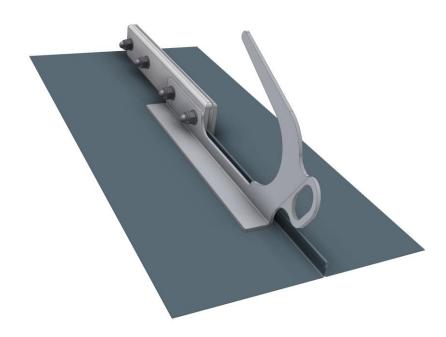


# **User Instructions**

# Roof Safety Hook / Anchor Device for Pitched Roofs and High-Pitched Roofs

LUX-top® SDH-S for slate roofs
LUX-top® SDH-Z II for tiled roofs
LUX-top® SDH-B for plain tile roofs
LUX-top® SDH-FALZ for double lock standing seam roofs

tested and certified according to
DIN EN 517:2006 - Type B
by DEKRA EXAM GmbH Certification body



These instructions for use are supplied with each LUX-top® SDH roof safety hook. They must be read through carefully before installation / use and must be kept accessible at all times, where possible near the equipment.



#### Introduction

Before installing the anchor points 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 device and only use original parts of the anchor system.



## **SAFETY INSTRUCTIONS:**

- If using the anchor points 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® SDH anchor point the
  resulting deformation of the roof safety hook (up to 20 cm) must be taken into
  account in the arrest distance.

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

Deformation of the roof safety hook

- + 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 point 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.
- Maximum allowable number of users: 1 person
- The roof safety hook 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. The installation and use must be
  according to the respective current state of the art standards. Health restrictions
  (cardiovascular problems, medication) can endanger the safety of the system use
  when working at heights.



- The LUX-top® SDH product may only be used for attaching roofers' ladders / duck runs and roofing trestles (in the hook), and for attaching the PPE against falls from a height to EN 363, consisting of, for example, full body harness (EN 361), lanyard (EN 354) und energy absorber (EN 355) in the anchor eyebolt provided for this purpose. Alternatively, use a restraint system (e.g. to EN 358)!
- 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.
- Use of the system for purposes other than those for which it is intended, e.g. by hanging undefined loads, is not allowed.
- 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.
- Equipment is attached to the LUX-top<sup>®</sup> SDH system at its anchor eyebolt by means of a connector (spring hook/karabiner) of the PPE against falls from a height, in accordance with its user instructions.
- Before each use the user must visually inspect the roof safety hook to ensure its proper functional and maintained condition, i.e. that it is ready for use and functions properly.
- 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® SDH system. In Germany these include, among other things:
- 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 protective equipment against falls"
- DGUV Information 201-008 "Roof Work"
- DGUV Regulation 101-016 "Roof Work"
- DGUVI 201-056 "Planning principles of anchor devices on roofs"
- ASR A2.1 "Technical rule for workplaces Protection against falling and falling objects, entering dangerous areas"



- A plan must exist, which takes into account the rescue measures for all possible emergency incidents that can occur during the work.
- 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<sup>®</sup> SDH, the product must be withdrawn from further use, it must be inspected by a competent person and if applicable released for use in writing.
- After a fall of a person secured to the LUX-top<sup>®</sup> SDH the stability of the surface/substrate must be checked on site before re-installing a new roof safety hook.
- 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. For safety reasons, it is essential that the position of the anchor point 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.
- If the anchor point 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.
- Position the anchor point on the building so that in case of a fall over the roof edge, the maximum possible fall factor is 1.
- Ensure safe, stable position during use!
- 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 roof safety hooks should be attached at the access to the safety system (e.g. roof hatch).



#### **General system description:**

The LUX-top® SDH system is a roof safety hook (DIN EN 517:2006 Type B), which is used for attaching roofers' ladders / duck runs and roofing trestles, and as an anchor point for attaching the personal protective equipment against falls from a height (safety gear) for 1 person maximum for work in areas in which there is a risk of a fall from a height.

