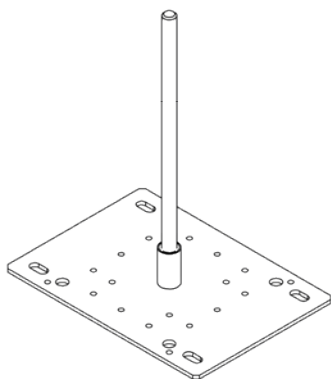


# TigaSAFE

ROOF SAFETY SYSTEMS



## INSTALLATION INSTRUCTIONS



### TS ZSL 300-800 B/B-S

Mounting on CONCRETE  
Concrete quality min. C20/25

### TS ZSL 300-800 H

Mounting on WOOD

### TS ZSL 300-800 S TS ZSL 300-800 S-KP

Mounting on STEEL



Made in **Austria**

# TigaTech

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## Important mounting instructions

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

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

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

Only the fasteners supplied by the manufacturer should be used.

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

Before mounting, the mounting surface must be checked for its suitability for mounting and the technician 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 installed 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, additional marking near the anchor device is recommended.

### For anchor devices type A

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

### For anchor devices type C

1. The minimum mounting distance between the TigaSafe anchor points when used as a rope system is 3 m. The maximum installation 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, due to its deflection, does not come into contact with a sharp or any other object that could damage the guide.
3. The maximum angle at which the guide can enter or exit intermediate fixtures or corner anchorages is 10 degrees.
4. The TigaSafe attachment points ESL 300-800 B/B-S/H/HD-B/S/S-KP/T and ZSL 300-800 B/B-S/H/HD-B/S/S-KP/T are designed for overhead application according to EN 795 (2012) type A as well as type C, therefore, application as an overhead system on the steel base substrate is permissible.
5. Minimum breaking strength of the flexible guide is 36 kN.
6. No use of height safety devices is foreseen.
7. Only class B or class T fasteners according to EN 362(2008) should be used.
8. The user must 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 must connect to the type C system before the original safeguard can be removed.
9. In the event that the safety system is stressed, the drop indicator of the FSA impact absorber bends or pops out, so that the stress on the TigaSafe impact absorber is immediately recognizable. In the case of the FSA I impact absorber, force absorber, and FSA I with force absorber, the loop provided in the installation instructions for the TigaSAFE rope system is retracted in the event of any stress.
10. The deflection of the individual anchor points is, depending on the height of the supports and the repositioning of the individual supports, at least 300 mm, maximum 1000 mm. When using TigaSafe rope systems, the rope deflection can be up to 4 m. Therefore, before each use, it is essential to ensure that there is sufficient clearance below the user and that there is no risk of impact with the ground, protruding building edges or other obstacles, or parts located below the working area are excluded. Note that the actual fall arrest distance depends 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 that 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 are mandatory and must be followed without fail! The safety regulations and general guidelines must be read and carefully followed before installing the anchor points or the rope system.**



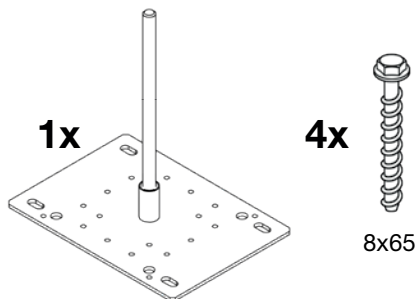
The instructions to be followed are shown schematically and explained in writing.  
Please contact our technical department if anything is unclear:

**TigaTech**

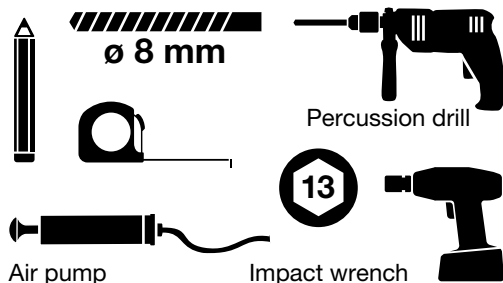
Derndorferberg 2, 4501 Neuhofen/Krems, Austria, Phone +43 7227 21600, Mail: office@tigatech.at

# CONCRETE TS ZSL 300-800 B (CONCRETE SCREW)

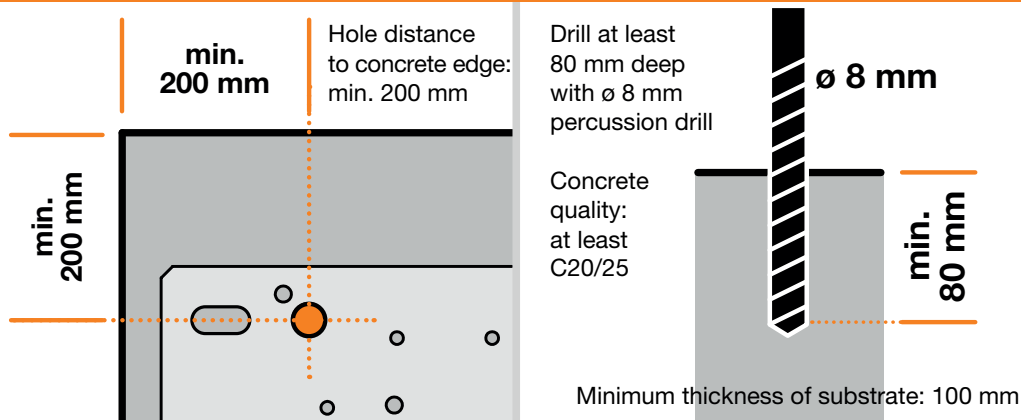
## 1) Product



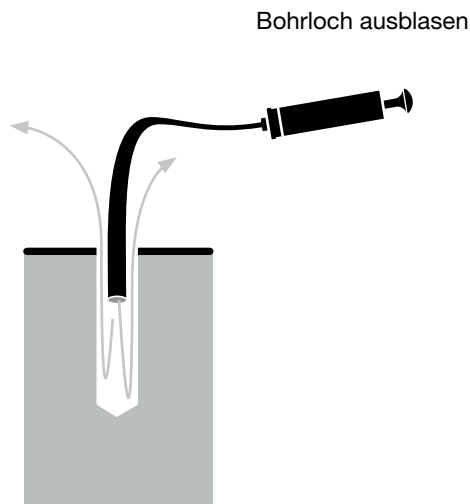
## 2) Required tools



## 3) Marking and drilling



## 4) Blow out and insert the screws



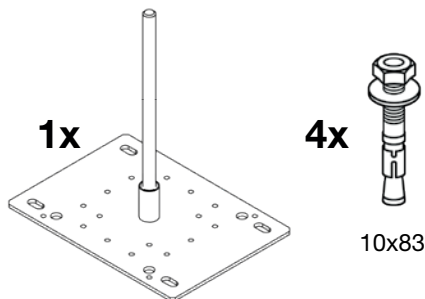
Screw in all four screws one after the other using an impact wrench. Tighten with a torque on the impact wrench of at least 200 NM until the screw head is flush with the substrate!



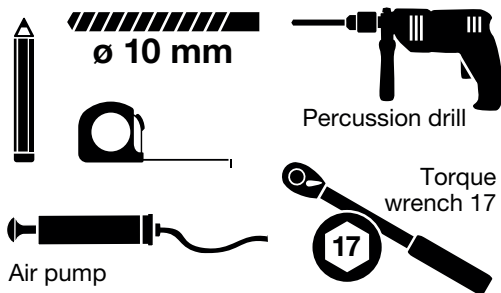
Fastening of lug, curve, or intermediate holder including accessories  
**See last page!**

# CONCRETE TS ZSL 300-800 B-S (IMPACT ANCHOR)

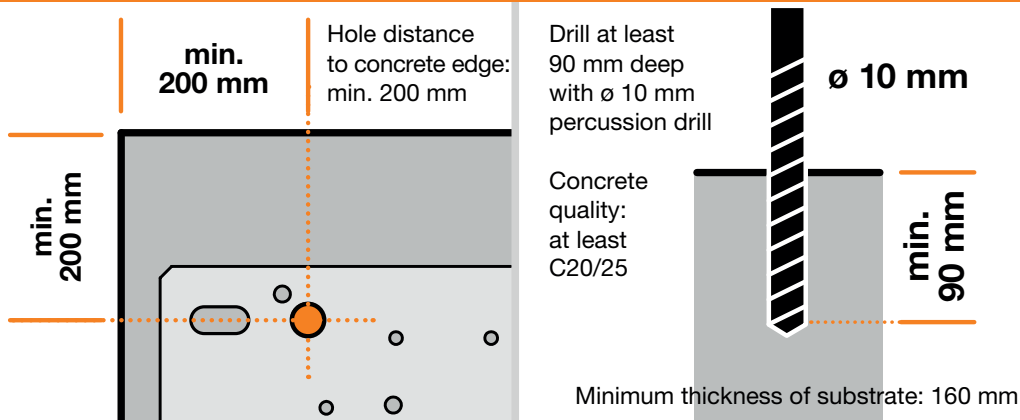
## 1) Product



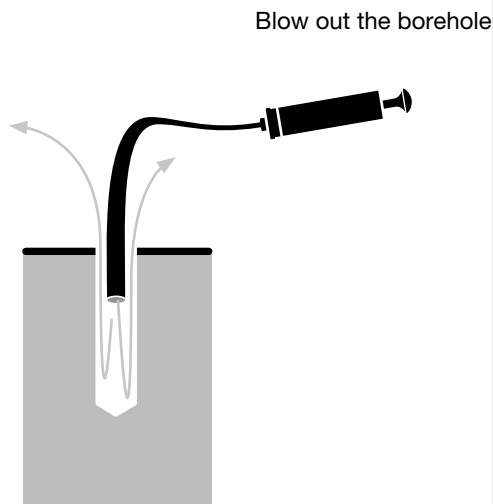
## 2) Required tools



## 3) Marking and drilling



## 4) Blow out and insert the screws



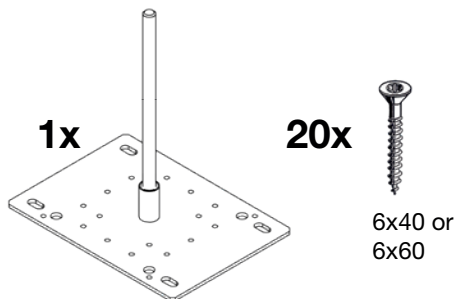
Tighten all four bolts in sequence with a torque wrench to the torque specified by the impact anchor manufacturer.

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

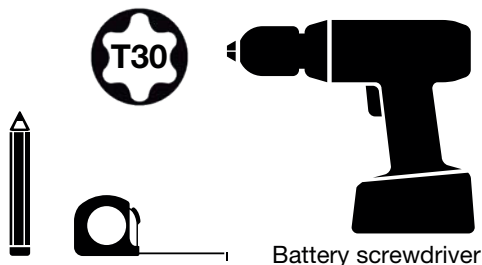
Fastening of lug, curve, or intermediate holder including accessories:  
**See last page!**

# WOOD TS ZSL 300-800 H (WOOD SCREWS)

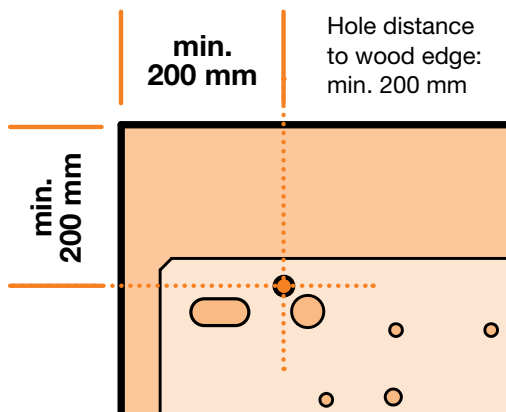
## 1) Product



## 2) Required tools



## 3) Marking



Thickness **OSB board:**  
**min. 25 mm**

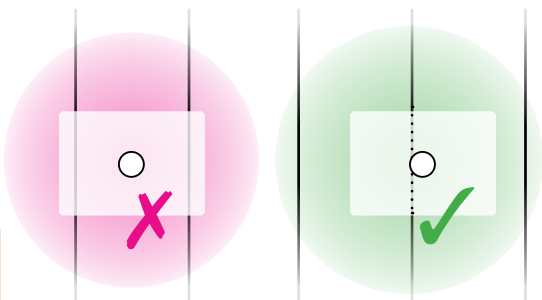
Thickness **multilayer boards:**  
**min. 19 mm**

Thickness **wooden formwork:**  
**min. 24 mm**

## 4) Screws insertion

Mount the base plate on at least **TWO** formwork boards!

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



**min. 8 NM**

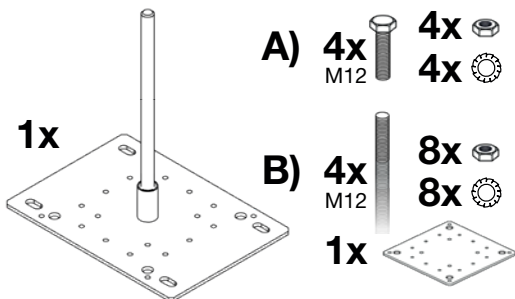
The diagram shows a curved arrow pointing clockwise, indicating the direction of rotation for tightening the screw. The text 'min. 8 NM' is written next to the arrow.

**Fastening of lug, curve, or intermediate holder including accessories:**  
**See last page!**

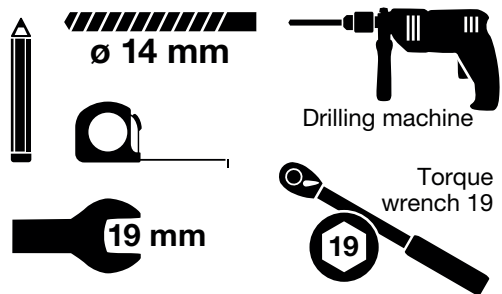
STEEL  
STEEL

TS ZSL 300-800 S (A)  
TS ZSL 300-800 S-KP (B)

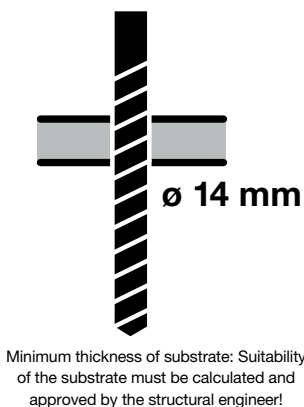
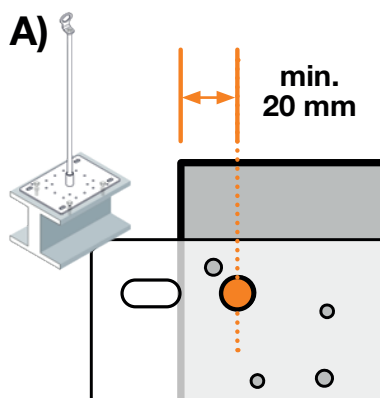
## 1) Product



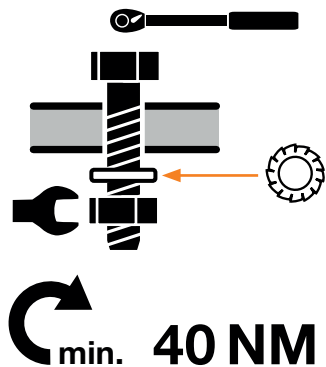
## 2) Required tools



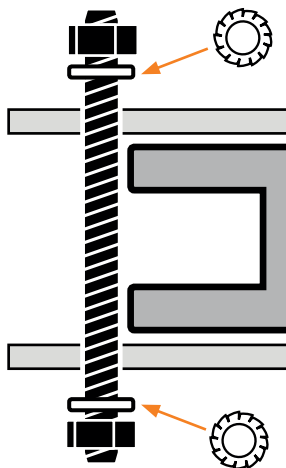
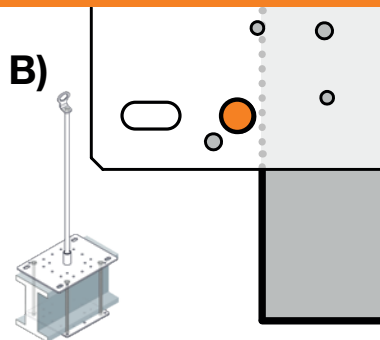
## 3A) Marking, drilling, screwing



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



## 3B) Counter plate positioning, screwing

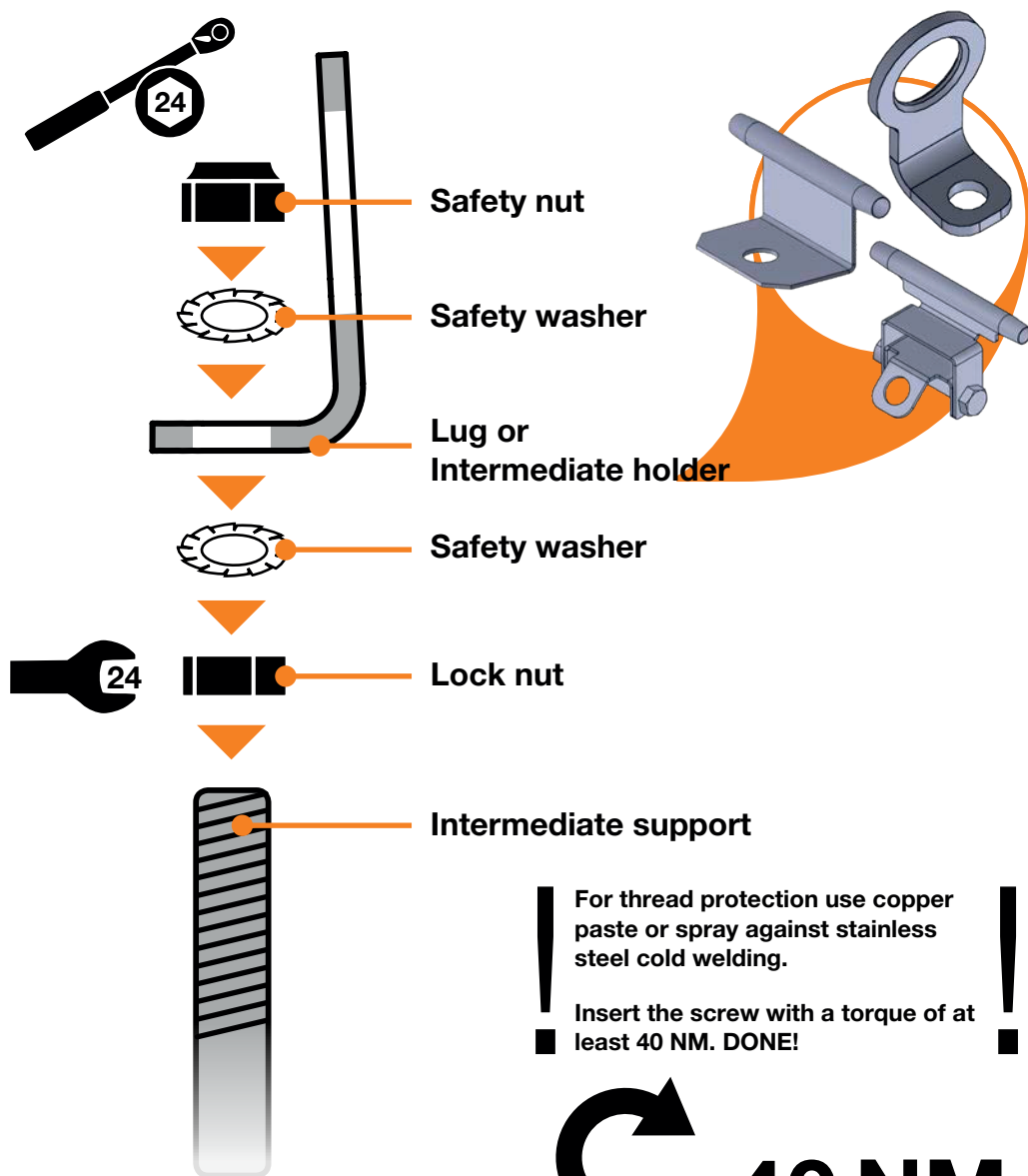


Insert all four screws one after the other using a torque wrench with a minimum torque of 40 NM.



Fastening of lug, curve, or intermediate holder including accessories:  
See last page!

# Fastening of lug or intermediate holder on intermediate support (ZS)



For thread protection use copper paste or spray against stainless steel cold welding.

Insert the screw with a torque of at least 40 NM. DONE!

**min. 40 NM**

# TigaSAFE

## ROOF SAFETY SYSTEMS

### Important product information

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

If the anchor device is used as part of a fall arrest system, the user must be equipped with a means of limiting the maximum dynamic forces acting on the user during a fall arrest procedure to a maximum of 6 kN.

The maximum force(s) that, in practice, can be applied by the arresting device to the structural facility 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 as well as the safety regulations must be observed!**

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

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