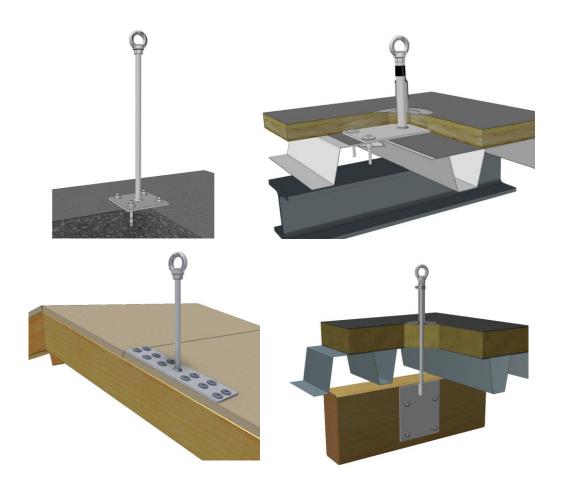


User instructions

for the anchor device

LUX-top® ASP

Installation variant 2 to 11



Anchor point for attaching personal fall protection equipment (PFPE) for up to 3 persons and for use in LUX-top® lifeline systems to EN 795:2012 Type C

Tested and certified to EN 795:2012 Type A + CEN/TS16415:2013 by the DEKRA Testing and Certification GmbH

LUX-top® ASP anchor points are tested dynamically and statically on the given fixing substrates!

These user instructions are supplied with each LUX-top® ASP anchor device. They must be read through carefully before use and must be kept accessible at all times, where possible near the equipment.



Introduction

Before installing the anchor device the load-bearing capacity of the roof/substructure must be checked. In case of doubt seek the advice of a structural engineer! The technical building regulations must be complied with. Do not make any changes to the anchor device and only use original parts of the anchor system.



SAFETY INSTRUCTIONS:

- If using the anchor device as part of a fall arrest system, for safety reasons, before
 each use it is essential to ensure the necessary clear space below the user at the
 workplace, so that in case of a fall it is not possible for them to hit the ground or any
 other obstruction!
- In the event of a fall of a person secured on the LUX-top® ASP anchor device the resulting deformation of the anchor device (up to 75 cm depending on the overall height) must be taken into account in the arrest distance.

The minimum clear space required below the system user is calculated from:

Deformation of the anchor device

- + Fully open length of the energy absorber according to its instructions for use
- + Elongation of the connection rope or cable due to extension
- + Displacement of the full body harness on the body
- + Height of the user
- + Safety clearance of 1.0 m
- If there is insufficient clear space below the user, the anchor device may only be used with a restraint system and must be labelled accordingly. To this end, also note and follow the instructions for use for the other personal fall protection equipment (PFPE).
- In case of horizontal use, only use lanyards, which are suitable for this type of use and which are tested for the applicable loading and stressing due to the corresponding edge design.
- The anchor device may only be installed and used by trained persons, who are familiar
 with these user instructions and with handling PPE against falls from a height and are
 physically and mentally suitable for the task. Health restrictions (e.g. cardiovascular
 problems, medication) can endanger the safety of the system user when working at
 heights.
- Use of the system for purposes other than those for which it is intended, e.g. by hanging undefined loads, is not allowed.
- The anchor device may only be used for attaching the PFPE (personal fall protection equipment) to EN 363, consisting, for example of a full body harness (EN 361), lanyard (EN 354) and energy absorber (EN 355).



