








INSTALLATION HANDBOOK

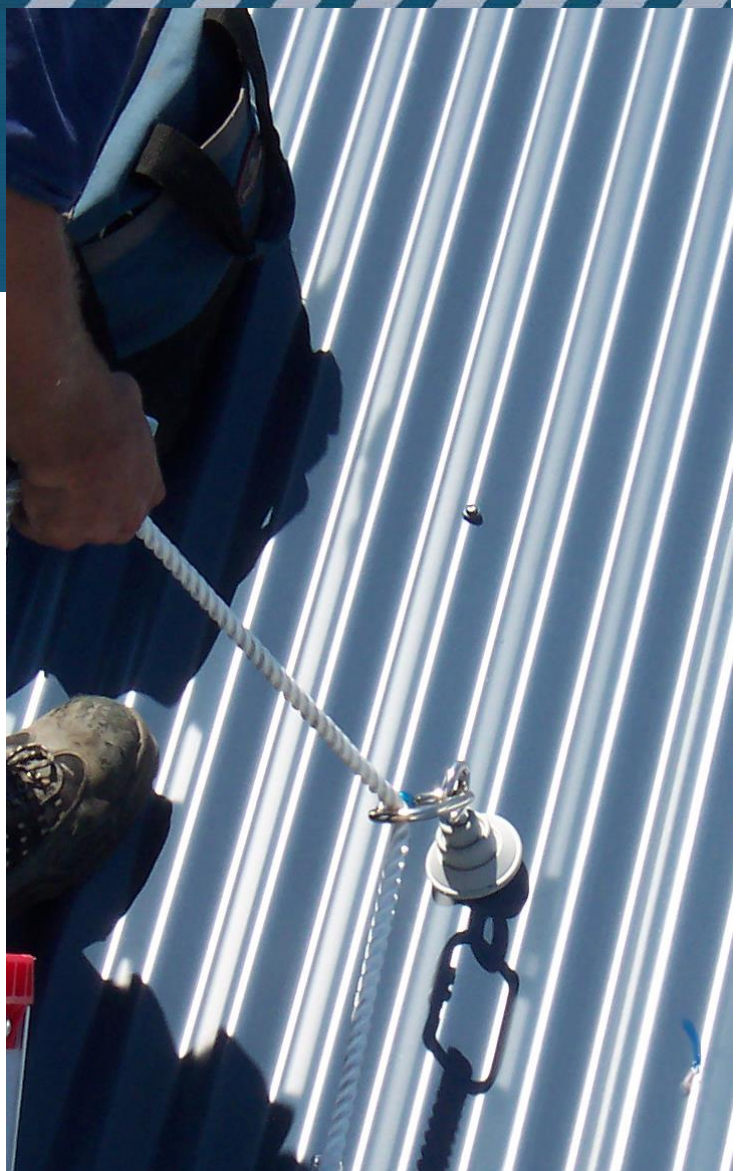
HINGELINK ANCHOR

SafetyLink is an innovative anchor company achieving success and keeping you safe whilst working at heights.

-  ROOF ANCHORS
-  HORIZONTAL LIFELINES
-  PERMANENT LADDERS
-  LADDER STABILISERS
-  TEMPORARY ANCHOR
-  WALKWAY & GUARDRAIL
-  X-RAIL - HORIZONTAL RAIL



Read entire handbook before installing SafetyLink products. All products must be installed in accordance with SafetyLink's installation handbook, using only products supplied by SafetyLink Pty Ltd. Failure to follow all warnings and instructions may result in serious injury or death.



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Safety Centre Training



Anchor Layout Video



Catalogue



Website

WARNINGS



READ CAREFULLY SOMEONE'S LIFE DEPENDS ON IT

INSTALLATION MUST BE CARRIED OUT BY, OR UNDER THE SUPERVISION OF A COMPETENT HEIGHT SAFETY INSTALLER. The building or structure for the anchorages should be assessed by an engineer, unless it is clear to a competent height safety installer that the anchorages system is structurally adequate.

STANDARD EYEBOLTS MUST ONLY BE USED AS A FALL ARREST ANCHOR.

ABSEILING EYEBOLTS ARE TO BE USED FOR ROPE ACCESS (ABSEILING).

SURFACE MOUNTED ANCHORS MUST NOT BE USED FOR ROPE ACCESS (ABSEILING).

RETRO EYEBOLTS USED FOR ROPE ACCESS (ABSEILING) EXCEPT ON HIGH PROFILE SECTION.

When installing anchor points all safety procedures must comply in accordance with the current safety code/s of practice/s for working at heights.

- Recommended waterproofing for roof tiles: *Sika Flex Co-Polymer Sealant*.
- Recommended waterproofing for metal roof: *Silicone Sealant*.
- A personal energy absorber or a fall-arrest device with a personal energy absorber must be used to connect to all SafetyLink Anchorages and (or) Strops.

⚠️ MAXIMUM USER PER EYEBOLT IS ONE (1)

⚠️ If any doubt exists with the strength of the structure or roof sheets an engineer should make the assessment.

⚠️ Installation must be carried out by, or under the supervision of a competent height safety installer.

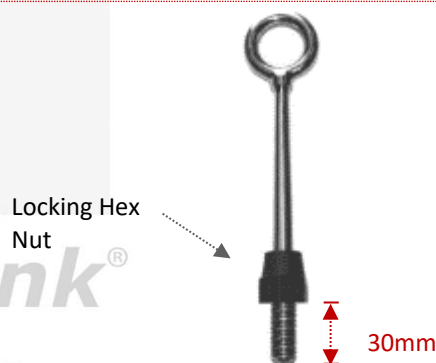
⚠️ During installation you must be safe at all times.

WARNING

Locking Hex Nut must be fully screwed up the thread of the eyebolt to expose 30mm of thread.

