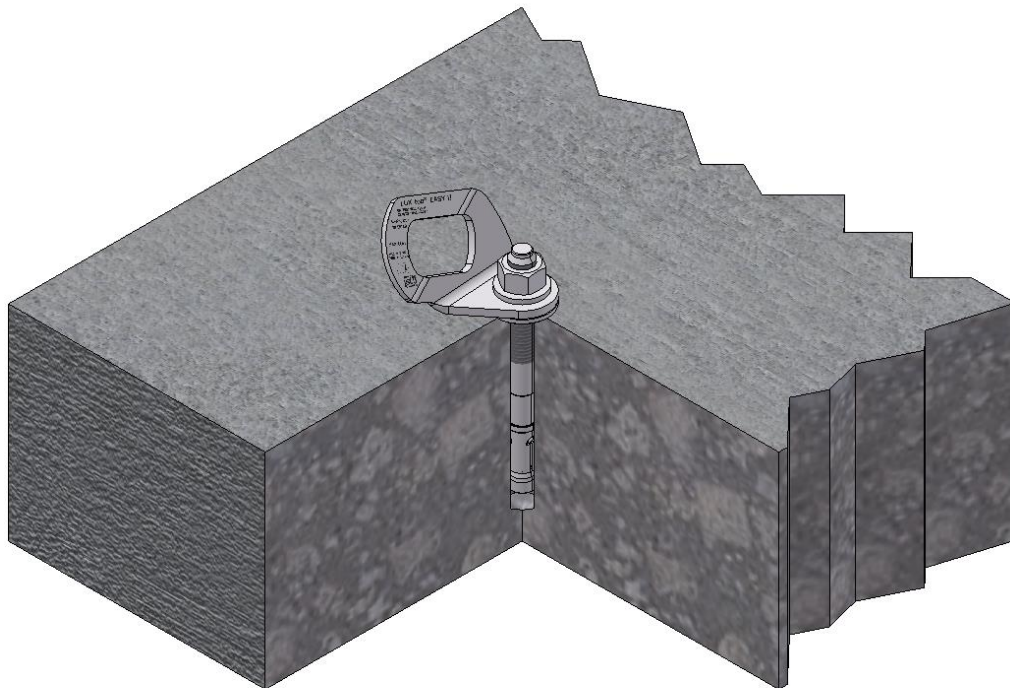


# Instructions for use for the anchor device

## LUX-top® EASY II



***Anchor point for attaching personal fall protection equipment (PFPE) for 1 person***

***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 A  
by DEKRA Testing and Certification GmbH**

**LUX-top® EASY II** anchor points are tested dynamically and statically on the specified fastening surfaces.

**These user instructions are supplied with each LUX-top® EASY II 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 roof / 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® EASY II** anchor device, the resulting deformation/elongation of the device (up to 10 cm) must be taken into account when calculating the fall arrest distance.

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

- Deformation/elongation 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 safety 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 only 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 PPE against falls from a height 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).

- 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.
- Attachment to the **LUX-top® EASY II** system is by means of a connecting element (carabiner) on the personal fall protection equipment in accordance with its instructions for use.
- 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® EASY II** 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 people due to falling"
  - DIN 4426 "Safety requirements for workplaces and transport routes"
  - DIN 363 "Personal fall protection equipment - personal fall protection systems"
  - DGUV Regulation 38 "Construction Work"
  - DGUV Regulation 112-198 "Use of personal fall protection equipment"
  - DGUV Regulation 101-016 "Roof Work"
  - DGUV I 201-056 "Planning principles of anchor devices on roofs"
  - ASR A2.1 "Technical rules for workplaces - Protection against falling and from falling objects, entering danger areas"
- 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, lightning strikes) or **after a fall of a person secured on the LUX-top® EASY II, the system must be withdrawn from further use** and checked by a qualified person.
- The stability of the fastening surface after the fall of a person secured on the **LUX-top® EASY II** must be checked on site before re-installing 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.**
- Position the anchor device to the building in such a way that fall factor 1 is only possible at the most when falling over the edge of the roof.
- 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 distances:

The distances to the edge are to be selected according to national provisions and depending on the roof geometry.

Anchor devices that are permanently provided on the roof area should be correctly selected and arranged depending on the type and use of the anchor device taking the particular features of the roof area into account.

Please find information about the recommended execution and positioning of anchor points on the roof e.g. in DGUV Information 201-056 "Planning principles for anchor devices on roofs", which was coordinated within the framework of the international group of experts, D-A-CH-S.

The brochure is available to download free of charge at [www.lux-top.com](http://www.lux-top.com) among other places.

National provisions remain unaffected by these recommendations. If these suggestions differ from national law, the user of this recommendation takes the full legal risk to the extent of the discrepancy.

### Combinations with other LUX-top® products:

- The **LUX-top® EASY II** product can only be used as a single anchor point and cannot be combined with lifeline systems according to DIN EN 795 type C.

## Important installation instructions:

- Installation of the **LUX-top® EASY II** may only be carried out by qualified installation personnel with the fastening materials supplied in accordance with the installation instructions and must be checked appropriately!
- Installation must take place on a substrate with sufficient load bearing capacity in accordance with the manufacturer's specifications. The minimum component dimensions and screw-in depths must be complied with in accordance with the installation instructions.
- The overall construction must be checked on site to ensure it can absorb the forces introduced!
- 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 installation documentation form attached to these instructions for use.
- The installation documentation form must be completely filled out after successful 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 app under [www.quick-doku.eu](http://www.quick-doku.eu)  
Further information about the installation documents can be found in DIN 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:

### **Permissible distances between anchor points for the LUX-top® EASY II system**

As an abseiling point for attaching the load-bearing system in accordance with TRBS 2121-3	Maximum 2.0 m, in building corners maximum 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.!

## Application / system description:

The **LUX-top® EASY II** system is an anchor point pursuant to DIN EN 795:2012 Type A, which is used for anchoring personal fall protection equipment when working in areas where there is a risk of falling.

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

**LUX-top® EASY II** is designed for loading in all directions.

The maximum force that is transferred from the anchor device to the building structure in the event of a fall, when used in accordance with the regulations, is 9 kN.

The **LUX-top® EASY II** anchor device is approved for use by **1 person** with a full body harness and an energy absorber.

The **LUX-top® EASY II** 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 rope-assisted 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® EASY II** anchor device consists of the following components:

- 1 x **LUX-top® EASY II** anchor point complete with fastening materials
- User instructions (including installation instructions)

Material used for the anchor point: stainless steel W1.4301/AISI 304

### Application I: anchor point

As an anchor point for securing **one person** with full body harness pursuant to DIN EN 361 and energy absorber pursuant to DIN EN 355.

### Application II: 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 (~ 300 kg).

The breaking load of the **LUX-top® EASY II** is > 12 kN (~1,200 kg).

(A single anchor point must not be used at the same time for anchoring the support and safety system!!!! Always use a separate anchor point to attach the safety system!)





# Assembly instructions

About the **LUX-top® EASY II** anchor device

## Preliminary notes

The load-bearing capacity of the roof structure must be checked before installing the anchor device. The technical building regulations must be complied with. Only original parts of the anchor point system incl. the fasteners supplied by the manufacturer may be used!

Mounting distances according to national regulations and depending on the building geometry.

## **Fixing to concrete structures**

**Concrete grade: min. C20/25**

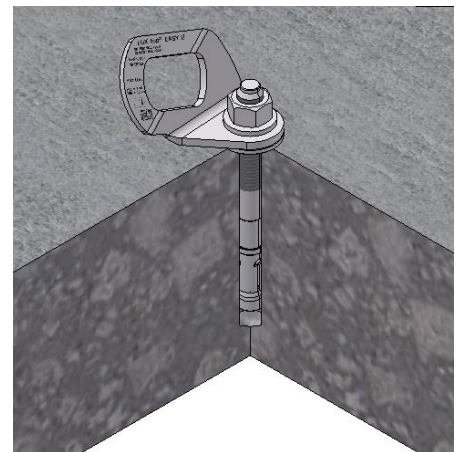
**Minimum structural element thickness: min. 120 mm**

Fixing materials:

**1 x anchor bolt (MKT)**

**Type: BZ3 M12x115/20 A4**

1. Position the anchor point at the desired location  
(place the rotating disc underneath the anchor point!)
2. Drill a hole: hole  $\varnothing$  12 mm  
Hole depth  $\geq$  90 mm
3. Clean the hole thoroughly (brush and blow out) !!!
4. Drive in the concrete anchor
5. Torque to 55 Nm



## **Fixing to steel structures**

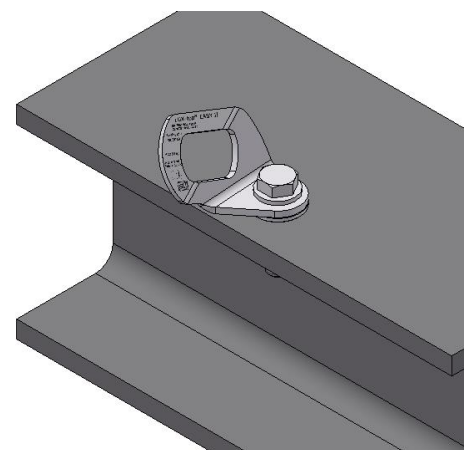
**Steel grade: min. S235**

**Minimum structural element thickness: according to technical building regulations (min. 4.0 mm)**

Fixing materials:

**1 x hexagon bolt M12 – A2-70**

1. Position the anchor point at the desired location  
(place the rotating disc underneath the anchor point!)
2. Drill a hole ( $\varnothing$  13 mm)  
Apply corrosion protection as required
3. Fit the bolt, washers and nut and apply the appropriate tightening torque (56 Nm). Use threadlocker, depending on the ambient conditions!



## Maintenance, care and testing:

Before each use, the anchor devices must be checked to ensure they are mechanically secured and in a sound condition. Loose, deformed or otherwise damaged anchor devices must be fastened or replaced.

If the fall protection system is damaged or put under stress by a fall, then this must no longer be used. In these cases the anchor device and its anchoring to the structure must be checked by a competent person and be dismantled and fully replaced if necessary.

The builder/building operator is obliged to ensure that the anchor device is in a proper condition at all times. It is therefore recommended, as required, however at least every 12 months (e.g. as part of the general roof maintenance), to have it checked by a competent person in strict compliance with the manufacturer's instructions for use.

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

The check should 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 may be documented.

The date of the next scheduled inspection should 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.

The **LUX-top® EASY II** anchor device is permanently weather-resistant.

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

Contact with acids, 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 relevant country's language to ensure the safety of the user.







# LUX-top® EASY II

## STANDARDS

The **LUX-top® EASY II** has been tested and certified according to DIN EN 795:2012 Type A

## SYMBOLS AND MARKINGS

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

- Type designation: **LUX-top® EASY II**
- Number of the relevant standard: **DIN EN 795:2012 Type A**
- 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: 

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

## Manufacturer:

**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

## 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.

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

- Installation of the LUX-top® anchor devices was carried out in accordance with the installation guidelines of the company ST Quadrat s.a.
- The fixing materials used were processed according to the manufacturer's guidelines (proper cleaning of the drill holes, edge distances, inspection of the substrate, etc.).
- The installation and use instructions as well as the technical documentation have been given to the customer so that they can provide them to the user.

(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](http://www.quick-doku.eu).

# Inspection Log Card / Log Book

Anchor device for personal fall protection equipment



**LUX-top®**

Manufacturer: [www.lux-top-absturzsicherungen.de](http://www.lux-top-absturzsicherungen.de)

<b>Type/Model</b>	<b>LUX top® EASY II</b>	<b>STANDARD: DIN EN 795 Type A</b>
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 (regular inspection or repair)	Identified damage + defects (description/action taken, etc.)	LUX-top® EASY II approved for safe use (yes/no)	Name + signature of the competent person	Date of the next test

---

Sketches, information, notes: