

# INNOTECH® SANDWICH



## INSTRUCTIONS FOR INSTALLATION AND USE



### ENGLISH

**ACHTUNG:**

Die Montage und die Verwendung der Sicherungseinrichtung 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 biztonsági berendezés felszerelése és használata csak az után megengedett, miután a szerelést végző és a használó 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 užívatelé 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.

**O B S :**

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® SANDWICH



## INSTRUCTIONS FOR INSTALLATION AND USE



### SAFETY INSTRUCTIONS

- INNOTECH SANDWICH-10, -11, and -12 should only be installed by specialised/competent experts familiar with the roof safety system and in compliance with the current state of the art.
- 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 PPE (Personal Protective 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 attachment device INNOTECH SANDWICH.
- A plan must be available that specifies rescue procedures for all possible emergencies.
- Before starting the work, you must 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 ground is suited for fixing the attachment 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.
- 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.
- You should plan, install and use the anchorage point in such a way that no one can fall over the edge if the personal protective equipment is used properly. (See planning documents at [www.innotech-safety.eu](http://www.innotech-safety.eu)).
- 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.

# INNOTECH® SANDWICH

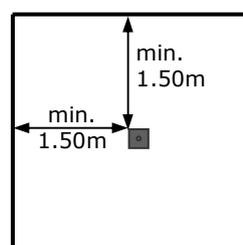


## INSTRUCTIONS FOR INSTALLATION AND USE



### SAFETY INSTRUCTIONS

- Fastening on the INNOTECH SANDWICH always occurs through the eyebolt with a carabiner and must be used with personal protective equipment in accordance with EN 361 (safety harness) and EN 363 (fall arrest system).
- For horizontal use, only those fasteners may be used that are suited for this purpose and have been tested for the respective edges (sharp edges, sheet with trapezoidal corrugations, steel girder, 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 check the entire fall arrest system for obvious defects (e.g. loose screws, deformations, abrasion, corrosion, defective roof sealing, etc.).  
If there are any doubts concerning the safe function of the restraint system, it must be inspected by an expert (written documentation).
- At least once a year, an expert must check the complete safety device including the personal protective equipment used. The inspection by an expert must be documented in the provided test log.
- 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 SANDWICH anchorage point was developed for personal safety and may not be used for other purposes. Never attach undefined loads to the restraint system.
- Do not use safety systems if wind speeds exceed normal parameters.
- Following strong storms, inspect the tin roof (substrate) before continuing to use the safety system.
- Do not make any changes to the enabled anchorage device.
- If used on sloping roofs, roof avalanches (ice, snow) must be avoided by means of suitable devices to intercept snow.
- If you provide the restraint system to external contractors, the instructions for installation and use must be handed over in writing.
- For reasons of statics, you must maintain a margin of at least 1.5 m to the end of the roof deck.



# INNOTECH® SANDWICH

## APPLICATION

Approved as an anchorage point with a flat or slightly inclined roof for **3 people** (including 1 person for first-aid administration) and the following fall protection systems in accordance with EN 363:2008

- Restraint systems
- Workplace positioning systems
- Fall arrest systems
- Rescue systems

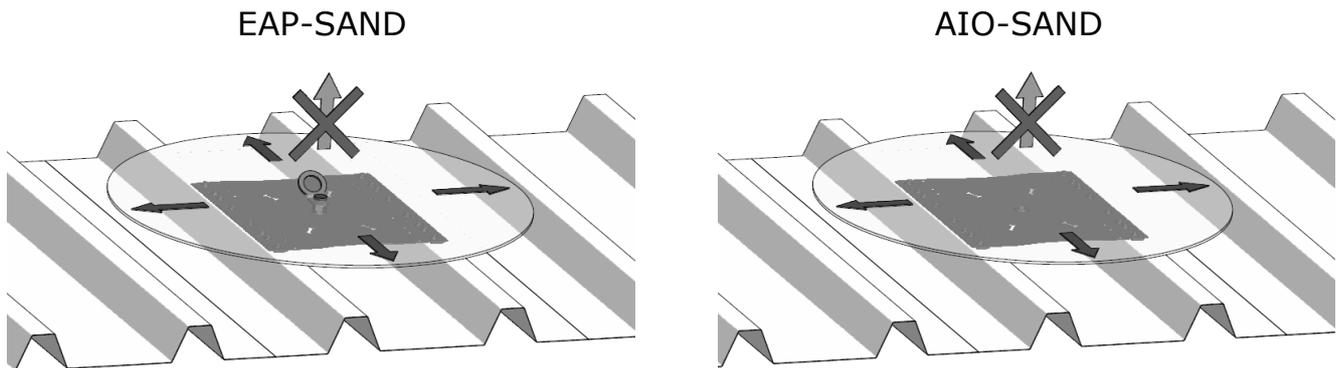
After installation the single anchorage point can be turned in all directions; this prevents the lifeline from looping. Always use the single anchorage point in conjunction with a carabiner. Attention: the single anchorage point can be plastically deformed!

Safe application requires that you observe the corresponding specifications provided by the PPE manufacturers.

## LOAD DIRECTIONS

When installing / using the fall prevention system, pay attention to the approved load directions!

Loads in "X" direction are not permitted!



## STANDARDS

INNOTECH SANDWICH 10, 11, and 12 has been tested and certified for installation on roofs in accordance with **EN 795:2012 Class A2**.

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

INNOTECH SANDWICH is also suitable as corner point and end point for the INNOTECH ALLinONE horizontal lifeline system. The maximum force introduced should not exceed 12 kN. The test was executed with 18 kN.

## MATERIAL

INNOTECH SANDWICH 10, 11 and 12 are made of stainless steel, quality 1.4301

## SIGNS AND MARKINGS

- |   |  |
|---|--|
| - Type designation:   | INNOTECH SANDWICH-10/-11/-12   |
| - Number(s) of the applicable standard(s):                                      | EN 795:2012 Cl. A  |
| - Name or logo of the manufacturer/reseller:                                    | INNOTECH   |
| - Manufacturer's serial number and year of manufacture:                         | xxxx / 20xx  |
| - Signs stating that the instructions specified in the manual must be followed: |  |

## DEVELOPMENT & SALES

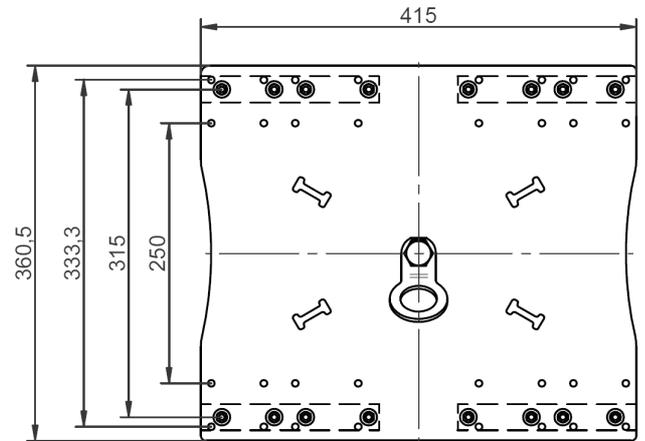
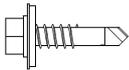
INNOTECH Arbeitsschutz GmbH A-4656 Kirchham, Laizing 10  
www.innotech-safety.eu

# INNOTECH® SANDWICH

## DIMENSIONS

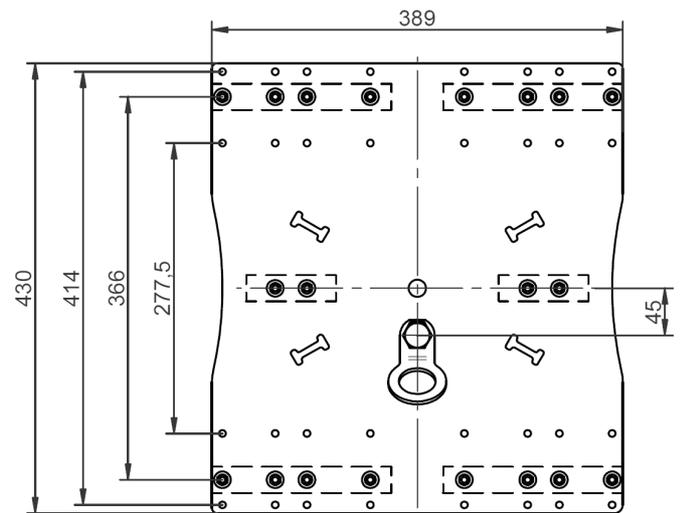
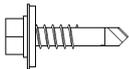
### INNOTECH SANDWICH- 10

Suitable for steel substrate min. 0.6 mm  
 Base plate dimensions 360 x 415 x 2 mm  
 6 hole channels each with 8 bores  
 for 16x bore fasteners



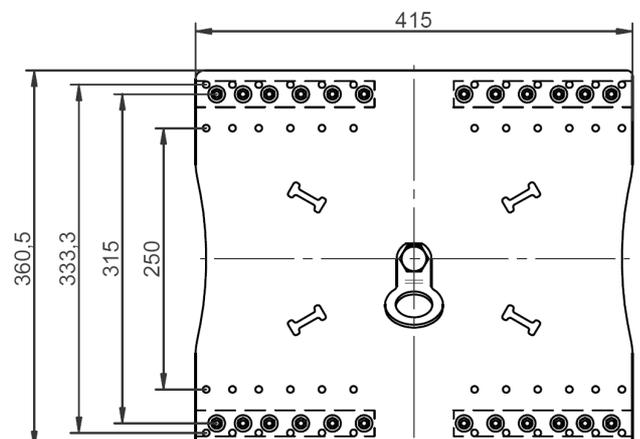
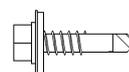
### INNOTECH SANDWICH- 11

Suitable for steel substrate min. 0.6 mm  
 Base plate dimensions 430 x 389 x 2 mm  
 6 hole channels each with 8 bores and  
 1 hole channel each with 4 bores  
 for 20 x bore fasteners



### INNOTECH SANDWICH- 12

Suitable for aluminium substrate min. 0.6 mm (EAP SAND)  
 Suitable for aluminium substrate min. 0.8 mm (AIO SAND)  
 Base plate dimensions 360 x 415 x 2 mm  
 6 hole channels each with 12 bores  
 for 24x bore fasteners



# INNOTECH® SANDWICH

## FASTENING ON THE SUBSTRATE

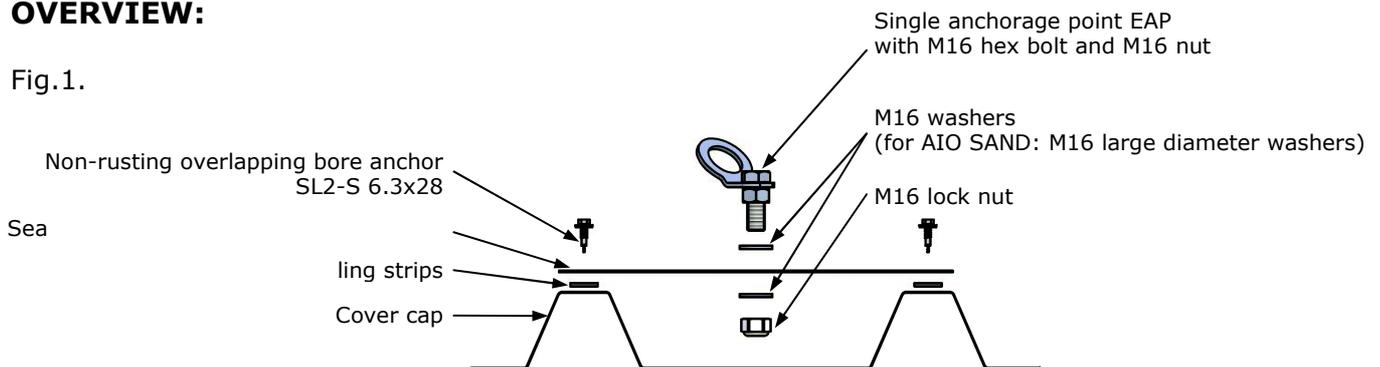
INNOTECH-SANDWICH has been tested in accordance with EN 795 Class A and **may only be used as anchorage point with a flat roof or slightly inclined roof.**

There are several possibilities for mounting the posts on the roof substrate.

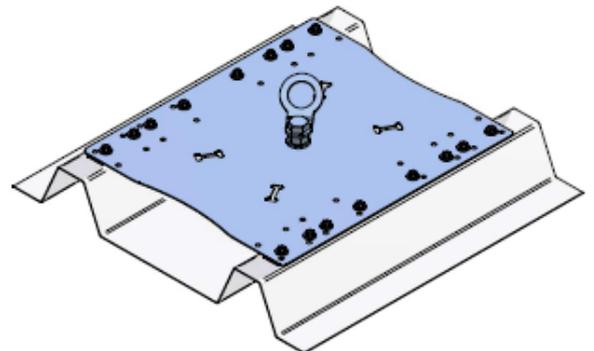
The basic prerequisite is a static load-bearing subconstruction and the use of the original fastener. If in doubt consult a structural engineer.

## OVERVIEW:

Fig.1.



Strictly ensure that installation of the INNOTECH SANDWICH-10-11-12 anchorage point is executed with the original fastening bolts; only these bolts achieve the required stability on the substrate.



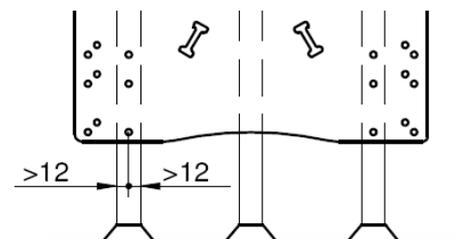
## INSTALLATION - FASTENING:

### Sequence:

- a) **Bond the supplied sealing strips on each hole channel** of the anchorage plate that is provided for fastening on the top side of the corrugated surface of the metal roof cover sheet (see Fig.).

The selected factory-drilled hole channel must always be in the middle, or in one third of the top side of the corrugated surface of the cover shell.

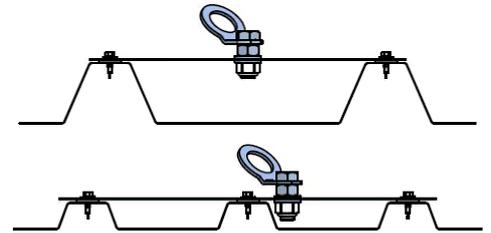
**ATTENTION:** If the hole channels do not match the corrugated sheeting, do not drill any additional holes. Only use the anchorage plate that fits your metal roof profile. These plates are available from your INNOTECH dealer.



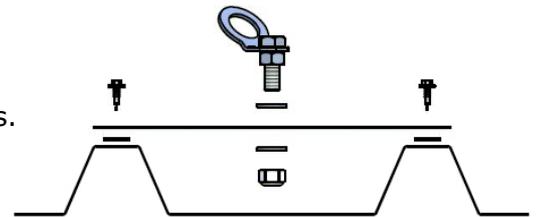
# INNOTECH® SANDWICH

## INSTALLATION - FASTENING:

b) For **installing the single anchorage point** there are two fastening bores available in the main sheet for **SANDWICH 11**. Select the position depending on the cover shell structure (see Fig.).



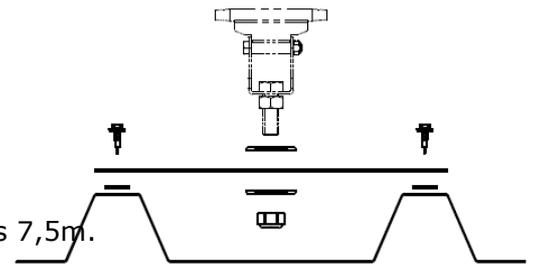
c) The **single anchorage point is mounted** on the main sheet as shown in Fig. 1. Use counter nut, washers, and lock nut on the underside of the sheet metal to adjust the anchorage point in such a manner that after mounting it rotates around its own axis. Check: Die after mounting, the lock nut should free at least 2 thread turns of the M16 bolt.



### Applies only for specialised companies that have been trained by INNOTECH ALLinONE:

When installing the ALLinONE lifeline system, the individual components EB-10/-13/-14/-15, SZH-10 or EDLE-10/-11/-14/-17/-18 can be mounted instead of the single anchorage point.

The maximum spacing of the intermediate cable brackets is 7,5m.



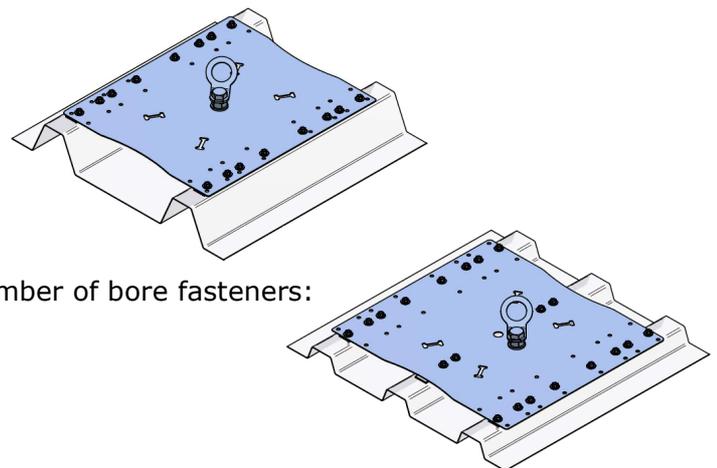
d) After bonding the sealing tape and bolting on the anchorage point **the main sheet must be properly screwed to the top side of the corrugated surface of the cover shell with the included original self-tapping screws.**

(Make sure to strictly adhere to the specified number of bore fasteners:

SANDWICH-10: 16x bore fasteners

SANDWICH-11: 16x or 20x bore fasteners

SANDWICH-12: 24x bore fasteners)



To ensure that the INNOTECH-SANDWICH adheres as strongly to the substrate as possible, we recommend replacing 2 bore fasteners with the original fastening bolts provided by the profile roof manufacturer!







## 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, inspection 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!)

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.

# INSPECTION LOG I

<b>PROJECT:</b>
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<b>PRODUCT:</b> <input type="text"/> units _____	<b>MANUFACTURING NO.:</b>
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**ANNUAL SYSTEM INSPECTION EXECUTED ON:**

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

<input type="checkbox"/> Instructions for installation and use	
<input type="checkbox"/> Acceptance log	
<input type="checkbox"/> Dowel log	
<input type="checkbox"/> 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 authorization)	

**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"/> Firm seat	
<input type="checkbox"/> .....	

**ROOF SEALING:**

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

**HORIZONTAL LIFELINE SYSTEM:**

Attention:  
Strictly ensure that the supplemental TEST LOG II (copy template in the installation instructions / user copy) is filled out!

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

Expert who is familiar with the safety system: NAME: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

# INNOTECH<sup>®</sup> SANDWICH

## DEVELOPMENT & SALES

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