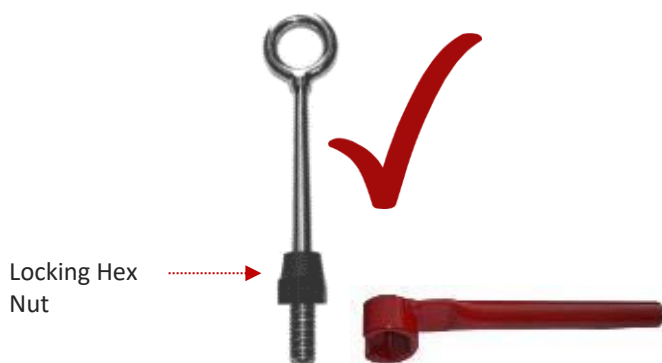
This thread must be fully screwed into the bracket.

Locking Hex Nut must be firmly tightened onto the bracket to stop the eyebolt from unscrewing and to gain maximum strength.



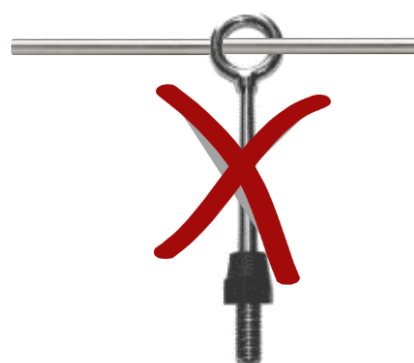
EYEBOLTS - Threads need to have a minimum of SIX FULL 360° TURNS into the ultimate thread.

RETRO EYEBOLTS - Threads need to have a minimum of EIGHT FULL 360° TURNS into the ultimate thread.



CORRECT

Always use a spanner when tightening and un-tightening the locking hex nut.



WRONG

DO NOT place an object into the eye of the eyebolt to tighten or un-tighten the locking hex nut, as this may damage the eyebolt.

MAINTENANCE – PERIODIC INSPECTIONS

All items of height safety equipment which are in regular use shall be subjected to periodic inspection and servicing. These regular scheduled inspections and servicing must be carried out by a competent height safety installer.

FIXED LADDERLINK: LADDER SUPPORT BRACKET

ALL LADDERLINKS MUST BE INSPECTED EVERY 12 MONTHS, INSPECTIONS NEED TO BE CARRIED OUT BY A COMPETENT HEIGHT SAFETY INSTALLER.

Procedures to be followed at inspection time:

- Visually inspect ladder support brackets for any signs of deterioration or the protective coating being removed. *(Note: LadderLink is made from marine grade aluminium and therefore should not corrode).*
- Ensure LadderLink is firmly secured to the structure as per SafetyLink Installation Handbook. *(refer to Installing LadderLink in Handbook).*

SAFETYLINK ANCHORAGES

ALL ANCHORAGES MUST BE INSPECTED EVERY TWELVE MONTHS, INSPECTIONS NEED TO BE CARRIED OUT BY A COMPETENT HEIGHT SAFETY INSTALLER.

Procedures to be followed at inspection time:

- Visually inspect anchors for signs of deterioration.
- The FrogLink/TileLink anchor point has two energy absorbing regions and two stabilising joints which hold the eyelet in place during use. If these energy absorbing regions are expanded this will indicate the anchor point has arrested a fall. Similarly, if the two stabilising joints have been broken this would also indicate the FrogLink/TileLink has arrested a fall and should be replaced.
- The eyebolt should remain straight, a bent eyebolt will indicate that the anchor point has arrested a fall *(The design features of the eyebolt includes the ability to bend like a fishing pole starting from the top and working its way to the bottom, enabling it to use up energy as the eyebolt bends whilst lessening the force on the person falling and the attachment point).*
- Visually inspect the components of the anchor for corrosion, superficial surface marking is permitted while deeper corrosion or pitting would require attention.
- Manually (by hand) check the eyebolt for rigidity and tightness, if the eyebolt can turn in the anticlockwise direction it will require attention.
- Visually inspect the rubber hat washer and waterproofing components to ensure it has remained sealed.
- Visually inspect the attachment component of the anchorage where practically possible.
- Visually inspect the parent structure for modifications or deterioration which might lead to loss of anchorage strength.
- For Concrete Installation Only: To comply with Australian Standards, each ConcreteLink must be tested after installation and at every recertification inspection. Ensure you wait the recommended curing time as specified by the chemical anchor instructions. The pull test can be done using a 16mm threaded eyebolt. Test consists of ultimate pull out force proof loading to 50% of design purpose of anchorage.
- A personal energy absorber or a fall-arrest device with a personal energy absorber must be used in conjunction with all SafetyLink Anchorages and Lifeline systems.

IN ADDITION TO SAFETYLINK PTY LTD EQUIPMENT, ALL ANCILLARY EQUIPMENT MUST BE INSPECTED IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND THE MANUFACTURER'S INSTRUCTIONS.



**FOR MAINTENANCE ADVICE AND SERVICES PLEASE CONTACT SAFETYLINK
ON +61 249 641068 OR 1300 789545 FOR YOUR NEAREST SAFETYLINK INSPECTION SERVICE
CENTRE OR EMAIL: info@safetylink.com**

WARRANTIES

EXTRACT: SafetyLink Pty Ltd STANDARD TERMS AND CONDITIONS

- 11.1 To the extent permitted by law all implied conditions, warranties and undertakings are expressly excluded.
- 11.2 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.
- 11.3 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.
- 11.4 The Company will not be 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.
- 11.5 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 arisen 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 product 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.

- 11.6 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.
- 11.7 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.



TIMBER RAFTER MOUNTED ANCHOR – HINGELINK (SIDE MOUNTED)

Product Code: HINGE001

All safety procedures must comply in accordance with the current safety code(s) of practice(s) for working at heights. Ensure safety at all times during and after installation by using an appropriate height safety protection system.

