

Installation and user instructions

for anchor device

LUX-top® KLICK SZP



Anchor point for fastening personal fall protection equipment (PFPE) for up to 2 persons

as an abseiling point for attaching the load-bearing system according to TRBS 2121-3, for 1 person

tested and certified according to DIN EN 795:2012 Type B and CEN/TS16415:2013 by DEKRA Testing and Certification GmbH

LUX-top[®] **KLICK SZP** anchor points are always tested dynamically and statically in combination with the specified fastening substrates!

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



Preliminary note

Before installing the anchor device, the load-bearing capacity of the substructure must be checked. In case of doubt seek the advice of a structural engineer! The technical building regulations must be complied with. No changes must be made to the anchor device and only original parts belonging to the anchor system may be used.



SAFETY INSTRUCTIONS:

- When using the anchor device as part of a fall arrest system, for safety reasons it is
 essential to ensure the necessary clearance below the user at the workplace before
 each use, so that in case of a fall it is not possible for the user to hit the ground or any
 other obstacle!
- In the event of a fall of a person secured on the LUX-top® KLICK SZP anchor device, the resulting deformation of the anchor device must be taken into account when calculating the fall arrest distance.

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

deformation of the anchor device

- + tear length of the energy absorber according to its instructions for use
- + extension of the connecting rope due to rope elongation
- + displacement of the full body harness on the body
- + height of the user
- + safety clearance of 1.0 m
- If there is insufficient clearance below the user, the anchor device may only be used with a restraint system and must be labelled accordingly. For this purpose, also observe the instructions for use of the other personal fall protection equipment (PFPE).
- For horizontal use, only lanyards that are suitable for this type of application and which are tested for the load due to the corresponding edge design may be used.
- The anchor device may <u>only</u> be installed and used by trained persons who are familiar
 with these user instructions and with handling personal fall protection equipment and
 who are physically and mentally suitable. Health restrictions (e.g. cardiovascular
 problems, taking medication) can endanger the safety of the system user when
 working at heights.
- Using the system for purposes other than those for which it is designed, e.g. by suspending undefined loads, is not allowed.



- The anchor device may only be used for attaching the personal fall protection equipment according to DIN EN 363, consisting of, for example, a full body harness (DIN EN 361), lanyard (DIN EN 354) and energy absorber (DIN EN 355). Alternatively use a restraint system according to DIN EN 358. Users should always contact the manufacturer of the personal fall protection equipment for advice regarding the suitability of the respective PFPE.
- 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 specified equipment, hazards can occur by the safe function of one of the elements being impaired. It must therefore be ensured 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 a proper condition and that they match these user instructions.
- The user must visually inspect the anchor device before each use to check its functional and maintenance condition.
- In conjunction with the use of the **LUX-top® KLICK SZP** system, the relevant national regulations and the accident prevention regulations and rules of the trade associations responsible for industrial safety must be complied with. For Germany these include:
 - TRBS 2121

"Technical rules for health & safety at work - risk to persons due to falling"

DIN 4426

"Safety requirements for workplaces and accesses"

DIN 363

"Personal fall protection equipment - Personal fall protection systems"

DGUV Regulation 38

"Construction work"

DGUV Rules 112-198

"Use of personal protective equipment against falls from a height"

DGUV Information 201-008

"Roofing work"

DGUV Rules 101-016

"Roofing work"

DGUVI 201-056

"Planning principles for anchor devices on roofs"

ASR A2.1

"Technical rules for workplaces - Protection against falling and from falling objects, entering danger areas"



Furthermore, the "Safety and Work Guideline for Rope Access and Positioning Techniques" issued by the Fach- und Interessenverbandes für seilunterstützte Arbeitstechniken e.V. (FISAT) [Professional and Interest Group for Rope-Assisted Work Techniques] should be considered.

- Make sure to maintain a safe stance during use!
- There must be a plan that takes into account rescue measures for all possible emergencies.
- If there are any doubts regarding the safe condition of the equipment (e.g. severe corrosion, deformations) or after a fall by a person secured on the LUX-top® KLICK SZP QUICKFIX II, the system must be withdrawn from further use and checked by a qualified person.
- The stability of the fastening surface must be checked on site after a fall before reinstalling a new anchor device.
- Even when using fall arrest systems, the lanyard must always be set as short as
 possible in order to keep the free-fall height to a minimum in case of a fall. For safety
 purposes, it is essential to select the position of the anchor device and the way work is
 carried out so that the free-fall and fall height are limited to a minimum. Ideally, a
 fall over the edge should be completely prevented by appropriate use of the
 PFPE.
- Please note that if these user instructions are not observed, and if the documentation is not complete, any recourse claims are excluded.
- In case of uncertainty when installing or using the system, the manufacturer must be contacted!
- At the access to the safety system (e.g. roof hatch), a set of operating instructions should be attached with information about the position and use of the anchor devices!



Installation information:

- The LUX-top® KLICK SZP may only be installed by qualified installation personnel, using the anchor sleeve and fastening materials supplied and in accordance with the installation instructions!
- Installation must take place on a substrate with sufficient load bearing capacity in accordance with the manufacturer's specifications. The minimum dimensions must be complied with in accordance with the installation instructions!
- The complete construction must be checked onsite.
- The fitters must ensure that the substrate is suitable for fixing the anchor device.
- All connections on 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 on the inspection log card attached to these user instructions.
- The inspection log card must be completely filled in after completion of the installation and passed onto the building operator or kept in a protected place together with the parts of the equipment not permanently installed.
- It is recommended to also document the proper installation using photos and other important installation data. For this purpose we recommend our documentation appunder www.quick-doku.eu.
 - Further information about the installation documents can be found in EN 795:2012 (Appendix A).
- The installation documents provide the user with evidence that the installation has been carried out properly and provide the basis for subsequent checks on the anchor device. A copy should therefore be kept in the building.
- During installation of the anchor device, the relevant national regulations and accident prevention regulations must be complied with.
- The fitters must take measures so that neither parts of the anchor device nor tools are able to fall down from the workplace.

Installation distances:

Permitted distances between the anchor points on the LUX-top® KLICK SZP system				
As an abseiling point for attaching the load-bearing	Maximum 2.0 m, in building corners maximum			
system in accordance with TRBS 2121-3	1.0 m*			
Purely as single anchor points	Maximum 3.0 m*			
In case of uncertainty, please contact the manufacturer				

^{*} This is a recommendation agreed with FISAT e.V.

^{**} Results from the fall over the edge problem relating to the lanyard for horizontal use. Directly on the edge, any work to the side of the anchor point should be limited to 1.5 m max.!



<u>Combinations with other LUX-top® products:</u>

LUX-top® KLICK SZP can be used with temporary horizontal anchor devices / temporary horizontal flexible anchor lines according to EN 795 Type C. For this purpose, observe the instructions for use for the relevant temporary system!

Application / system description:

The LUX-top® KLICK SZP system is a stainless steel anchor point that can be fastened in the associated anchor sleeves by means of a self-locking mechanism. The anchor sleeves can be installed in reinforced concrete, steel or masonry components after checking the load-bearing capacity of the installation substrate.

The anchor device can be loaded in all directions.

The maximum force that is introduced to the structure by the anchor device in the case of a fall is 12 kN.

Attachment to the LUX-top® KLICK SZP system is done by means of a connecting element (carabiner according to EN 362) on the PFPE in accordance with its instructions for use.

Before each use of the system, the user must check whether the locking mechanism has been locked in accordance with the regulations! To do this, the user must check whether the <u>green check ring</u> on the unlocking pin is visible after inserting the anchor eye in the respective anchor sleeve.

Only then can the PFPE be fastened to the anchor point.

The use of the anchor point is strictly forbidden if the check ring has not completely emerged!!!





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

- Restraint systems
- Fall arrest systems
- Rescue systems
- As part of the load-bearing system in accordance with TRBS 2121-3 for ropeassisted access and positioning technique (industrial climbing)

The respective user instructions of the other personal fall protection equipment and abseiling and rescue equipment used must also be observed!

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

- LUX-top® KLICK SZP anchor point with anchor eye as well as anchor sleeve and fastening material.
- User instructions (including installation instructions)

Materials:

- Stainless steel (base body with anchor eye / anchor sleeve)
- Aluminium (unlocking pin)
- FKM (check ring)

Application I: rope access technique

For anchoring the load-bearing system pursuant to TRBS 2121-3 for rope access and positioning techniques (SZP = industrial climbing) for 1 person with a maximum working load (WLL) of 3 kN (\sim 300 kg).

The breaking load of the LUX-top® KLICK SZP is > 13 kN (\sim 1,300 kg).



Application II:

As an anchor point for securing **two persons (includes one person for first aid or rescue)** with full body harness according to EN 361 and energy absorber according to EN 355.

Even an anchor point already deformed by a fall can still normally be used to rescue a person who has fallen from a height.



Assembly instructions

NOTES:

- Prior to installation, it must be ensured that the respective substrate is suitable for fastening the anchor device and has a sufficient load-bearing capacity.
- Each anchor sleeve must be checked after installation with a LUX-top® KLICK SZP anchor point! To do this, the user must check whether the green check ring on the unlocking pin is visible after inserting the anchor eye in the respective anchor sleeve.

1. Installation of the anchor sleeve on concrete structures:

1.1 Installation with glued-in anchor sleeve.



- Drill a hole (Ø 28 mm) in the concrete structural element.
- 2. Blow out the drill hole using a blow-out pump.
- Thoroughly clean the drill hole using a special brush!
- 4. Blow out again.

After the final blow-out, the drill hole must be completely free from drilling dust residues!

- 5. Inject the composite mortar supplied, while continually pulling back the applicator gun.
- Insert the anchor sleeve, rotating it at the same time, until it is flush with the front edge of the component. A little of the composite mortar must escape from the drill hole when doing this.

On no account may the anchor sleeve spring back behind the finished construction (pay attention to any plaster layers, etc.)!

7. Allow to cure - done!

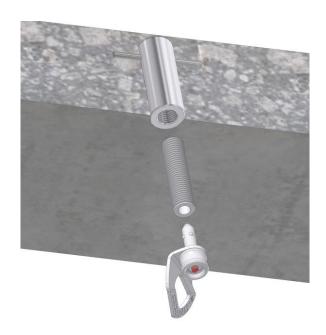
Installation parameters

Minimum concrete grade:	C20/25
Minimum component thickness:	120 mm
Drill hole diameter:	28.0 mm
Minimum anchorage depth:	80.0 mm
Minimum distance to the edge:	120 mm

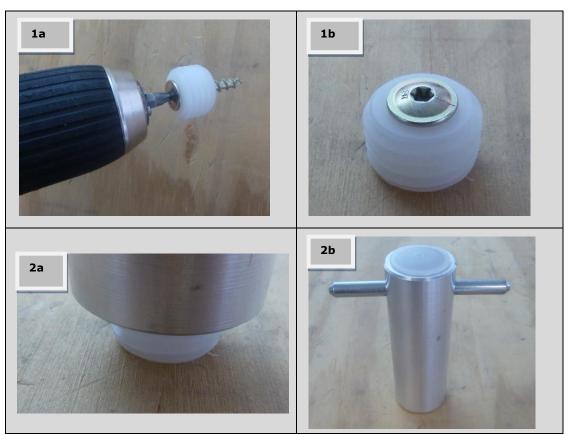
Always consult the manufacturer in case of deviating boundary conditions!



1.2 Installation with cast-in-concrete sleeve for screwing in the anchor sleeve.



- Fasten the plastic threaded plug to the formwork shell in the desired position using a screw.
- Fully screw the cast-in-concrete sleeve onto the threaded plug.
- 3. Concrete the component.
 Observe the installation parameters!
- When demoulding, leave the plastic threaded plug in the cast-in-concrete sleeve to protect it against dirt. Only remove it after all construction work is completed.
- 5. Screw the previously cleaned anchor sleeve into the cast-in-concrete sleeve using a suitable liquid thread-locking compound. Finer adjustment of the protrusion (e.g. with plastered ceilings) can be done by means of screwing the anchor sleeve in or out. The anchor sleeve must not be recessed behind the surface of the finished construction, but must be at least flush!



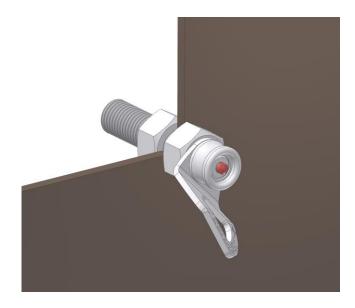
Installation parameters

Minimum concrete grade:	C20/25
Minimum component thickness:	120 mm
Minimum distance to the edge:	120 mm
Minimum screw-in depth in the cast-in concrete sleeve:	55.0 mm

Always consult the manufacturer in case of deviating boundary conditions!



