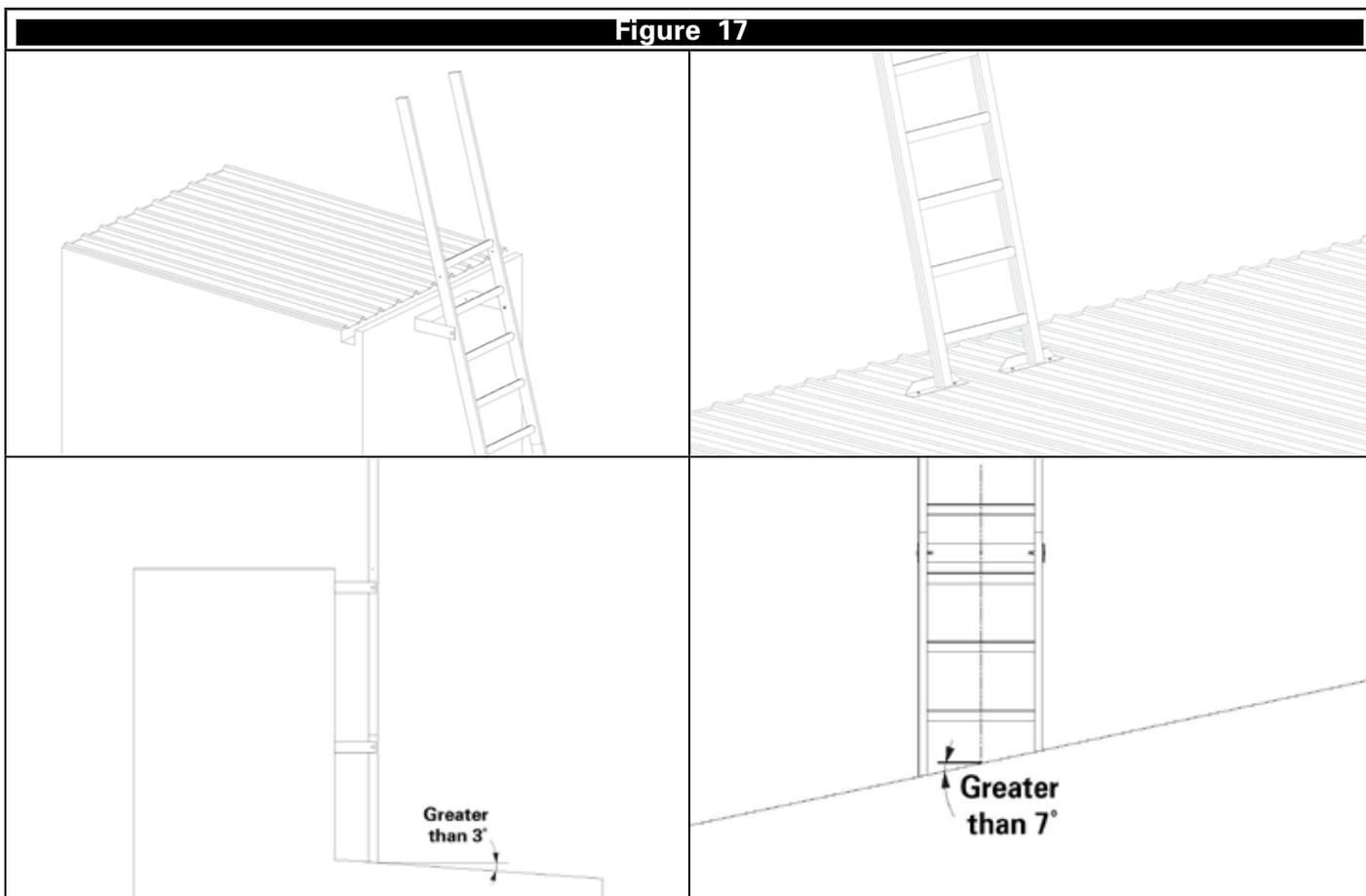
3.2.2 Brackets and Stiffeners

- I Ladder brackets shall be installed no greater than 3m apart, see Figure 15.
- II The top bracket shall be installed in between the top rung and next rung down (second rung). Where this is not possible, the top bracket may be installed in between the second and third rungs. See Figure 16.



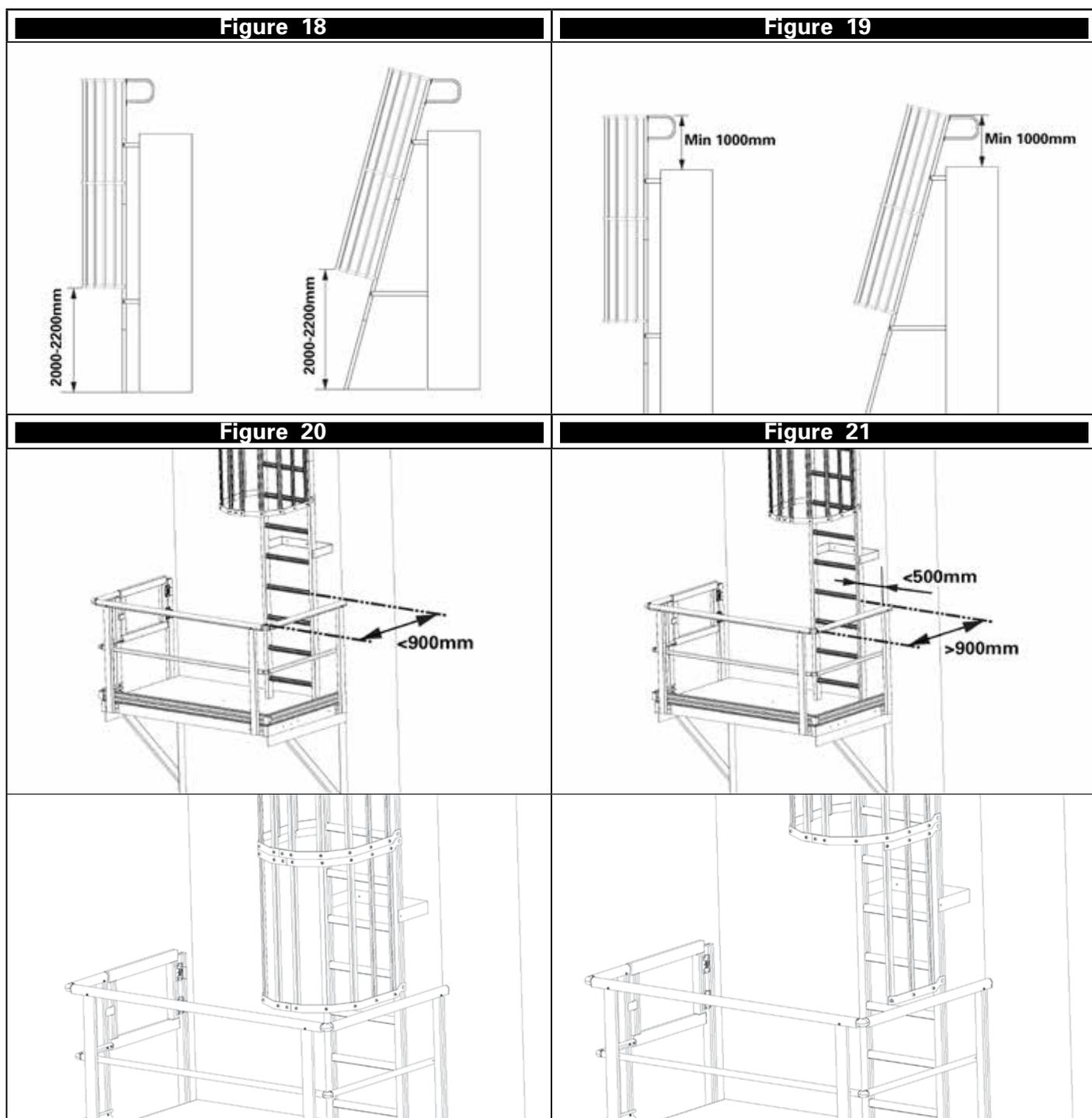
3.2.3 Entry / Exit Platforms

- I Where ladders terminate on uneven or angled surfaces platforms or landing shall be installed. Figure 17 shows four examples of uneven surfaces that require platforms.



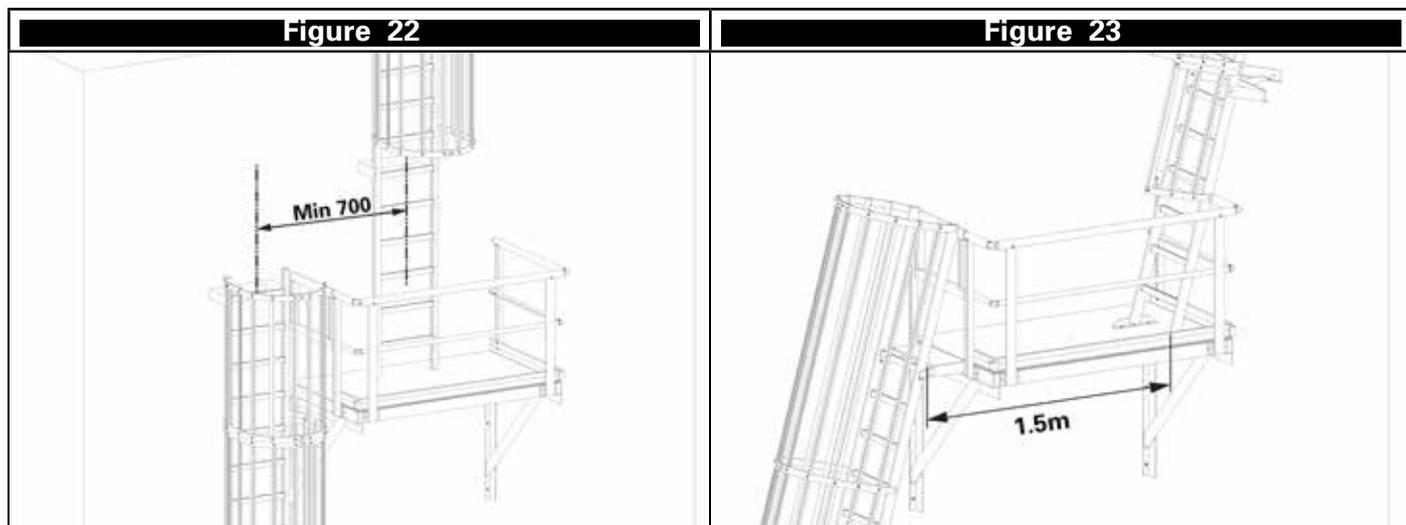
3.2.4 Cages

- I The Ladder Cage must start between 2000mm and 2200mm from the ladder landing as shown in Figure 18.
- II At the top of the ladder, the cage shall extend not less than 1m above the platform or to the top of the guardrailing if installed. See Figure 19.
- III Where a ladder terminates at a platform fitted with guardrailing that is less than 900mm horizontally from the front of the ladder, a half cage shall be installed. See Figure 20.
- IV Where a ladder terminates at a platform fitted with guardrailing that is less than 500mm laterally from the outside of either stile, edge protection shall be installed. See Figure 21.



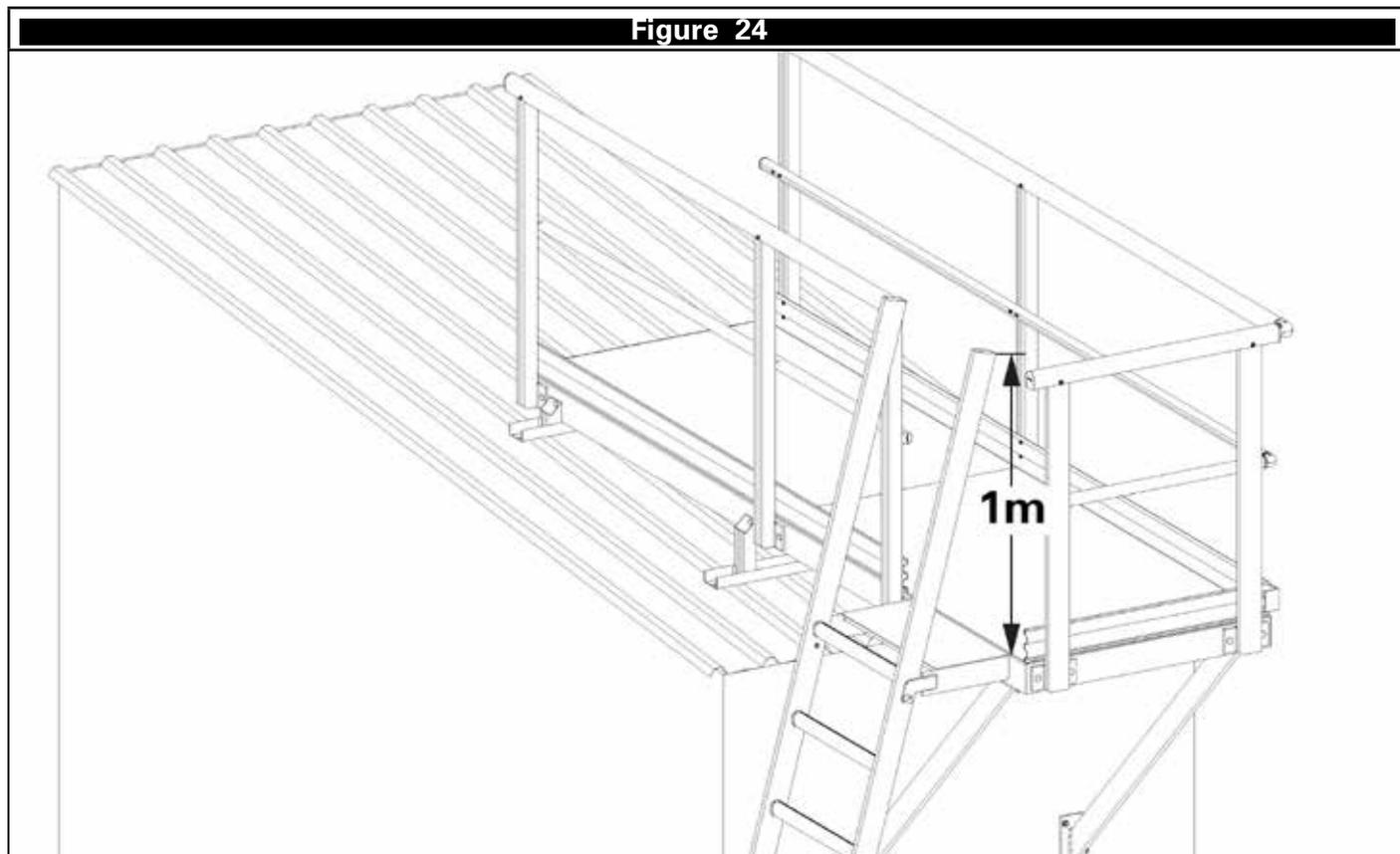
3.2.5 Midway and Rest Platforms

- I Ladders over 6m (when measured vertically) shall be fitted with a rest platform. The rest platform shall;
 - ✓ Be staggered with a distance between the 2 centre lines of at least 700mm. See Figure 22.
 - ✓ Where staggering or change of direction of 180 ° is not possible, the distance between ladders shall be at least 1.5m. See Figure 23.



3.2.6 Ladder Head

- I Where the top of a ladder terminates at a platform and is it necessary for the user to step through the stiles, the stile shall extend not less than 1m above the platform. See Figure 24.



3.3 Fasteners

3.3.1 Cup Head Screws

All Ladder 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 Label

All systems shall be marked with the label shown in Figure 25. The label shall be filled out by the installer and fixed with 2 x trifold rivets.

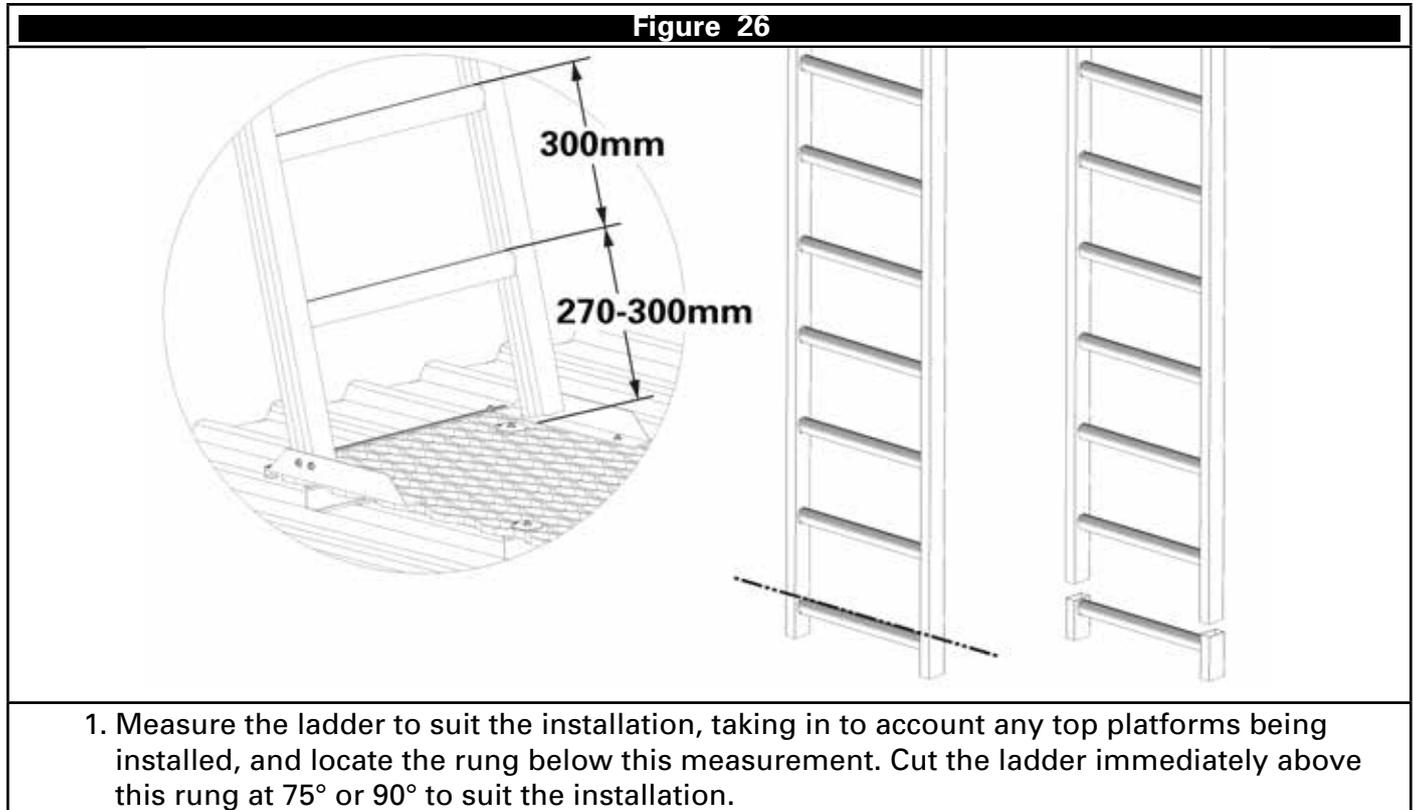
Figure 25

 SafetyLink's FastFit Access Systems are compliant with AS1657-2018, when installed in accordance with the manufacturer's requirements.	
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Certified By:	<input type="text"/>
Install Date:	<input type="text"/>
Location ID:	<input type="text"/>
NEXT INSPECTION	
<input type="text"/>	<input type="text"/>
 Install Guide	 SafetyLink®

4 Ladders

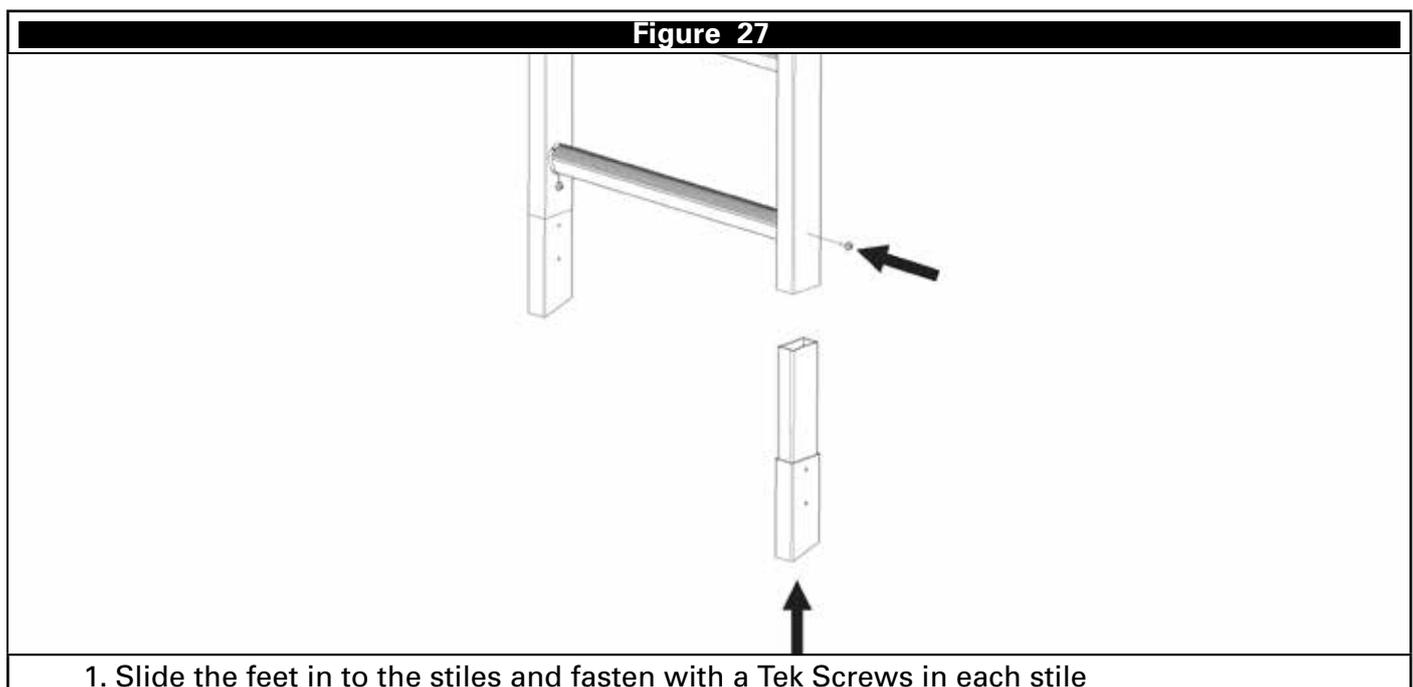
4.1 Base Cutting

- ✓ If a ladder is not going to be fitted with ladder feet or an adjustable landing platform, it is necessary to cut the base for any ladder installation to ensure the bottom rung spacing requirements of Section 3.2.1 are met.



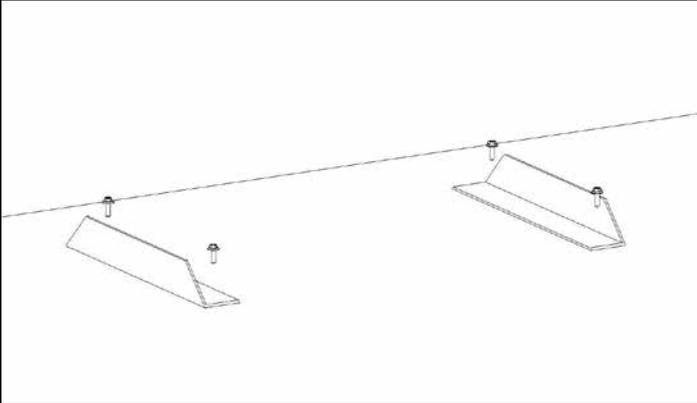
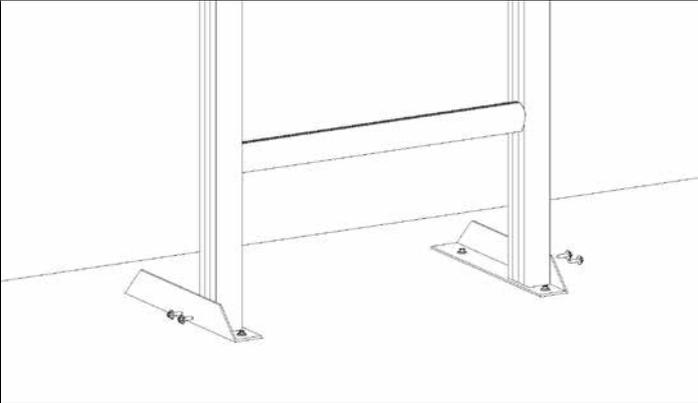
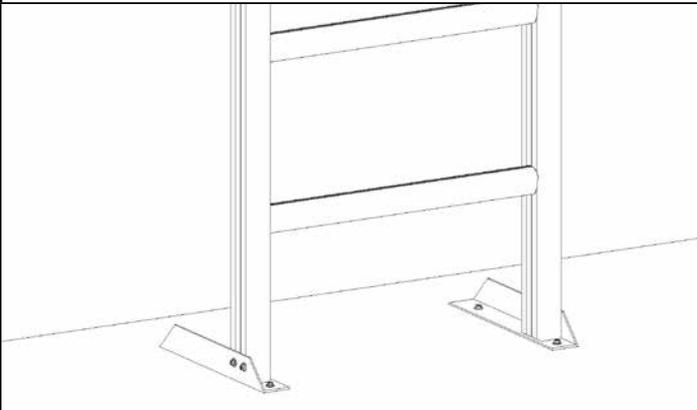
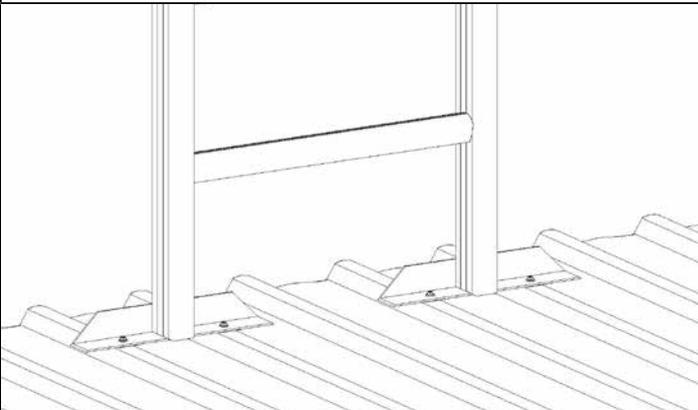
4.2 Ladder Feet 75° and 90°

- ✓ Ladder feet are beneficial for maximising the length of a ladder and provide an equal spacing between the ground and first rung without the need to cut the ladder.



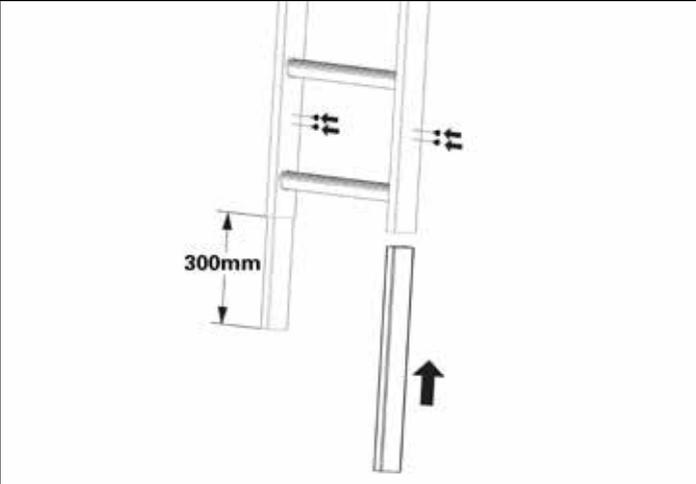
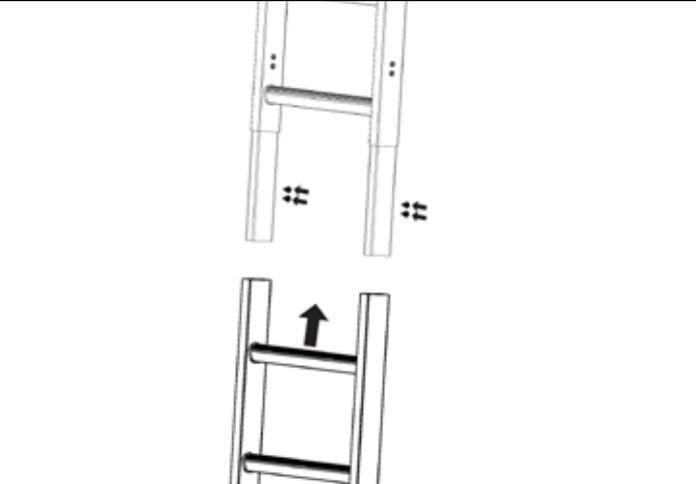
4.3 Base Support Angle

Figure 28		
SUBSTRATE	FASTENER	QUANTITY
Roof Sheet	5mm Trifold Rivet	2
Purlin	12g Tek Screw	2
Concrete	6mm concrete plug	2
Timber	Timber Tek Screw 20mm	2
Walkway Mesh	12G Tek Screw 20mm	2

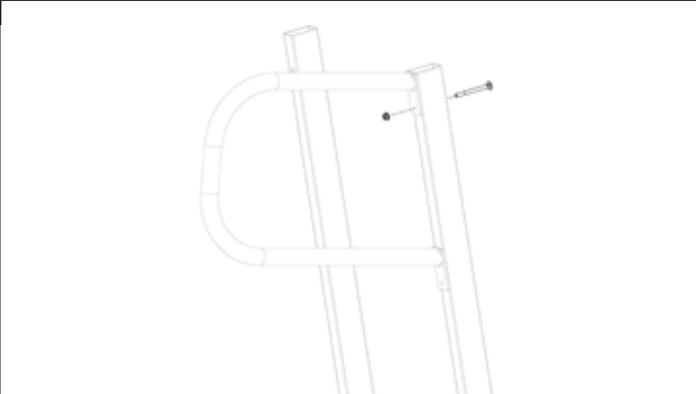
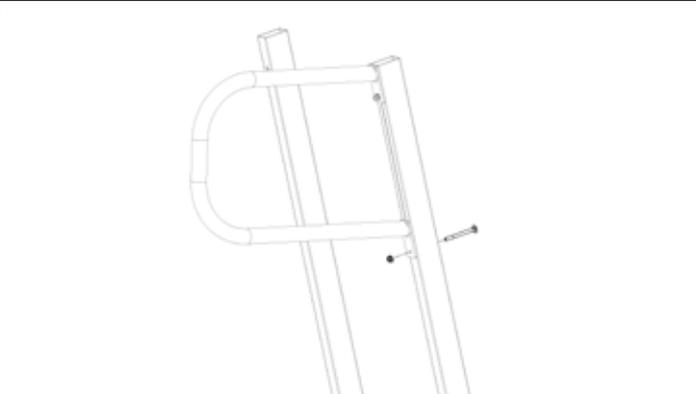
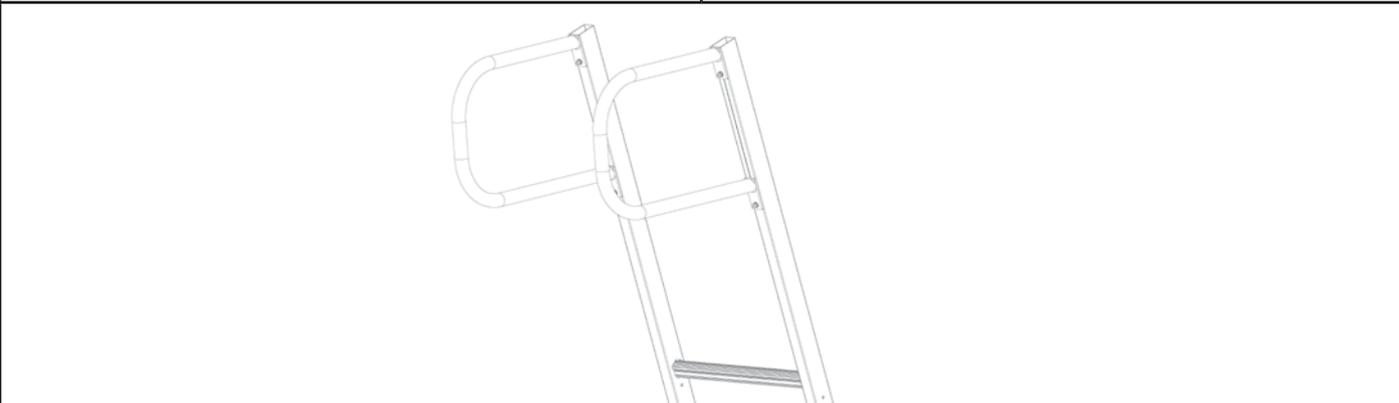
Figure 29	
	
<p>1. Fix the support angle to the supporting structure with fasteners capable of supporting 150kg. Figure 28 is a list of recommended fasteners.</p>	<p>2. Fix the Support angle to the ladder stiles as shown below with 2x 12Gx20mm Tek Screws in each stile.</p>
	
PREFERRED INSTALL	ACROSS ROOF SHEETING

4.4 Splice join

⚠ *There shall be no gap between the 2 ladder sections, the stiles shall meet flush the entire way around the section.*

Figure 30	
	
<p>1. In each stile of a ladder section, insert a splice section to extend 300mm inside the stile and fasten with 2 Tek Screws in each stile. Screws can be internal or external of the stile.</p>	<p>2. Install the joining ladder section and fasten with 2 Tek Screws in each stile.</p>

4.5 Handrails 75° and 90°

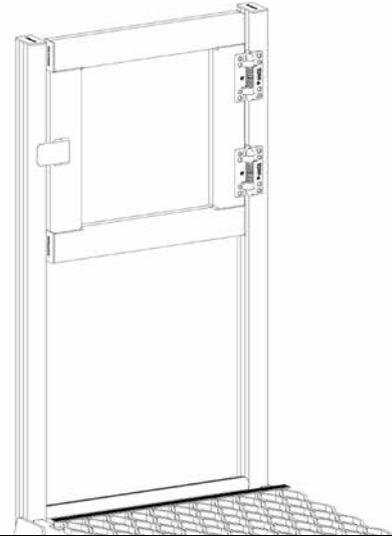
Figure 31	
	
<p>1. Fasten the top of the handrail to the end of the ladder section with the bolt provided through the pre-drilled hole.</p>	<p>2. Align the lower end of the handrail and drill a Ø10.5mm hole through the centre of the stile to align with the lower bolt hole in the handrail and fasten with the bolt provided.</p>
	
<p>3. Repeat on the other stile with the second hand rail.</p>	

4.6 Gates

Figure 32



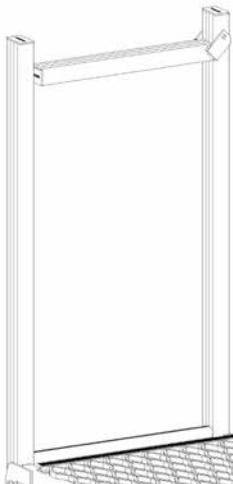
1. Align the gate with the appropriate stile to allow the gate to open in the correct orientation/direction and drill 4x Ø5mm holes to align with the hinges.



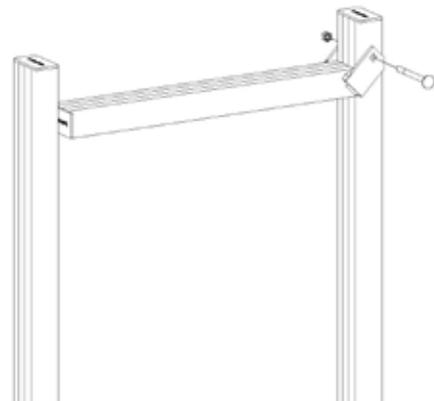
2. Install 4 x Rivet to secure the gate.

4.7 Ladder Safety Bar

Figure 33



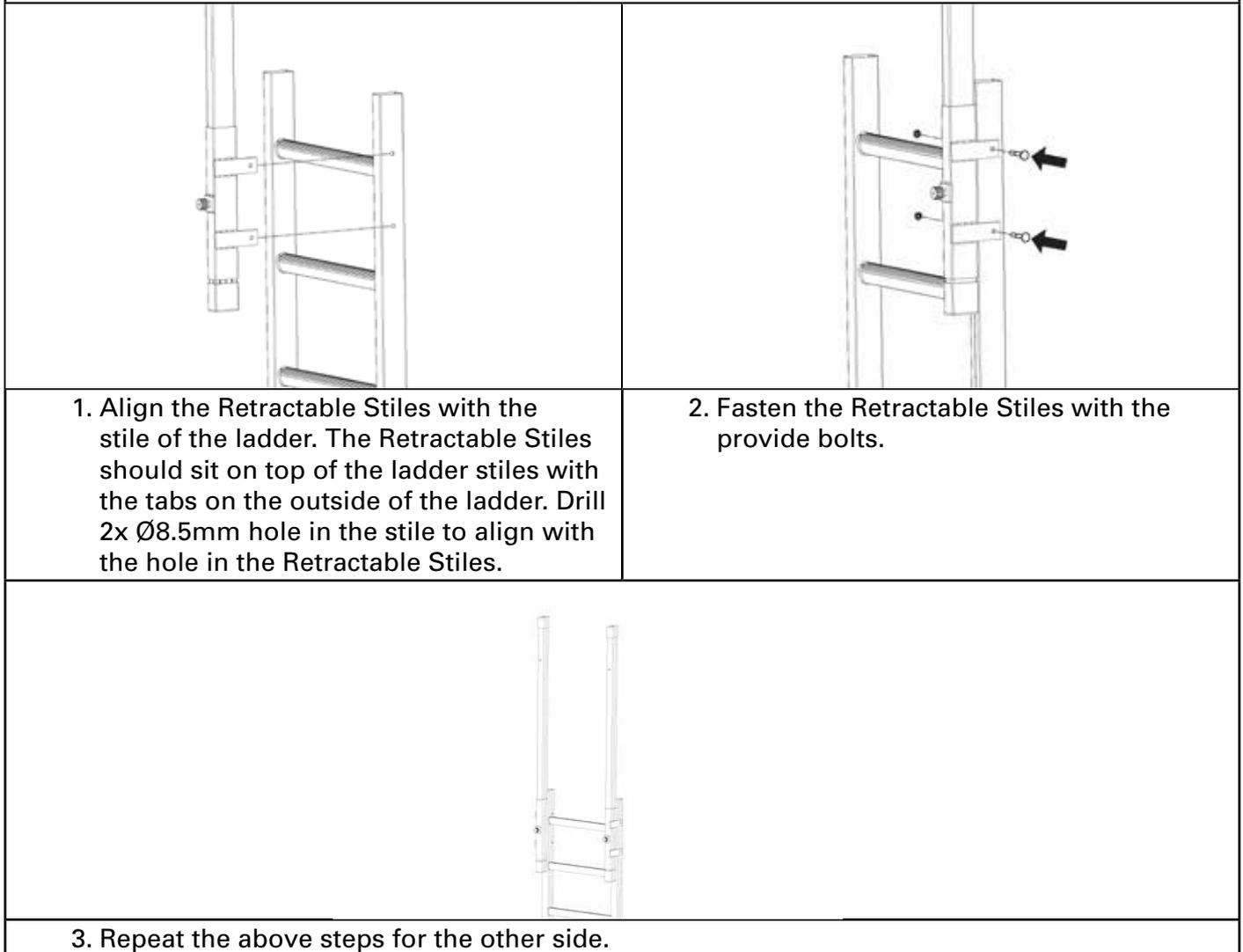
1. Align the Safety Bar with the appropriate stile to allow the bar to pivot in the correct direction and drill a Ø10.5mm hole in the stile to align with the hole in the bar.



2. Fasten the bar with the provide bolt.

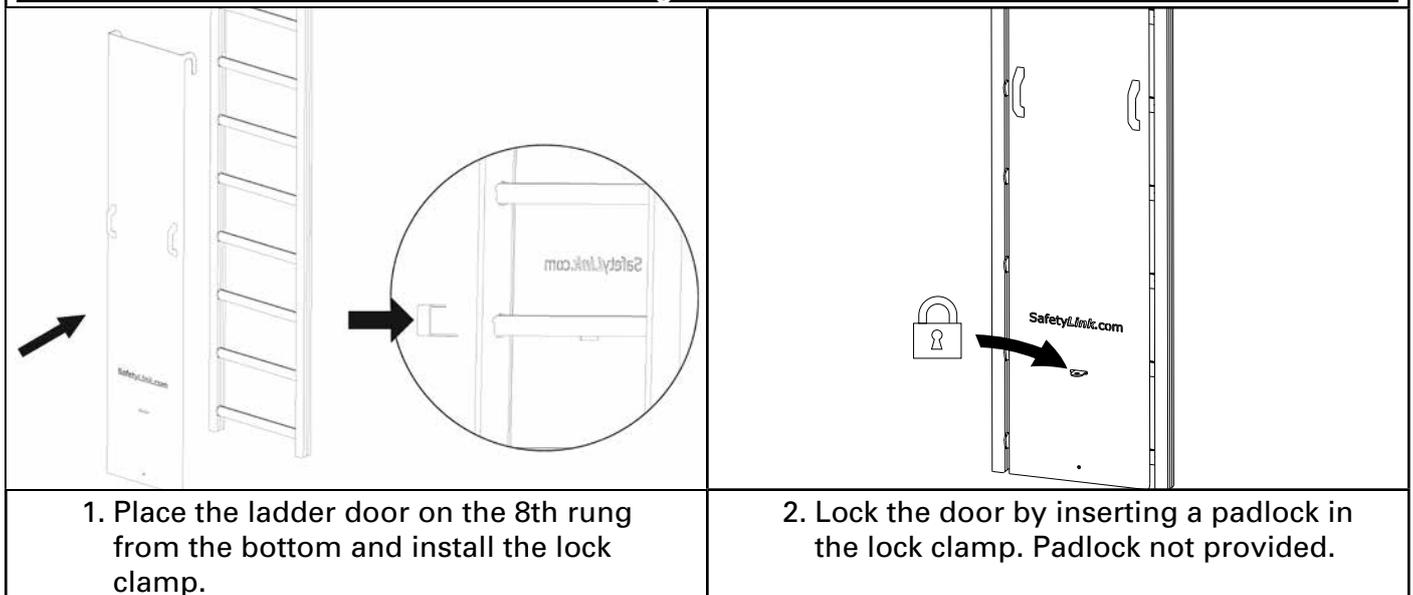
4.8 Retractable Stiles

Figure 34



4.9 Ladder Door

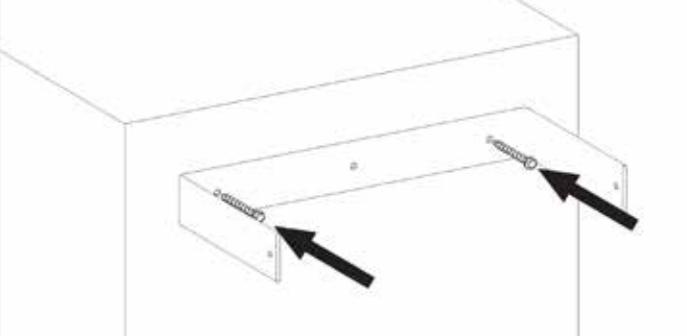
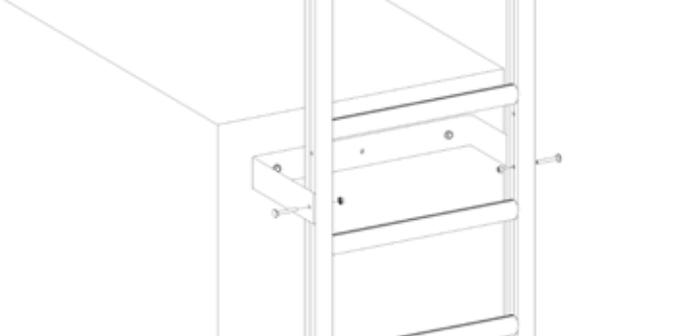
Figure 35



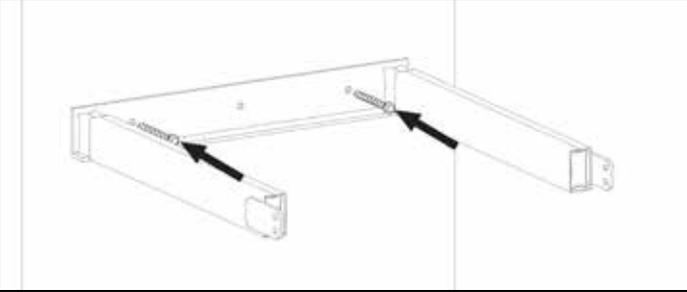
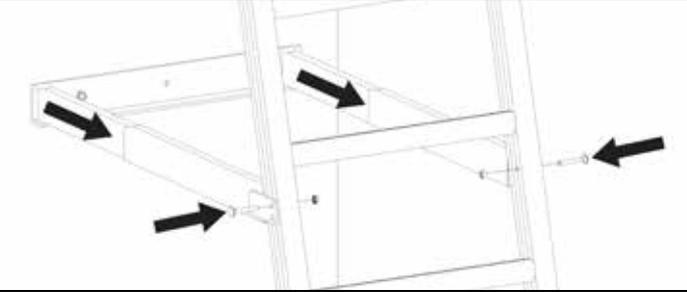
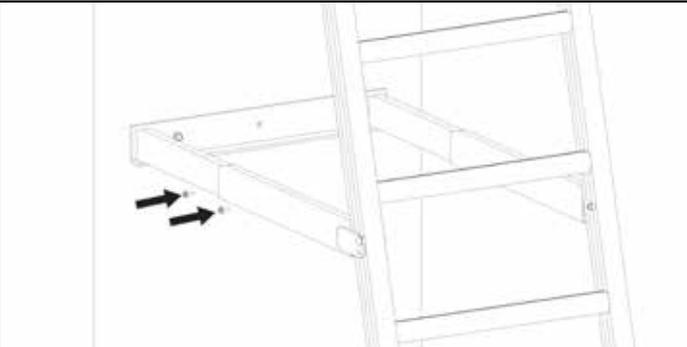
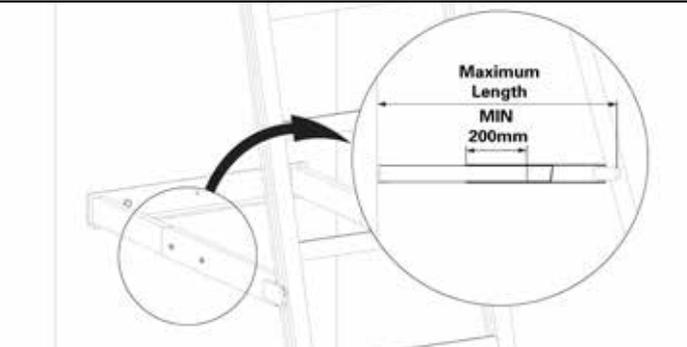
5 Support Brackets and Stiffeners

5.1 Fixed Ladder Brackets

Figure 36		
SUBSTRATE	FASTENER	QUANTITY
Roof Sheet	Trifold Rivet	3
Purlin	12g Tek Screw	3
Concrete	Concrete Screw or expansion bolt M8 (min)	2
Timber	Timber Tek Screw x 75mm	3

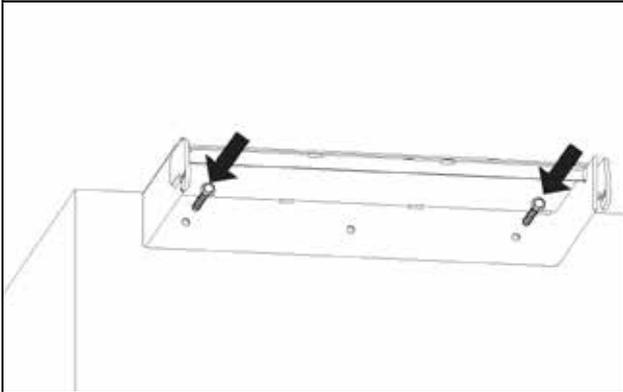
Figure 37	
	
<p>1. Fix the bracket to the supporting structure with fasteners capable of supporting 150kg each. Figure 36 is a list of recommended fasteners.</p>	<p>2. Fix the bracket to the ladder stiles by drilling an Ø8.5mm hole in each stile and securing with the supplied bolts.</p>

5.2 Adjustable Ladder Brackets

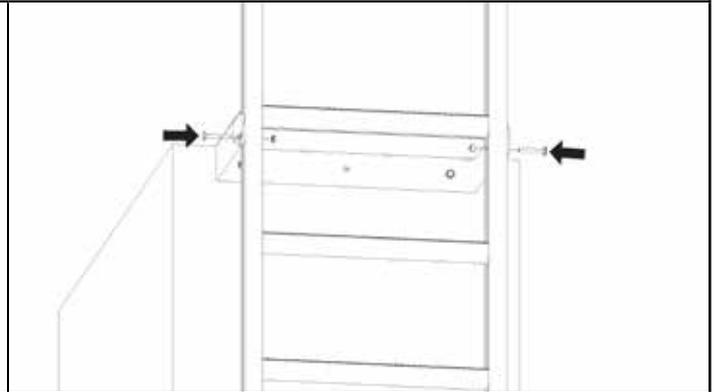
Figure 38	
	
<p>1. Fix the bracket to the supporting structure with fasteners capable of supporting 150kg. See Figure 36 for a list of recommended fasteners.</p>	<p>2. Fix the bracket to the ladder stiles by drilling an Ø8.5mm hole in each stile and securing with the supplied bolts.</p>
	
<p>3. Install 2x tek Screws in each of the arms of the bracket. Install these screws in the overlap of the 2 profiles.</p>	<p>⚠ Ensure 200mm overlap. LADER002.BRKADJ.600-1000 Max Length =1000mm LADER002.BRKADJ.800-1200 Max Length =1200mm</p>

5.3 Landing Brackets

Figure 39



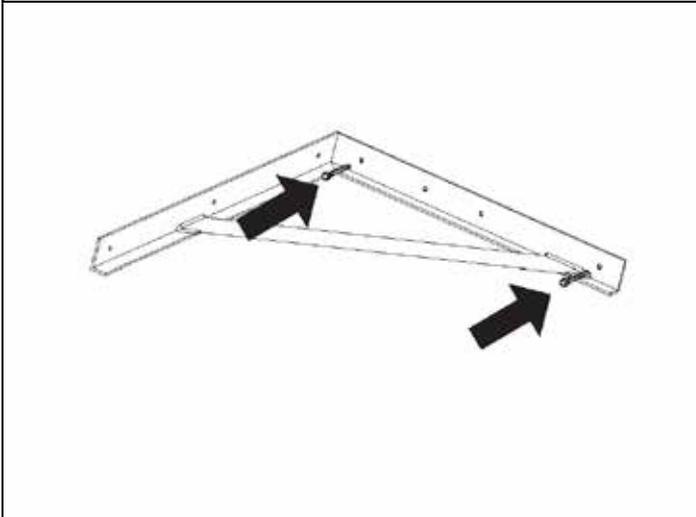
1. Fix the bracket to the supporting structure with fasteners capable of supporting 150kg each. See Figure 36 for a list of recommended fasteners.