The first HingeLink anchor point must be in a position easily and safely reached from a safe access point. *HingeLink can be used with both the standard and abseiling eyebolts, the **abseiling eyebolt is required on pitches greater than 30 degrees**.*

INSPECT THE TIMBER FOR STRENGTH

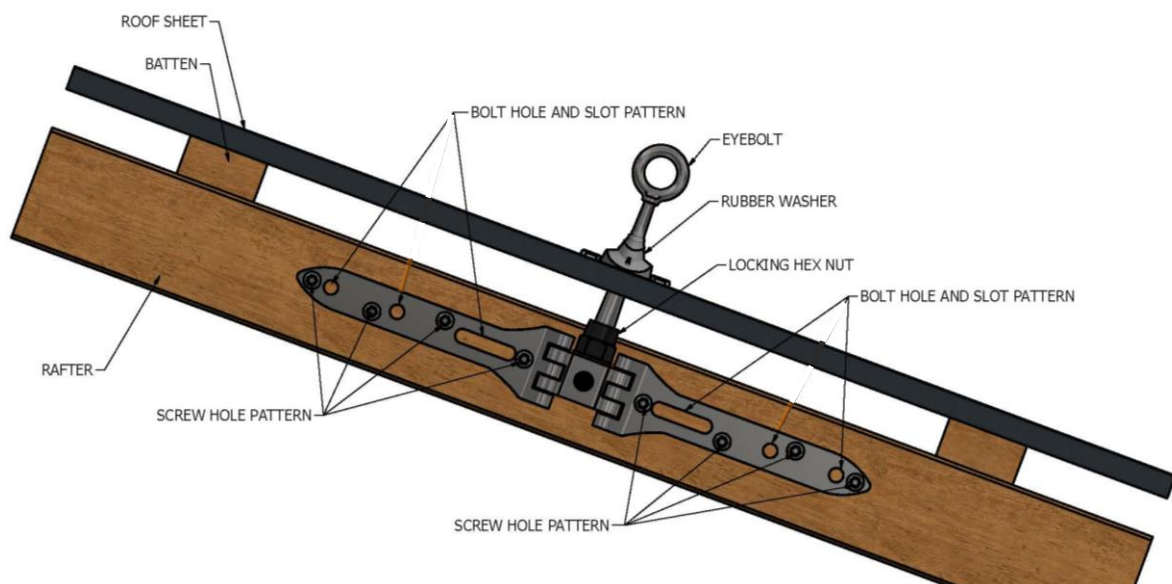
Install anchors only to timber strong enough to support the anchor point and the maximum intended loads. Minimum timber size is 35mm by 90mm MGP10. Inspect the timber for splits, cracks, knots and damage. Ensure the timber structure is secured in accordance with current building codes and manufacturer's instructions.

⚠ If any doubt exists with the strength of the structure or roof sheets an engineer should make the assessment.

FIXING HINGELINK BRACKET

1. Place the bracket in centre of rafter, check the eyebolt will clear the roof sheeting and allow for waterproofing.
2. Select and mark the location the eyebolt will exit the roof sheeting.
3. Use marking to drill a 16mm hole through the roof sheet to allow the eyebolt to exit.
4. To secure the bracket use 8 x 12g 50mm Hex Head Screws in the small holes to fix the HingeLink bracket to the timber.

⚠ Lateral bracing straps must be used if there is a possibility of falling in a direction 45 to 90 degrees to the rafter



FITTING THE EYEBOLT AND WATERPROOFING WASHER

1. Remove the Locking hex nut from the eyebolt and install the rubber waterproofing washer.
2. Install the locking hex nut onto the eyebolt exposing 30mm of thread (coat threads with Loctite) (*refer to Warnings*).
3. Screw the eyebolt through the roof sheeting all the way into the HingeLink base plate. Before tightening the locking hex nut, turn the eyebolt to line up with the fall of the roof (see diagram above). Tighten the locking hex nut using a spanner.
4. Threads need to have a minimum of **six full 360° turns** into the ultimate thread.

WATERPROOFING

Apply only to a dry surface, use a sealant between the rubber washer and the roof sheeting to waterproof the roof and fix waterproofing washer down in accordance with waterproofing instruction manual.

STEEL RAFTER MOUNTED ANCHOR – HINGELINK (SIDE MOUNTED)

Product Code: HINGE001

All safety procedures must comply in accordance with the current safety code(s) of practice(s) for working at heights. Ensure safety at all times during and after installation by using an appropriate height safety protection system.

The first HingeLink anchor point must be in a position easily and safely reached from a safe access point. *HingeLink can be used with both the standard and abseiling eyebolts, the **abseiling eyebolt is required on pitches greater than 30 degrees**.*

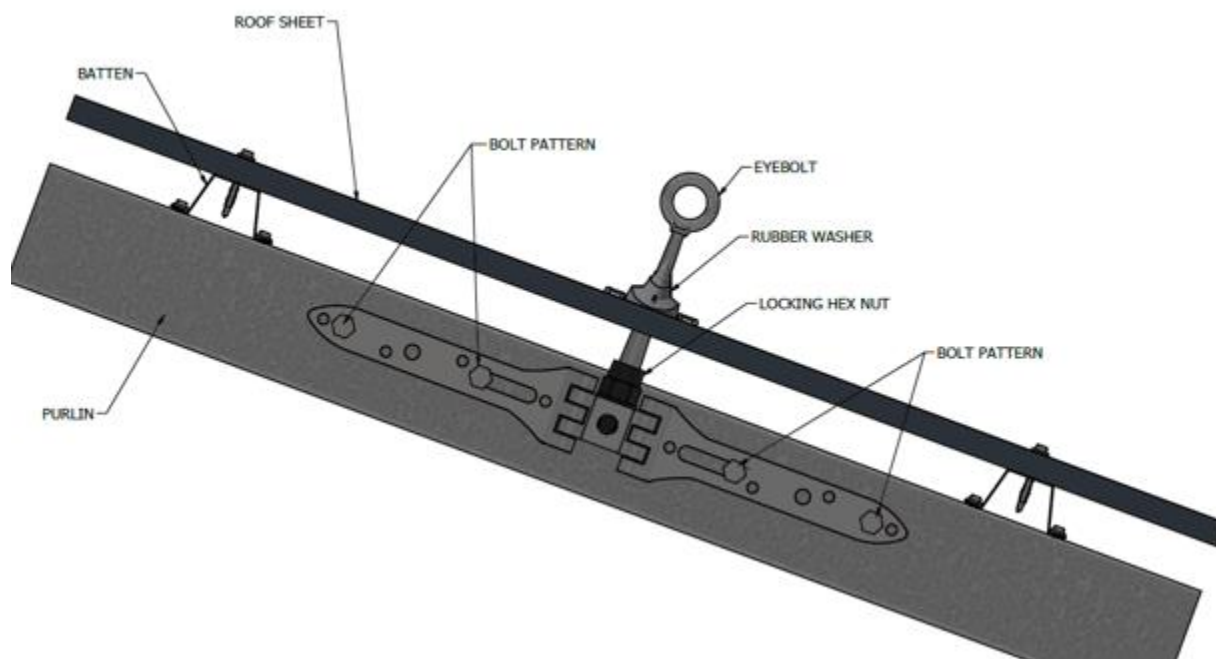
INSPECT THE STEEL FOR STRENGTH

Install anchors only to steel structure strong enough to support the anchor point. Minimum steel purlin size is 100x1.5mm. Inspect the steel for rust, cracks or damage. Ensure the steel structure is secured in accordance with current building codes and manufacturer's instructions

FIXING HINGELINK BRACKET

1. Place the bracket in centre of rafter, check the eyebolt will clear the roof sheeting and allow for waterproofing.
2. Select and mark the location the eyebolt will exit the roof sheeting.
3. Use marking to drill a 16mm hole through the roof sheet to allow the eyebolt to exit.
4. Select and mark the 4x hole locations onto steel purlin.
5. Use markings to drill required holes onto steel purlin.
6. To secure the bracket use four (4) M10 bolts with spring washer, washer, and nut (coat threads with Loctite).

⚠ Lateral bracing straps must be used if there is a possibility of falling in a direction 45 to 90 degrees to the rafter.



FITTING THE EYEBOLT AND WATERPROOFING WASHER

1. Remove the Locking hex nut from the eyebolt and install the rubber waterproofing washer.
2. Install the locking hex nut onto the eyebolt exposing 30mm of thread (coat threads with Loctite) (*refer to Warnings*).
3. Screw the eyebolt through the roof sheeting all the way into the HingeLink base plate. Before tightening the locking hex nut, turn the eyebolt to line up with the fall of the roof (see diagram above). Tighten the locking hex nut using a spanner.
4. Threads need to have a minimum of **six full 360° turns** into the ultimate thread.

WATERPROOFING

Apply only to a dry surface, use a sealant between the rubber washer and the roof sheeting to waterproof the roof and fix waterproofing washer down in accordance with waterproofing instruction manual.

TIMBER RAFTER MOUNTED ANCHOR – HINGELINK (TOP OF RIDGE MOUNTED)

Product Code: HINGE001

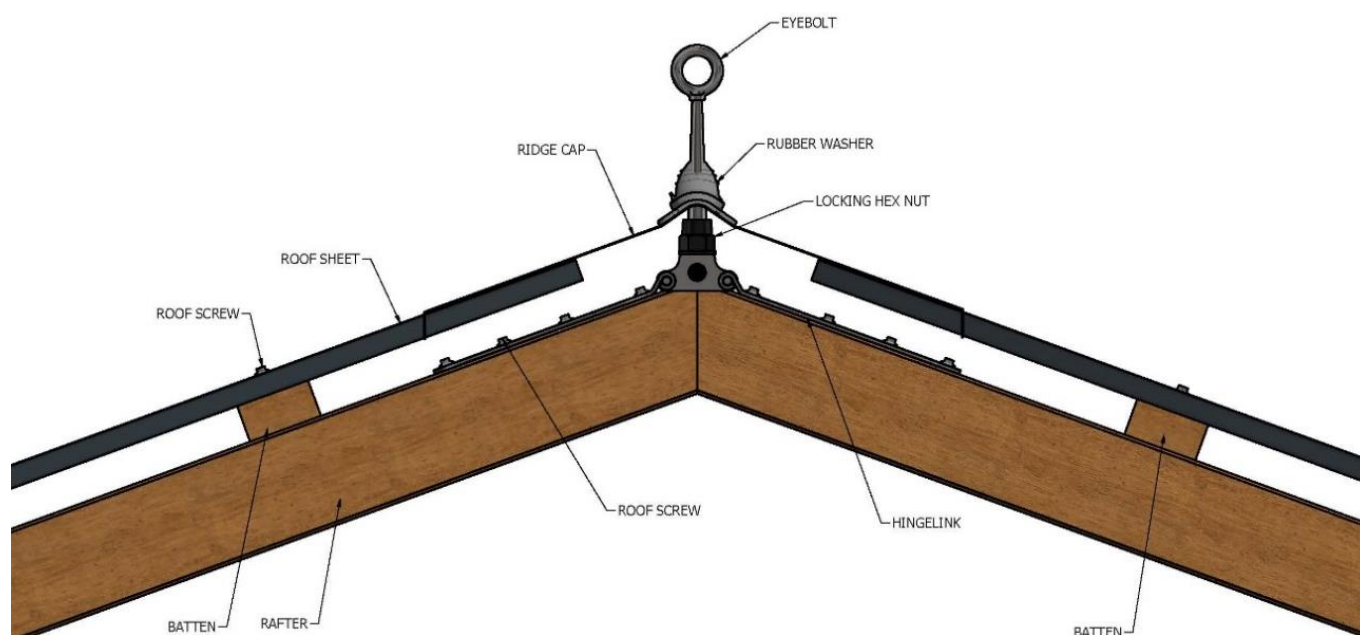
All safety procedures must comply in accordance with the current safety code(s) of practice(s) for working at heights. Ensure safety at all times during and after installation by using an appropriate height safety protection system. The first HingeLink anchor point must be in a position easily and safely reached from a safe access point.

INSPECT THE TIMBER FOR STRENGTH

Install anchors only to timber strong enough to support the anchor point and the maximum intended loads. Minimum timber size is 35mm by 90mm MGP10. Inspect the timber for splits, cracks, knots and damage. Ensure the timber structure is secured in accordance with current building codes and manufacturer's instructions.

COMPONENTS

Qty	Product Description
1	Eyebolt: Standard or Abseil with Locking Hex Nut 316SS
1	Washer: 75mm Rubber Hat
1	HingeLink Base 316SS



*Innovative
Fall Protection*

FIXING THE HINGELINK BRACKET

1. Installing the eyebolt to the HingeLink base plate will make it easier to check the eyebolt for plumb.
2. Place the HingeLink over the truss and down either side. Ensure the eyebolt is plumb.
3. Check the eyebolt will clear the roof sheeting and allow for waterproofing
4. Use 8 x Hex Head 12g 50mm screws in the small holes to fix the Hinglink bracket onto timber.

FITTING THE EYEBOLT AND WATERPROOFING WASHER

5. Remove the Eyebolt from the HingeLink base plate
6. Remove the Locking hex nut from the eyebolt and install the rubber waterproofing washer. Install Ridge cap with 16mm hole for eyebolt to exit.
7. Reinstall the locking hex nut onto the eyebolt exposing 30mm of thread (coat threads with Loctite) (*refer to Warnings*).
8. Screw the eyebolt all the way into the HingeLink. Before tightening the locking hex nut turn the eyebolt to line up with the fall of the roof (see diagram above). Tighten the locking hex nut using a spanner.
9. Threads need to have a minimum of **six full 360° turns** into the ultimate thread.

WATERPROOFING

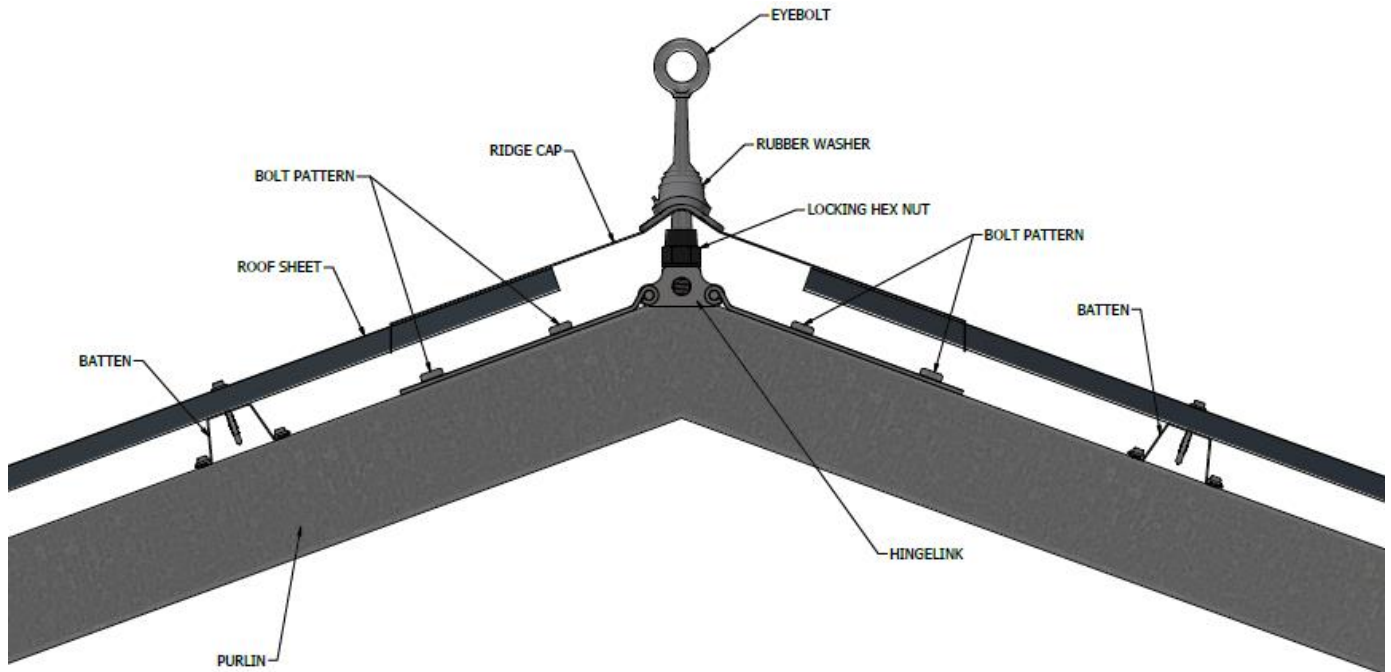
Apply only to a dry surface, use a sealant between the rubber washer and the roof sheeting to waterproof the roof and fix waterproofing washer down in accordance with waterproofing instruction manual.



STEEL RAFTER MOUNTED ANCHOR – HINGELINK (TOP OF RIDGE MOUNTED)

INSPECT THE STEEL FOR STRENGTH

Install anchors only to steel structure strong enough to support the anchor points maximum intended loads. Minimum steel purlin size is 100x1.5mm. Inspect the steel for rust, cracks and damage. Ensure the steel structure is secured in accordance with current building codes and manufacturer's instructions



FIXING THE HINGELINK STAINLESS STEEL BRACKET

1. Installing the eyebolt to the HingeLink base plate will make it easier to check the eyebolt for plumb.
2. Place the HingeLink over the truss and down either side. Ensure the eyebolt is plumb.
3. Check the eyebolt will clear the roof sheeting and allow for waterproofing
4. Select, mark and drill the 4x required fixing holes on the steel purlin.
5. To secure the bracket use four (4) M10 bolts with spring washer, washer, and nut (coat threads with Loctite).

FITTING THE EYEBOLT AND WATERPROOFING WASHER

1. Remove the Eyebolt from the HingeLink base plate
2. Remove the Locking hex nut from the eyebolt and install the rubber waterproofing washer. Install Ridge cap with 16mm hole for eyebolt to exit.
3. Reinstall the locking hex nut onto the eyebolt exposing 30mm of thread (coat threads with Loctite) (*refer to Warnings*).
4. Screw the eyebolt all the way into the HingeLink. Before tightening the locking hex nut turn the eyebolt to line up with the fall of the roof (see diagram above). Tighten the locking hex nut using a spanner.
5. Threads need to have a minimum of **six full 360° turns** into the ultimate thread.

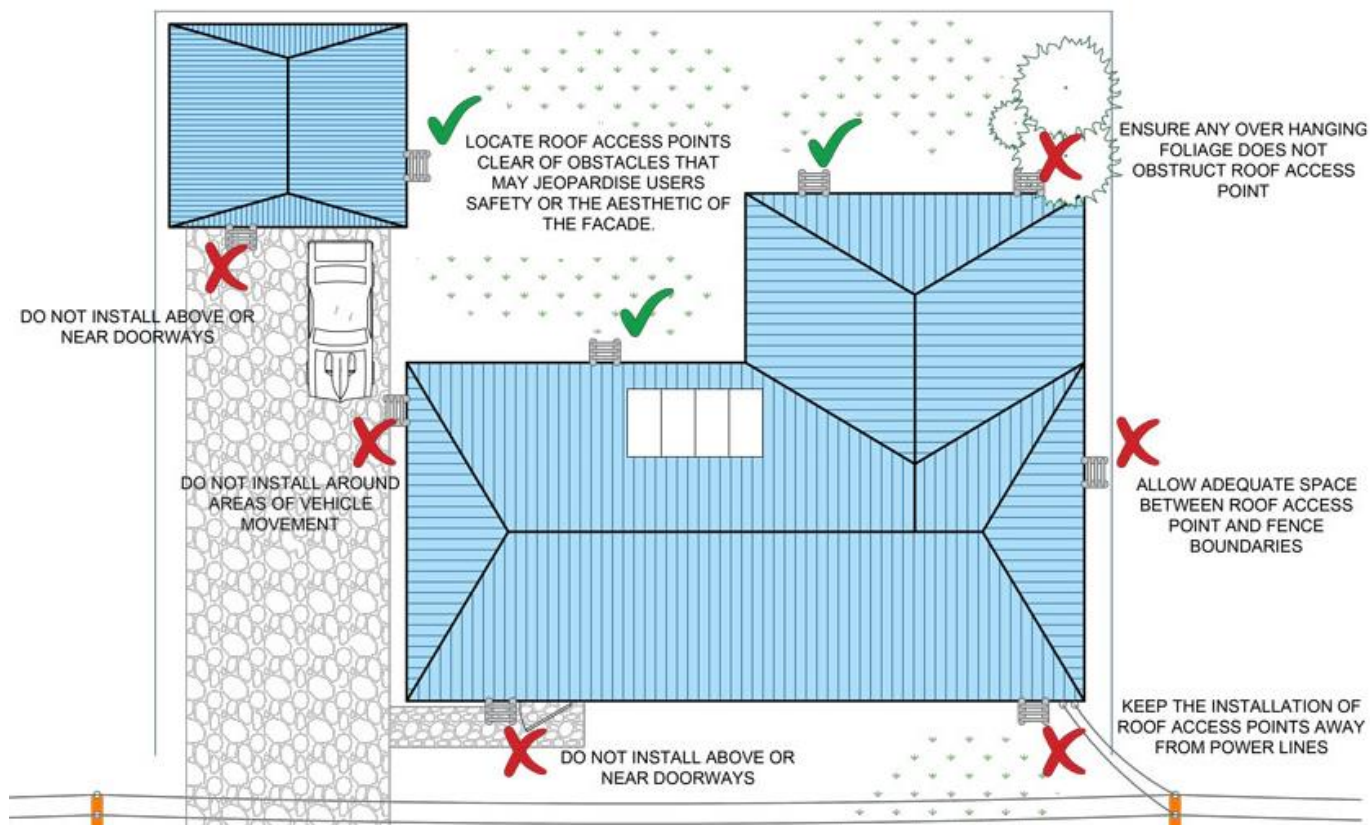
WATERPROOFING

Apply only to a dry surface, use a sealant between the rubber washer and the roof sheeting to waterproof the roof and fix waterproofing washer down in accordance with waterproofing instruction manual.

APPENDIX – Diagram 2 – Anchor Positioning Layout

THIS IS A GUIDE ONLY

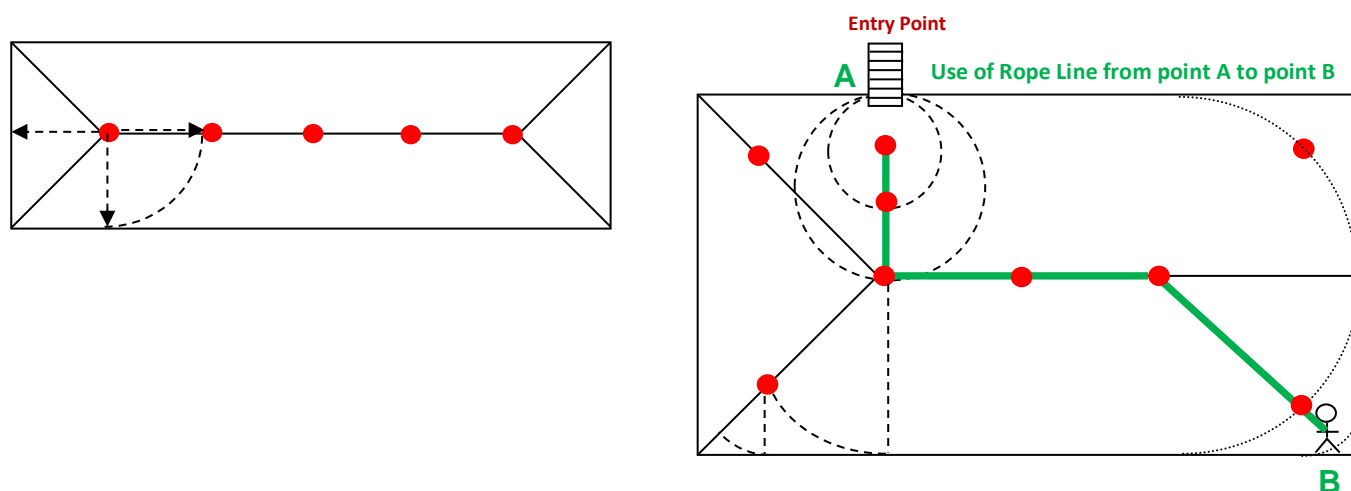
All working at heights safety procedures must be complied with when installing SafetyLink anchor points. For more information refer to your state or territories current legislation, regulations, policies and codes of practices.



- ⚠ IF ANY DOUBT EXISTS WITH THE STRENGTH OF THE STRUCTURE OR ROOF SHEETS AN ENGINEER SHOULD MAKE THE ASSESSMENT.
- ⚠ DURING INSTALLATION YOU MUST BE SAFE AT ALL TIMES.
- ⚠ INSTALLATION MUST BE CARRIED OUT BY, OR UNDER THE SUPERVISION OF A COMPETENT HEIGHT SAFETY INSTALLER.

ACCESS, LAYOUT AND USE OF A SAFETYLINK ANCHOR SYSTEM

SafetyLink anchor points are positioned by calculating the pendulum effect, this limits the likelihood of a fall past the edge of the roof space. The pendulum effect still applies to a flat roof.



SPACING MUST BE NO GREATER THAN THE RAFTER LENGTH, PLEASE CONTACT YOUR DISTRIBUTOR IF YOU ARE UNSURE.

SAFETYLINK HEIGHT SAFETY SYSTEMS MUST ONLY BE INSTALLED AS PER OUR INSTALLATION GUIDES, TO STRUCTURES AS SPECIFIED IN THE INSTALLATION MANUAL FOR EACH PRODUCT. SHOULD ANY DOUBT EXIST IN REGARD TO THE STRUCTURES INTEGRITY AN ENGINEER SHOULD BE CONSULTED.

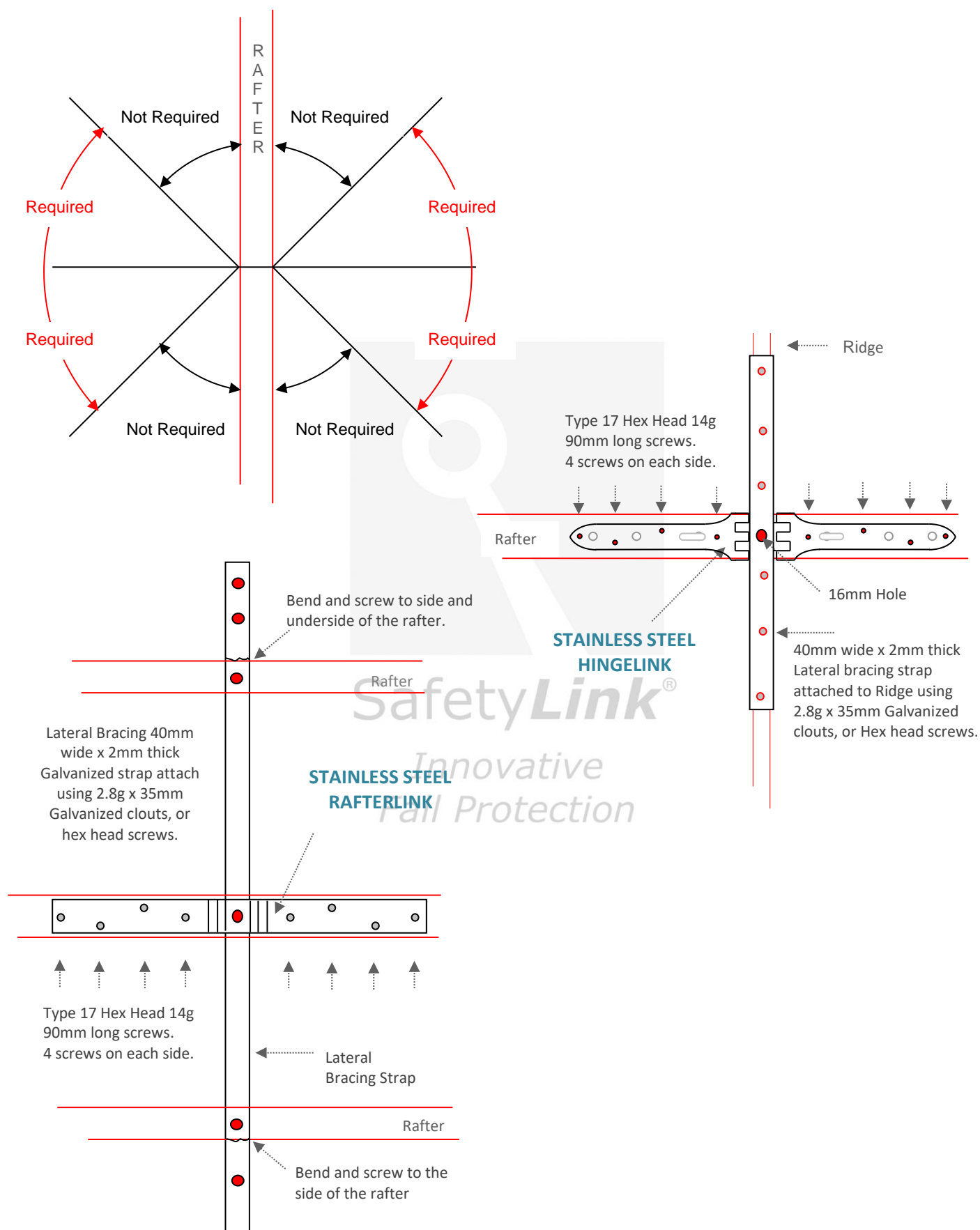


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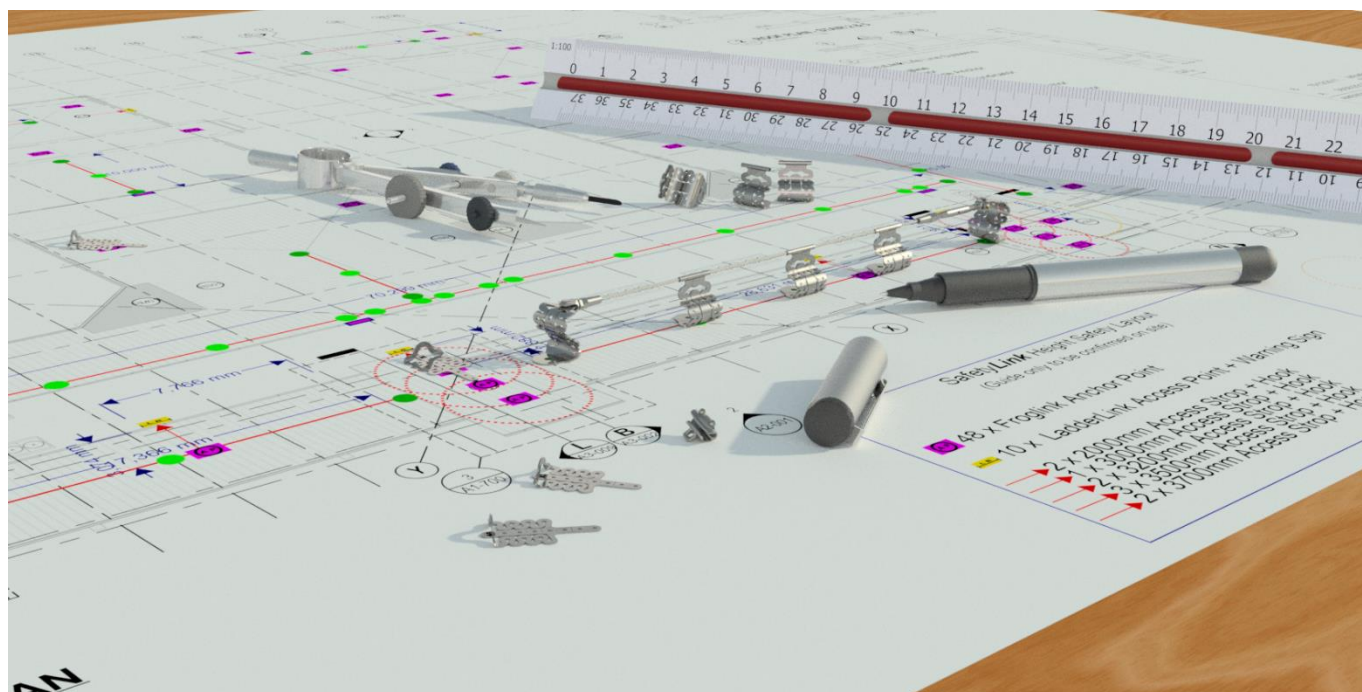


APPENDIX – Diagram 3 – Lateral Bracing Straps

Bracing may be required for sideways loads due to rafter size, location of rafter (high in the hip) and existing additional structural bracing (noggin, metal bracing, plywood decking). Assessment will always need to be made by a competent person for each anchor installation at time of install.



FOR TIMBER GRADES LOWER THAN 90X45 MPG10 DOUBLE STRAP BRACING IS REQUIRED.



SafetyLink's design and planning team are here to help work out the positioning of your fall protection system, ensuring all areas of your roof are accessed safely.

Things to consider when planning your roof layout:

- Are all areas of your roof protected, allowing complete access when working at heights?
- Are you protected from the ground up, allowing complete access to your roof?
- Detailed comprehensive documentation provided e.g. installation guides, testing results, product sheets should be provided.
- SafetyLink can also provide you with a qualified and reputable installer of SafetyLink products.

Contact our design team at info@safetylink.com and we can plan your fall arrest system for you.

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Patents: SafetyLink Pty Ltd has a multitude of patents, patents pending, design applications, trademarks and copyrighted documents both lodged and issued. Should you wish to know the progress of our intellectual property on a specific product please email us on ip@safetylink.com and quote the product code.

IN CASE OF ACCIDENT

- ⚠ **A FALL RESCUE PLAN AND SAFE WORK STATEMENT MUST BE DEVELOPED PRIOR TO USING SAFETYLINK SYSTEMS AND EQUIPMENT.**
- ⚠ **PERSONS WORKING AT HEIGHTS SHOULD NOT WORK ALONE.**

It is critical that before using any SafetyLink Systems a fall rescue plan is in place for any persons suspended mid-air following a fall. Serious injury or death can occur in a matter of minutes, particularly if a person's movement or breathing is restricted or loss of consciousness has occurred. In accordance with your fall rescue plan and appropriate first aid procedures it is essential to remove the person from the suspended position as quickly as possible.

In accordance with AS/NZS 1891.4:2009 clause 9.5

EQUIPMENT WHICH HAS ARRESTED A FALL OR SHOWS A DEFECT

Any piece of equipment including both personal and permanently installed items, which has been used to arrest a fall or which shows any defect during operator or periodic inspection shall be withdrawn from service immediately and a replacement obtained if necessary. A label indicating the condition or defect should be attached to the equipment, and it should be examined by a competent height safety installer who will decide whether the equipment is to be destroyed or repaired if necessary and returned to service. In the latter case, details of any repair shall be documented, and a copy given to the operator.



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