2. Installation of the anchor sleeve on steel constructions:



- 1. Drill a \emptyset 26 mm hole in the steel construction and treat it with a suitable rust inhibitor.
- 2. Screw and lock the anchor sleeve to the steel construction with the two M24 nuts. The anchor sleeve must not be recessed in the respective nut on either side, but must be at least flush! If constant vibrations are to be expected, a liquid threadlocker (high strength) must additionally be used!

Installation parameters

Minimum steel grade:	S235
Minimum component thickness:	6.00 mm
Drill hole diameter:	26.0 mm

Always consult the manufacturer in case of deviating boundary conditions!



Maintenance, care and testing:

The LUX-top® KLICK SZP anchor device must be checked by a competent person as required, but at least every 12 months, taking exact note of 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 check is to be arranged by the operator.

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

Contact between the stainless steel anchor device and "black" steel (also in the form of swarf), as well as chemicals and other aggressive substances must be prevented.

Cleaning the equipment

The **LUX-top**[®] **KLICK SZP** anchor device is weather resistant.

Depending on the conditions of use, the anchor device must be cleaned occasionally with a brush and warm water.

Contact with acids, bitumen, cement, chloride, paint or aggressive cleaning liquids must be avoided.

Under no circumstances use aggressive cleaning agents or chemicals!

Miscellaneous:

Changes or additions to the anchor device may not be made without 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, the reseller must make the instructions for use, maintenance, regular checks and repairs available in the language of the other country to ensure the safety of the user.



LUX-top® KLICK SZP

STANDARDS

LUX-top® KLICK SZP has been tested and certified according to EN 795:2012 Type B and CEN/TS16415.

SYMBOLS AND MARKINGS

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

Type designation: LUX-top® KLICK SZP

 Number of the relevant standard: EN 795:2012 Type B and CEN/TS16415:2013

Name or logo of the manufacturer/distributor:

Manufacturer's serial number / year of manufacture: XX/20XX

· Max. permissible number of persons (as an anchor point): MAX ₹ ₹

· Max. permissible number of persons (as an abseiling point): MAX ₹

• Symbol indicating that the user instructions must be observed:

CE mark with code of the notified body: (€ 0158

The legibility of this product labelling must be checked regularly, at least during the prescribed annual inspection, however!

Manufacturer and sales: ST Quadrat s.a. 11, rue Flaxweiler

L-6776 Grevenmacher/Potaschberg

Luxembourg

Notified body used at the time of the type test:

DEKRA Testing and Certification GmbH Dinnendahlstrasse 9 D – 44809 Bochum



Installation documentat **LUX-top®**

fall protection systems

	ALL PROTECTI
Project data	
Building/Construction project	
Street/Post code/Town or City	
Installation company	
Company	'
Street/Post code/Town or City	
Contact / Phone number	
Installer	
Details of the anchor device and substrate	
Type/model/height/installation variant	
Year of manufacture/serial no.	
Rod diameter	
No. on sketch map	
Fixing substrate/construction material	
Structural element dimensions	
Fixing materials, if applicable with details of torque	
Date of completion	
Roof layout/sketch map (if necessary on additional sheet)	
Confirmations by the installation company	
Die Montage der LUX-top® Anschlageinrichtungen erfolgte gemäß den Einbaurichtlinien der Firma - Quadrat s.a.	51
Die verwendeten Befestigungsmittel wurden gemäß deren Hersteller - Richtlinien verarbeitet (Sachgemäße Reinigung der Bohrlöcher, Randabstände, Überprüfung des Untergrundes etc.).	
Die Aufbau und Verwendungsanleitungen sowie technischen Dokumentationen wurden dem Auftraggeber übergeben und sind dem Benutzer zur Verfügung zu stellen.	

(Place, date) (Stamp, signature)

This certificate is to be handed over to the owner.

Detailed installation and photo documentation can be drawn up at www.quick-doku.eu.

Inspection Log Card / Log Book Anchor device for personal fall protection equipment



Type/Model	LUX top® KLICK SZP	STANDARD: EN 795 Type C + CEN/TS16415
Serial number + year of		
manufacture		
Installation date		
Initial commissioning date		
Project / property name		
Address of the owner (user) /		
customer		

Regular system check, inspection and repair					
Date	Reason for processing	Identified damage + defects	Product released for safe use	Name + signature	Date of the next
	(regular inspection or repair)	(description/action taken, etc.)	(yes/no)	of competent person	test