- If the anchor device is used as part of a fall arrest system the user must be equipped with an energy absorber, which limits the maximum dynamic forces that act on the user during an arrest to 6 kN maximum.
- By combining individual elements of the named equipment, hazards can occur as the safe function of one of the elements can be impaired. Therefore, always ensure that the equipment parts put together to form a system are compatible with each other.
- The components of the personal protective equipment against falls from a height must be checked to ensure that they are in proper condition and that they comply with these user instructions.
- The attachment to the LUX-top® ASP is made by means of a connector (spring hook/carabiner)) of the PFPE, according to its instructions for use.
- The user must visually inspect the anchor device before each use to ensure its proper functional and maintained condition.
- The relevant national regulations and the health & safety regulations (in Germany the
 accident prevention regulations of the trade associations responsible for industrial
 safety) and any other relevant regulations must be complied with when using the
 LUX-top® ASP system. For Germany these include, among other things:
 - TRBS 2121 "Technische Regeln für Betriebssicherheit Gefährdung von Personen durch Absturz" / Technical rules for health & safety at work risk to people due to falling
 - DIN 4426 "Sicherheitstechnische Anforderungen an Arbeitsplätze + Verkehrswege" / Safety requirements for workplaces and transport routes
- DIN 363 "Persönliche Absturzschutzausrüstung Persönliche Absturzschutzsysteme"
 / Personal fall protection equipment personal fall protection systems
- BGV C22 "Bauarbeiten" / Construction work
- BGR 198/DGUV Regel 112-198 "Einsatz von persönlicher Schutzausrüstung gegen Absturz" / Use of personal protective equipment against falls from a height
- BGI 5164 "Planungsgrundlagen von Anschlageinrichtungen auf Dächern"/Planning principles for anchor devices on roofs
- ASR A2.1 "Technische Regeln für Arbeitsstätten Schutz vor Absturz…, Betreten von Gefahrenbereichen"
- Ensure safe, stable position during use!
- A plan must exist, which takes into account the rescue measures for all possible emergency incidents that can occur.
- Should any doubt occur regarding safe condition (e.g. severe corrosion, lightning strikes)
 or following a fall of a person secured on the LUX-top® ASP the system must
 be withdrawn from further use and inspected by a competent person.
- After a fall of a person secured to the LUX-top® ASP the stability of the surface/substrate must be checked on site before re-installing a new anchor device.



- The lanyard must always be set as short as possible, even when fall arrest systems are used, in order to reduce any free-fall height in case of a fall to a minimum. It is essential for safety that the position of the anchor device and the plan of work be chosen so that the free fall and the fall height are limited to a minimum. Ideally, a fall over the edge should be completely prevented by appropriate use of the PPE against falls from a height.
- Position the anchor device on the building so that in case of a fall over the roof edge, the maximum possible fall factor is 1.
- Please note that failing to follow these user instructions, and if the documentation is incomplete, all claims for compensation are excluded.
- The manufacturer must be contacted in case of any uncertainty during installation or use of the system!
- A standard operating procedure with information on the location and use of the anchor devices should be attached at the access to the safety system (e.g. roof hatch).



<u>Installation spacings:</u>

The distances from the edge are to be chosen in accordance with the national provisions and depending on the roof geometry.

The correct choice and layout of anchor devices provided permanently on the roof must be made depending on the type and use of the anchor device and taking into account the special features of the roof.

Information on the recommended type and positioning of anchor points is provided, for example, in BGI 5164 "Planungsgrundlagen von Anschlageinrichtungen auf Dächern" (Planning principles for anchor devices on roofs), which were drawn up and agreed by the international expert work group D-A-CH-S.

The brochure is available, among other things, under www.lux-top-absturzsicherungen.de and can be downloaded free of charge.

National provisions are not affected by these recommendations. Where these suggestions differ from national law, the user of these recommendations bears the full legal risk to the scope of the deviation.

Allowable distances between anchor points in the LUX-top® ASP system		
As pure, individual anchor points	Maximum 3.0 m*	
With temporary horizontal anchor devices	Maximum 7.5 m (recommended) Larger distances are possible depending on the system	
With LUX-top® FSE 2003 stainless steel rope systems	Maximum 10 m (recommended) Maximum 15 m (in accordance with test certificate)	
If you are at all uncertain, please contact the manufacturer		

^{*}Results from the edge fall problem of connectors for horizontal use.

Directly at the fall edge, work to the side of the anchor point should be limited to max. 1.5 m distance from the anchor point!

Combination with other LUX-top® products:

- The LUX-top® ASP product can be used as an extremity (start or end) or corner point and as an intermediate point (optionally also with traversable rope guide (anchor line)) in the LUX-top® FSE 2003 stainless steel rope system to EN 795 Type C. In this case, also note and follow the user instructions of the LUX-top® FSE 2003 system!
- The LUX-top® ASP product can be used with temporary horizontal anchor devices / temporary horizontal flexible anchor lines to EN 795 Type C. In this case, note and follow the user instructions of the respective temporary system!

Required bar diameter for LUX-top® ASP			
Type of use	Overall height up to 600 mm	From 700 mm	
Single anchor points	Ø 18 mm	Ø 26 mm	
With temporary horizontal anchor devices	Ø 18 mm	Ø 26 mm	
With LUX-top® FSE 2003 stainless steel rope systems	Start / end / corner points = Ø 26 mm	Ø 26 mm	
	Intermediate points = \emptyset 18 mm	Ø 26 mm	
Exceptions are possible following consultation with the manufacturer			



Important installation instructions:

- The LUX-top® ASP may only be installed by qualified installation personnel using the fixing materials supplied according to the installation instructions and must be checked appropriately!
- The anchor point must be installed on a substrate with sufficient load bearing capacity in accordance with the manufacturer's specifications. Always ensure compliance with the minimum component dimensions and distances from edges given in the installation instructions!
- The overall construction must be checked on site to ensure it can absorb the transferred forces!
- The installers must ensure that the surface/substrate is suitable for fixing the anchor device.
- All connections of the anchor device must be properly and conscientiously installed and checked according to the manufacturer's specifications. This must be confirmed by the responsible fitter in the installation documentation form attached to these user instructions.
- The installation documentation form must be filled in full following installation and handed over to the building owner/user or kept in a protected place with the parts of the equipment that are not permanently installed.
- We recommend that you also additionally document proper installation by taking photos and with other important installation data. We recommend that you use our documentation app available under www.quick-doku.eu
 Additional information to that given in the installation documents is provided in EN 795:2012 (Annex A).
- The installation documents verify to the user that the installation has been carried out properly and provide the basis for subsequent inspections of the anchor device. A copy should therefore be kept in the building.
- You must comply with the relevant national regulations and the accident prevention regulations during installation of the anchor device.
- The installers must take measures so that neither components of the anchor device nor tools can fall from the work area.
- In case of sloped surfaces and roofs, snow guards must be installed to prevent loading of the LUX-top® ASP system with snow loads!



Use / system description:

The **LUX-top® ASP** system is an anchor point in accordance with EN 795:2012 Type A + CEN/TS16415:2013, which is used to anchor personal fall protection equipment for working in areas in which there is a risk of falling.

It can be installed on diverse load-bearing substrates in accordance with the relevant installation instructions.

The **LUX-top**[®] **ASP** is intended for loading in all directions.

If used in accordance with the regulations, the maximum force input into the structure by the anchor device in case of a fall is 12 kN.

The **LUX-top® ASP** anchor device is approved for simultaneous use by **3 people** with full body harnesses and energy absorbers (including 1 person for first aid/rescue). An anchor point already deformed by a fall can still be used for the rescue of a person who has fallen from a height.

LUX-top® ASP can be used in the following fall protection systems to EN 363:2008:

- Restraint systems
- Fall arrest systems
- Rescue systems

The respective user instructions of the other PFPE and abseiling (descent) and rescue equipment used must also be noted and followed!

Depending on the fixing surface, overall height and bar diameter, the **LUX-top® ASP** is also suitable as an anchor point for load-bearing systems for rope-assisted access techniques (descent work, etc.)! Additional requirements must be noted and fulfilled for this use case. For example, redundant safety must always be ensured. For further information, please ask the manufacturer.

The LUX-top® ASP anchor device consists of the following components:

- 1 LUX-top® ASP anchor point complete with anchor eye and fixings
- User instructions
- Installation Instructions

Anchor point material: Stainless steel W1.4301 / AISI 304



Maintenance, care and testing:

Before each use the anchor devices must be checked for secure fit and intactness. Loose, deformed or otherwise damaged anchor devices must be fixed or replaced.

If the fall protection system is damaged or used in a fall it may no longer be used. In these cases the anchor device and the anchoring on the structure must be inspected by a competent person and if necessary dismantled and completely replaced.

The LUX-top® ASP anchor device must be tested as and when necessary, however, at least once every 12 months, by a competent person precisely following the manufacturer's instructions.

This inspection is essential, as the safety of the user depends on the effectiveness and durability of the anchor device.

The test is to be arranged by the owner.

An inspection log card is included in the appendix to these user instructions, on which the inspection by the competent person must be documented.

The checklist also given in the appendix can be used as an aid.

The date of the next scheduled inspection must always be entered on the inspection log card.

Prevent contact between the stainless steel anchor device and "black" steel (including in the form of grinding dust), as well as chemicals and other aggressive substances.

The **LUX-top**[®] **ASP** anchor device is permanently weather-resistant.

Depending on the use conditions, the anchor device must be cleaned occasionally with hot water.

Avoid any contact with acids, bitumen, cement, chloride, paint or aggressive cleaning liquids.

Never use aggressive cleaning products or chemicals!

Miscellaneous:

Changes or additions to the anchor device may only be made with the prior written consent of the manufacturer. Equally, all repairs may only be carried out in agreement with the manufacturer. If sold on to another country, to ensure the safety of the user the instructions for use, maintenance, the regular checks and repairs must be available in the respective language.



LUX-top® ASP

STANDARDS

The LUX-top® ASP has been tested and certified to EN 795:2012 Type A + CEN/TS16415:2013

SYMBOLS AND MARKINGS

A label must be attached and must contain the following information:

· Type designation: LUX-top® ASP

Number of the relevant standard: EN 795:2012 Type A + CEN/TS16415:2013

· Name or logo of the producer/seller:

SU

Manufacturer's serial number / year made: XXXXXXX/20XX

· Max. allowable number of people:

MAX 表表表

· Symbol indicating that the user instructions must be noted and followed:

 $\bigcap_{\mathbf{i}}$

The legibility of this product labelling must be checked following installation and during the specified mandatory annual inspection!

If the label is no longer accessible following installation, it is advisable to attach additional labelling near the anchor device!

Producer: ST Quadrat s.a.

11, rue Flaxweiler

L-6776 Grevenmacher / Potaschberg

Luxembourg

Notified body used for the type test:

DEKRA Testing and Certification GmbH - Dinnendahlstraße 9, D - 44809 Bochum



Installation documentation for **LUX-top®** anchor devices

Object Data Building/Construction project Street/Zip Code/City **Installation Company** Company Street/Zip Code/City Contact person/Phone Installer Details for the anchor point and fixing surface Type/Model/ Overall height Production year/Serial No. Rod diameter No. on site sketch Fixing surface/Construction material Structural member/Element dimensions Fixation (If necessary declaration of torque) **Date of completion** Roof layout/Site sketch (use additional sheet if necessary) Confirmations by the installation company The LUX-top® anchor devices have been installed in accordance with the installation guidelines issued by ST Quadrat. The fixings used have been installed in accordance with the relevant manufacturer's guidelines (proper cleaning of the drillholes, distances from the edges, checking the substrate, etc.) The layout and instructions for use as well as the technical documentation have been handed over to the customer and are to be made available to the user. (City, date) (Stamp, signature) This documentation must be handed over to the building owner.