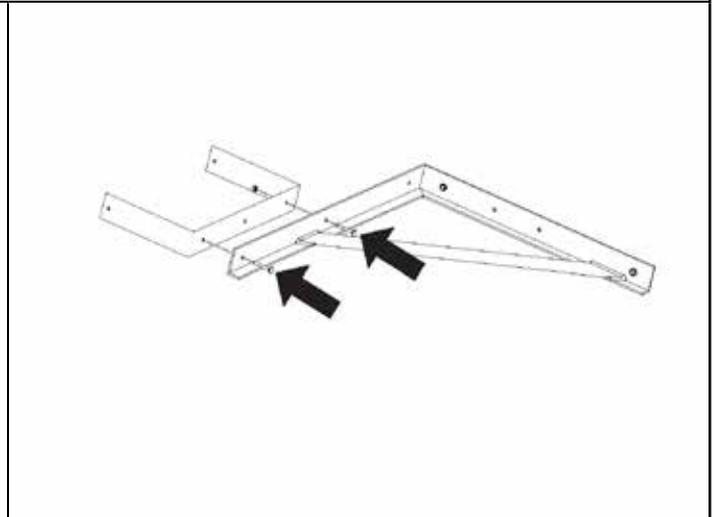
2. Fix the bracket to the ladder stiles by drilling an Ø8.5mm hole in each stile and securing with the supplied bolts.

5.4 Side Mount

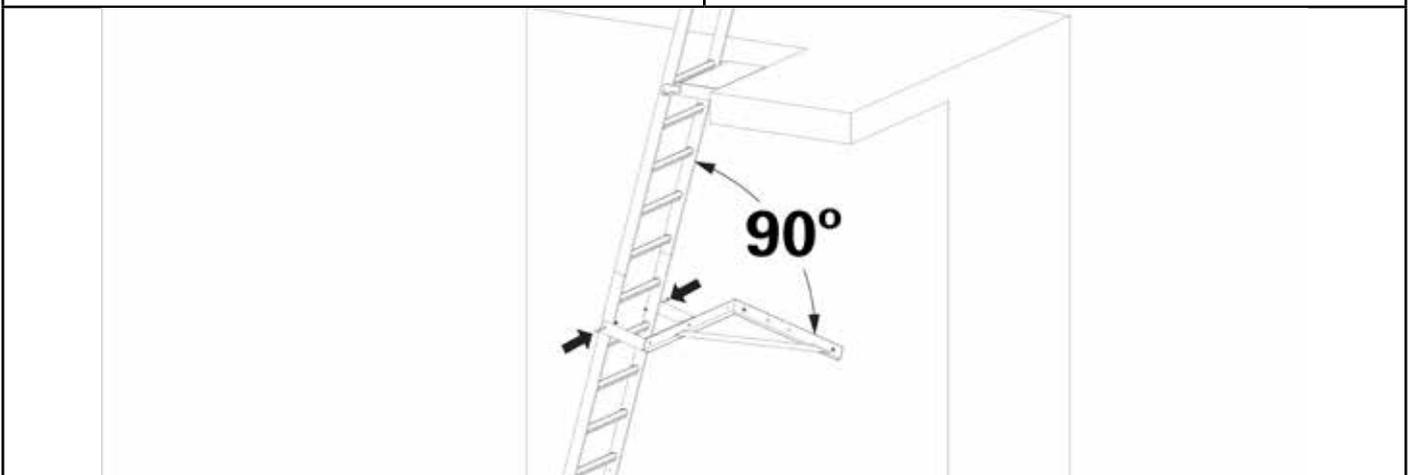
Figure 40



1. Fix the Side Mount Bracket to the supporting structure with fasteners capable of supporting 150kg each. See Figure 36 for a list of recommended fasteners.



2. Fasten the 250mm Ladder bracket to the Side mount bracket with 2x M8x20 Cup head bolts.



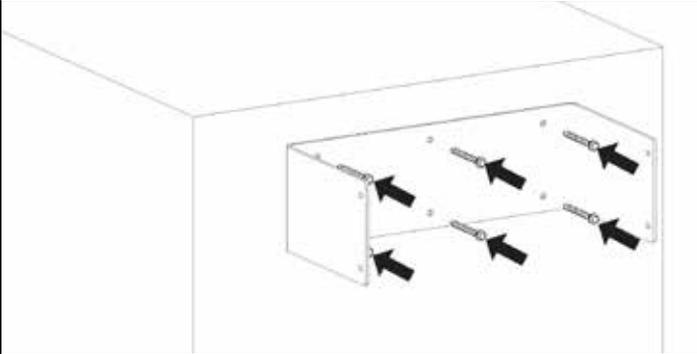
3. Fix the Ladder Bracket to the ladder stiles by drilling an Ø8.5mm hole in each stile and securing with the supplied bolts.

5.5 Suspended Ladder

Figure 41

SUBSTRATE	FASTENER	QUANTITY
Roof Sheet	8mm Trifold Rivet	6
Purlin	14g Tek Screw	6
Concrete	Concrete Screw or expansion bolt M8 (min)	4
Timber	Timber Tek Screw x 75mm	6

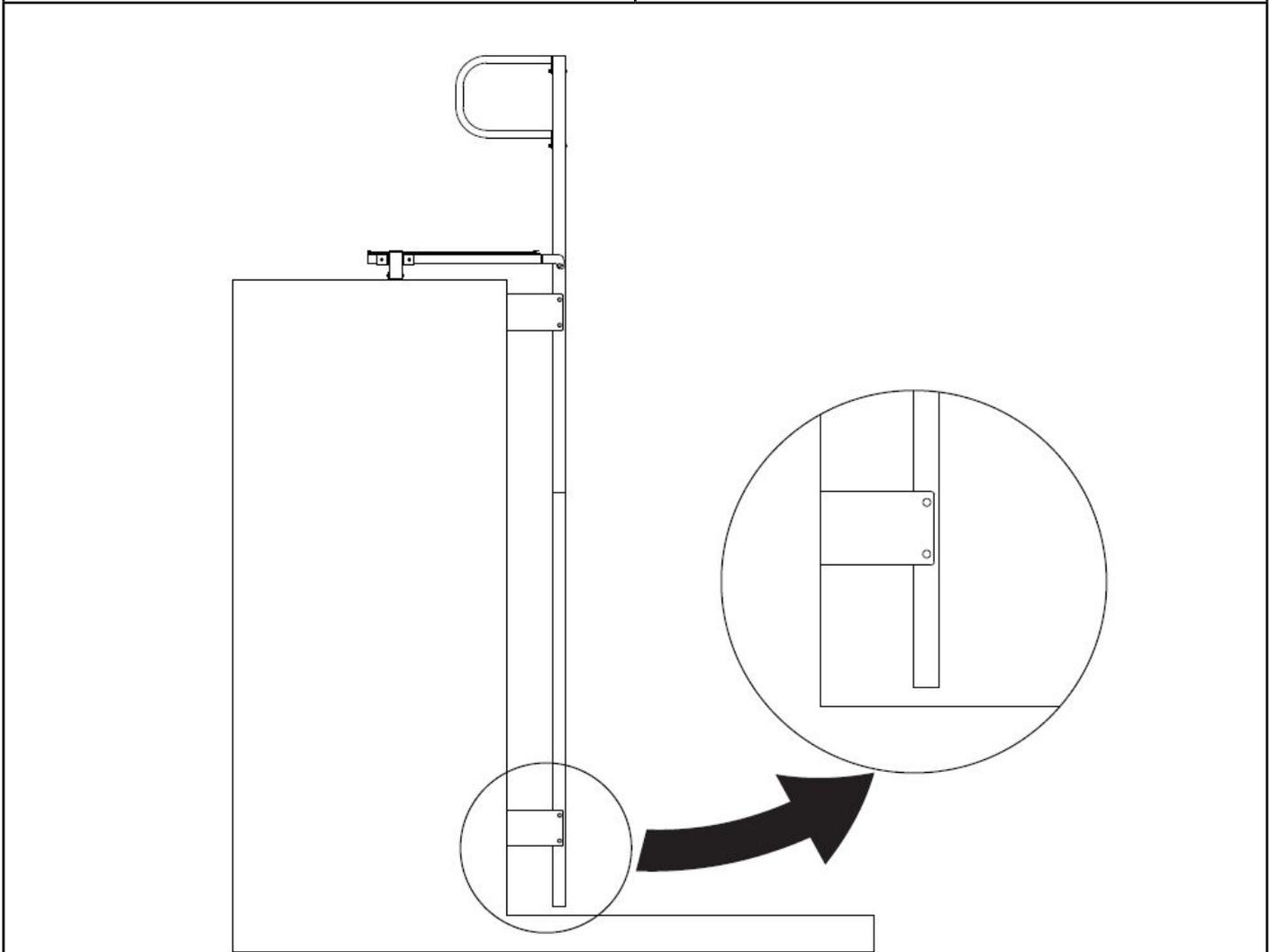
Figure 42



1. Fix the bracket to the supporting structure with fasteners capable of supporting 150kg each. Figure 41 is a list of recommended fasteners.



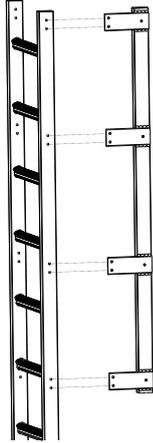
2. Fix the bracket to the ladder stiles by drilling 4x Ø8.5mm hole in each stile and securing with the supplied bolts.



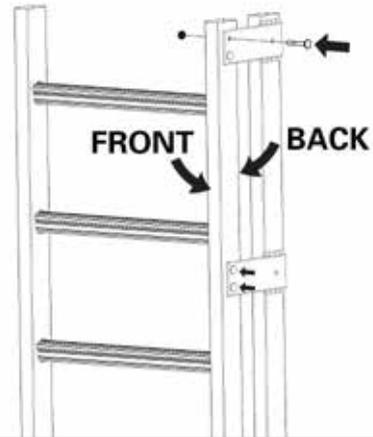
Bracket spacing shall remain the same as Section 3.2.2.

5.6 Stiffeners

Figure 43



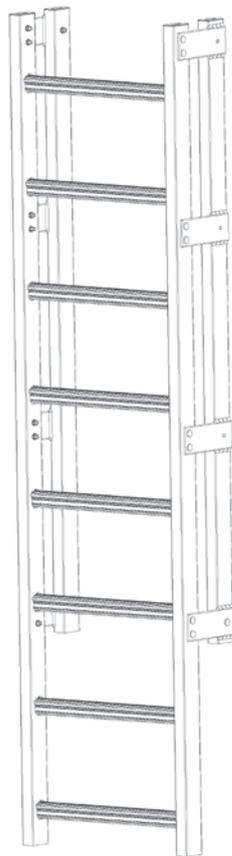
1. Align the stiffener with the stile of the ladder. The stiffener should sit below or behind the ladder stile with the mounting tab to the outside of the ladder. Drill through the holes in every tab an Ø8.5mm hole.



2. Secure the stiffener with the provided bolts.



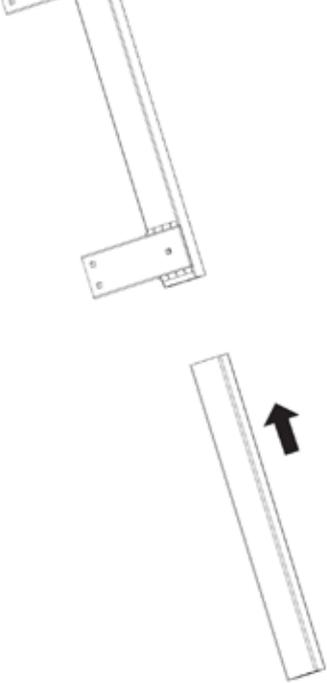
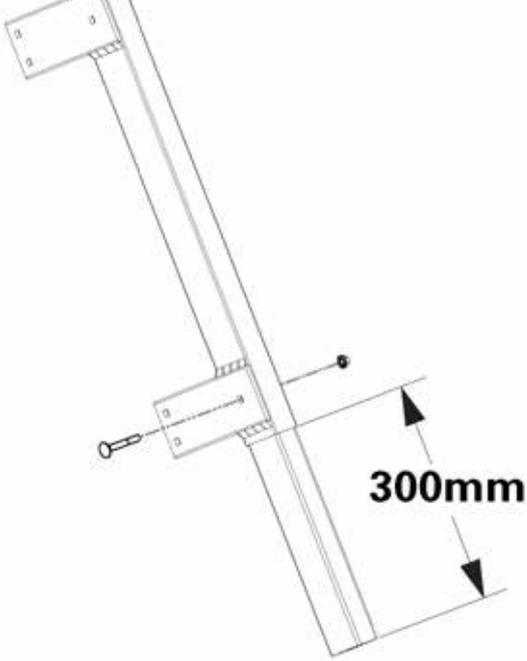
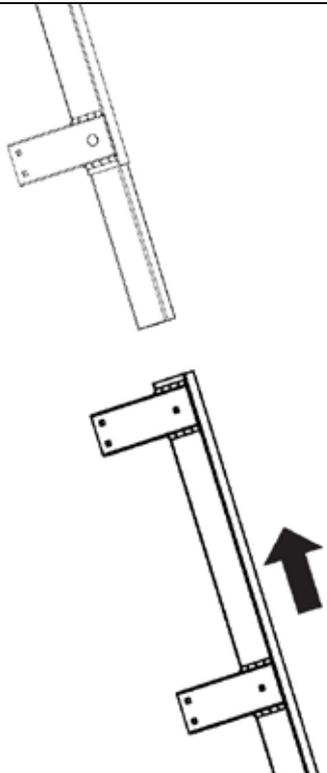
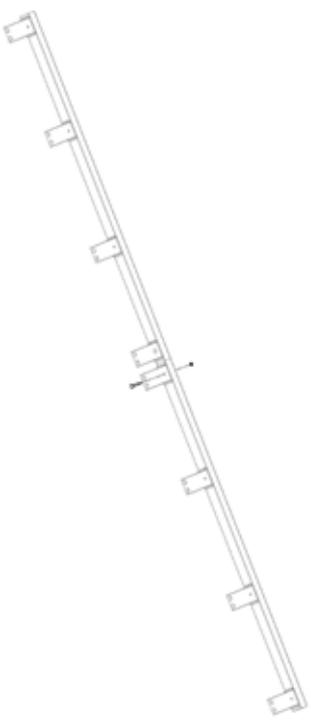
The stiffeners shall be installed towards the back of the ladder.



3. Repeat for the second side.

5.7 Stiffener Joins

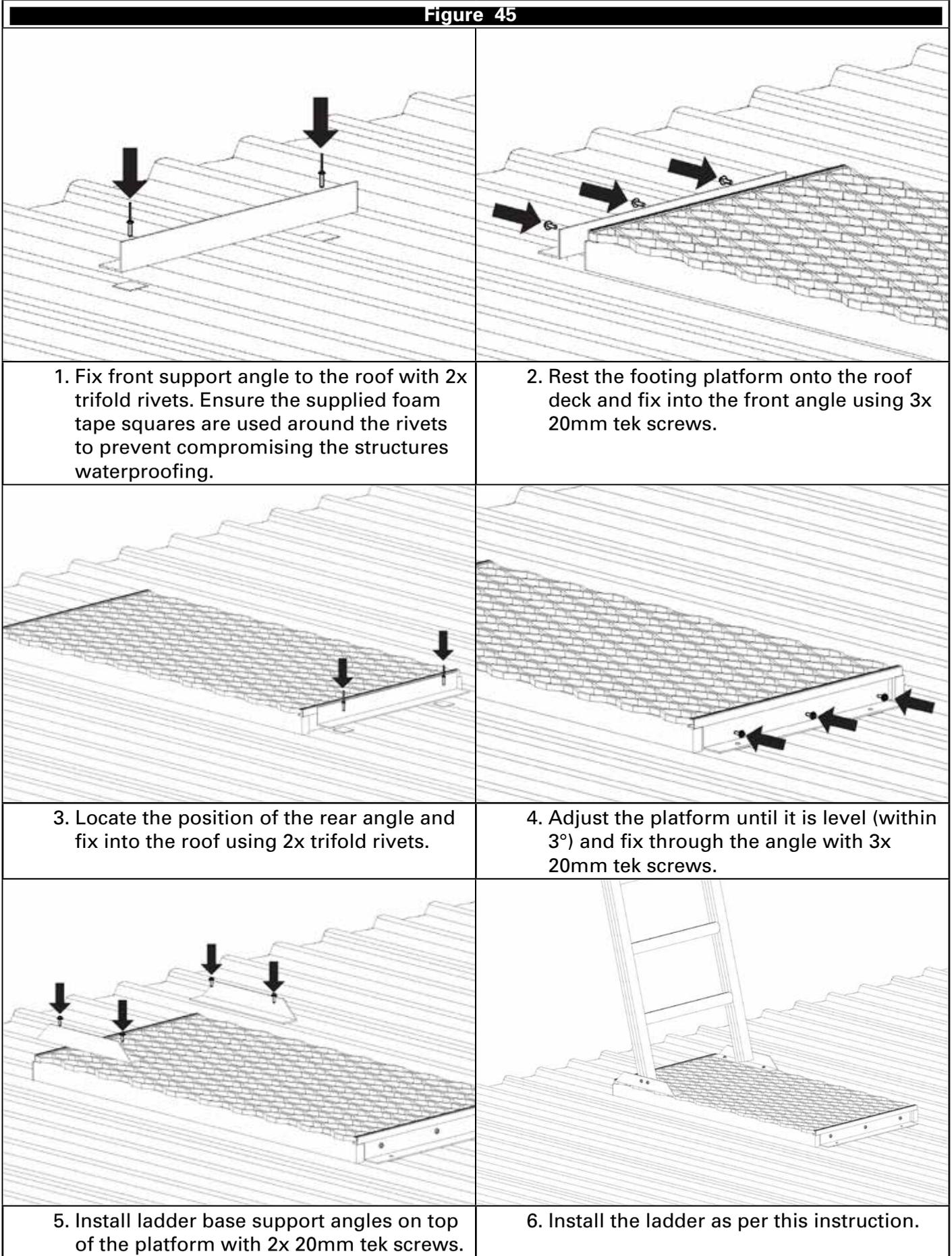
Figure 44

	
<p>1. In to the stiffener section, insert a splice section so it extends 300mm inside the stiffener and drill an Ø8.5mm hole in the pre-marked location on the stiffener's mounting tab.</p>	<p>2. Fasten with an M8x60mm Cap head screw.</p>
	
<p>3. Slide the next stiffener on to the splice and drill an Ø8.5mm hole in the pre-marked location on the stiffener's mounting tab.</p>	<p>4. Fasten with an M8x60mm Cap head screw.</p>

6 Entry/Exit Platforms

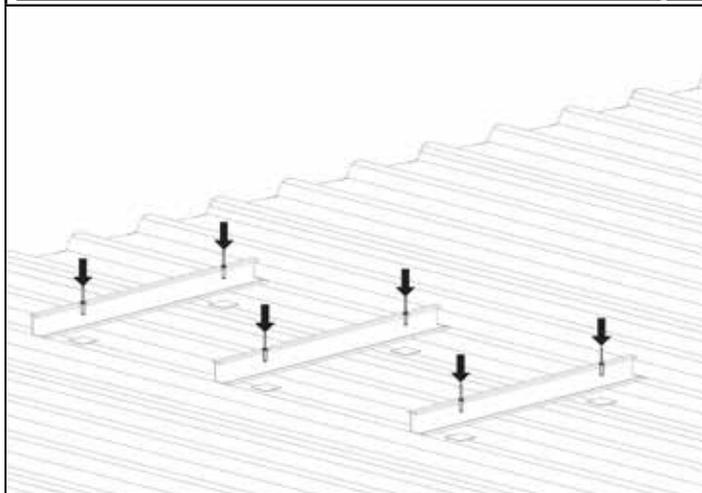
6.1 Footing Landing

Figure 45

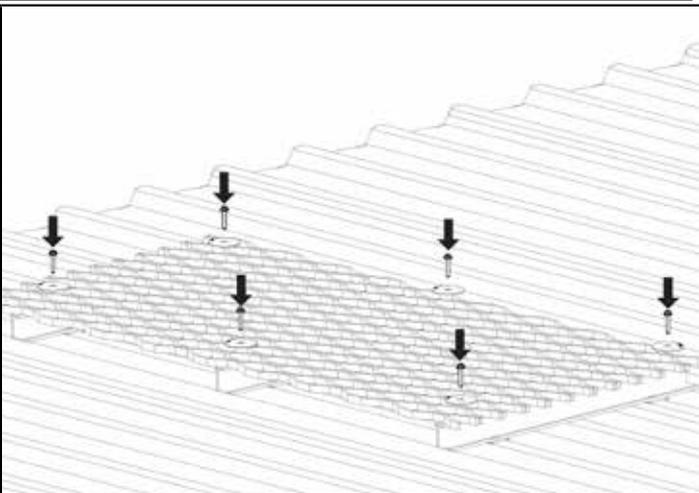


6.2 Walkway Landing

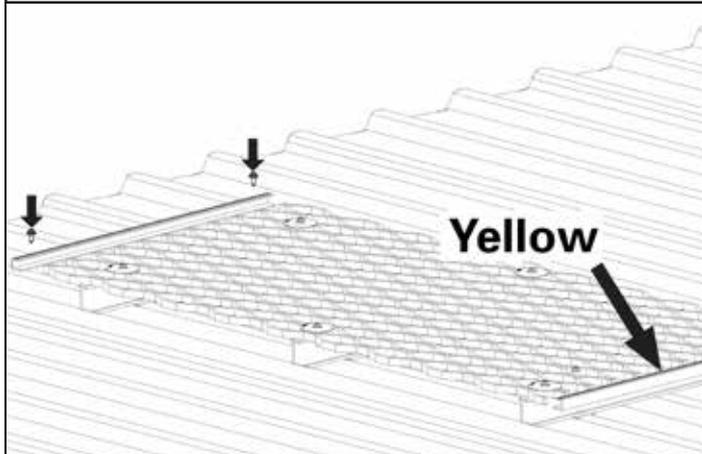
Figure 46



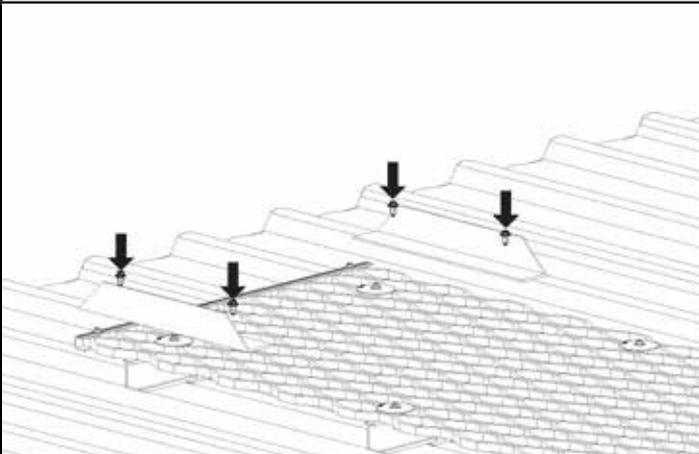
1. Fix 3x walkway support channels to roof with 2x trifold rivets each. Ensure the supplied foam tape squares are used around the rivets to prevent compromising the structures waterproofing.



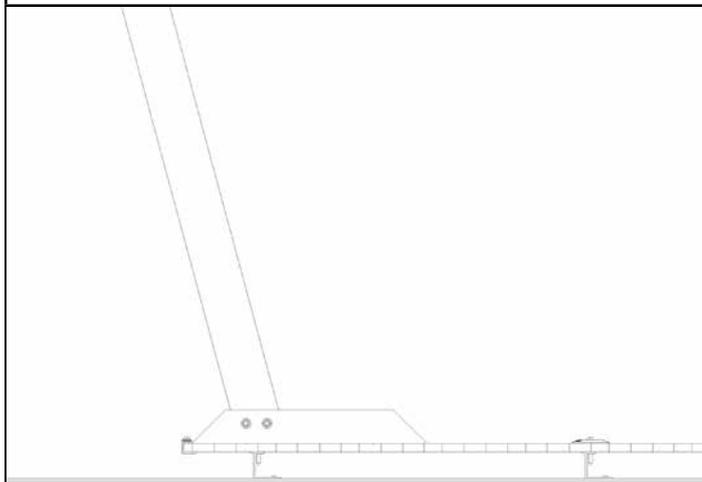
2. Fix the walkway grating to the walkway support channels with 6x 35mm tek screws and 40mm washers.



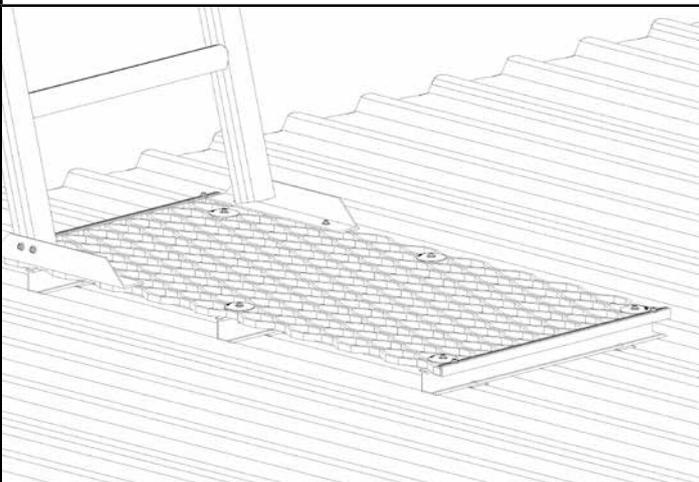
3. Secure the end bars to the walkway grating with 2x 20mm tek screws each. The yellow end bar should be installed on the front side of the ladder as shown above.



4. Install ladder base support angles on top of the platform with 2x 20mm tek screws.



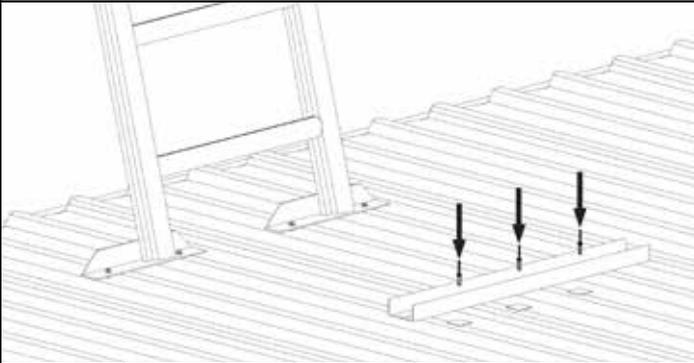
5. Ensure that the ladder is installed on top of one of the walkway support channels as shown above.



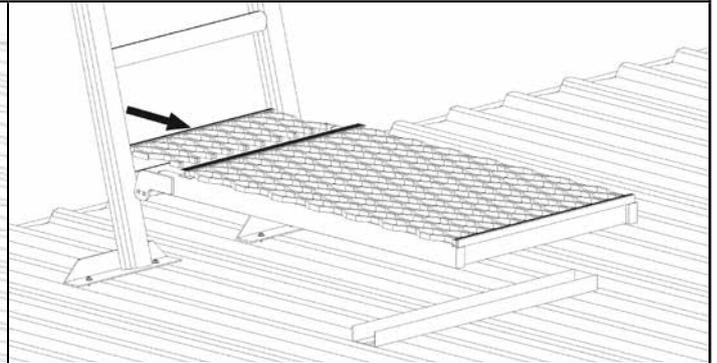
6. Install the ladder as per this instruction.

6.3 Adjustable Base

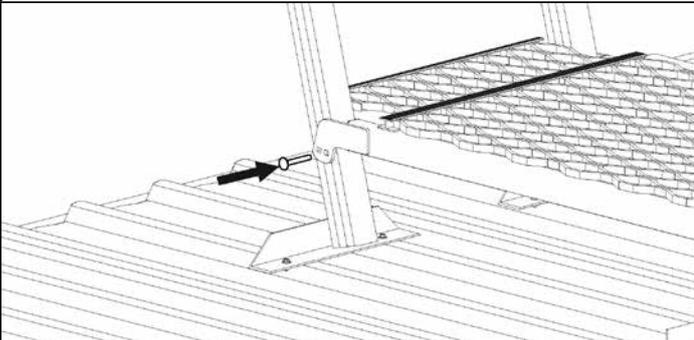
Figure 47



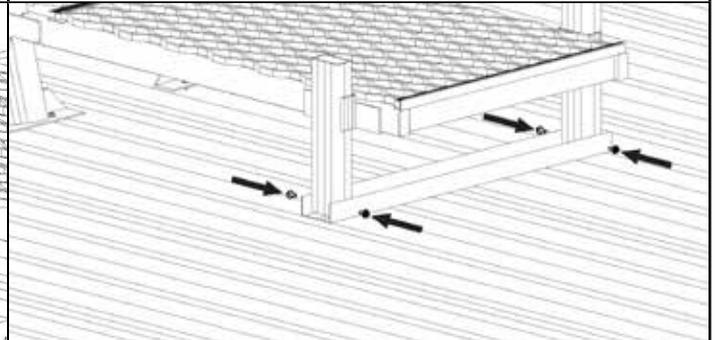
1. Fix base channel to roof using 3x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing.



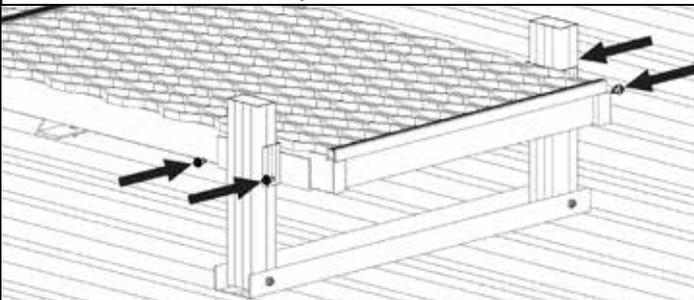
2. Insert walkway infill section and position on top of the bottom rung. Do not install screws in this step.



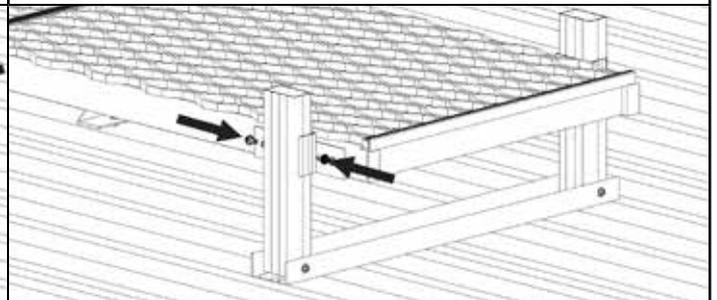
3. Ensure that the platform is near level and drill 2x Ø8.5mm holes into the ladder. Fix the platform to the ladder with 2x M8x60mm cup head bolts.



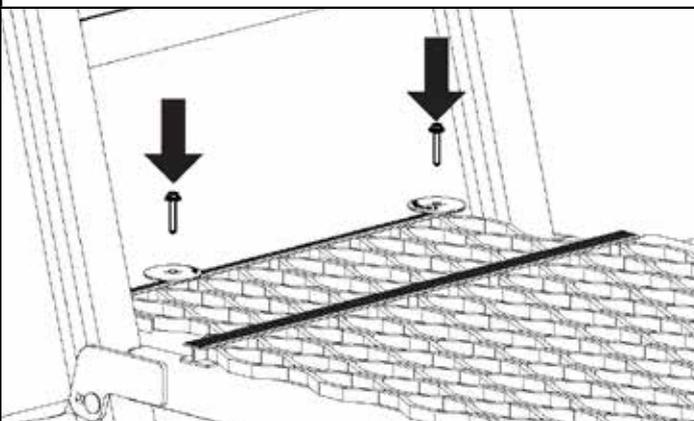
4. Align the support bracket with the base channel and fix the RHS into the channel with 2x20mm tek screws.



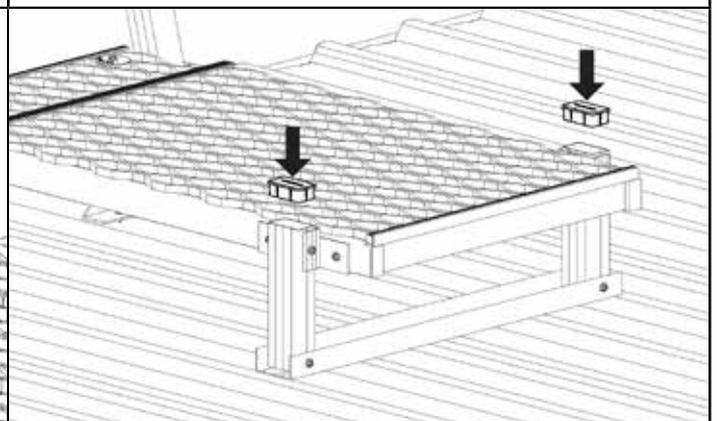
5. Install 2x20mm tek screws to fix the support bracket to the platform.



6. Ensure that the platform is level (within 3°) and secure with 2x20mm tek screws.



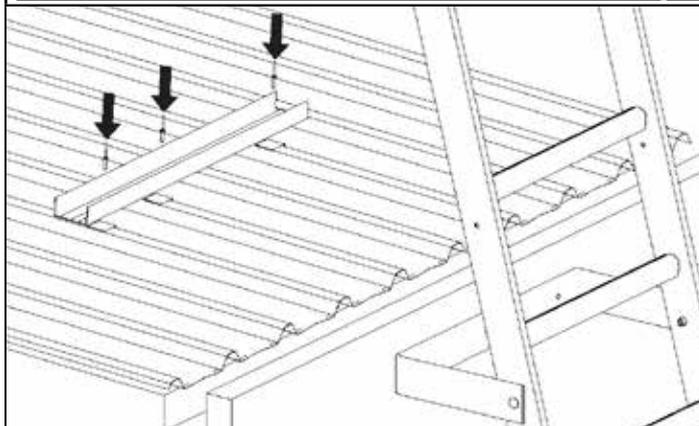
7. Fix the walkway infill section with 2x35mm tek screws and 40mm washers into the bottom rung of the ladder.



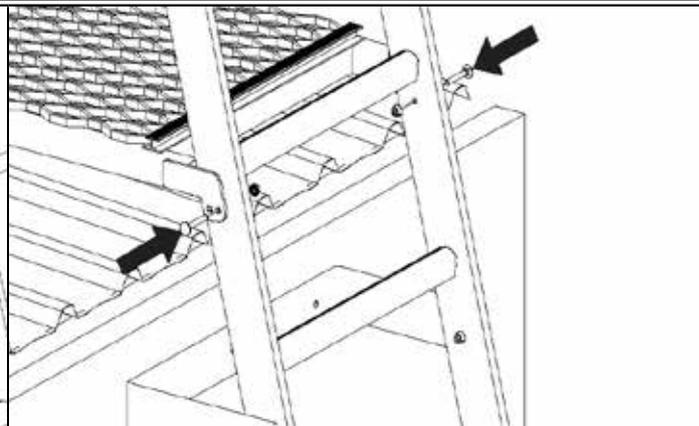
8. Cut excess RHS so that it sits flush with the top of the platform and install end caps.

6.4 Adjustable Top

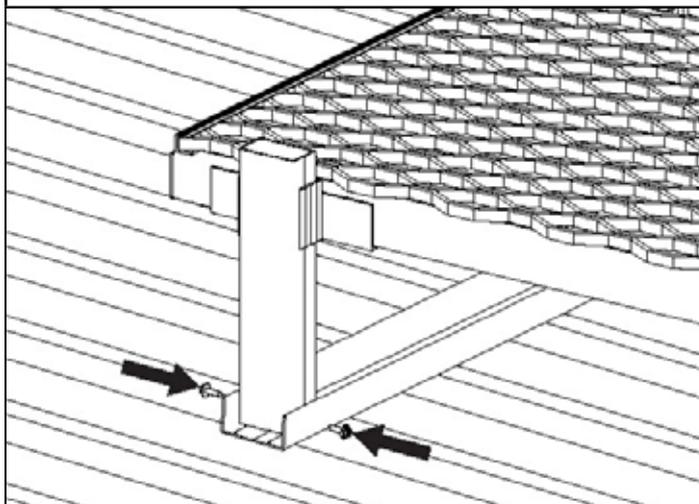
Figure 48



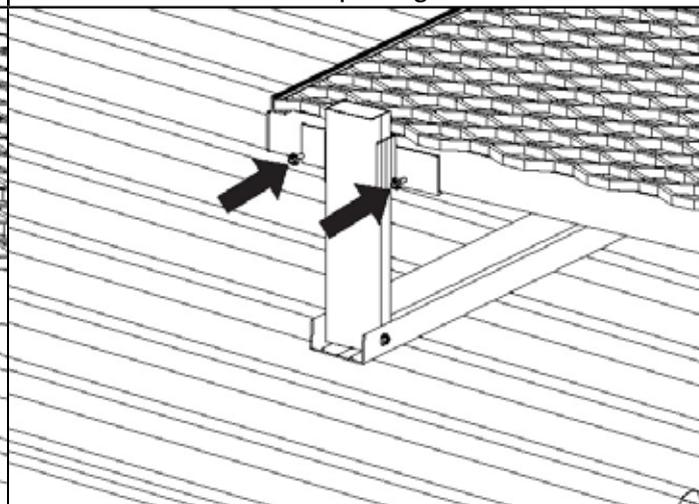
1. Fix base channel to roof using 3x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing.



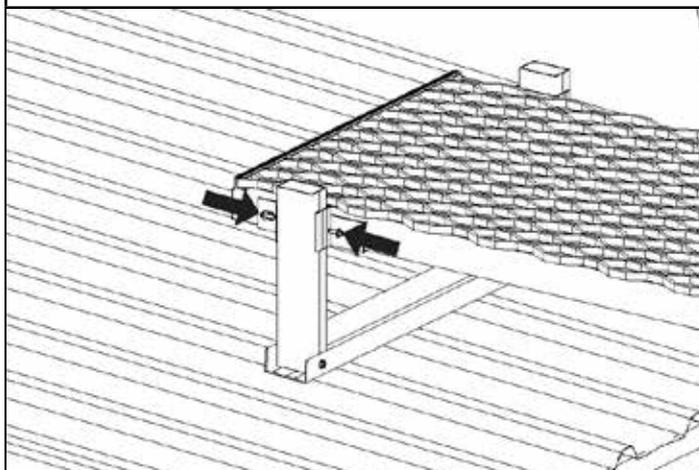
2. Bolt top platform to the existing 8.5mm hole in the ladder head, using the appropriate hole in the platform bracket. For a 90 degree ladder the square hole that is parallel to the platform should be used. For a 75 degree ladder, the square hole that is angled should be used. This will ensure that the platform is always level with the top rung.



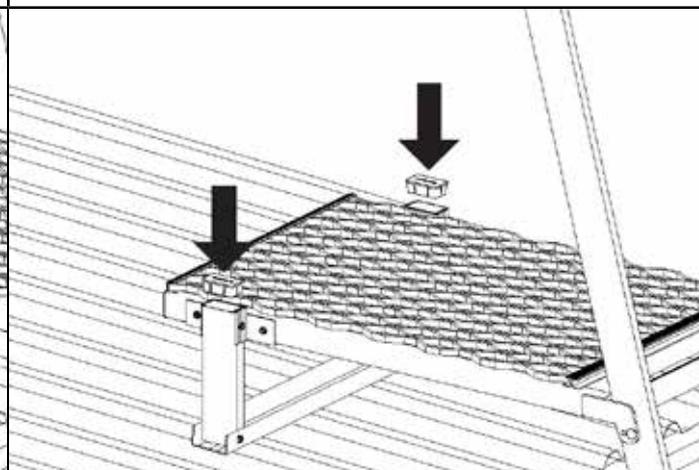
3. Align the support bracket with the base channel and fix the RHS into the channel with 2x20mm tek screws.



4. Install 2x20mm tek screws to fix the support bracket to the platform.



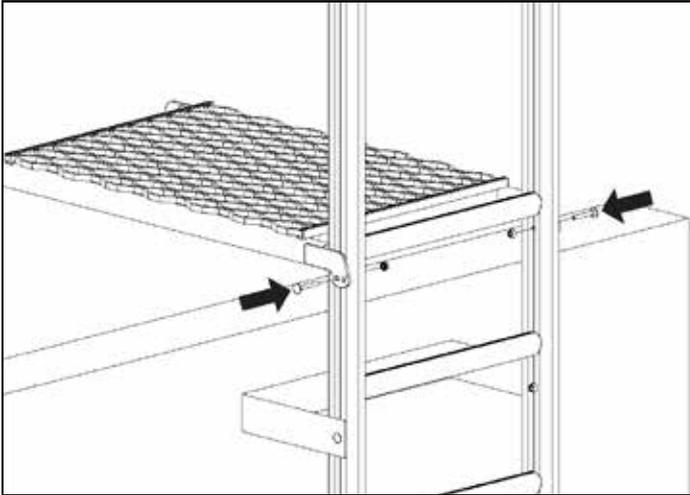
5. Ensure that the platform is level (within 3°) and secure with 2x20mm tek screws.



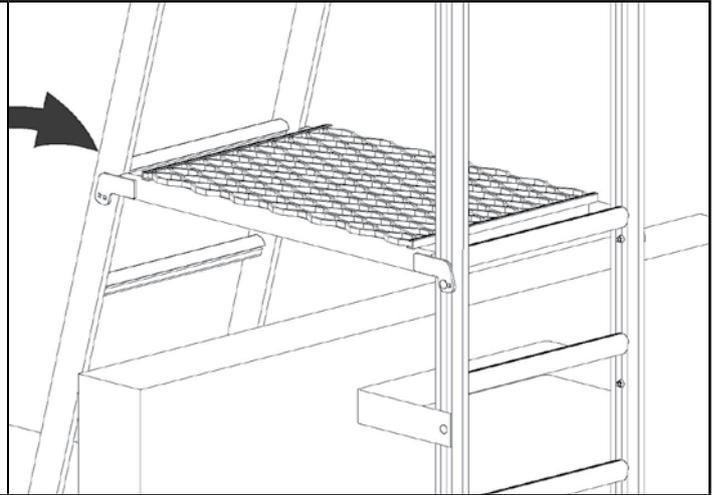
6. Cut excess RHS so that it sits flush with the top of the platform and install end caps.

6.5 Parapet

Figure 49



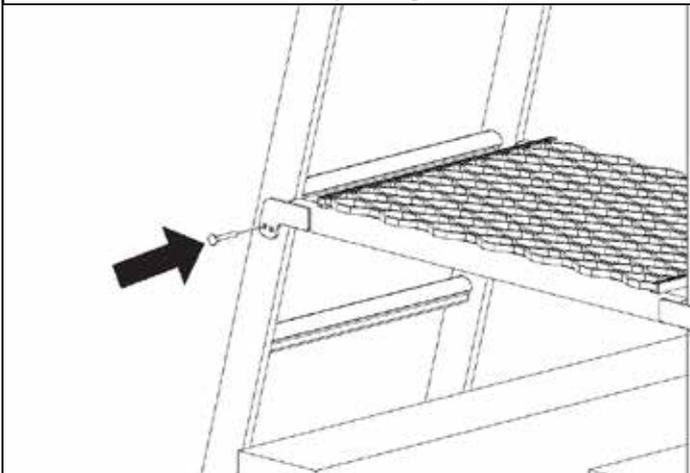
1. Using 2x M8x60mm bolts, install the parapet platform to the existing 8.5mm hole in the ladder head, using the appropriate hole in the platform bracket. For a 90 degree ladder the square hole that is parallel to the platform should be used. For a 75 degree ladder, the square hole that is angled should be used. This will ensure that the platform is always level with the top rung.



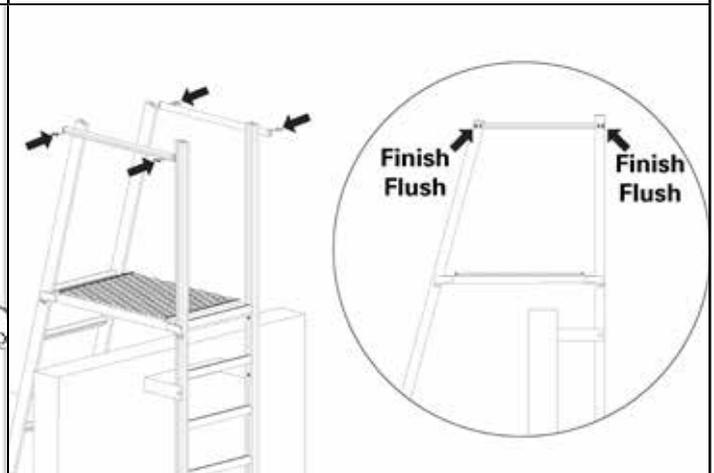
2. Cut the bottom of the second ladder head down so that the platform is level when it is bolted together.



Be sure to take in to account any base platform for this ladder.



3. Using 2x M8x60mm bolts, install the platform to the second ladder head using the appropriate hole in the platform bracket. Fix the base of the ladder with either the base support angle or base platform.



4. Measure the distance between the outside of the stiles at the top of the 2 ladders. Cut 2 lengths of the guardrails to the measured length.

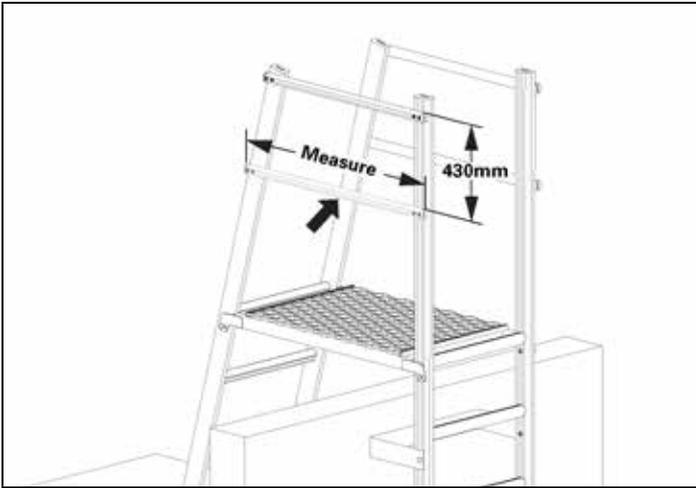


Cutting should not be required for 2x90 degree ladders. Install a plastic endcap into each end of the cut guardrails.



Pre-drill 2x6mm holes in the ends of the guardrails. This step is important to ensure that the tube is not crushed by the screw.

Install the guardrail onto the outside of the ladders using 4x 50mm tek screws. Ensure that the guardrail is level.



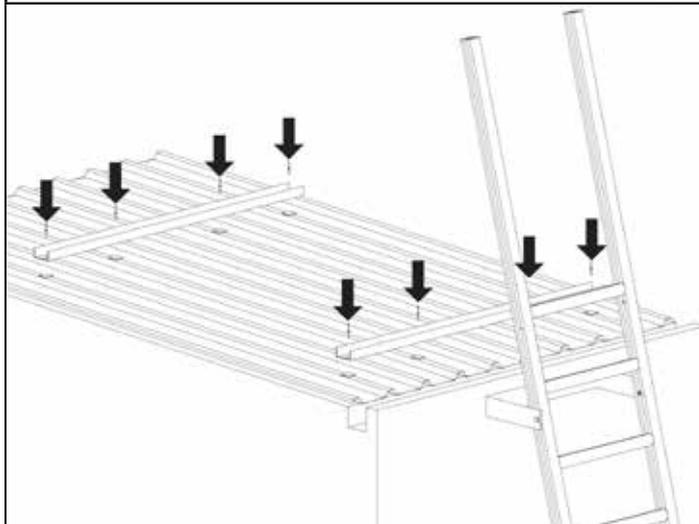
5. Measure approximately 430mm down from the top guardrail and make a small mark. Now, measure the distance between the outside of the stiles at this mark and cut the guardrail to this length.



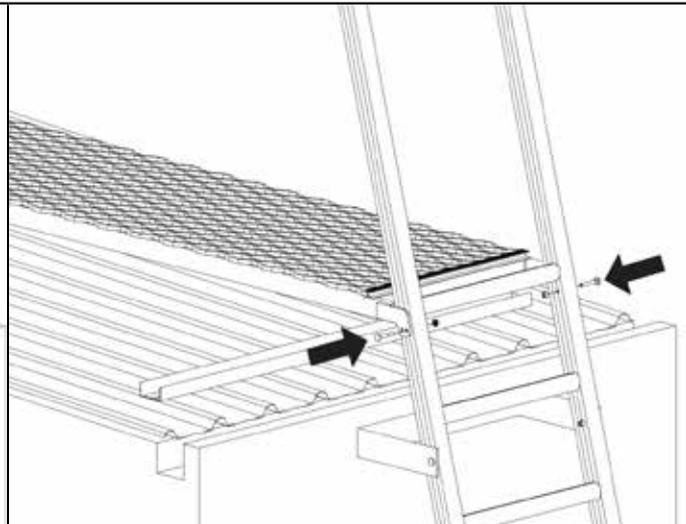
6. Fix the guardrail to the ladder in the same manner as described in Step 4.

6.6 2400mm & 3000mm Adjustable Landing

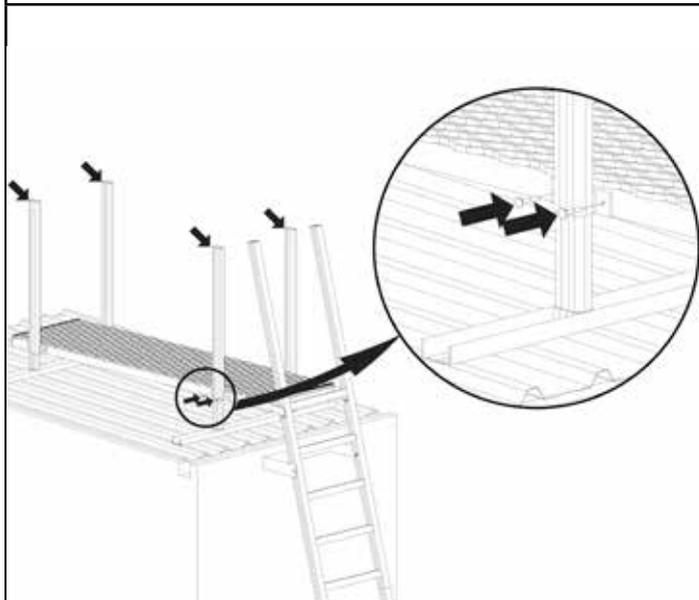
Figure 50



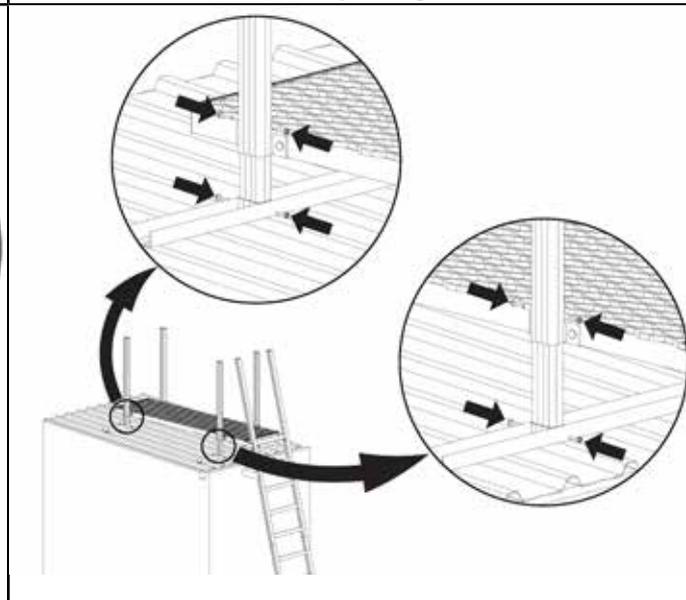
1. Fix each base channel to roof using 4x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing. The channels should be centralized to the ladder.



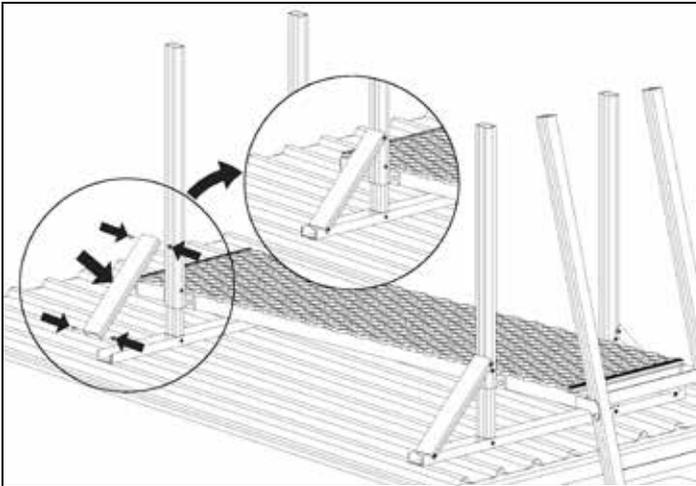
2. Bolt the platform to the existing 8.5mm hole in the ladder head, using the appropriate hole in the platform bracket. For a 90 degree ladder the square hole that is parallel to the platform should be used. For a 75 degree ladder, the square hole that is angled should be used. This will ensure that the platform is always level with the top rung.



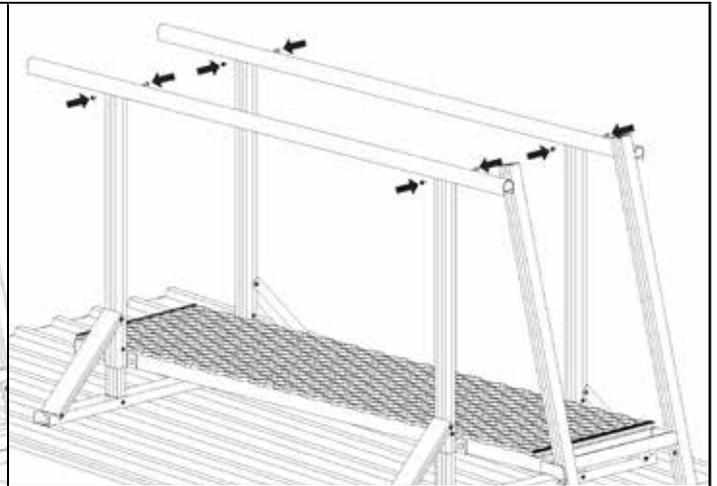
3. Insert the 450mm long splice sections into the base of each handrail post. Align each of the 4 handrail posts above the base channels and fix with 2x M8x50mm bolts.



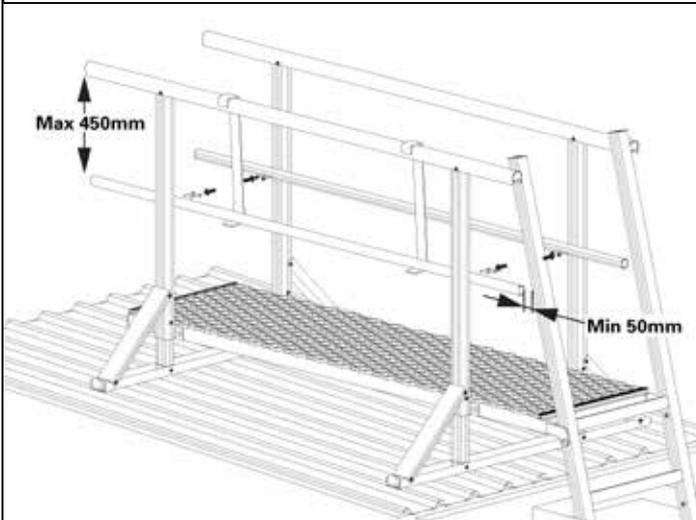
4. Secure the bottom of the splice sections into the base channel with 2x20mm tek screws. Ensuring that the platform is level (within 3°), secure with 2x20mm tek screws through the sides of each post into the splice.



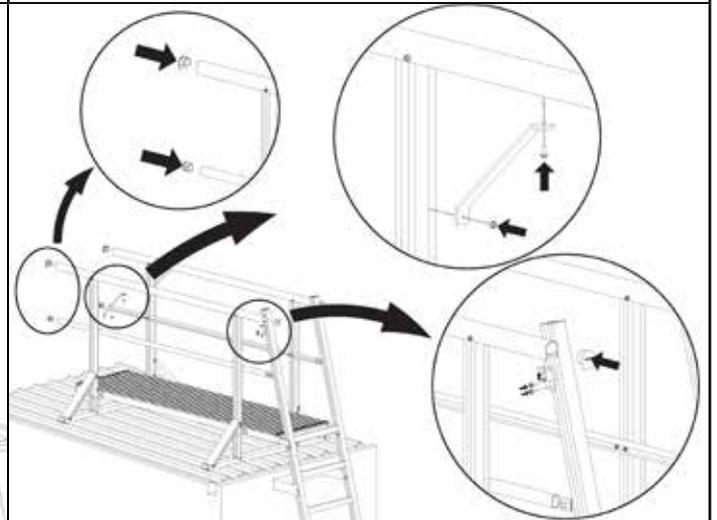
5. Install the brace channels at approximately 45°, securing with 4x 20mm tek screws each.



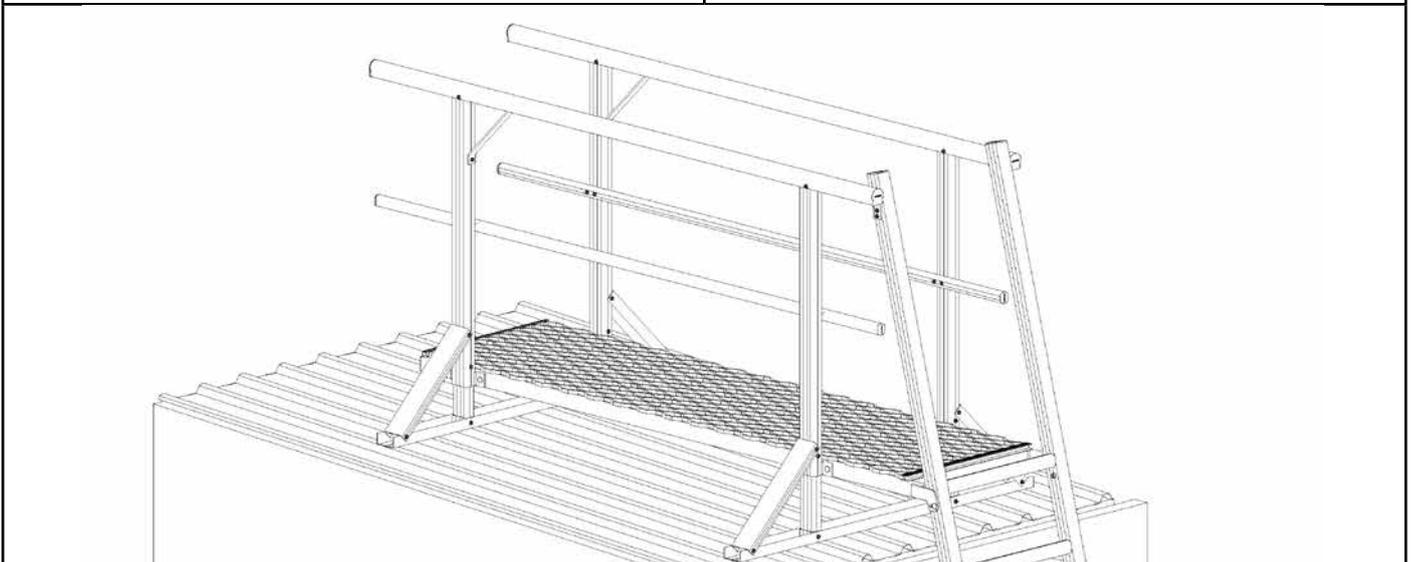
6. Place the handrail profile on top of the posts, ensure that the end does not protrude past the front of the ladder. Secure with 2x 20mm tek screws in each post.



7. The kneerail should be installed and secured with 2x 50mm tek screws into each post. Alternatively the kneerail installation tool (GUARD001.TOOL_KR) can be used to assist. Ensure that there is a minimum of 50mm gap between the back of the ladder and the kneerail.

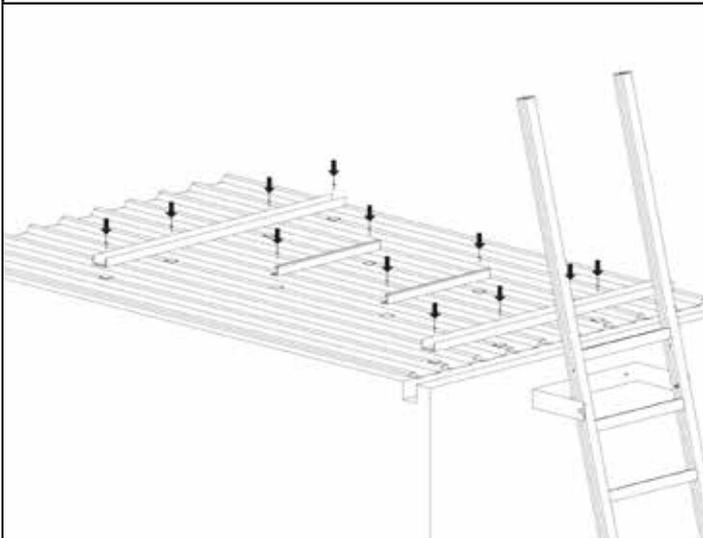


8. Install endcaps using a soft rubber mallet. The handrail brace should be installed with 2x20mm tek screws. The handrail should be attached to the ladder stile with 3x 20mm tek screws and the handrail connecting bracket.

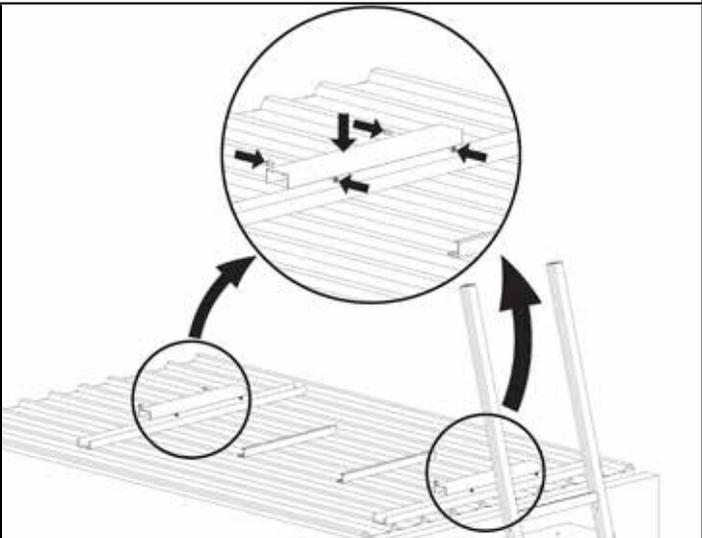


6.7 2400mm & 3000mm Walkway Landing

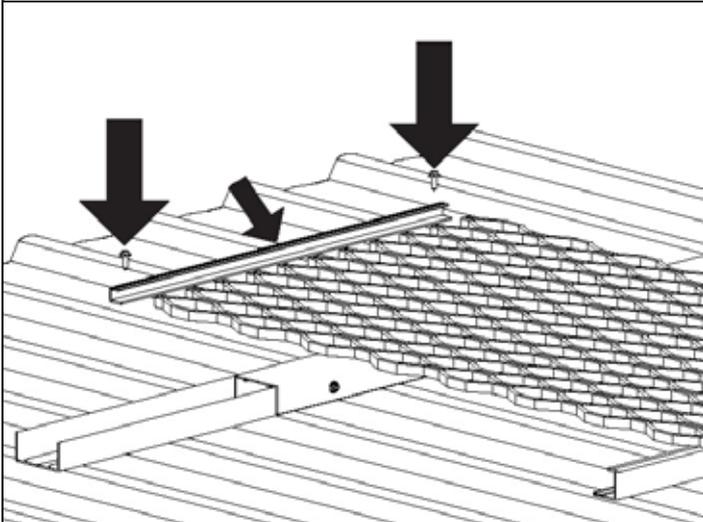
Figure 51



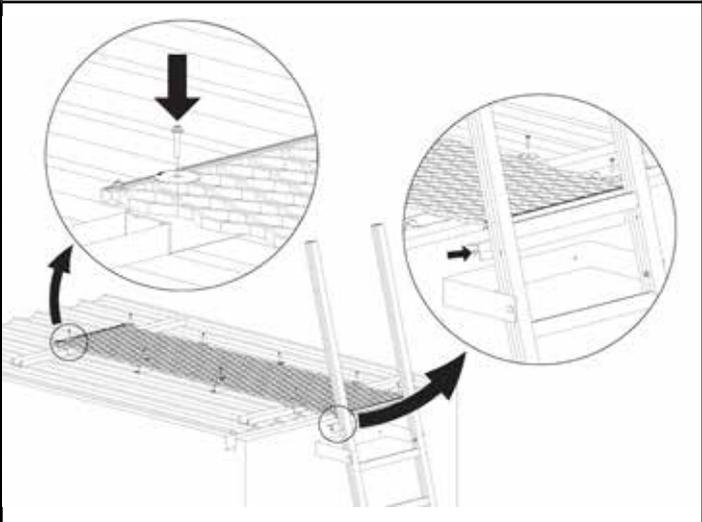
1. Fix each base channel to roof using 4x 5mm trifold rivets, and each walkway support using 2x 5mm rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing. The channels/supports should be centralized to the ladder.



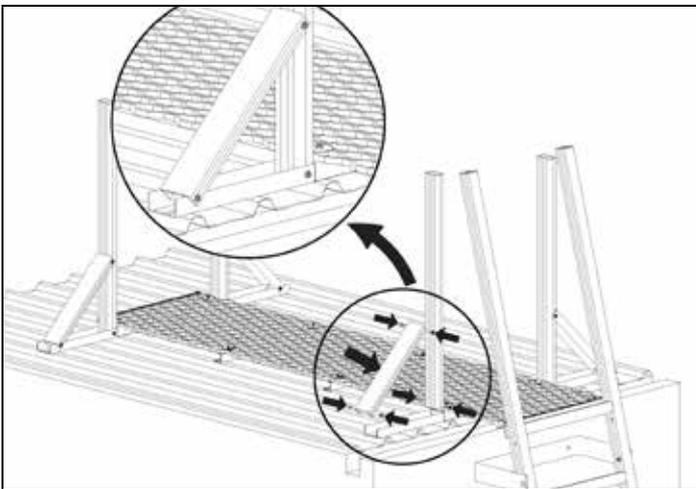
2. Fix each 600mm channel with 4x 20mm tek screws.



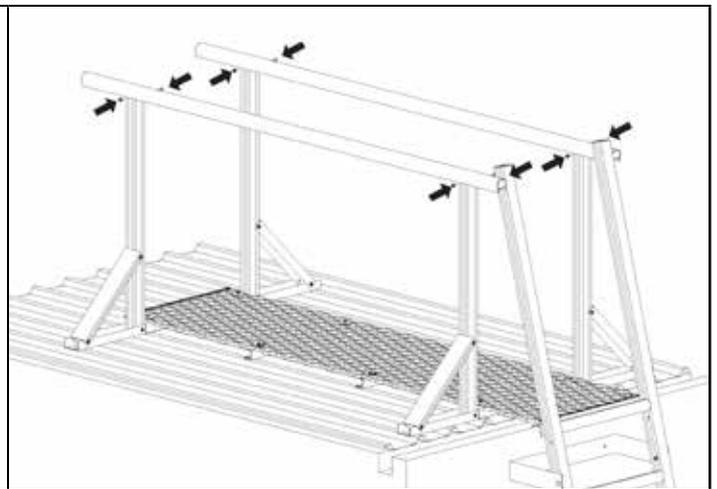
3. Fix endbars to mesh using 2x 20mm tek screws. The yellow end bar should be installed at the opposite end to the ladder.



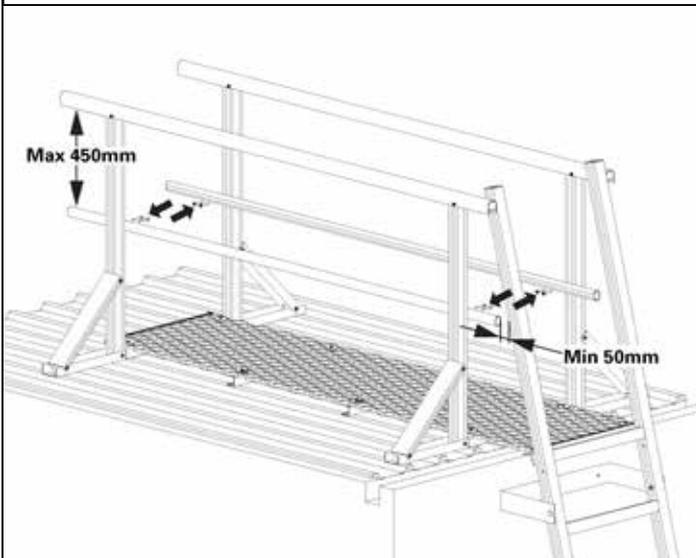
4. Fix the walkway mesh to the supports using 2x grating washers and 35mm tek screws. Secure the walkway mesh to the rear face of the ladder using the supplied 50mm angle.



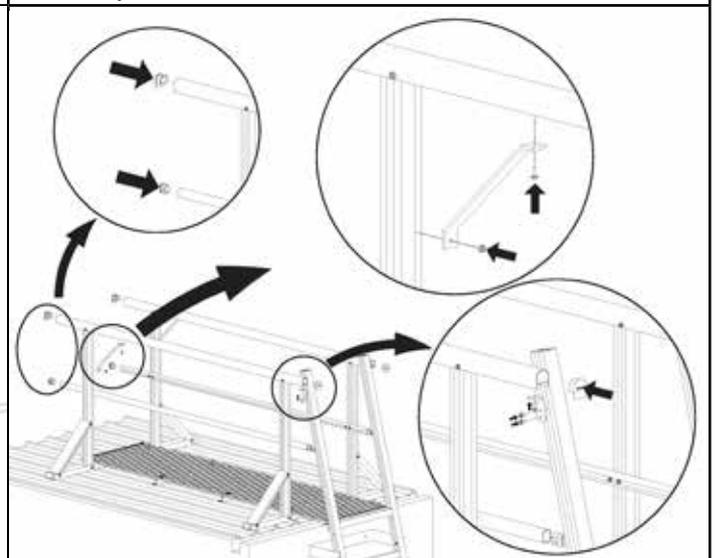
5. Secure the handrail posts into the base channel using 2x 20mm tek screws and install the bracing channels using 4x 20mm tek screws.



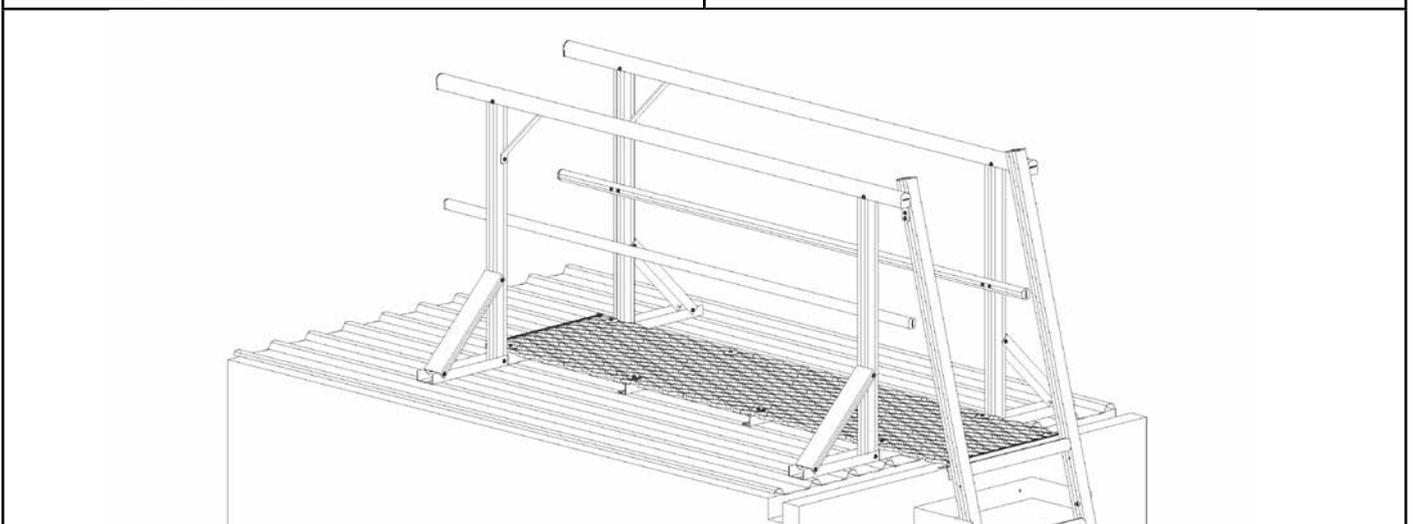
6. Place the handrail profile on top of the posts, ensure that the end does not protrude past the front of the ladder. Secure with 2x 20mm tek screws in each post.



7. The kneerail should be installed as per figure 7 and secured with 2x 50mm tek screws into each post. Alternatively the kneerail installation tool (GUARD001. TOOL_KR) can be used to assist. Ensure that there is a minimum of 50mm gap between the back of the ladder and the kneerail.



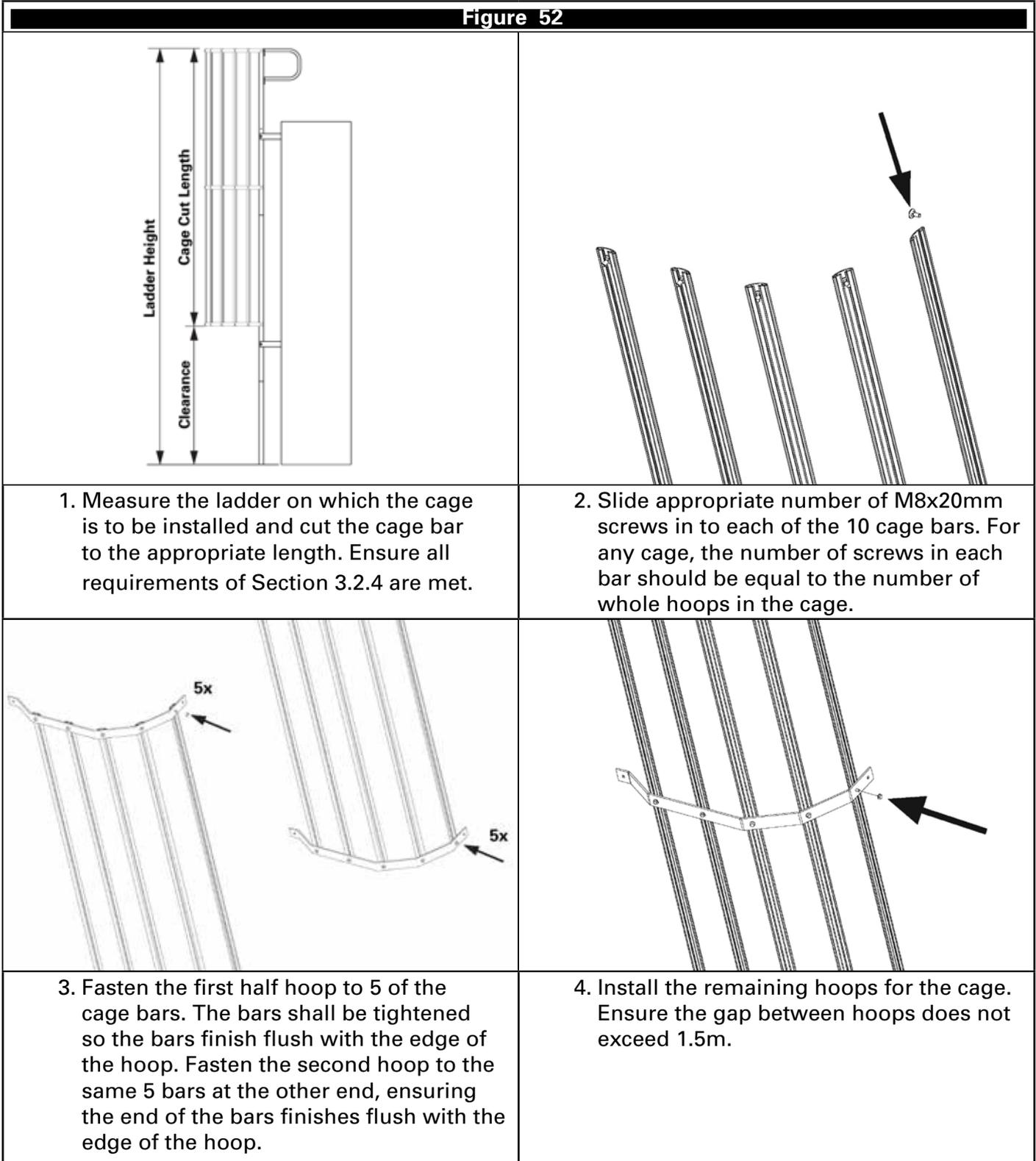
8. Install endcaps using a soft rubber mallet. The handrail brace should be installed with 2x20mm tek screws. The handrail should be attached to the ladder stile with 3x 20mm tek screws and the handrail connecting bracket.



7 Cages

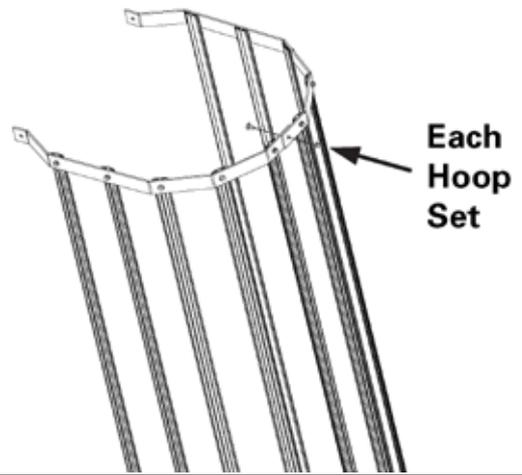
7.1 Ladder Cages (Assembly)

Figure 52

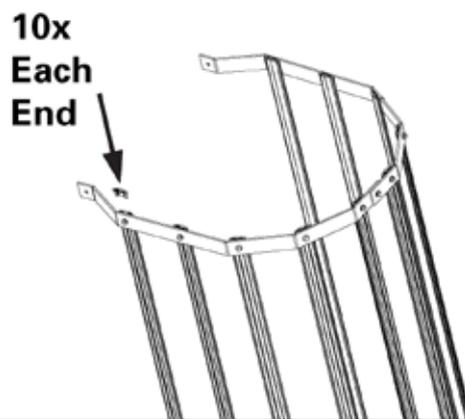




5. Repeat Step 3 and 4 for the second half of the cage.



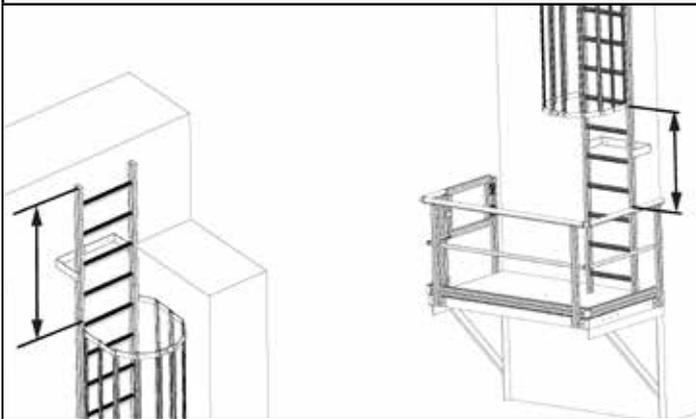
6. Join the 2 halves of the cage together with the M8x20mm cup head screws provided.



7. Install a cap in to both ends of each cage bar.

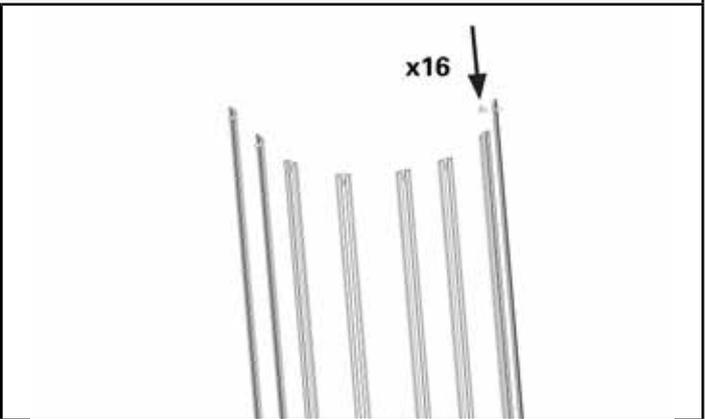
7.2 Half Cage (Assembly)

Figure 53

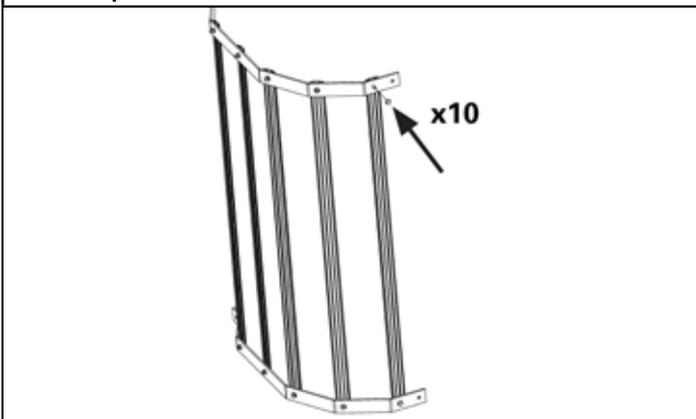


1. Measure the ladder on which the cage is to be installed and cut the cage bar to the appropriate length. Ensure all requirements of Section 3.2.4 are met.

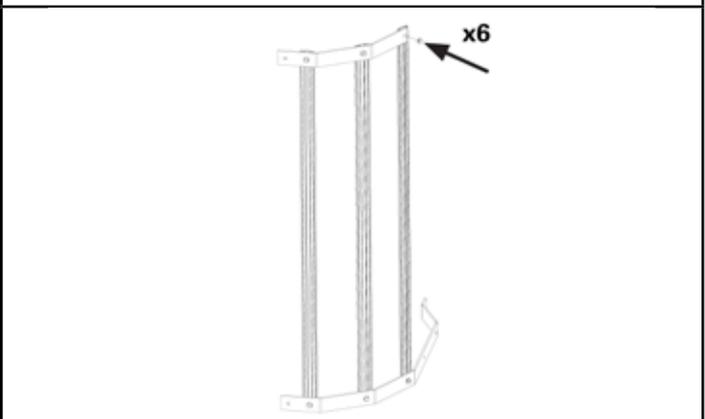
✓ The half cage can be installed at the top or bottom of a ladder to provide protection.



2. Slide 2 M8x20mm screws in to each of the 8 cage bars.



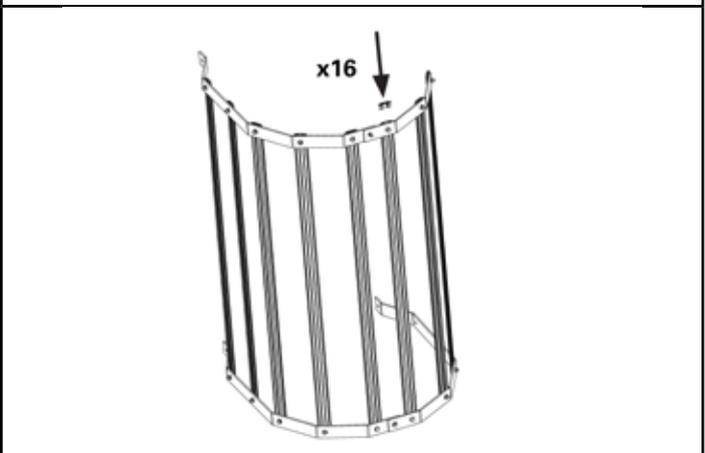
3. Fasten the first half hoop to 5 of the cage bars. The bars shall be tightened so the bars finish flush with the edge of the hoop. Fasten the second hoop to the same 5 bars at the other end, ensuring the end of the bars finishes flush with the edge of the hoop.



4. Repeat Step 3 for the 2 short cage hoops and remaining 3 cage bars.



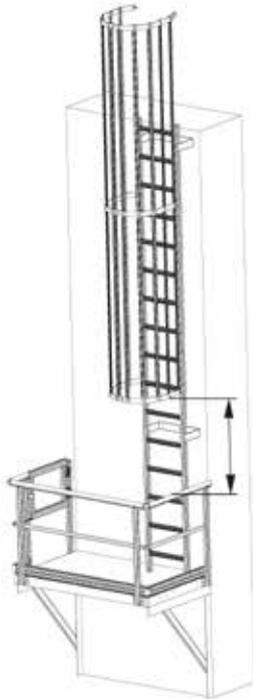
5. Join the 2 pieces of the cage together with the M8x20mm cup head screws provided.



6. Install a cap in both ends of each cage bar.

7.3 Edge Protection (Assembly)

Figure 54

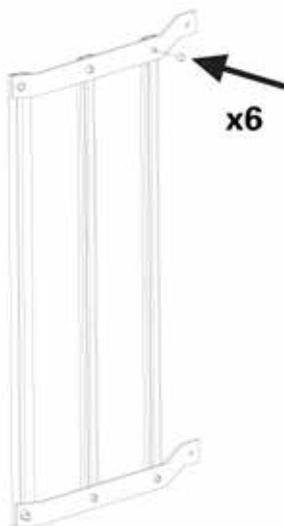


1. Measure the ladder on which the cage is to be installed and cut the cage bar to the appropriate length. Ensure all requirements of Section 3.2.4 are met.

x6
↓

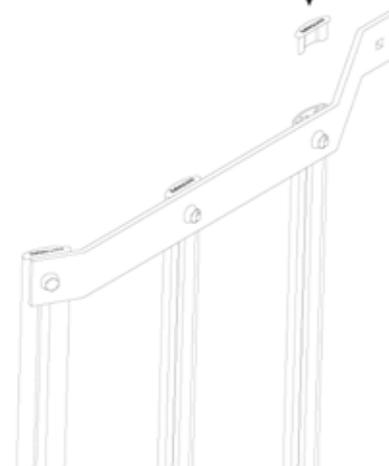


2. Slide 2 screws in to each of the 3 cage bars.



3. Fasten the first half hoop to 3 of the cage bars. The bars shall be tightened so the bars finish flush with the edge of the hoop. Fasten the second hoop to the same 3 bars at the other end, ensuring the end of the bars finishes flush with the edge of the hoop.

x6
↓



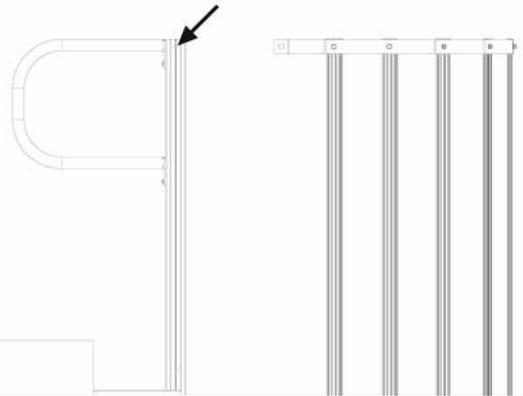
4. Install a cap in both ends of each cage bar.

7.4 Cage (Installation)

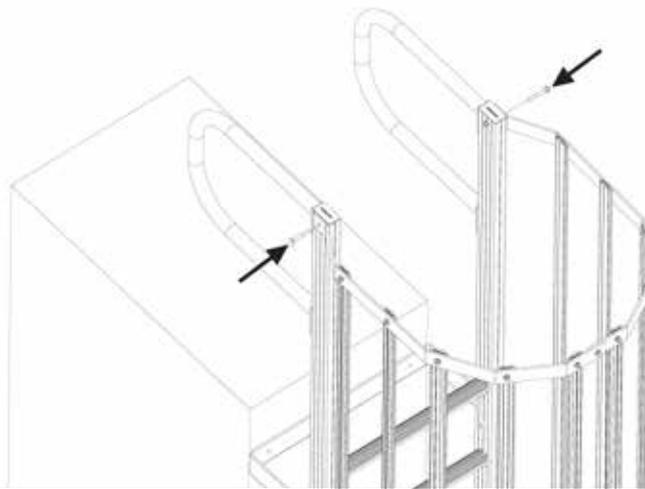
Figure 55



1. Measure the distance between cage hoops and mark the stile of the ladder. Ensure all requirements of Section 3.2.4 are met.



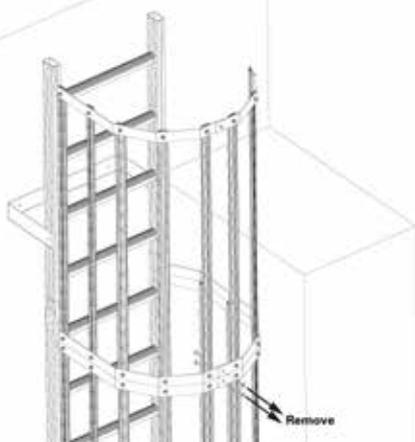
2. Drill $\text{\O}8.5\text{mm}$ hole on the centreline of the stile to line up with the cage hoop.



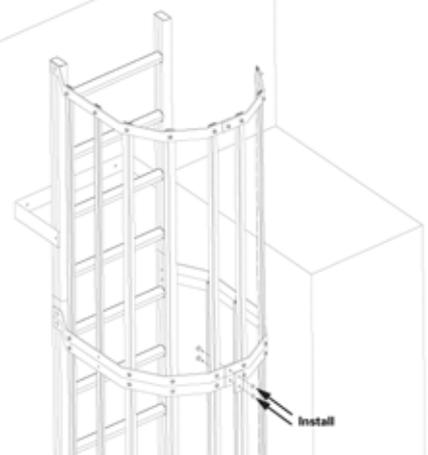
3. Fasten the cage to the ladder with the M8x60mm cup head bolts provided.

7.5 Cage Join Kit (Installation)

Figure 56



1. Remove the existing M8x20mm cup head screws installed in the cage hoops and bars in the location where the join is to be made.

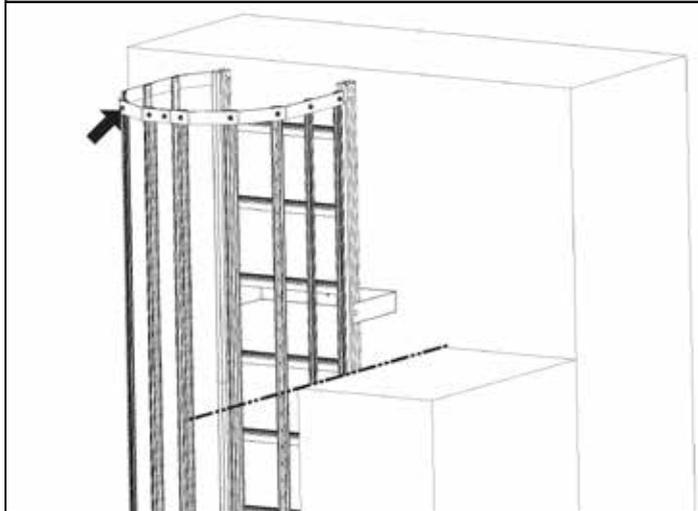


2. Install the M8x30 screws provided and fasten the join plate.

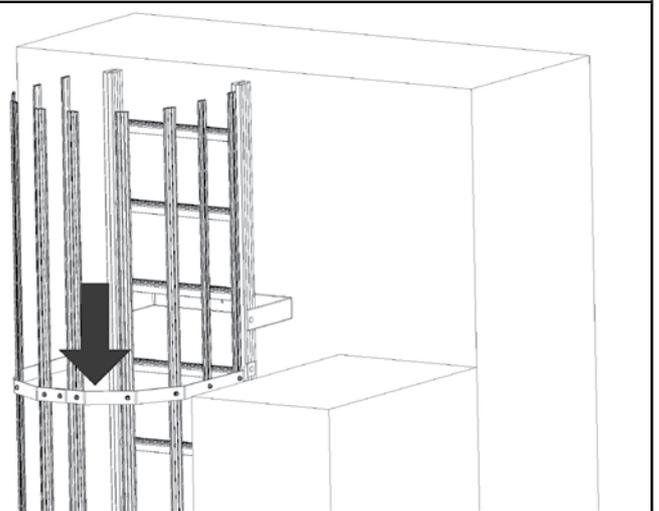
7.6 Half Cage (Cut Down)

- ✓ To prevent the need for joining a regular cage to a half cage, any regular cage can be cut on site to provide the same protection as a half cage.

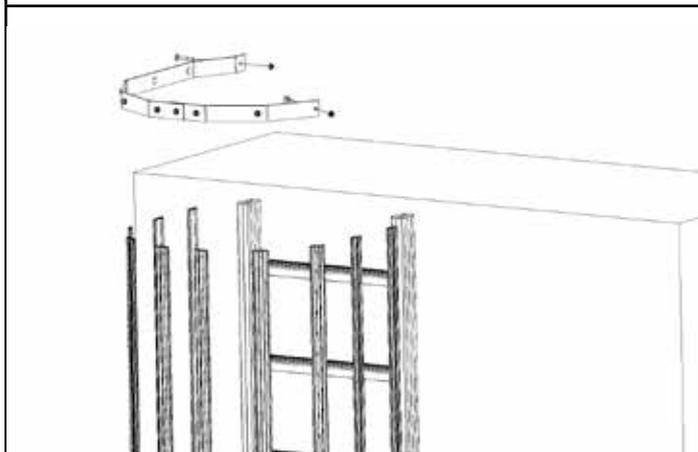
Figure 57



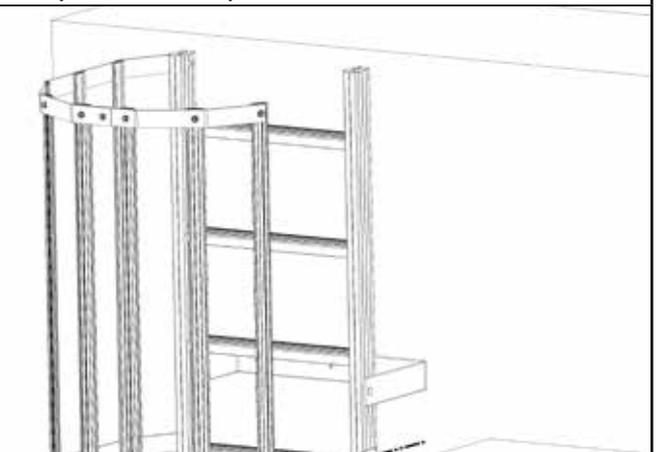
1. Loosen the M8x20mm cup head screws installed in the cage hoops and bars. From this hoop remove the 2x M8x60mm cup head screws from the ladder stile.



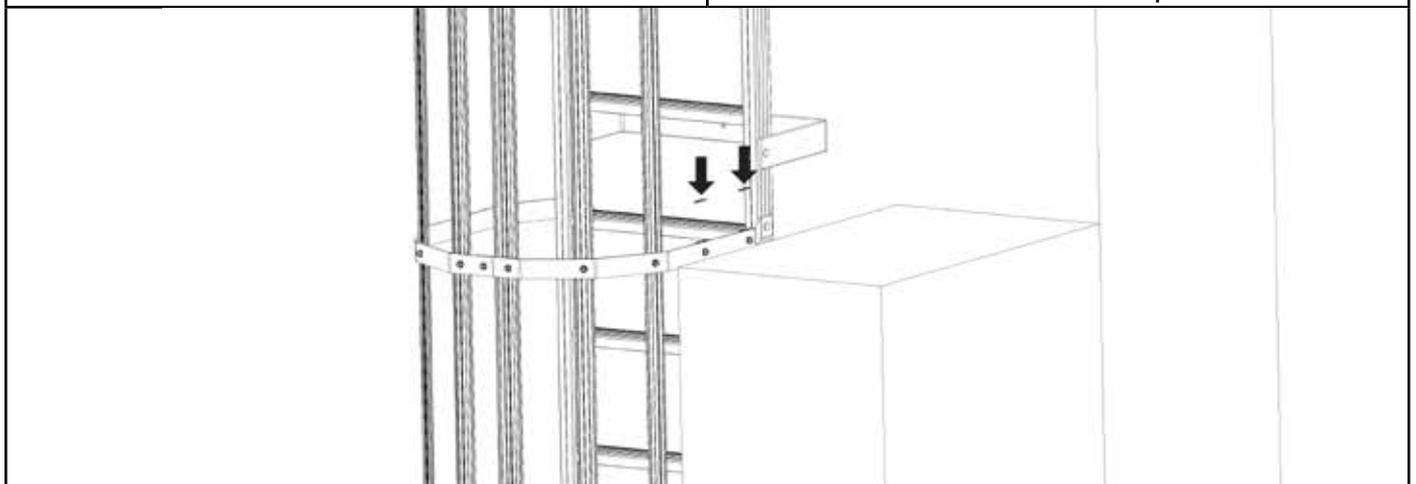
2. Slide the hoop down to the desired local and reinstall the M8x60mm screws in the ladder stiles. Ensure the cage finishes below the height of the exit platform to prevent a trip hazard.



3. Assembly and install the new cage hoop.



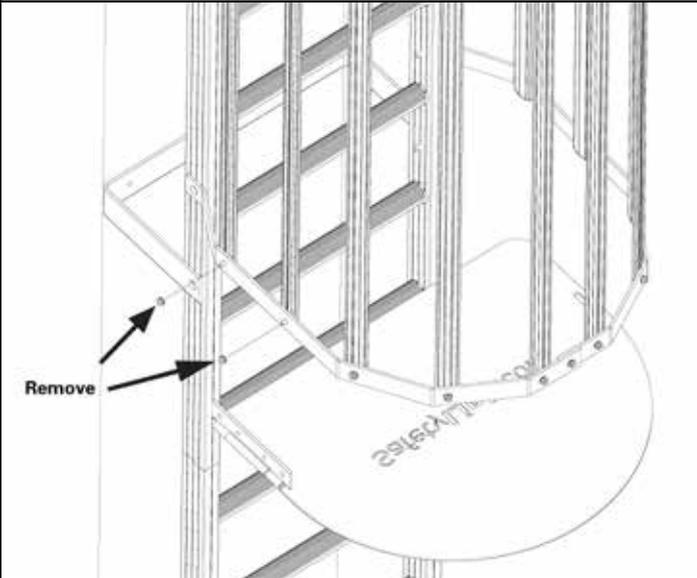
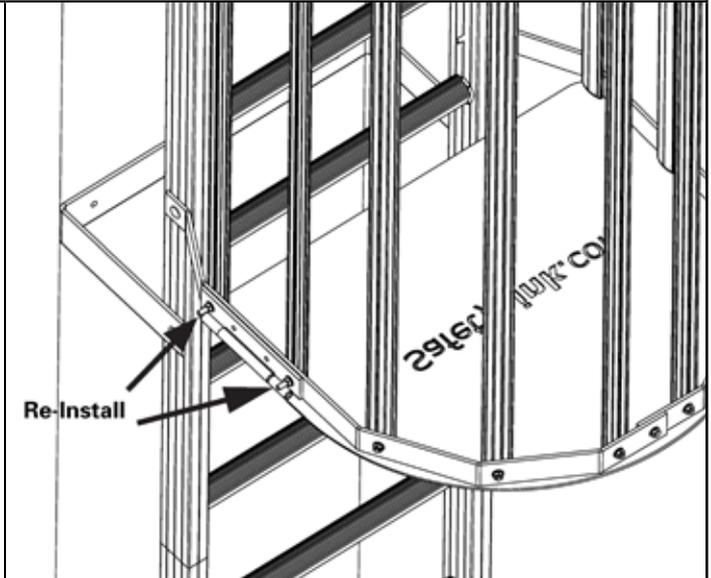
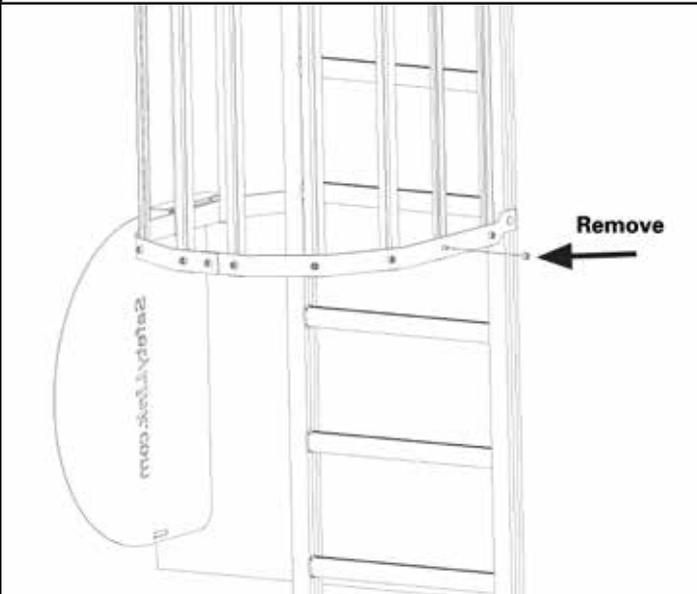
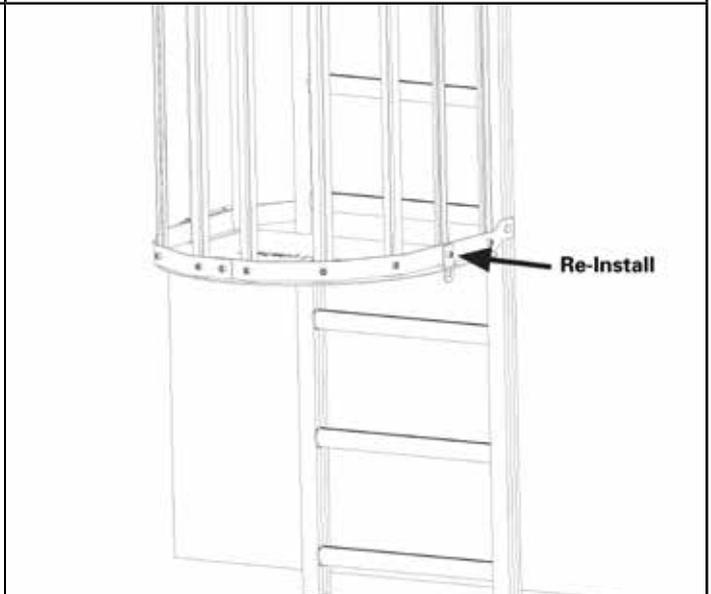
4. Fasten the new hoop to the stile with a M8x60mm screw. Cut the 2 cage bars flush with the lower hoop.



5. Install the cage caps in the 2 cut bars.

7.7 Cage Door (Installation)

Figure 58

 <p>A technical line drawing of a cylindrical cage structure. Two arrows point to screws on a horizontal bar, with the word "Remove" written next to them.</p>	 <p>A technical line drawing of the same cage structure. Two arrows point to screws being inserted into the cage hoops, with the word "Re-Install" written next to them.</p>
<p>1. Remove the existing M8x20mm cup head screws installed in the cage hoops and bars in the location where the cage door hinge meets the ladder cage.</p>	<p>2. Install the M8x30 screws provided and fasten the cage door hinge.</p>
 <p>A technical line drawing of the cage structure. An arrow points to a screw on a horizontal bar, with the word "Remove" written next to it.</p>	 <p>A technical line drawing of the cage structure. An arrow points to a screw being inserted into a cage hoop, with the word "Re-Install" written next to it.</p>
<p>3. Remove the existing M8x20mm cup head screw installed in the cage hoop and bar in the location where the cage door lock is to be installed.</p>	<p>4. Install the M8x30 screws provided and fasten the cage door lock. Install a padlock to lock the cage door. Padlock not provided.</p>

8 Midway and Rest Platforms

8.1 Cantilever Landing

- ✓ This landing platform is suitable for installation on roofs with a pitch of 8° or less. For roof pitches greater than 8°, contact Safetylink for advice.

Figure 59

SUBSTRATE	FASTENER	QUANTITY
Purlin	Platform brace to support channel M8 in each	3
	Support channel to structure M10 purlin bolt (min)	2
Concrete	Concrete Screw or expansion bolt M8 (min)	2
Timber	Timber Tek Screw x 75mm	3

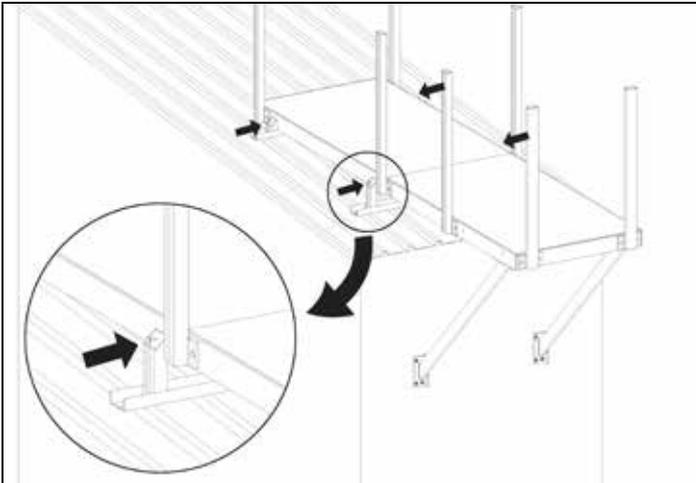
Figure 60

1. Fix each roof support bracket to the roof using 3x 5mm tri-fold rivets and foam squares.

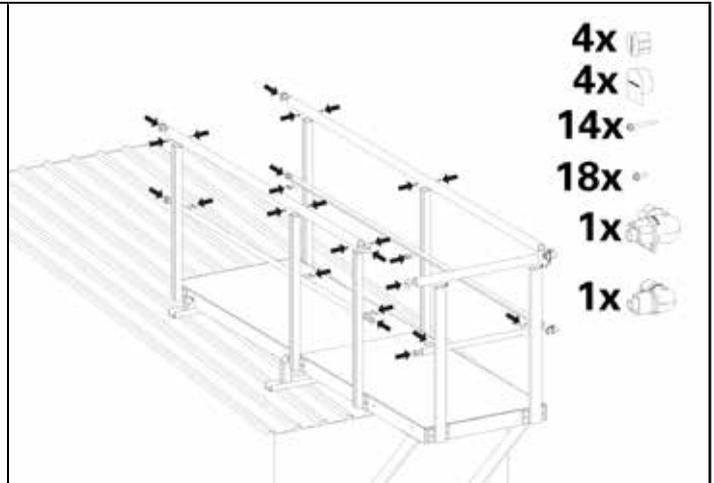
2. Using M8x30mm cup head bolts, fix the handrail posts to the platform in the predrilled holes. The posts can be bolted on in 2 configurations, depending on which side the ladder access is required.

3. Bolt the cantilever brackets into the pre-drilled holes on the underside of the platform. Fix the brackets to the wall using the recommended fasteners, see Figure 59. The platform should extend 1200mm from the wall.

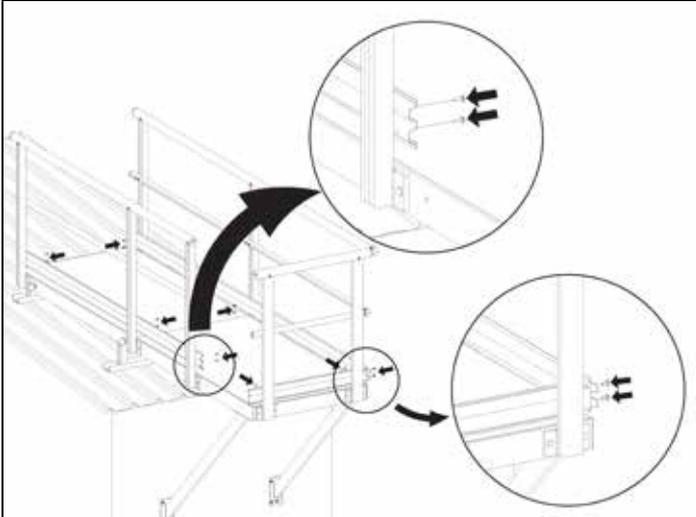
4. If installing into metal cladding, the brace must be supported with a channel to span at least 2 purlins. See Figure 59.



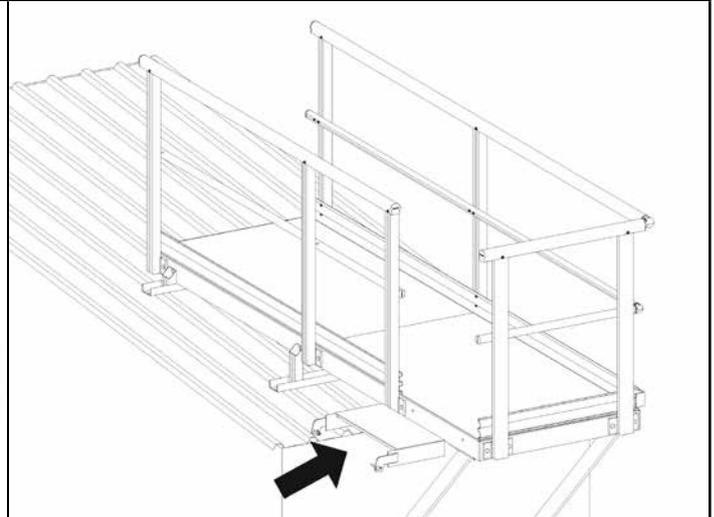
5. Fix the platform to the roof support brackets using M8x20mm cup head bolts



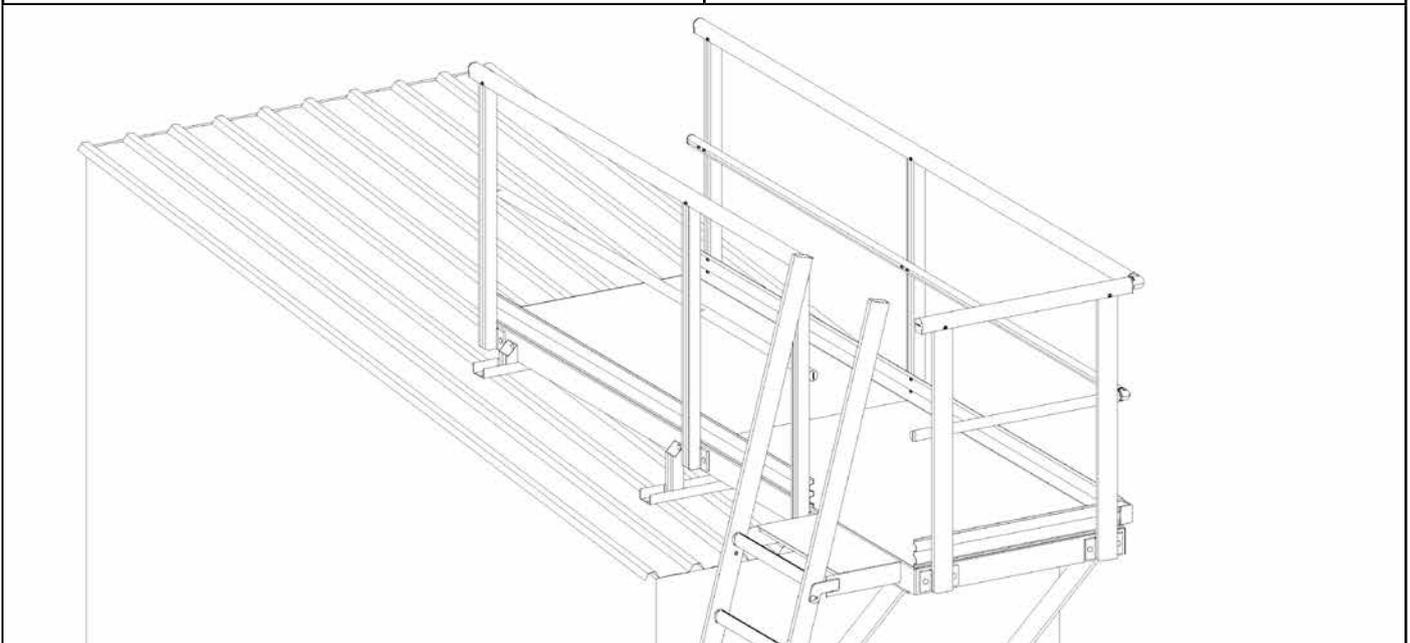
6. Install the handrail and kneerail using the supplied fixings and elbow joints. Install the end caps with a rubber mallet.



7. Assemble the toe board sections together using M8x20mm cup head bolts and fix to the handrail posts using 20mm tek screws. Note: The gap between the toe board and the platform can not exceed 10mm.



8. Install ladder landing bracket using 2x M8x30mm cup head bolts and install ladder.



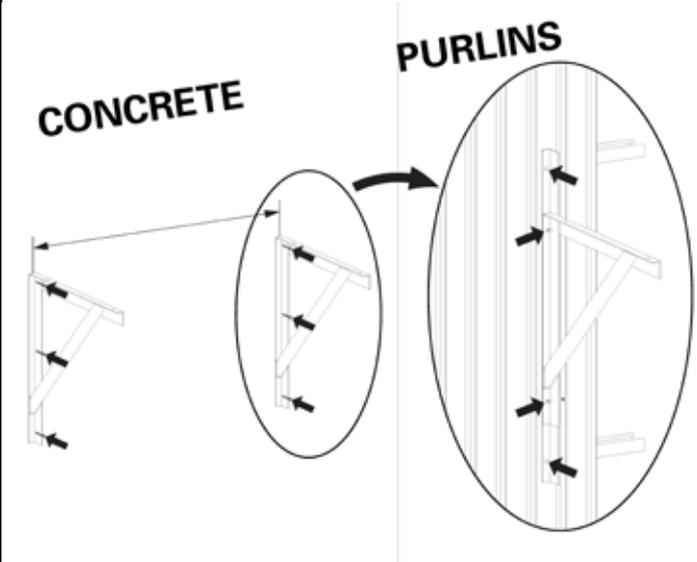
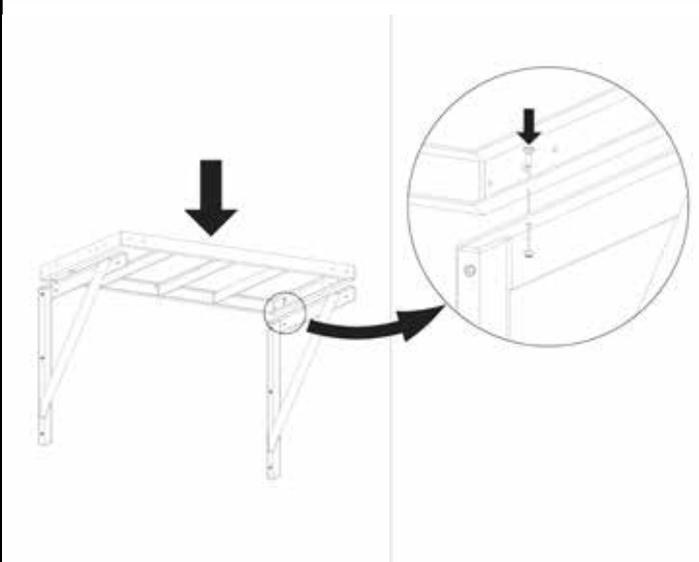
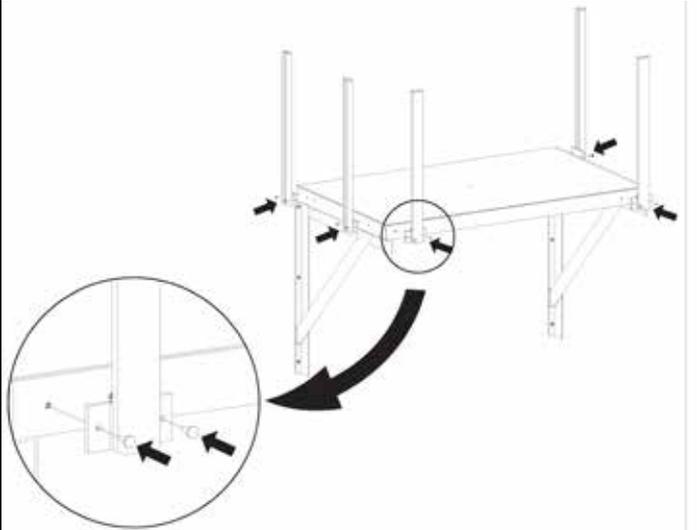
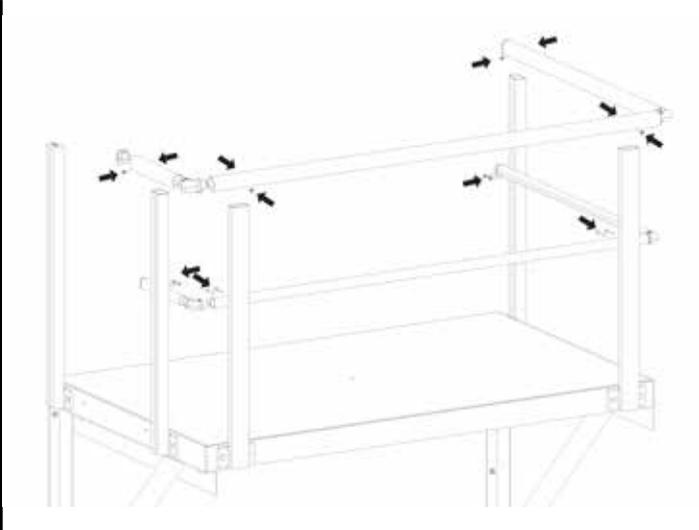
9. Install the ladder as per this instruction.

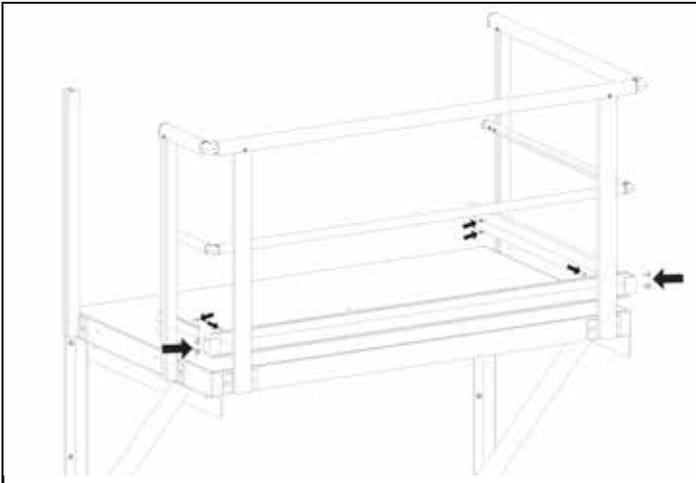
8.2 Midway Rest

Figure 61

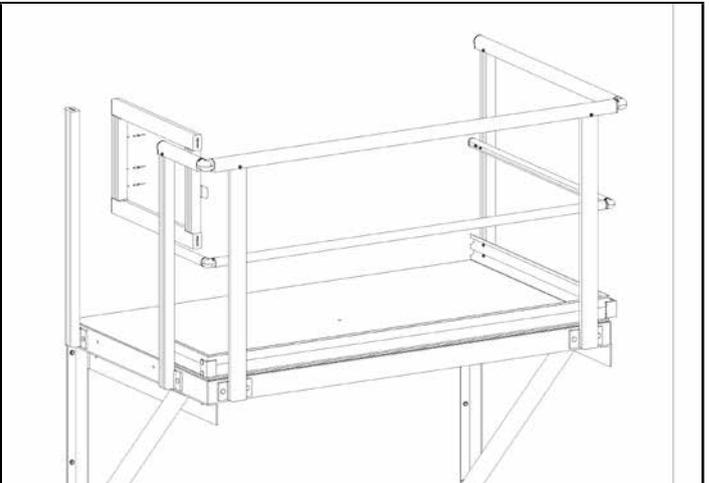
SUBSTRATE	FASTENER	QUANTITY
Purlin	Platform brace to support angle M8 in each	2
	Support angle to structure M10 purlin bolt (min)	4
Concrete	Concrete Screw or expansion bolt M8 (min)	2
Timber	Timber Tek Screw x 75mm	3

Figure 62

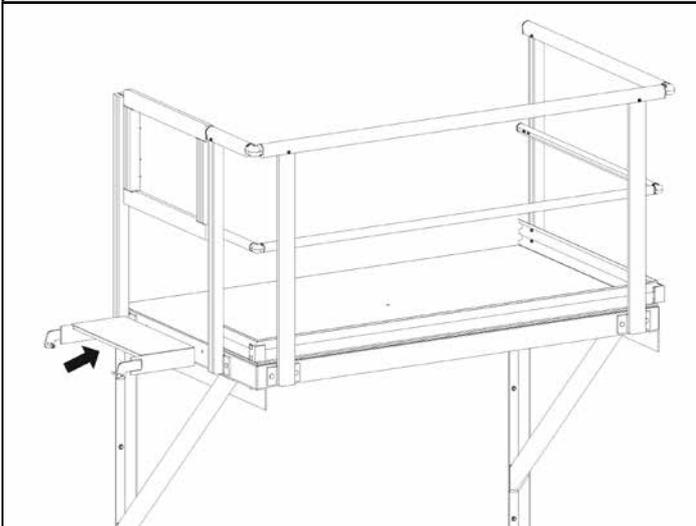
	
<p>1. Install cantilever brackets to wall using the recommended fasteners, see Figure 61. The brackets must be spaced at 1950mm apart. If installing into metal cladding, the brackets must span at least 2 purlins. If the spacing of the purlins is more than 1200mm, then a 100x50mm angle may be used to bridge the gap.</p>	<p>2. Install the main platform base onto the brackets using 4x M8x30mm cup head bolts.</p>
	
<p>3. Using M8x30mm cup head bolts, fix the handrail posts to the platform in the predrilled holes. The posts can be bolted on in 2 configurations, depending on which side the ladder access is required.</p>	<p>4. Install the handrail and kneerail using the supplied fixings and elbow joints. The handrails and elbows shall be installed with 20mm tek screws, the kneerails installed with 50mm tek screws.</p>



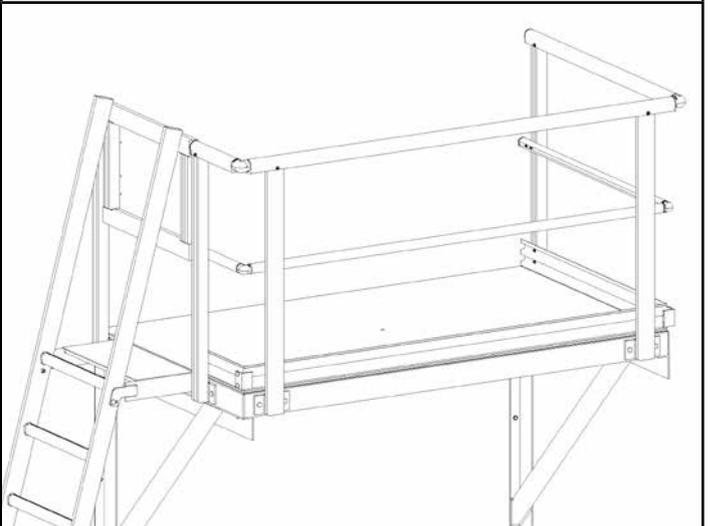
5. Assemble the toe board sections together using M8x20mm cup head bolts and fix to the handrail posts using 20mm tek screws. Note: The gap between the toe board and the platform can not exceed 10mm.



