

TigaSAFE

ROOF SAFETY SYSTEMS



SAFETY REGULATIONS AND GENERAL GUIDELINES

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Made in **Austria**

TigaTech GmbH

Important

These safety regulations must be strictly followed and must be read carefully before installing the anchor points or rope system. If these safety regulations have not been understood while reading, the use of the anchor points and/or the rope system is not permitted!

The TigaSafe anchor devices and TigaSafe anchor systems may only be used with personal fall protection equipment and not with lifting equipment. Personal protective equipment may only be used within the specified operating conditions and for the intended purpose.

Structural modifications of and to anchor points, rope systems and accessories and the replacement or use of materials and parts other than those supplied by the manufacturer are not permitted without the express written consent of the manufacturer TigaTech GmbH.

These safety regulations have been prepared exclusively for English-speaking countries. If the products are sold in countries where other languages are used, the Distributor is responsible for ensuring that the safety regulations, assembly instructions and all other necessary documents are translated into the respective national language and supplied with the delivered products.

In principle, a safety plan must be in place for all possible emergencies.

It is essential to ensure that the necessary clearance is provided below the user, so that in the event of a fall no impact with the ground or other obstacle is possible. Furthermore, it is essential to ensure that the drop height is kept to a minimum.

The user must ensure that his rope connections are designed in such a way that no fall over the edge can occur or that in the event of a fall the fall path is less than the height of the building.

Safety regulations for assembly

When installing TigaSafe products, the guidelines in the installation instructions from TigaTech GmbH enclosed with the product must be followed. Installation may only be carried out by qualified persons or qualified companies.

In order to avoid dangerous situations, it must be ensured during planning and installation that the users are secured in accordance with the ASG.

The installation subfloor must be suitable for the respective rope systems and their load requirements and must be checked before installation. The suitability of the respective system for the subsurface as well as the respective requirements for the installation subsurface can be found in the installation instructions and must be available during installation as well as for each use. In case of doubts or lack of knowledge whether the mounting surface meets the load requirements, TigaSafe products must not be mounted or used and in case of doubt a structural engineer must be consulted.

The safety equipment must not impair the rain protection of roof coverings or the backwater protection of roof waterproofing. In the case of roofs with sub-roofs or vapour barriers, the fastening of the safety device must not impair the function of these layers.

The installation must be checked appropriately.

The safety equipment must be installed in such a way that regular testing of the anchorage device is possible.

After assembly, make sure that all markings and signs are clearly legible. If the marking of the anchorage device is no longer accessible after installation, an additional marking in the vicinity of the anchorage device, which can be reached at any time, is recommended.

It must be ensured that the attachment points are properly and tightly connected by means of a connecting collar (sealed).

Care must be taken to ensure that the anchor points and/or rope systems supplied are free from damage, in particular damage caused during transport.

Snow and ice loads can lead to deformation and damage of the anchor points. The systems must therefore be regularly cleared of snow and ice.

Documentation and notice board

After installation, copies of the installation documents must be handed over to the user. These documents shall be kept for the purpose of subsequent inspections of the anchorage devices in the building and shall at least include the following:

- Address and place of installation
- Name and address of the installing company
- Name of the person responsible for installation
- Product identification (manufacturer of the anchorage device, type, model/article, standard)
- Fasteners (manufacturer, product, intended tensile and transverse forces)
- Schematic installation plan, e.g. of the roof and relevant user information, such as the position of the anchor points
- Maintenance information
- Year of manufacture, date of purchase
- Commissioning date/1. Use

This schematic plan should be placed in the building so that it is visible or available to everyone (e.g. at the entrance to the roof).

Declarations by the responsible installer should be signed by him and should contain at least information that the anchorage devices have been installed in accordance with the manufacturer's installation instructions, that they have been fitted in accordance with the plan, that they have been fastened to the specified subsurface as specified, that they have been commissioned in accordance with the manufacturer's instructions and that they have been delivered with photographic information, in particular if the attachments and the subsurface underneath are no longer visible after completion of the installation. It is recommended that, if more than one anchorage point is to be photographed for identification, the anchorage devices be marked with numbers and this numbering be included in the test report of the anchorage device and the schematic layout of the mounting surface.

The building operator is obliged to keep documentation on the safety equipment, which must comply with ÖNORM B 3417:2016. In addition, a placard must be permanently installed at a weather-protected location near access to the security equipment. This must contain at least an overview plan, operating instructions and the date of the last inspection.

Commissioning and use

Instructions for use and a maintenance plan must be drawn up for each safety equipment. These instructions must be brought to the user's attention before work is commenced. **The use of TigaSafe security systems is only allowed for trained and instructed personnel.**

Before commissioning and before each use, the TigaSafe anchor points and/or rope systems as well as the mounting surface must be checked for obvious defects and whether the following criteria are met:

- free from corrosion (Caution: corrosion damage may occur if steel tools are used and grinding dust is generated on stainless steel parts)
- no loose connections and connecting pieces
- free from damages

- no bends and deformations
- no visual defects
- complete and correct labelling
- no cracks
- no wear
- firm connection to the mounting surface

If these conditions are not met or if there are other defects or doubts about the safety, the safety equipment must not be used and a specialist or the manufacturer must be contacted. In the event of any damage or strain caused by a fall, the entire safety equipment must be checked by an expert before further use. A fall and any stress on the safety equipment must therefore be reported to the building operator.

In the event of any ambiguities or uncertainties, a specialist or the manufacturer must be contacted.

Annual inspection

A periodic inspection of the fall protection system is prescribed at intervals of one year in accordance with ÖNORM B 3417-2016.

The fall protection device and the mounting surface must be inspected at least once a year by a competent person and the time interval from the last inspection before use must not exceed one year. It is recommended to mark the anchorage devices with the date of the next or last inspection. The safety of the user depends on the effectiveness and durability of the equipment and the mounting surface. If the period from the last inspection is more than one year, the fall protection must not be used.

The regular inspections (approvals) may only be carried out by the manufacturer or by a competent person or body authorised by him. This test must be documented in writing and enclosed with the documentation on the safety equipment.

The following points are to be strictly listed during an annual inspection or processing:

- date of inspection or repair
- reason for processing (annual inspection or repair)
- determined damages
- performed repair
- further essential information
- name and signature of the qualified person
- date of the next periodic review

We recommend a regular inspection taking into account legal regulations, type of equipment, frequency of use and environmental conditions, with the interval between inspections not exceeding 12 months. The legibility of the product labelling must also be checked during the annual inspection.

The procedure according to ÖNORM B 3417-2016 Figure C.1 Annex C or EN 795:2012 -05 A2 is recommended for the testing of roof safety systems and anchorage devices by a competent person.

Accessories

All accessories must comply with the latest standards:

EN 795 Single anchor point mobile carrier

EN 365 Protective equipment

EN 361 Riser belts/vests

EN 355 Fall arrester connecting means

EN 353-2 Fall arrester + ropes, safety sets EN 1496 B Tripod - persons - rescue winch EN

360 Fall arrester

EN 397 Safety helmet

and the guidelines for the use of personal protective equipment against falls from a height "complying with DGUV regulation 112-198."

The instructions for use and assembly instructions for all accessories must be strictly followed.

ATTENTION: TigaSafe is not liable for the use of other or third-party system accessories in combination with TigaSafe components. Compatibility and liability must be clarified with the respective manufacturers.

Transport and storage

When transporting TigaSafe products, make sure that the individual products, in particular the external threads and screw connections, are not damaged.

The TigaSafe products must be transported and stored in their original packaging. Storage should be dry and weatherproof.

General regulations

The TigaSafe safety system was developed exclusively for personal protection and is intended for the use, maintenance and repair of roofs. It must not be used for other loads, safety measures during construction work or for sports and leisure activities. **The use of TigaSafe security systems is only allowed for trained and instructed personnel.**

Information about the maximum number of people using the anchorage device at the same time is given in the respective installation instructions.

Personal protective equipment is not part of the roof safety system. Prior to use, personal protective equipment must be checked for proper condition and suitability for use with TigaSafe anchor points and/or rope systems. Additional requirements for the personal protective equipment to be used can be found in the documentation and in the placard and the suitability of the personal protective equipment must be ensured before use.

A safety plan must be drawn up for all possible emergencies and contingencies.



In principle, the brochure "Safety on the roof" must be followed for all work on roofs, especially when using TigaSafe safety systems.

>> <http://www.auva.at/portal27/portal/auvaportal/content/contentWindow?contentid=10007.672046&action=2&viewmode=content>

It must be ensured that no other person can be harmed as a result of the roof work (e.g. tools falling from the roof or system components etc.) It must be ensured that if the anchorage device is used as part of a fall arrest system, the user must be equipped with means limiting the maximum dynamic forces acting on the user during a fall arrest operation to a maximum of 6 kN.

The maximum force(s) that can be applied in practice from the anchorage device to the structural equipment is/are 12 kN. The anchorage devices are designed for loading in all directions parallel to the structure.

The TigaSafe roof safety systems are suitable as restraint systems, fall arrest systems and rescue systems. In principle, only safety harnesses may be used in a fall arrest system. The displacement of the individual attachment points is a minimum of 300 mm and a maximum of 1000 mm, depending on the column height and the displacement of the individual columns. When using TigaSafe cable systems the cable displacement can be up to 4 m. It is therefore essential to ensure before each use that there is sufficient clearance below the user and that there is no risk of impact with the floor, protruding building edges or parts or other objects and obstacles below the working area. Note that the actual collection distance depends on the size of the user's body, the displacement of the harness on the body, the elongation of the rope and the displacement of the attachment points may vary and therefore there is a sufficient additional safety distance to be considered. You should therefore also take corresponding safety precautions.

Even an anchor point that has already been deformed by a fall can normally still be used to rescue a falling person.

If one or more users utilize the safety system, they must be brought to safety immediately. In the event of a fall, damaged parts of the existing safety system must be replaced. The entire system must be completely checked before being put into operation again.

The use of TigaSafe safety systems is only permitted if no health impairment is present. The use of the TigaSafe safety system is prohibited when taking medication, drugs, alcohol and other substances that influence consciousness and performance, as the safety of the user is impaired.

Warning! The combination of individual elements of the equipment may create hazards by compromising the safe functioning of any of the elements or components or the combined equipment.

Changes and additions to the TigaSafe roof safety systems may not be made without the prior written consent of the manufacturer and all repairs may only be carried out in accordance with the measures specified by the manufacturer.

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