A detailed installation documentation with pictures can be generated on the website <u>www.quick-doku.eu</u>



CHECKLIST

for regular inspection of LUX-top® anchor devices by a competent person

LUX-top® ASP anchor point

1	Corrosion Is there any visible corrosion on one of the components (bar, footplate, ring bolts, etc.)?	yes, on
	Can a cause for the corrosion (e.g. chimney nearby) be found?	☐ yes,
		□ _{no}
	Is the load-bearing capacity of the anchor device limited?	yes
		□no
	Is the fixing accessible for examination?	yes
	If yes, has the fixing been carried out completely and correctly? (if applicable, check tightening torque!) *)	□ yes
2	Dirt/soiling Is one of the components dirty (e.g. soiled by bird droppings, moss, algae)?	□ yes,
	Does the dirt impair its functionality?	□ yes,
	Is it possible to prevent the soiling in future?	ges,

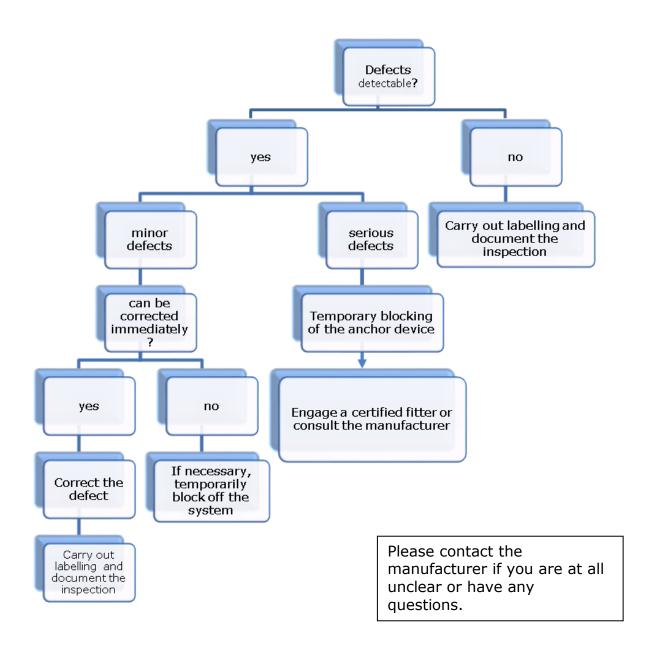
^{*)} Always consult the manufacturer beforehand!



3	Appearance Are the anchor points visibly deformed? (E.g. due to fall load)	☐ yes,
		no
	On sloped ropes: Is there any identifiable damage due to snow loads?	☐ yes,
		no
	Is there any identifiable damage due to lightning strikes?	yes
		no
	Are there any signs of external effects or tampering?	☐ yes,
		no
	Is the labelling sticker attached and legible?	yes
		no
	Are all the components of the anchor point still installed in accordance with the installation instructions and parts list?	yes
	(e.g. anchor eye, serrated lock washer, lock nut)	no, the following is/are missing:
	Is the anchor eye secured against turning by locking the	yes
	lock nut?	
		□ no
4	Documentation Are the user instructions for the anchor point available?	yes
		no
	Is the installation documentation available and correctly filled out?	yes
		no,
	Is the fixing documentation available (if applicable with	
	photos)? Refer to EN 795:2012 (Annex A).	□ yes
	,	no,



5 Evaluation of the inspection



Inspection log card / log book Anchor device for personal fall protection equipment



LUX-top®

Producer: www.lux-top-absturzsicherungen.de

Type/Model	LUX top® ASP	STANDARD: EN 795 Type A + CEN/TS16415
Serial number + year of manufacture		
Installation date		
Date of initial putting into service		
Project / property name		
Address of the building owner (user) / customer		

Regular system check, inspection and repair					
Date	Reason for entry	Damage + defects found (description /	ASP released for safe use	Name + signature	Date of the next
	(regular inspection or repair)	actions, etc.)	(yes/no)	of the competent person	inspection



Sketches, information, notes: