



## INSTALLATION AND OPERATING MANUAL



### ENGLISH

**ACHTUNG:**

Die Montage und die Verwendung der Sicherheitseinrichtung ist erst zulässig, nachdem der Monteur und der Anwender die Original Aufbau- und Verwendungsanleitung in der jeweiligen Landessprache gelesen haben.

**ATTENTION:**

Assembling and using of the safety product is only allowed after the assembler and user read the original installation and application instruction in his national language.

**Attention!:**

Le montage et l'utilisation du dispositif de sécurité ne sont autorisés qu'après lecture par le monteur et par l'utilisateur de la notice d'origine de montage et d'utilisation dans la langue du pays concerné.

**Attenzione:**

Il montaggio e l'uso del dispositivo di sicurezza è ammesso soltanto dopo che il montatore e l'utente hanno letto le istruzioni per l'installazione e l'uso nella rispettiva lingua nazionale.

**ATENCIÓN:**

No está permitido montar ni usar el dispositivo de protección antes de que el montador y el usuario hayan leído las instrucciones de montaje y uso originales en la lengua del respectivo país.

**Atenção:**

A montagem e o emprego do mecanismo de proteção somente serão permitidos, após o montador e o usuário terem lido as instruções de uso originais, no respectivo idioma do país, sobre a montagem e o emprego do mesmo.

**Attentie:**

De montage en het gebruik van de veiligheidsinrichting is pas toegestaan, nadat de monteur en de gebruiker de originele montage- en gebruikershandleiding in de desbetreffende taal gelezen hebben.

**Figyelem:**

A biztonságai berendezés felszerelése és használatá csak az után megengedett, miután a szerelést végző és a használatú személyek a nemzeti nyelvükre lefordított, eredeti használati utasítást elolvasták és megértették.

**Pozor!**

Montaža in uporaba varnostnih naprav je dovoljena šele takrat, ko sta monter in uporabnik prebrala originalna navodila za montažo in uporabo v konkretnem jeziku.

**POZOR:**

Montáž a používání zabezpečovacího zařízení jsou povoleny až poté, co si pracovníci provádějící montáž a uživatelé přečetli v příslušném jazyce originální návod k montáži a používání.

**DİKKAT!:**

Güvenlik tertibatının montajına ve kullanımına, ancak montaj teknisyeni ve kullanıcı, orijinal kurulum ve kullanma talimatını kendi ülke dilinde okuduktan sonra, izin verilir.

**Obs! :**

Monteringen og anvendelsen av sikkerhetsinnretningene er gyldige først etter at montøren og brukeren har lest den originale oppbygnings- og bruksanvisningen i det tilsvarende landets språk.

**OBS :**

Säkerhetsanordningen får inte monteras och användas förrän montören och användaren har läst igenom konstruktionsbeskrivningen och bruksanvisningen i original på resp lands språk.

**Huomio:**

Turvalaitteiden asennus ja käyttö on sallittu vasta, kun asentaja ja käyttäjä ovat lukeneet alkuperäisen asennus- ja käyttöohjeen omalla kielellään.

**GIV AGT:**

Montagen og brugen af sikkerhedsudstyret er først tilladt, efter at montøren og brugeren har læst den originale vejledning i samling og brug på det pågældende lands sprog.

**UWAGA:**

Montaż i użytkowanie urządzenia zabezpieczającego dozwolone jest wtedy, gdy monter i użytkownik przeczytają oryginalną instrukcję montażu i użytkowania w swoim języku.

**DEUTSCH**

**ENGLISH**

**FRANÇAIS**

**ITALIANO**

**ESPAÑOL**

**PORTUGUES**

**NEDERLANDS**

**MAGYAR**

**SLOVENSKY**

**ČESKY**

**TÜRKÇE**

**NORSK**

**SVENSKA**

**SUOMI**

**DANSK**

**POLSKI**

# INNOTECH® QUADRAT-12



## INSTALLATION AND OPERATING MANUAL



### SAFETY INSTRUCTIONS

- INNOTECH-QUADRAT-12 should only be installed by competent experts who are familiar with the roof safety system.
- You must be familiar with these instructions, as well as with the local safety regulations as a prerequisite for installing and using the system. You must also be physically and mentally fit and trained in the use of PSE (Personal Safety Equipment).
- Medical conditions (cardiovascular problems, intake of medicines, alcohol) can affect the safety of the user when working in high places.
- Adhere to the respective accident prevention regulations (e.g. working on roofs) when installing/using the INNOTECH QUADRAT-12 anchorage device.
- A plan must be available that specifies rescue procedures for all possible emergencies.
- Before starting work, ensure that no objects can fall to the ground from the work site. The area below the work site (sidewalk, etc.) must be kept clear.
- The fitters must ensure that the substrate is suitable for fastening the anchorage device. If in doubt consult a structural engineer.
- The anchorage device on the roof is designed for stress in all directions parallel to the installation surface or at right angles to the anchor.
- If uncertainties arise during installation it is imperative that you contact the manufacturer.
- The roof covering must be properly sealed in accordance with applicable guidelines.
- Document the professional fastening of the fall arrest system to the building with photos of each fitting situation.
- Ensure that stainless steel does not come into any contact with swarf or steel tools, as this may lead to corrosion.
- All stainless steel bolts must be greased with a suitable lubricant before installation.
- Plan, install, and use the anchorage point in such a manner that no one can fall over the edge if the personal safety equipment is used properly. (See planning documents at [www.innotech.at](http://www.innotech.at))
- At the access to the roof safety system you must document the positions of the anchorage devices by means of diagrams (e.g. view of the roof from above).
- The minimum free space required between the roof edge and the ground is calculated as follows:  
Manufacturer's specification of the personal safety equipment used + sag of the cable according to table + deflection of the cable + body height + 1 m safety margin.



## INSTALLATION AND OPERATING MANUAL



### SAFETY INSTRUCTIONS

- Fastening to the INNOTECH-QUADRAT-12 is executed through the eyebolt and always requires a carabiner. It must be used with a personal protective equipment in accordance with EN 361 (full body harness) and EN 363 (fall arrest system).
- Attention: For horizontal implementation, only use rope that is suited for this purpose and that has been tested for the respective edges (sharp edges, corrugated sheeting, steel girders, concrete, etc.).
- There is a hazard when combining individual elements of the specified units, since the safe function of one of the elements can be impaired through the combination. (follow the specific instructions provided with each element!)
- Before use, you must visually inspect the entire restraint system for obvious defects (e.g. loose screws, deformation, abrasion, corrosion, defective roof covering, etc.). If there is doubt relative to the safe function of the restraint system it must be inspected by an expert (written documentation).
- At least once a year an expert must inspect the complete safety device. The inspection by the expert must be documented on the provided control card.
- After a fall and the resulting strain, you must stop using the restraint system and have it checked by an expert (component parts, fastening to the substrate, etc.).
- The INNOTECH-QUADRAT-12 system has been developed for personal safety and should not be used for other purposes. Never attach undefined loads to the restraint system.
- At wind forces of more than the usual strength safety systems are not allowed to be used.
- Do not make any changes to the enabled anchorage device.
- If you provide the restraint system to external contractors, the instruction manuals must be handed over in writing.
- If used on sloping roofs, roof avalanches (ice, snow) must be avoided by means of suitable devices to intercept snow.
- Only suitable for singular installation! Do not use again after disassembly!
- If the equipment is sold in other countries, the instructions for installation and use must be provided in the respective national language!

# INNOTECH® QUADRAT-12

## APPLICATION

As anchorage point for **3 people** (1 person incl. for first-aid purposes) with personal protective equipment according to EN 361 (full body harness) and EN 363 (fall arrest system).

## STANDARDS

INNOTECH QUADRAT-12 has been tested and certified for installation on roofs in accordance with **EN 795 A**.

**The inspection was executed both statically and dynamically on the original substrate.**

## MATERIAL

INNOTECH QUADRAT-12 is made of KTL-coated steel and stainless steel, quality 1.4301

## SIGNS AND MARKINGS

- Type designation:
- Number(s) of the applicable standard(s):
- Name or logo of the manufacturer/reseller:
- Manufacturer's serial number and year of manufacture:
- Signs stating that the instructions in the manual must be followed:

INNOTECH QUADRAT-12  
EN 795:2012 A  
INNOTECH  
xxxx / 20xx



## DIMENSIONS

INNOTECH QUADRAT-12 Ø 16mm

Support heights: 300 mm, 400 mm, 500 mm, special lengths on request

Base plate dimensions: Außenmaß 390 x 400 x 2 mm

## ATTENTION

If the INNOTECH QUADRAT-12 POST is used as end point or corner point for horizontal lifeline systems, then it is indeed suitable for absorbing high arrest forces in the event of a fall, however the basic stability of 16 mm posts Ø is quite low; with posts exceeding 300 mm in height deformations can occur. Consequently the roof insulation must be designed in such a manner that it satisfies these requirements.

## DEVELOPMENT

INNOTECH Arbeitsschutz GmbH      A-4656 Kirchham, Laizing 10  
www.innotech.at

# INNOTECH® QUADRAT-12

## FASTENING ON THE SUBSTRATE

There are several possibilities for installing the anchors on the roof substrate.

The basic prerequisites are a static bearing substructure and compliance with the installation instructions. If in doubt consult a structural engineer.

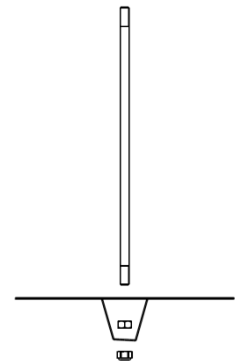
The height of the anchor above the surface of the structure should not exceed 300 mm.

INNOTECH QUADRAT-12 is suitable for corrugated sheeting from 100 mm in height.

Strictly ensure that installation of the INNOTECH QUADRAT-12 anchorage point is executed with the original fastening bolts; only these bolts achieve the required stability on the substrate.

## ASSEMBLY

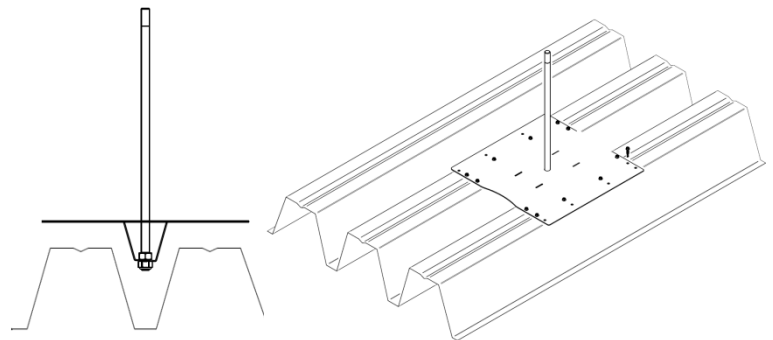
Guide the threaded rod into the 16 mm bore in the base plate and unscrew the M16 nut in the intermediate space of the sheet metal structure, as shown in the Fig. Now tighten the threaded rod with the self-locking nut so tight that it can no longer turn. This means that both nuts are also countered against each other.



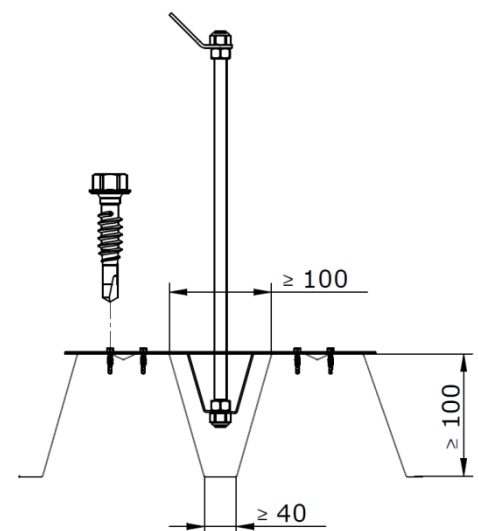
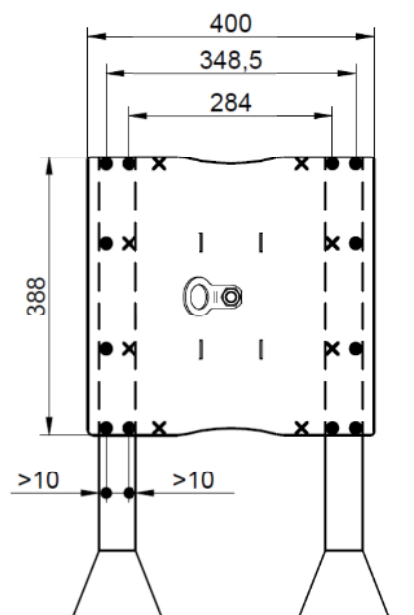
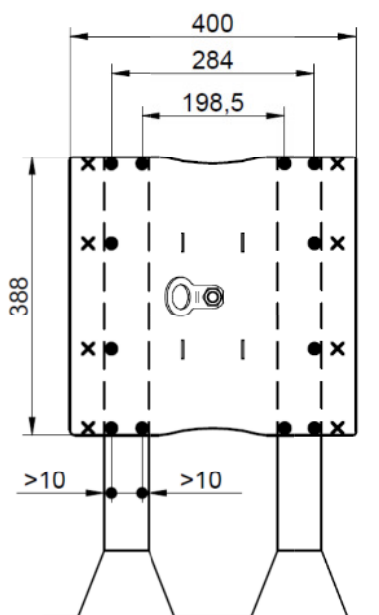
## FASTENING

The fastening must be executed directly on the corrugated carrying shell that is at least 0.75 mm thick, with 12x SL2-6.3 x 28 bore fasteners as shown in the Fig.

Depending on the width of the sheeting 12 bore fasteners must always be fastened on the corrugated sheeting surface. (See Fig.)



X... N.A.



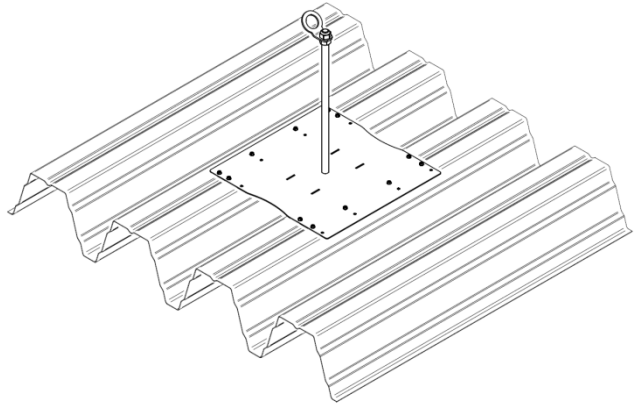
# INNOTECH® QUADRAT-12

## SINGLE ANCHORAGE POINT

The single anchorage point is approved for 3 people in accordance with EN 795 A.

After installation it can rotate in all directions. This prevents looping of the restraint cable.

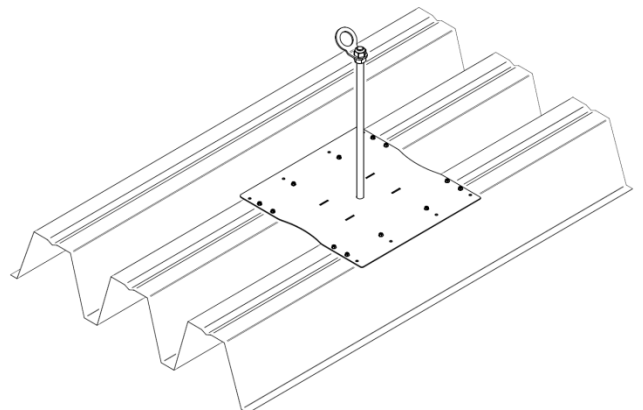
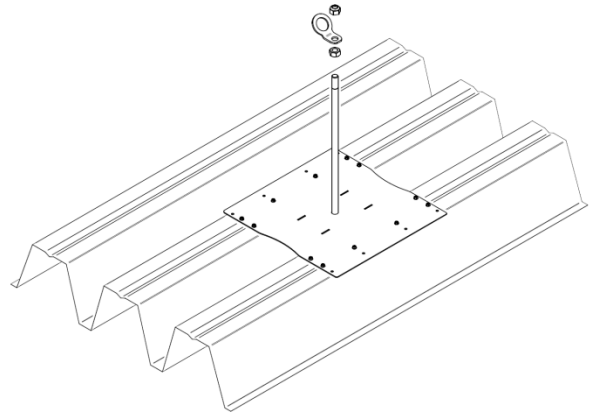
The single anchorage point must always be used in conjunction with a carabiner.



## INSTALLATION - SINGLE ANCHORAGE POINT

- 1) Screw M16 nut onto the thread and tighten.
2. Place eyebolt on and fasten with the M16 lock nut. After fastening loosen the lock nut a quarter turn; the anchorage point will now rotate 360° around its own axis.
3. Check: The lock nut should free approximately 2 thread turns of the M16 threaded rod.

Attention: The single anchorage point can be plastically deformed!



# ACCEPTANCE LOG

**PROJECT:**  
ORDER NUMBER:

<b>CLIENT:</b>	<u>Specialist:</u>	
Company address:		
<b>CONTRACTOR:</b>	<u>Specialist:</u>	
Company address:		
<b>INSTALLATION OF EAP / ANCHORAGE POINTS:</b> (Single anchorage points (EAP) or anchorage points of a horizontal lifeline system in accordance with EN 795:1996 Class C)		
<u>Specialist:</u>		
Company address:		

## FASTENER / PHOTO DOCUMENTATION

<b>PRODUCT:</b> <input type="text"/> units _____ <b>Year of manufacture / serial number:</b> _____ (Type designation EAP / anchorage point)						
<b>INSTALLATION SUBSTRATE:</b> _____ (e.g.: solid concrete quality: C16/20; timber rafter dimensions; for tin roofs: roof manufacturer, profile, material, sheet metal thickness, etc.)						
Date:	Location:	Dowel type: BEF / adhesive? / designation	Setting depth: [mm]	Drill bit Ø: [mm]	Tightening torque:	Photos: (storage location)
					Nm	
					Nm	

The undersigned installation company warrants that the dowels have been properly processed in accordance with the dowel manufacturer's guidelines. (Proper cleaning of bores, compliance with curing times and processing temperature, edge spacing of the dowels, inspection of the substrate, etc.)

### OPTIONAL: when setting up a horizontal lifeline system in accordance with EN 795:1996 Class C

<b>INSTALLATION - HORIZONTAL LIFELINE SYSTEM:</b>	
<u>Specialist:</u>	
Company address:	
<b>DESIGNATION - HORIZONTAL LIFELINE SYSTEM: cable system no.:</b>	

Client accepts the performances of the contractor. The instructions for installation and use, fastener / photo documentations and test sheets have been transferred to the client (building owner) and have been made available to the user. When accessing the roof securing system, you must document the positions of the anchorage devices by means of diagrams (e.g. top view of the roof).

**The expert fitter familiar with the safety system confirms that the installation work has been executed properly, in accordance with the state of the art, and in accordance with the manufacturer's instructions for installation and use. The safety specifications for reliability are confirmed by the installation company.**

**Transfer of:** (e.g: travelling eyebolts, personal protective equipment PPE, fall arrest devices HSG, storage cabinet, etc.)  
 units \_\_\_\_\_  units \_\_\_\_\_  units \_\_\_\_\_  units \_\_\_\_\_

**Comments:** \_\_\_\_\_

Name: \_\_\_\_\_ Client                      Fitter - EAP/ anchorage points                      Fitter - horizontal lifeline system

Date, Signature \_\_\_\_\_



# INSTRUCTIONS FOR THE EXISTING SAFETY SYSTEM



The building owner must affix this notice in a conspicuous location near the access to the system!

This system must be used in accordance with the state of the art and in accordance with the instructions for installation and use.

The storage location for the instructions for installation and use, test logs, etc. is:

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- Overview diagram showing the position of the anchorage devices:

Draw in the areas where there is a break-through hazard (e.g. light domes or / and roof lights)!

The maximum limit values of the anchorage devices are provided in the respective instructions for installation and use or the rating plate of your system.

If there is strain caused by fall, or if in doubt, the anchorage device must be taken out of service immediately and sent to the manufacturer, or to a specialised workshop for inspection and repair.  
The same applies if there is damage to the anchorage equipment.



# TEST LOG I

SINGLE ANCHORAGE POINT (EAP)

**PROJECT:** \_\_\_\_\_



ORDER NUMBER: \_\_\_\_\_

**PRODUCT:**  units \_\_\_\_\_

**Year of manufacture / serial number:** \_\_\_\_\_

(Type designation EAP)

**ANNUAL SYSTEM INSPECTION EXECUTED ON:**

<b>CLIENT:</b>	<u>Specialist:</u>	
Company address:		
<b>CONTRACTOR:</b>	<u>Specialist:</u>	
Company address:		

<b>INSPECTION POINTS:</b> <input checked="" type="checkbox"/> checked and in order!	<b>DEFECTS DETECTED:</b> (Description of defects/ measures)
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**DOCUMENTATION:**

<input type="checkbox"/> Instructions for installation and use	
<input type="checkbox"/> Inspection log / fastener / photo documentation	

**PPE (personal protection equipment against falling):**  
*Inspection in accordance with manufacturer's specifications*

<input type="checkbox"/> Expiration date	
<input type="checkbox"/> Annual inspection performed	
<input type="checkbox"/> Not checked (no authorisation)	

**ROOF SEALING:**

<input type="checkbox"/> No damage	
<input type="checkbox"/> No corrosion	

**VISIBLE PARTS OF THE ANCHORAGE DEVICE**

<input type="checkbox"/> No deformation	
<input type="checkbox"/> The attachment eye can rotate	
<input type="checkbox"/> No corrosion	
<input type="checkbox"/> Threaded joints secured	
<input type="checkbox"/> Tightening torque of the fastening bolts	
<input type="checkbox"/> Firm seat	

*Attention: Strictly ensure that test log II is filled out for horizontal lifeline systems in accordance with EN 795:1996 Class C!*

**Acceptance result:** The lifeline system corresponds to the specifications in the manufacturer's instructions for installation and use and the state of the art. Technical safety reliability is confirmed.

**Comments:** \_\_\_\_\_

Name: \_\_\_\_\_ Client \_\_\_\_\_ Inspection: Contractor: \_\_\_\_\_  
(Expert who is familiar with the safety system)

Date, Signature \_\_\_\_\_

# **INNOTECH<sup>®</sup> QUADRAT-12**

## **SALES AND DEVELOPMENT**

INNOTECH<sup>®</sup> Arbeitsschutz GmbH  
A-4656 Kirchham, Laizing 10  
[www.innotech.at](http://www.innotech.at)