The system is tested as a roof safety hook to EN 517 Type B in all loading directions (eaves, verge and ridge).

The installation must be carried out according to the manufacturer's specifications (see installation instructions) on an adequately firm, stable load-bearing surface (load-bearing roof structure).

#### Important: Use original parts only!

If used on slate roofs (**LUX-top**<sup>®</sup> **SDH-S**) the roof safety hook is bolted directly into the rafters through the boarding, in accordance with the installation instructions.

The variant for tiled roofs (**LUX-top**® **SDH-Z II**) is also bolted directly into the rafters through the cross lathing, in accordance with the installation instructions.

A roof batten is also required for installation on plain tile roofs (LUX-top® SDH-B). The roof safety hook is bolted into the rafters through the roof battens, in accordance with the installation instructions.

Material: - Stainless Steel W1.4301/W1.4307 (AISI 304 / AISI 304-L)

- Aluminium (LUX-top® SDH-FALZ clamping jaws)



#### Installation notes:

- The LUX-top® SDH may only be installed using the fastenings supplied with it by the
  manufacturer, and in accordance with the separately supplied installation instructions!
   IF THE REQUIRED MINIMUM ENGANGEMENT LENGTH IS NOT ENSURED DUE TO THE ROOF
  CONSTRUCTION FOUND ON SITE, LONGER WOODSCREWS MUST REQUESTED FROM THE
  MANUFACTURER!
- The installers must ensure that the surface is suitable for fixing the roof safety hook.
- You must comply with the relevant national regulations and the accident prevention regulations during installation of the roof safety hooks.
- The room below the work area is to be kept clear.
- The installers must take measures so that neither components of the roof safety hook nor tools can fall from the work area.
- All connections of the construction must be properly and conscientiously installed and checked according to the manufacturer's requirements.
- The inspection log card and also the form of the installation documentary must be fully completed following installation and handed over to the building owner or stored in a protected place together with the parts of the equipment not permanently installed.
- We recommend that you document proper installation, e.g. by taking photos. We recommend that you use our Documentation App for this, download from <a href="www.quick-doku.eu">www.quick-doku.eu</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 roof safety hooks.

#### Combination with other products:

• The maximum load which is allowed to be transmitted into the LUX-top® SDH roof safety hook must not exceed 12 kN. Please observe and follow the user instruction of the respective PFPE (e.g. temporary horizontal anchor devices)!



# <u>Installation recommendation / installation spacings LUX-top® SDH on high-pitched roofs</u>

The installation spacings must be chosen according to the national regulations and depending on the roof geometry.

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

For information on the recommended implementation and positioning of anchor points on the roof, please refer to the DGUVI 201-056 "Planungsgrundlagen von Anschlageinrichtungen auf Dächern" (planning principles for anchor devices on roofs), which is determined by the international experts workgroup D-A-CH-S.

The brochure is available for example at <a href="https://www.lux-top-absturzsicherungen.de">www.lux-top-absturzsicherungen.de</a> to download free of charge.

In some cases the use of additional fall protection systems supplementary to the roof safety hooks can make sense (e.g. LUX-top® FSE 2003 lifeline system with LUX-top® ASP – anchor points along the ridge). In case of doubt contact the manufacturer!

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.



#### Maintenance, care and testing:

Before each use, the user must check the system for integrity (see safety instructions).

The owner/operator is obligated to ensure that the anchor point / roof safety hook is in perfect and flawless condition at all times. It is therefore recommended, as needed, but at least every 12 months (e.g., within the general roof maintenance), to have the anchor points / roof safety hooks inspected by a qualified person.\*)

This regular inspection/monitoring is essential, as the safety of the user depends on the effectiveness and durability of the anchor points / roof safety hooks.

Test loading the system for the purpose of verification is not allowed on the structure!

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

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

Prevent contact between the stainless steel anchor points / roof safety hooks and "black" steel (including in the form of grinding dust), as well as chemicals and other aggressive substances since this can lead to corrosion.

The roof safety hook **LUX-top**<sup>®</sup> **SDH** is permanently weatherproof.

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

Never use aggressive cleaning products or chemicals!

#### Miscellaneous:

Changes or additions to the anchor points / roof safety hooks 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 a country with a different language, to ensure the safety of the user the instructions for use, maintenance, the regular checks and repairs must be available in the respective language.

<sup>\*)</sup> **Note:** According to the German DGUV regulation 112-198 before anchor devices, which are permanently mounted on a building or structure can be used, it must be ensured that the last professional inspection is not older than one year, if shorter inspection intervals are not specified due to the prevailing operating conditions.

## **LUX-top® SDH**



#### **USE**

For attaching roofers' ladders / duck runs and roofing trestles (in the hook), and for attaching the PPE against falling from a height to EN 363 consisting, for example, of a full body harness (EN 361), lanyard (EN 354) and energy absorber (DIN EN 355) in the anchor eyebolt provided for this purpose.

#### **STANDARDS**

LUX-top® SDH has been tested and certified to EN 517:2006 Type B

#### SYMBOLS AND MARKINGS

Type designation:

A PPE notice must be attached and must contain the following information:

LUX - top<sup>®</sup> SDH-X

Numbers of the relevant standards:

EN 517:2006 Type B

Name or logo of the producer/seller: ST Quadrat s.a.

st

Serial number / year of manufacture:

xx/20xx

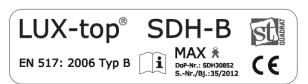
Max. allowable number of people:



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



Example - Product labelling:



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

Producer: ST Quadrat s.a.

11, rue de Flaxweiler

L-6776 Grevenmacher / Potaschberg

Luxembourg

Notified body used for the type test:

DEKRA EXAM GmbH Zertifizierungsstelle - Dinnendahlstraße 9, D – 44809 Bochum



### **CE mark:**

LUX-top<sup>®</sup> SDH-B (SDH30852)

LUX-top® SDH-S (SDH30816)

LUX-top® SDH-Z II (SDH30788)

LUX-top® SDH-FALZ (SDH30861)



14

### ST QUADRAT s.a. 11, rue de Flaxweiler 6776 Grevenmacher / Potaschberg Luxemburg

#### SDH30852 / SDH30816 / SDH30788 / SDH30861

#### **EN 517**

Roof safety hook type B for attaching roofers' ladders / duck runs an roofing trestles (in the hook), and for attaching the PPE against falling from a height on Pitched Roofs and High-Pitched Roofs

Essential features	Performance	Standard
Mechanical strength	fulfilled	
Fire behaviour	A1	EN 517:2006
Version against outer fire exposure	B <sub>Dach</sub>	EN 517.2006
Longevity of the mechanichal strength	fulfilled	

0158

## Installation documentation **LUX-top® SDH**



Proj	ect data
Buildin	ng/Construction
Street	/Post code/Town or City
Inst	allation firm
Compa	any
Street	/Post code/Town or City
Contac	ct/Phone number
Install	ler
Deta	ails of the anchor points and surface/ substrate
Type/	Model
Year b	puilt/Serial No.
No. or	n site sketch
Fixing	surface or substrate / construction material
Struct	ural member/Element dimensions
Fixing	materials
Date o	of completion
Roo	f layout/site sketch (if necessary on additional sheet)
Con	firmations by the installation firms
	The LUX-top $^{\otimes}$ anchor devices are installed according to the installation instructions and guidelines of ST QUADRAT Fall Protection S.A.
	The fixing materials used have been used according to their manufacturers' guidelines (checking the surfacturers proper cleaning of the drillholes, correct tightening torques + distances from edges, etc.)
	The installation and use instructions as well as the technical documentation have been handed over to the owner/customer so that they can make them available 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.

# Inspection log card / log book Anchor points for personal fall protection equipment





Manufacturer: www.lux-top-absturzsicherungen.de

LUX top® SDH	STANDARD: EN 517:2006 Type B
	LUX top® SDH

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

Version 08/2018

# STANDER

## Sketches, information, notes: