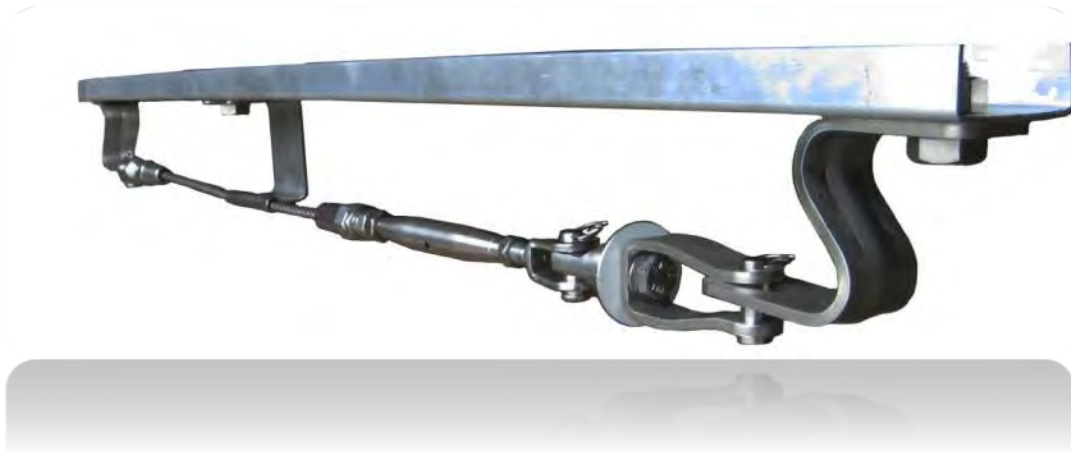


INSTALLATION HANDBOOK

WALL/CEILING MOUNTED STEEL HORIZONTAL LIFELINE

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

- ROOF ANCHORS
- HORIZONTAL LIFELINES
- PERMANENT LADDERS
- LADDER STABILIZERS
- TEMPORARY ANCHOR



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 a serious injury or death.



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INSTALLATION OF A SAFETYLINK HORIZONTAL LIFELINE SYSTEM USING WALL/CEILING MOUNTED ANCHORS

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READ CAREFULLY SOMEONE'S LIFE DEPENDS ON IT

-  The building or structure for the anchorages should be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.
 -  All safety procedures must be complied with in accordance with the current safety code(s) of practice(s) for working at heights. 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.
 -  To prevent galling of threads on tensioners use nickel anti-seize.
 -  Recommended waterproofing for roof tiles: *Sika Flex Co-Polymer Sealant*.
 -  Recommended waterproofing for metal roof: *Silicone Sealant*.
 -  All bolt threads must be coated with Loctite prior to assembly. (*IMPORTANT NOTE: Before applying Loctite 243 use Loctite 7471 primer to activate the surface according to manufacturer's instructions*).
 -  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.
-
-  **Maximum user per system is Four (4).**
 -  **Maximum person per span is Two (2).**
 -  **See system information for site specific use.**

SafetyLink[®]
Innovative
Fall Protection

MAINTENANCE – PERIODIC INSPECTIONS

All items of 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 person.

SAFETYLINK ANCHORAGES

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

Procedures to be followed at inspection time:

- Visually inspect anchors for signs of deterioration.
- The Single End Anchor and Intermediate Wall Bracket should remain straight, a bent Single End Anchor or Intermediate Wall Bracket will indicate that the Lifeline has arrested a fall.
- 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 Single End Anchor and Intermediate Wall Bracket for rigidity and tightness, if the Single End Anchor and Intermediate Wall Bracket can turn in the anticlockwise or clockwise direction it will require attention.
- 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.
- Check the condition of line Tensioners and Energy Absorbers.
- Check for any evidence of wear, cuts, looseness, extension, interstrand wear, corrosion, stiffness, brittleness or fraying of the steel cable.
- Check the integrity of cable terminations.
- Check for the presence of contaminants or exposure to a corrosive or extreme environment which could significantly reduce the working load of the Lifeline.
- Run the SafetyLink Shuttle along the length of the line to verify its correct function.

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 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 of her 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 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.

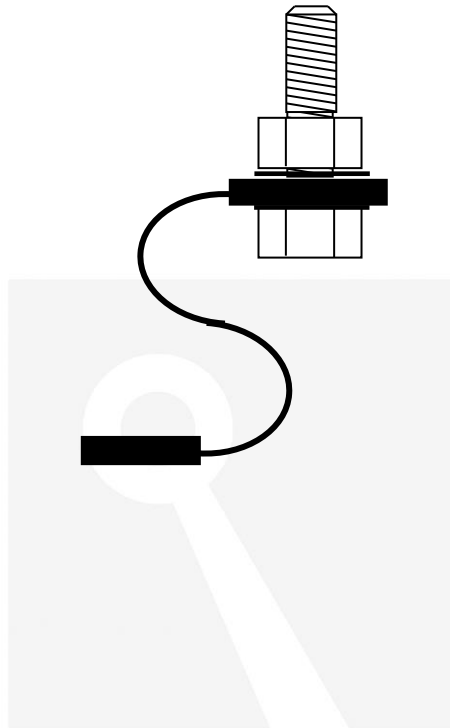
Please note that the benefits to the purchaser (as a consumer) given by this warranty are in addition to your other rights and remedies under the Australian Consumer Law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund 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.

- 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.

INSTALLATION OF A SAFETYLINK WALL/CEILING MOUNTED HORIZONTAL LIFELINE SYSTEM USING WALL MOUNTED END UNIT

DESIGNED TO BE MOUNTED ON THE VERTICAL FACE OF A WALL OR THE UNDERSIDE OF A CEILING



COMPONENTS

Nut: 16mm 316 Stainless Steel



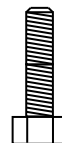
Washer: 16mm 316 Stainless Steel x 2



S Cable End Support



Bolt: 16mm x 90mm 316 Stainless Steel

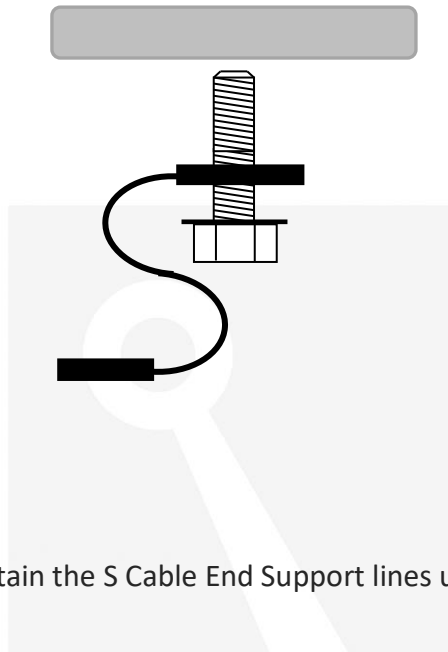


ASSEMBLING

STEP 1

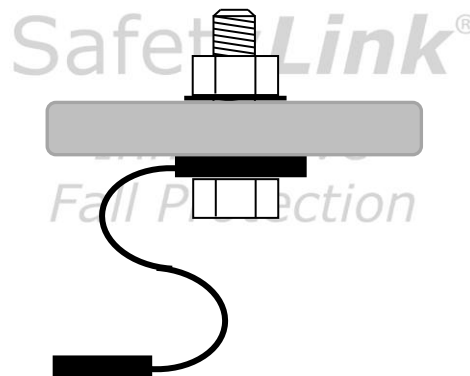
Insert Bolt through 16mm Washer and S Cable End Support then through steel section.

Note: Use Loctite on all threads. (IMPORTANT NOTE: Before applying Loctite 243 use Loctite 7471 primer to activate the surface according to manufacturer's instructions).



STEP 2

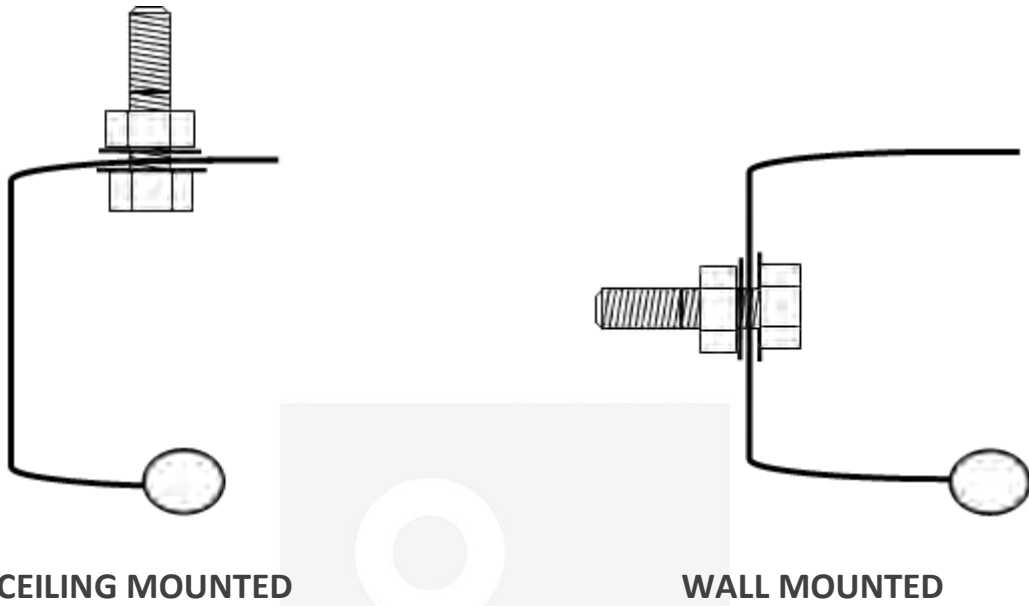
Apply Washer and Nut making certain the S Cable End Support lines up with run of the Static Line.



Note: Threads need to have a minimum of **six full 360° turns into the ultimate thread.**

- ⚠ INSPECT THE STEEL FOR STRENGTH.**
- ⚠ INTERMEDIATE WALL BRACKETS MUST BE SPACED AT **MAXIMUM 10 METRES** APART.**
- ⚠ If any doubt exists as to the strength of the structure an engineer should make the assessment.**
- ⚠ During installation you must be safe at all times.**

INSTALLATION OF A SAFETYLINK WALL/CEILING MOUNTED HORIZONTAL LIFELINE SYSTEM USING INTERMEDIATE WALL BRACKET



COMPONENTS

Nut: 16mm 316 Stainless Steel



SafetyLink®

Washer: 16mm 316 Stainless Steel

Innovative
Fall Protection

Intermediate Wall/Ceiling Bracket



Bolt: 16mm x 90mm 316 Stainless Steel



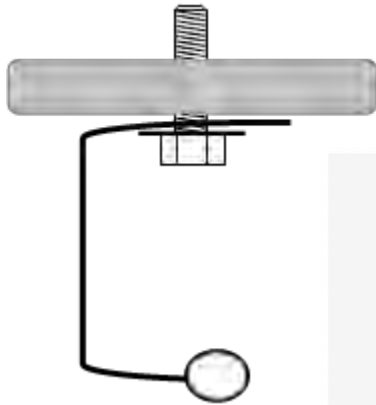
ASSEMBLING

NOTE: MAXIMUM DISTANCE BETWEEN INTERMEDIATE WALL BRACKETS IS TEN (10) METRES.

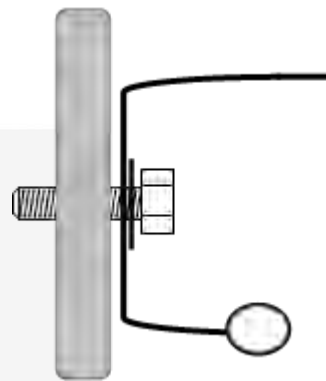
(IMPORTANT NOTE: Before applying Loctite 243 use Loctite 7471 primer to activate the surface according to manufacturer's instructions).

STEP 1

Insert Bolt through 16mm Washer and Intermediate Bracket then through steel section.
(Coat threads with Loctite).



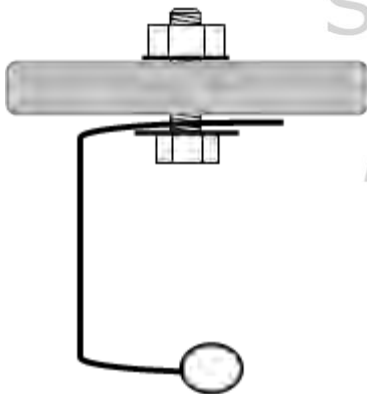
CEILING MOUNTED



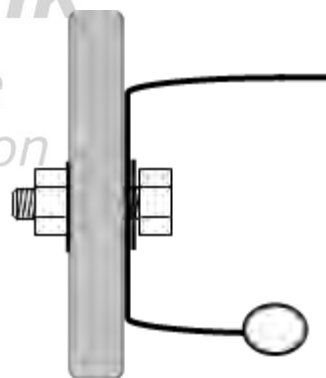
WALL MOUNTED

STEP 2

Apply Washer and Nut, tighten nut making certain the Intermediate Bracket lines up with the run of the line.



CEILING MOUNTED



WALL MOUNTED

Note: Threads need to have a minimum of **six full 360° turns into the ultimate thread.**

- ⚠ INSPECT THE STEEL FOR STRENGTH.**
- ⚠ INTERMEDIATE WALL BRACKETS MUST BE SPACED AT **MAXIMUM 10 METRES** APART.**
- ⚠ If any doubt exists as to the strength of the structure an engineer should make the assessment.**
- ⚠ During installation you must be safe at all times.**

INSTALLATION: HORIZONTALLY ON ROOF PITCHES BELOW 25 DEGREES

1. Install *Swaged/Swageless Termination* to the cable in accordance with product guidelines. See [Appendix A](#).
2. Determine which end is most suitable to have the cable *Tensioner with Tension Indicator*. (Some lifelines may require a *Tensioner with Tension Indicator* on both ends). Connect the cable with *Termination* end to the *FrogLine End Anchor* top connection point. This will be at the opposite end to where the *Tensioner* end will be. (Ensure securing pin has been installed correctly).
3. Run the cable through *Intermediates* and *Corners* to the opposite end of the Lifeline system (Intermediates must be installed as per installation manual, **maximum distance between Intermediates is 10 metres**).
4. Connect *Swaged/Swageless Tensioner with Tension Indicator* to *FrogLine End Anchor* top connection point. (Do not attach *Tensioner* to cable at this stage).
5. Adjust the *Tensioner* out to the maximum safe length.
6. Match the cable along the side of the *Tensioner* and mark where to cut cable so that it will reach safely in to the *Tensioner* unit in accordance with product guidelines. [Appendix A](#).
7. Cut cable to length.
8. Install *Swage/Swageless Tensioner* fitting to cable as per [Appendix A](#). Connect *Tensioner* to *FrogLine End Anchor* top connection point (Ensure securing pin has been installed correctly).
9. Tension cable until the disc on the Tension Indicator can spin and indicates 80kg/8kn/800n.

TIGHTENING TORQUE FOR SWAGELESS TERMINALS

Wire size:		Nm	Lbf ft [®]
Ø 3	-	11	8.25
-	1/8"	11	8.25
Ø 4	5/32"	17	12.75
-	3/16"	22	16.5
Ø 5	-	22	16.5
-	7/32	38	28.5
Ø 6	-	38	28.5
-	1/4"	38	28.5
Ø 7	9/32"	48	35.5
Ø 8	5/16"	58	43.0
-	3/8"	75	55.5
Ø 10	-	75	55.5
Ø 12	-		
-	1/2"		
Ø 14	-		
Ø 16	-		

INSTALLATION



BLUE WAVE®

Swageless SS Terminal 8mm 7x7, 7x19



Jaw housing
Hauptstück



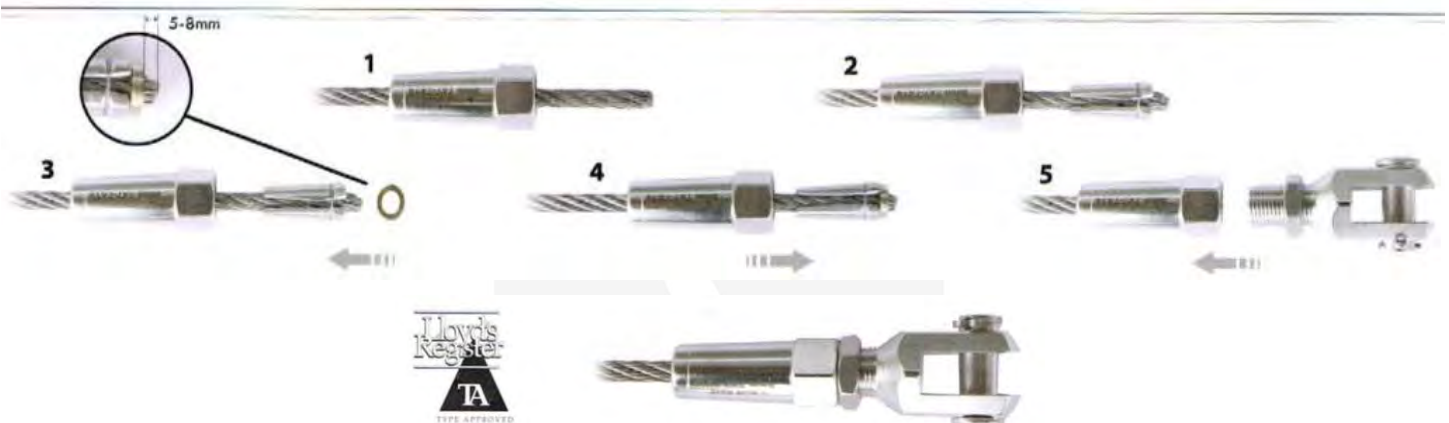
Jaws
Backen



Brass Ring
Messing Ring



Head
Kopfteil



Make sure that the cable matches the terminal.

The SS terminal use only for 8mm 7x7 and 7 x 19 Stainless Wire.

Do no reuse jaws or house.

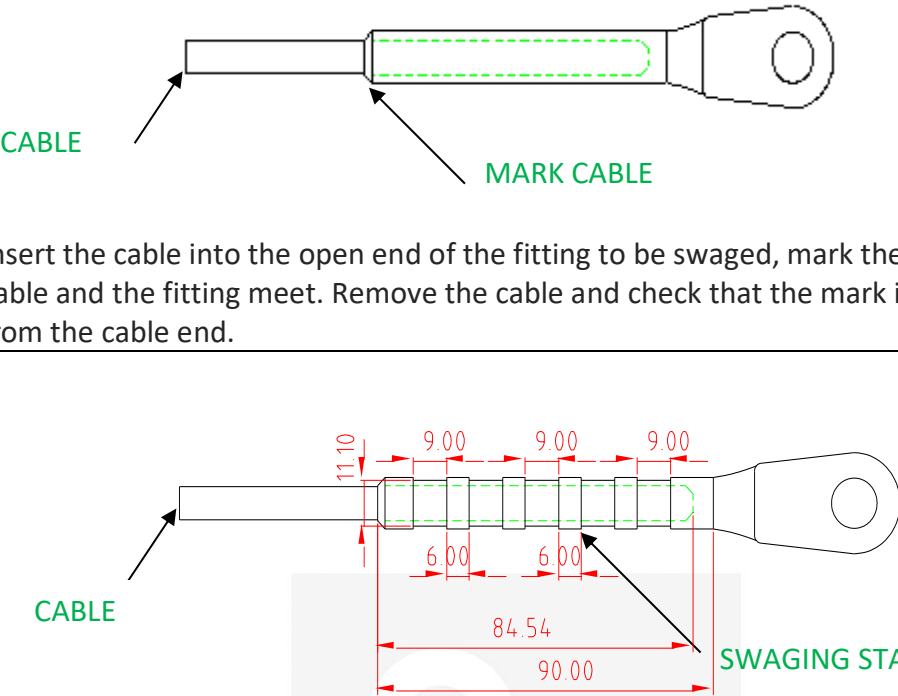
- 1 Slide the jaw housing in place on the cable.
- 2 Slide the jaws onto the cable, ensuring there is equal space between the jaws.
- 3 Place the brass pressure ring on the end of the cable. Make sure that the distance from the pressure ring to the end of the cable is 5-8mm.
- 4 Slide the jaw housing over the jaws.
- 5 The terminal can now be assembled. Screw the head on the jaw housing with a torque wrench – min. 58 Nm (43Lbf ft), Tighten the lock nut with min. 50 Nm (36 Lbf ft).

Note: after the first dynamic load the terminal **MUST** be tightened again. When assembling Swageless Terminals the breaking strength of the cable will be reduced by 0-15%.

The user is responsible for choosing the proper cable, and for correct assembly.



APPENDIX A – CRIMPED FITTINGS INSTALLATION



CABLE

MARK CABLE

1. Insert the cable into the open end of the fitting to be swaged, mark the cable where the cable and the fitting meet. Remove the cable and check that the mark is at least 84mm from the cable end.

CABLE

SWAGING START

2. Re-insert the cable into the fitting to distance previously marked. Start swaging the fitting from the closed end as shown above. Continue to swage as indicated above 5 times, first swage is 6mm from the depth indicator.
3. Ensure that you can no longer see the mark that was made in Step 1. Check the crimped sections are within the allowable tolerances using Vernier Callipers. (Allowable tolerances = $11.10 \pm 0.2\text{mm}$).

IMPORTANT NOTES TO REMEMBER

- ⚠ Ensure marked cable as indicated in step one is a minimum of 84mm.
- ⚠ Ensure all crimped sections (flat) are with 11.10mm, with a tolerance level of + or - 0.2mm. This distance should be the case of all 8mm 7 x 19 and 7 x 7 cable. The measurement should be taken with Vernier Callipers to ensure accuracy. If your measurements are outside the acceptable tolerance range this can be a sign of either a loss of pressure in your swaging tool or an indication that your dies are worn or incompatible. Any swaging that occurs outside the acceptable tolerances will need to be restarted using the appropriately amended tools.
- ⚠ When swaging the cable the mark made in step 1 will disappear during the final swage due to the lengthening of the material during the swaging operation.
- ⚠ The swaged end has a mark indicating the end of the solid section of the unit and the start of the hollow section. Start swaging 6mm from the mark indicating the solid section.
- ⚠ When completed the swaged section should be a minimum of 80mm long. The dies are made with a 9mm wide section to crimp. These 9mm crimping sections need to be completed 5 times, that is there will be five flat sections along the swaged end. In between each crimped section you need to maintain a distance of between 5 and 6mm.
- ⚠ **DO NOT** swage the solid section indicated by the mark on the unit this will damage the swaging tool and the dies. (Marking the swaging depth on the end to be swaged unit (84mm from the opening will help to avoid this). To do this, use Vernier Callipers, checking the maximum size and minimum size.