6. Install the gate using 4x 5mm trifold rivets so that the gate can swing inwards onto the platform.



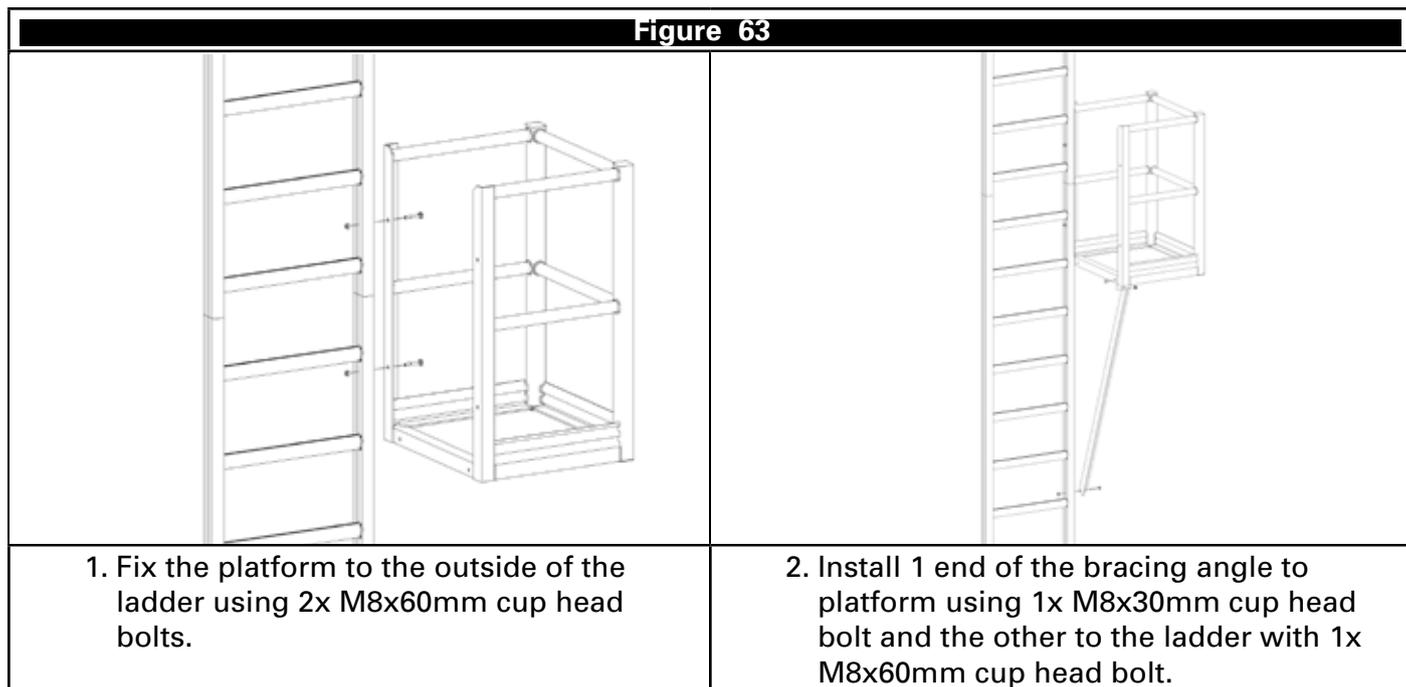
7. Install ladder landing bracket using 2x M8x30mm cup head bolts.



8. Install the ladder as per this instruction.

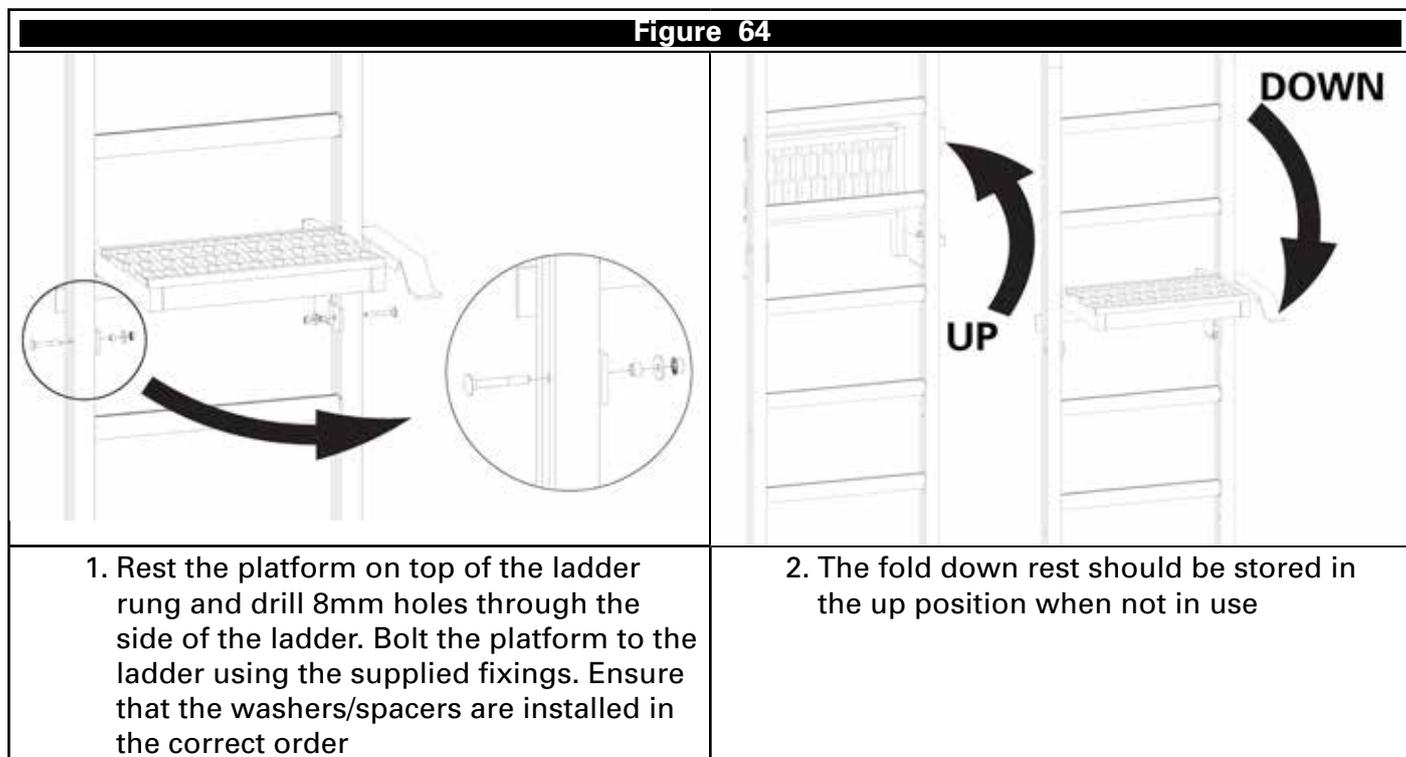
8.3 Small Midway Rest

⚠ *This platform should only be used where it is not reasonably practicable to use a platform meeting the requirements of Section 3.2.5.*



8.4 Fold Down Rest

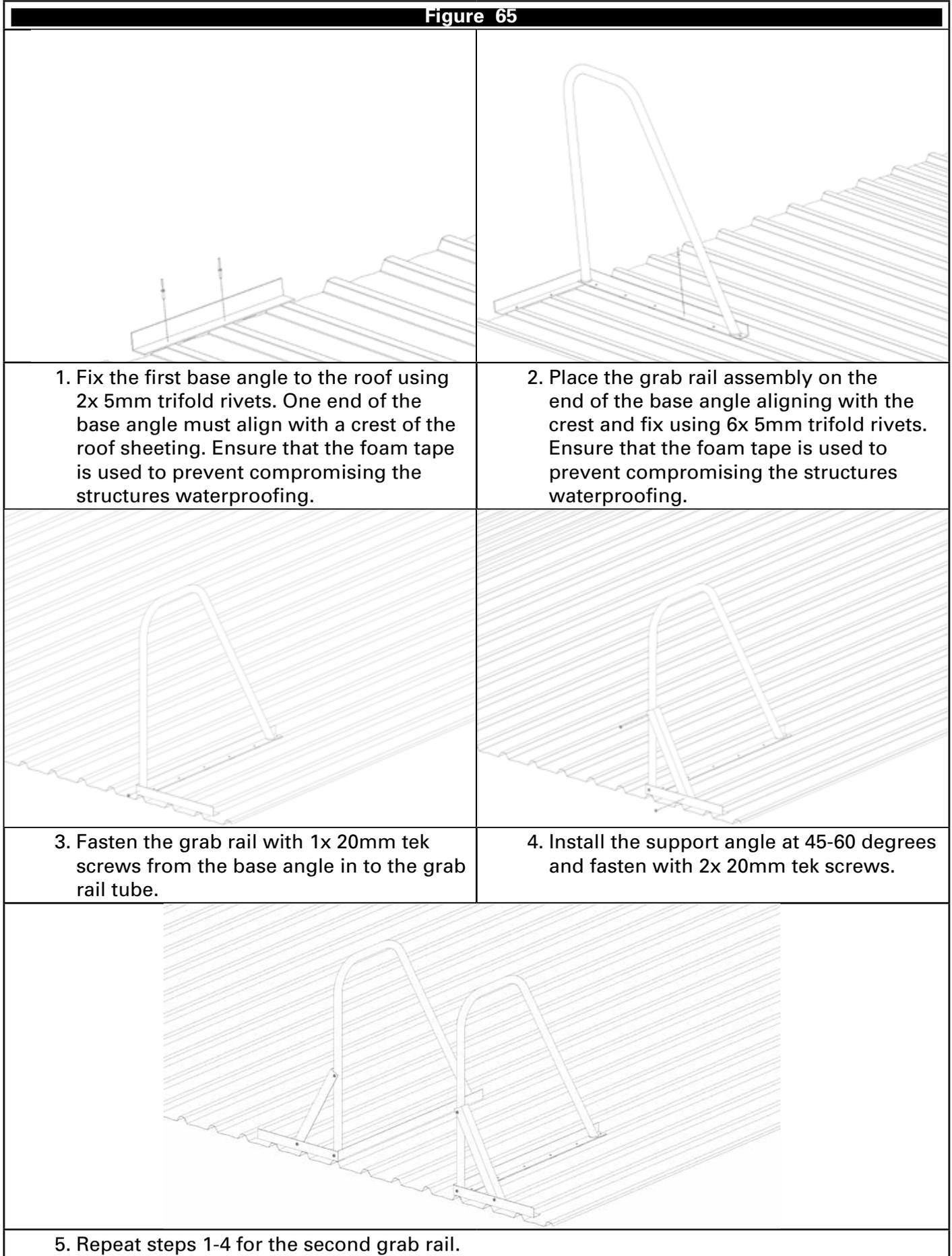
⚠ *This platform should only be used where it is not reasonably practicable to use a platform meeting the requirements of Section 3.2.5.*



9 Ladder Dock

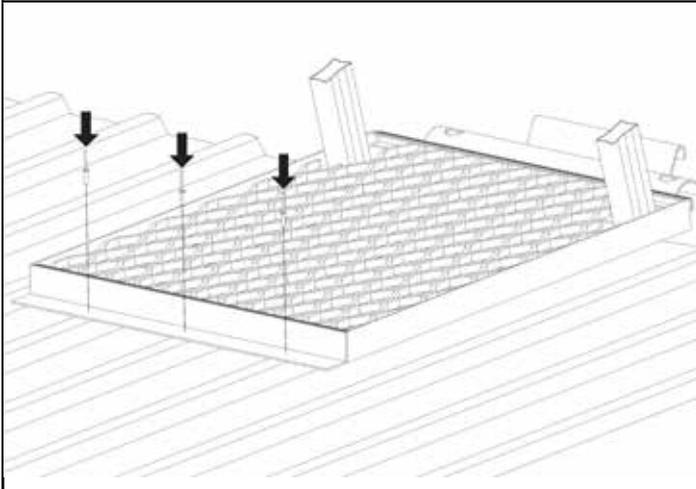
9.1 Separate Handrails

Figure 65

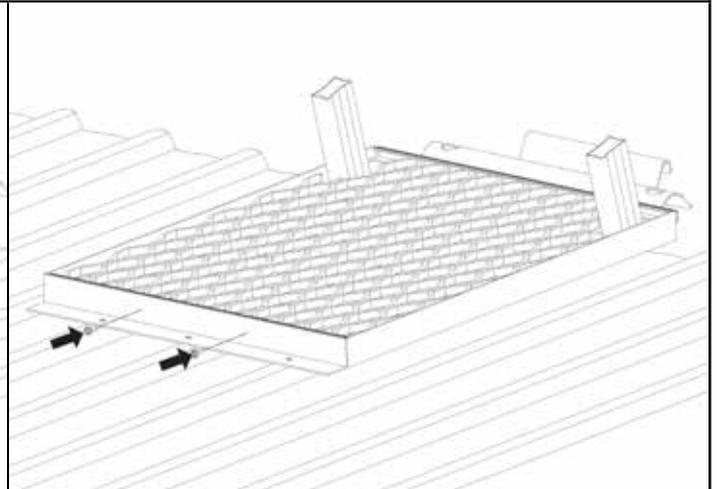


9.2 Platform Dock

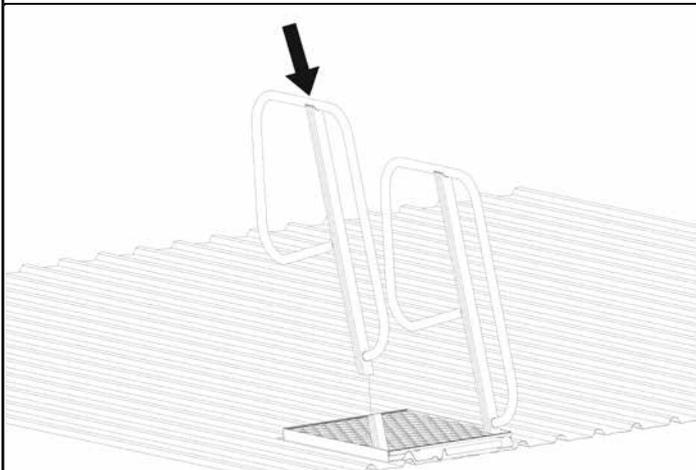
Figure 66



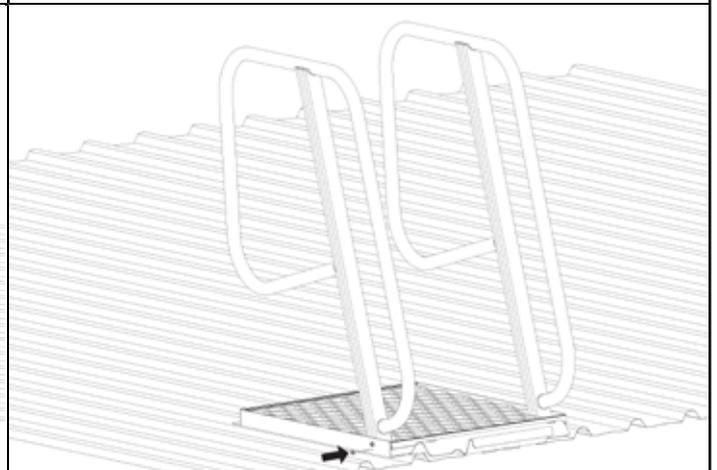
1. Fix the base angle to the roof using 3x 5mm trifold rivets. Ensure that the foam tape is used to prevent compromising the structures waterproofing.



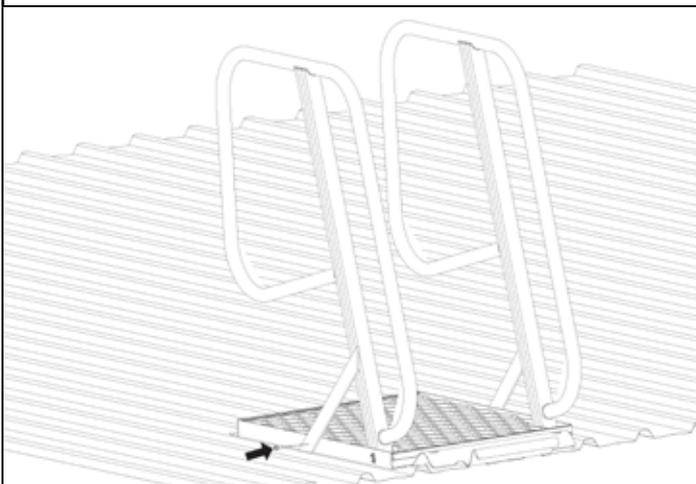
2. Fix the platform to the angle with 2x 20mm tek screws.



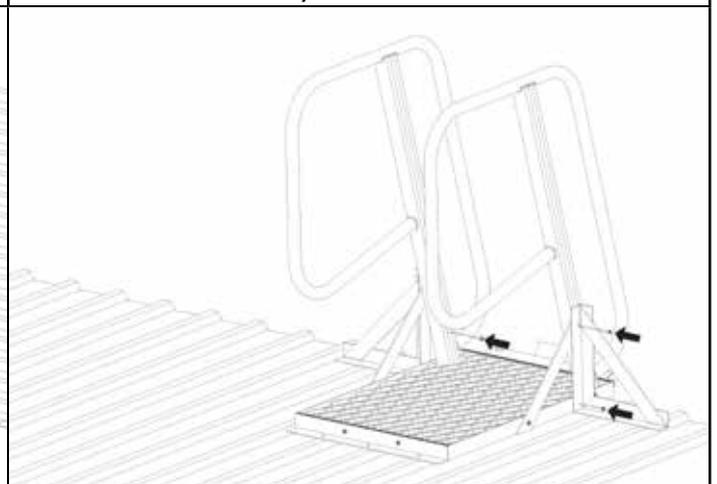
3. Install the 2 stile assemblies on the 2 welded posts.



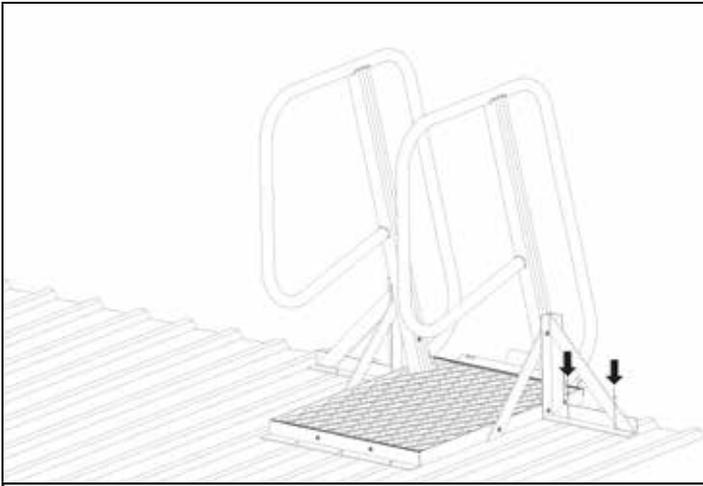
4. Fasten with 2x 20mm tek screws on each side through the platform angle, into the stile assembly.



5. Install a cross brace on each side and fasten with a single 20mm tek screw into the platform angle.



6. Install an angle brace on each side and fasten with 2x 20mm tek screw. 1 into the platform angle and the other into the stile assembly, capturing the cross brace. Install a final 20mm tek screw through the stile assembly into the welded post.

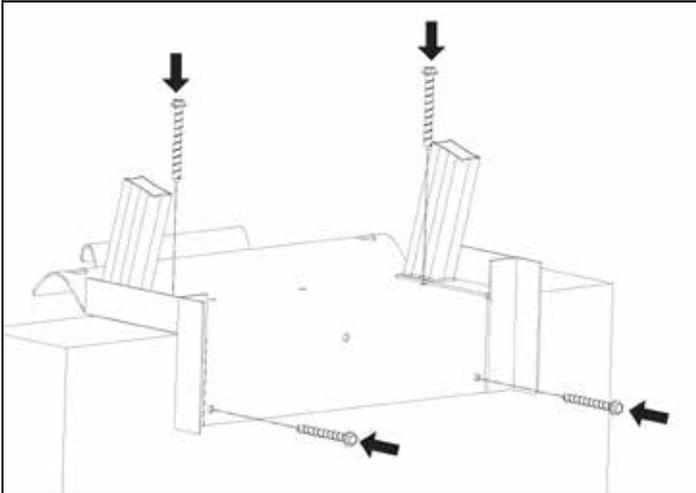


7. Fix the angle brace to the roof sheeting with 2x 5mm trifold rivets on each side. Ensure that the foam tape is used to prevent compromising the structures waterproofing.

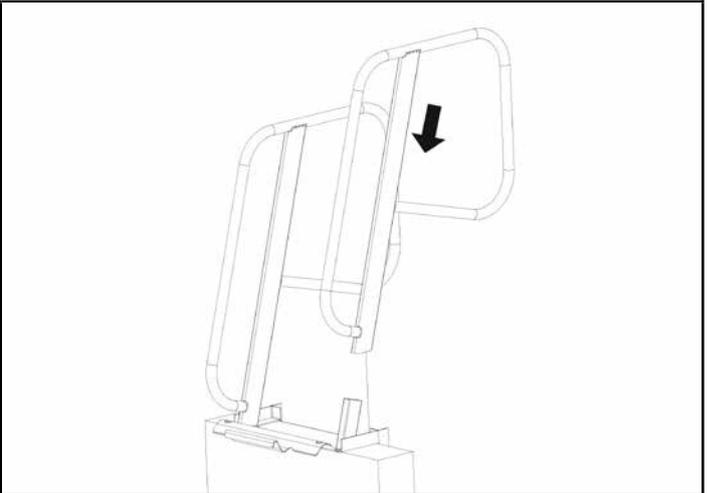


9.3 Parapet Dock

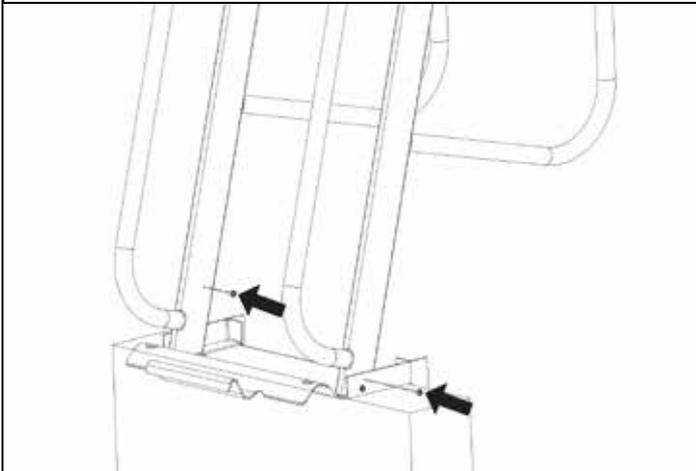
Figure 67



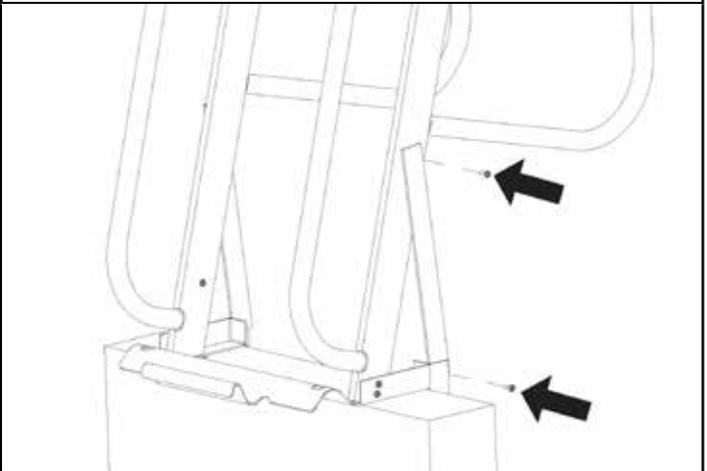
1. Fix the base assembly to the parapet with 4x 8mm concrete screws / expansion bolts.



2. Install the 2 stile assemblies onto the 2 welded posts on the base assembly.



3. Fasten each side with 2x 20mm tek screws through the base angle and 1x 20mm tek screw through the stile assembly into the welded post.



4. Install a cross brace each side with 2x 20mm tek screws.

10 Inspection

10.1 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
SECTION 3.1 ON PAGE 10	Check the requirement of the applicable section have been met.	<input type="checkbox"/>	<input type="checkbox"/>
	Comments:		
SECTION 3.2 ON PAGE 12	Check the requirement of the applicable section have been met.	<input type="checkbox"/>	<input type="checkbox"/>
	Comments:		
SECTION 3.3 ON PAGE 16	Check the requirement of the applicable section have been met.	<input type="checkbox"/>	<input type="checkbox"/>
	Comments:		
SECTION 4 ON PAGE 17 - SECTION 9 ON PAGE 49	Inspect the applicable installation procedure has been followed for each components of the system.	<input type="checkbox"/>	<input type="checkbox"/>
	Comments:		
SECTION 3.3.4 ON PAGE 16	Inspect the system has been labelled and the label is legible.	<input type="checkbox"/>	<input type="checkbox"/>
	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 supplied 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).

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Fall Protection*



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