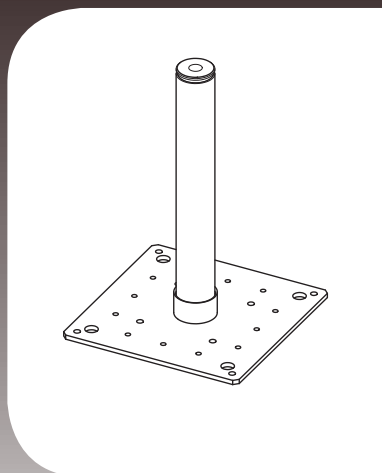


# TigaSAFE

ROOF SAFETY SYSTEMS



## ASSEMBLY INSTRUCTIONS



### TS ES 300-1000 B

Mounting on CONCRETE (concrete min. quality C20)

### TS ES 300-1000 H

Mounting on WOOD

### TS ES 300-1000 S

### TS ES 300-1000 S-KP

Mounting on STEEL



Made in **Austria**

**TigaTech** GmbH

## Important assembly instructions

The anchor devices should only be mounted by qualified personnel or qualified companies.

The supplied lugs (eyelets) must be properly mounted on a prop immediately after it has been installed! Otherwise, there is a considerable risk of injury from the support. As soon as a lug (eyelet) has been properly mounted on the prop, it must be used to secure other anchorage devices during assembly!

The assembly must be appropriately checked, e.g., by calculation and testing.

Only the fasteners enclosed by the manufacturer may be used.

The suitability of the material of the fastening elements must be given.

Before mounting, the mounting surface must be checked for its suitability for mounting and the installer must ensure that it can withstand the loads. If there are doubts or no knowledge as to 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.

If the marking of the anchor device is no longer accessible after installation, an additional marking near the anchor device is recommended.

### For type A anchor devices

The deflection of the anchor device and the displacement of the anchor point corresponds to the prop height.

### For type C anchor devices

1. The minimum mounting distance between the TigaSafe anchorage points when used as a rope system is 3 m. The maximum mounting distance between the anchor points is 15 m.
2. Warning, Caution! The type C anchor devices must be mounted in such a way that the guide does not come into contact with a sharp edge or any other objects that could damage the guide as a result of its deflection during a fall arrest.
3. The maximum angle at which the guide can enter or exit intermediate fixings or corner anchorages is 10 degrees.
4. Minimum breaking strength of the flexible guide is 36 kN.
5. No use of height safety devices is intended.
6. Only class B or class T fasteners in accordance with EN 362(2008) should be used.
7. The user should be connected to the type C system at all times via the appropriate equipment. If a corner or intermediate anchorage is to be passed, the user should connect to the type C system through a redundant (non-traversable system) belay before the original belay may be removed.
8. In case the safety system is strained, the fall indicator bends or pops out, so that the strain on the TigaSafe impact absorber is immediately recognisable. If this happens, the roof must be closed immediately, and the rope safety system must no longer be used as such.
9. The deflection of the individual anchor points is at least 300 mm, maximum 1000 mm, depending on the prop height and the repositioning of the individual props. When using TigaSafe rope systems, the rope deflection 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 ground, protruding building edges or parts, or other objects and obstacles located below the working area. Note that the actual fall arrest distance may vary depending on the height of the user, the displacement of the harness on the body, the rope elongation, and the deflection of the anchor points and, therefore, a sufficient additional safety distance must exist and be taken into account. Therefore, also take appropriate safety precautions.

**These assembly instructions and the specified work steps must be followed **without fail!**  
The safety regulations and general guidelines must be read and followed carefully before installing  
the anchor points or the rope system.**



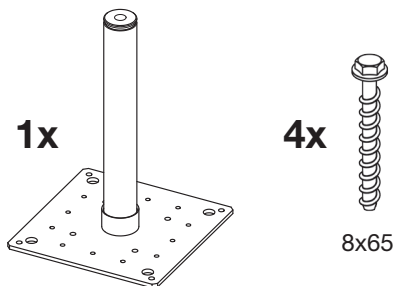
The instructions to be followed are shown schematically and explained in writing.  
If anything is unclear, please contact our technical department:

**TigaTech**

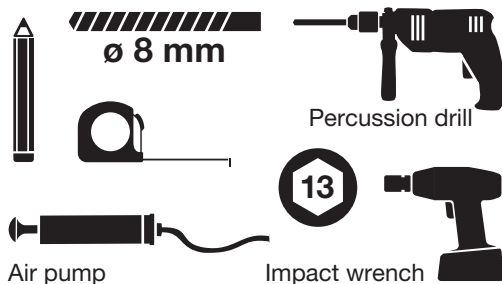
Derndorferberg 2, 4501 Neuhofen/Krems, Austria, Tel. +43 7227 21600, Mail: office@tigatech.at

# CONCRETE TS ES 300-1000 B (CONCRETE BOLT)

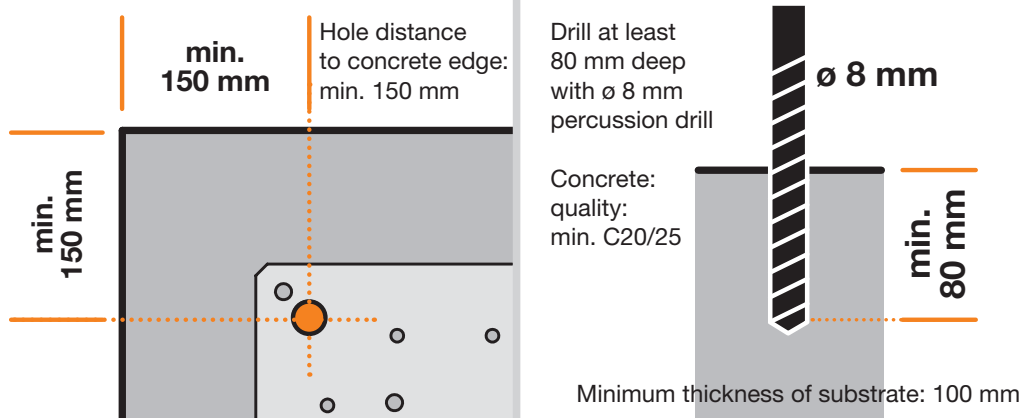
## 1) Product



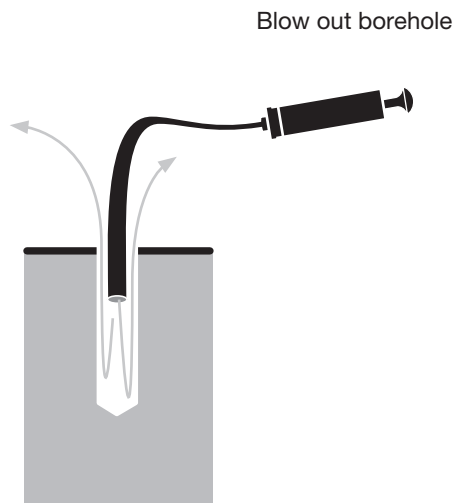
## 2) Required tools



## 3) Marking and drilling



## 4) Blow out and screw in bolts



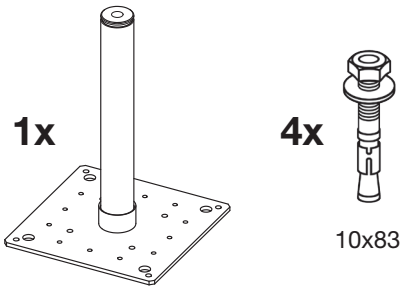
Tighten all four screws one after the other with an impact wrench. Tighten with a torque of the impact wrench of at least 200 NM until the screw head is flush with the surface!

**min. 200 NM**

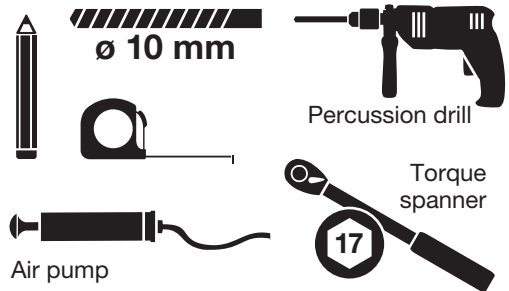
Fastening of strap or intermediate holder incl. accessories:  
**See last page!**

# CONCRETE TS ES 300-1000 B-S (SLAG ANCHOR)

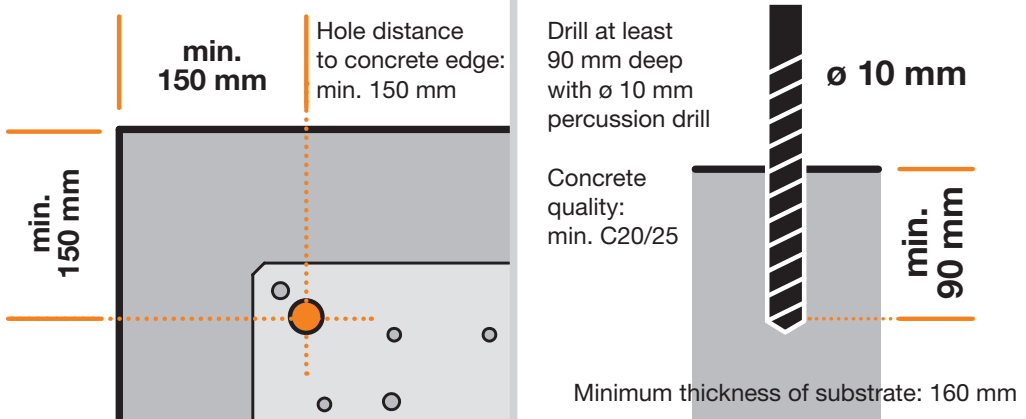
## 1) Product



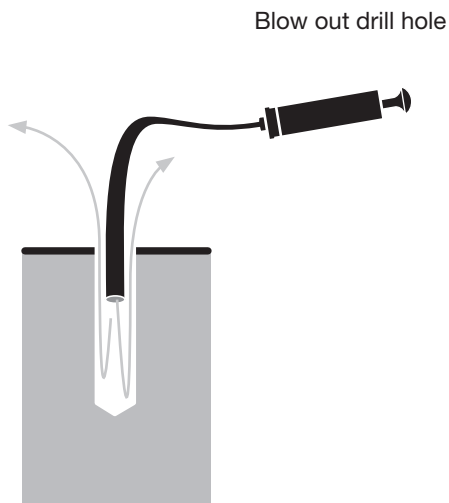
## 2) Required tools



## 3) Marking and drilling



## 4) Blow out and screw in bolts



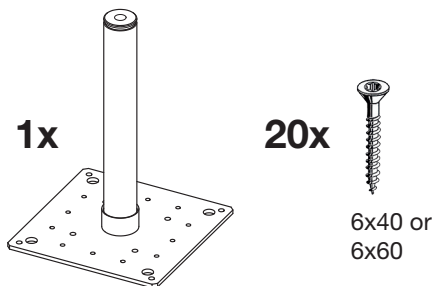
Tighten all four screws one after the other with a torque spanner to the specified torque by the manufacturer of the impact armature.

**25 NM**  
(with the enclosed impact anchors)

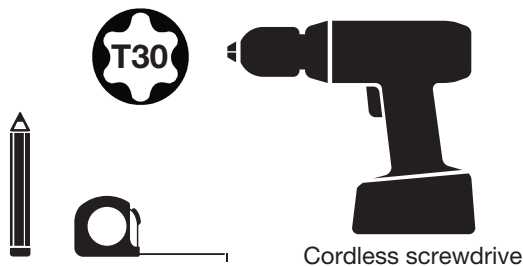
Fastening of strap or intermediate holder incl. accessories:  
**See last page!**

# WOOD TS ES 300-1000 H (WOOD SCREWS)

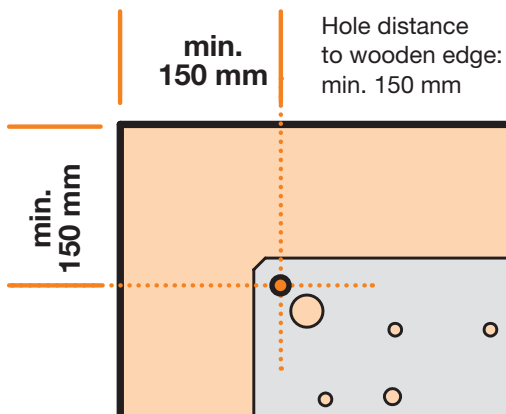
## 1) Product



## 2) Required tools



## 3) Marking



Strength OSB panel:  
**min. 18 mm**

Strength Multilayer panels:  
**min. 19 mm**

Strength Wooden formwork:  
**min. 24 mm**

## 4) Screw in the bolts

Mount the base plate on at least TWO formwork boards!

All 20 A2 screws must be screwed in completely one after the other with 8 NM, until the screw head is flush with the substrate.

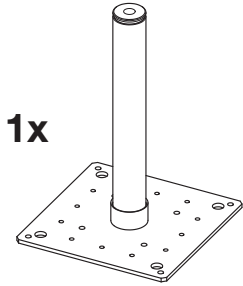


Fastening of strap or intermediate holder incl. accessories:  
**See last page!**

# STEEL TS ES 300-1000 S (A)

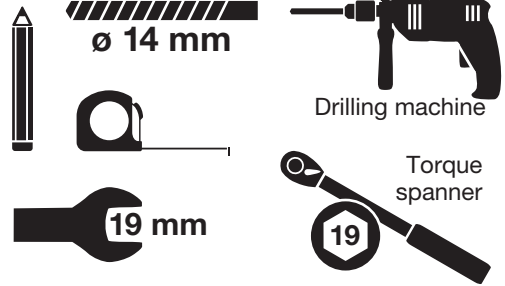
# STEEL TS ES 300-1000 S-KP (B)

## 1) Product

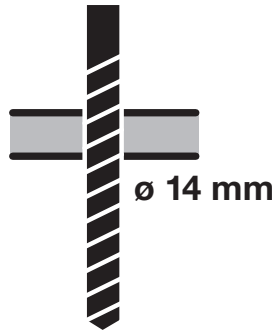
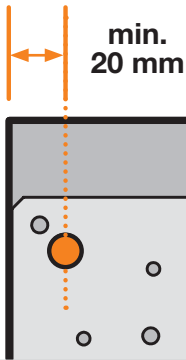
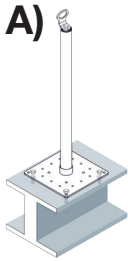


- A)** 4x M12 4x 4x
- B)** 4x M12 8x 8x
- 1x

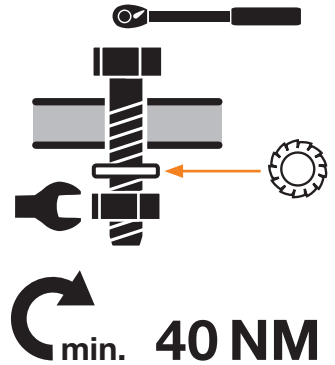
## 2) Required tools



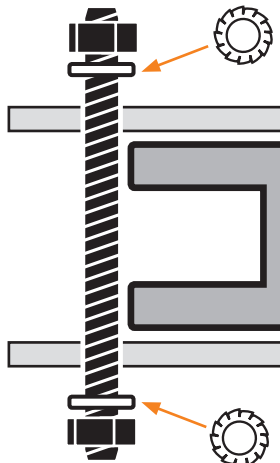
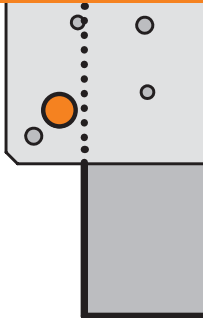
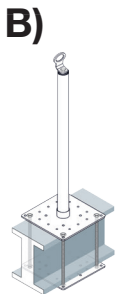
## 3A) Marking, drilling, screwing



Minimum thickness of substrate: Suitability of the substrate must be calculated and approved by the structural engineer!



## 3B) Position counter plate, screws

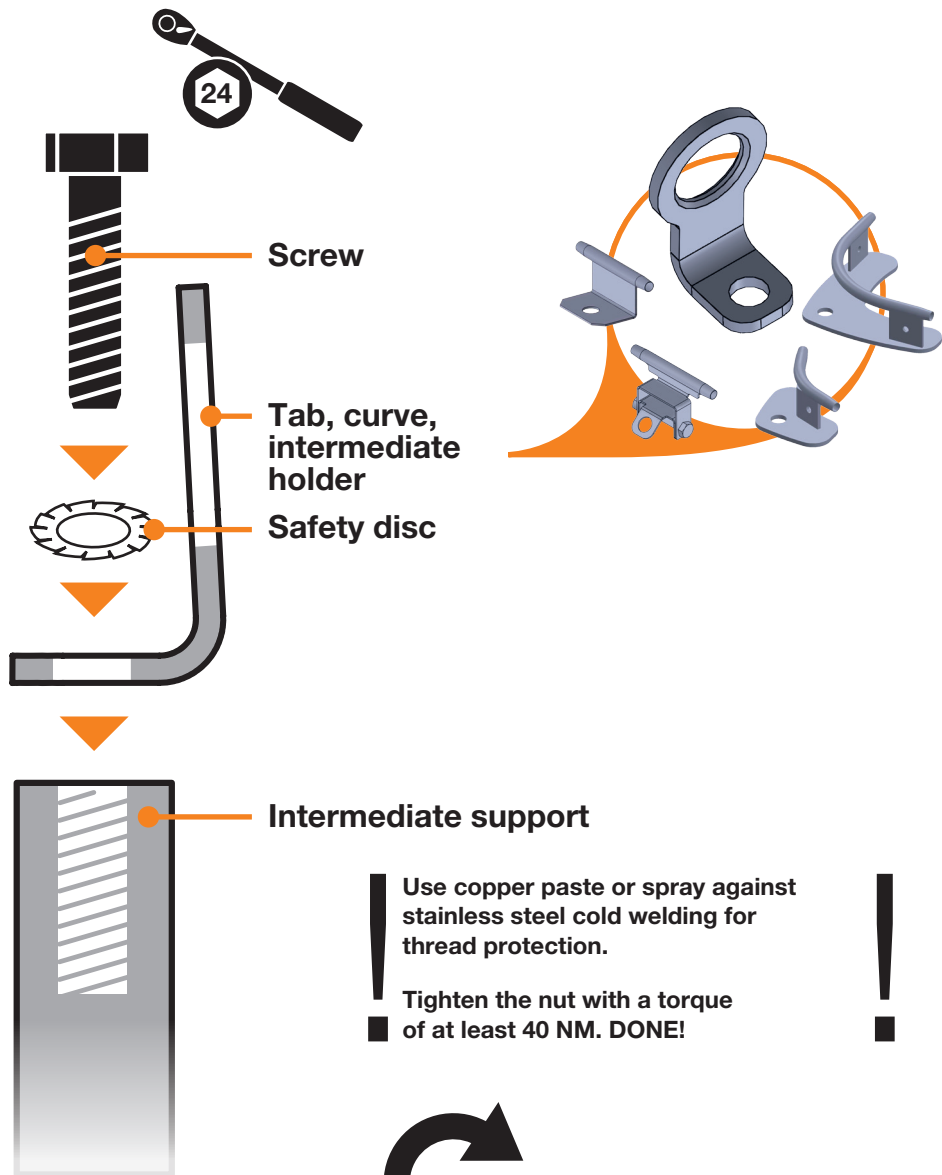


Screw in all four screws one after the other with a torque spanner with a minimum force of 40 NM.



Fastening of strap or intermediate holder incl. accessories:  
See next page!

# Attachment of strap, curve, or intermediate holder to intermediate support



**min. 40 NM**

# TigaSAFE

## ROOF SAFETY SYSTEMS

### Important product information

The anchor device may be used by a maximum of 3 persons at the same time.

When the anchor device is used as part of a fall arrest system, the user should be provided with a means to limit the maximum dynamic forces applied to the user during a fall arrest operation to a maximum of 6 kN.

The maximum force(s) that can be applied in practice by the anchor device to the structure is/ are 12 kN. The anchor devices are designed for a load in all directions parallel to the structure.

Every time a TigaSafe product is installed, an **installation report** must be drawn up in accordance with ÖNORM 3417 (2016).

**The installation guidelines and the safety regulations must be observed!**

>> See assembly protocol on [www.tigatech.at](http://www.tigatech.at)

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