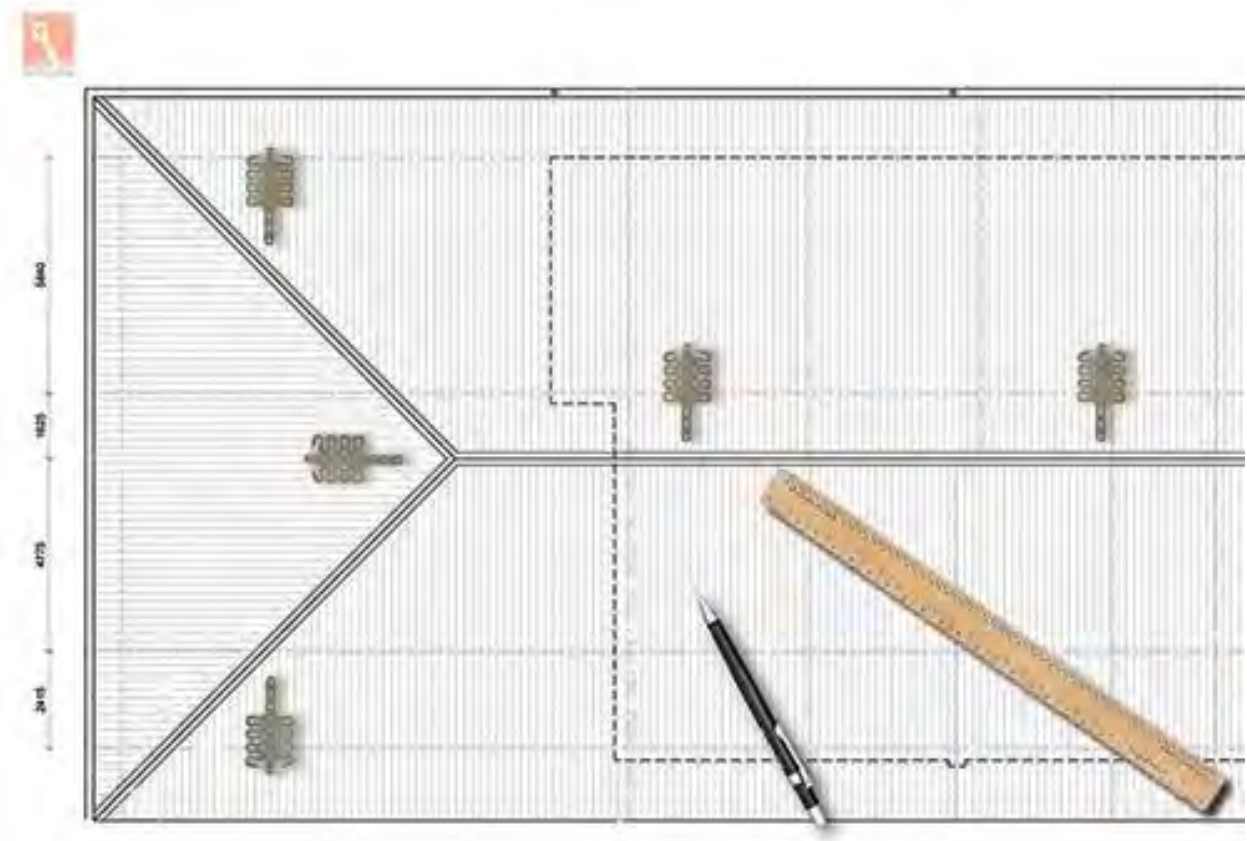
WALL MOUNTED SYSTEM SETTING OUT

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

Lifelines must only be installed and used by competent people with relevant current height safety qualifications.



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 regards to the structures integrity an engineer should be consulted.



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.



SafetyLink®

*Innovative
Fall Protection*

IN CASE OF ACCIDENT

- ⚠ A FALL RESCUE PLAN SHOULD BE DEVELOPED PRIOR TO USING SAFETYLINK 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 person 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.



Terms/Conditions/Warranties

DISTRIBUTOR:

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