

# AIO-ENDS-50/-51



## Instruction manual

**DE – ACHTUNG:** Die Verwendung des INNOTECH-Produkts ist erst zulässig, nachdem die Gebrauchsanleitung in der jeweiligen Landessprache vollständig gelesen und verstanden wurde.

DE

**EN – ATTENTION:** Use of the INNOTECH product is only permitted after the instruction manual has been read and fully understood in the respective language.

EN

**IT – ATTENZIONE:** L'utilizzo del prodotto INNOTECH è permesso solo previa lettura e comprensione dell'intero manuale di istruzioni nella lingua del relativo paese di utilizzo.

IT

**FR – ATTENTION :** L'utilisation du produit INNOTECH n'est autorisée qu'après avoir entièrement lu et compris la notice d'utilisation dans la langue du pays concerné.

FR

**NL – ATTENTIE:** Dit INNOTECH-product mag pas gebruikt worden nadat u de gebruikshandleiding in de taal van het betreffende land gelezen en begrepen hebt.

NL

**ES – ATENCIÓN:** Se autorizará el uso de los productos INNOTECH una vez que se hayan leído y entendido las instrucciones de uso en el idioma del país.

ES

**PT – ATENÇÃO:** O uso do produto INNOTECH apenas é permitido depois de ter lido e compreendido na totalidade as instruções de uso na respetiva língua nacional.

PT

**DK – GIV AGT:** Du må først bruge et produkt fra Innotech, efter du har læst og forstået brugsvejledningen i fuldt omfang i dit lands sprog.

DK

**SV – OBS :** Denna INNOTECH-produkt får inte användas förrän bruksanvisningen på respektive lands språk har lästs igenom och förståtts.

SV

**CZ – POZOR:** Práce s výrobkem INNOTECH je povolena teprve po kompletním přečtení a porozumění návodu k použití v jazyku daného státu.

CZ

**PL – UWAGA:** Produkty firmy INNOTECH mogą być używane dopiero po dokładnym zapoznaniu się z całą instrukcją obsługi w ojczystym języku.

PL

**SL – POZOR:** Uporaba izdelka INNOTECH je dovoljena šele po tem, ko ste navodila prebrali v celoti v ustrezнем jeziku svoje dežele in jih tudi razumeli.

SL

**SK – POZOR:** Produkt INNOTECH môžete používať až po prečítaní a porozumení celého návodu na použitie pre príslušnú krajinu.

SK

**HU – FIGYELEM:** Az INNOTECH termékek használata csak azt követően engedélyezett, hogy saját nyelvén elolvasta és megértette a teljes használati utasítást.

HU

**TR – DİKKAT:** INNOTECH ürününün kullanımına ancak ilgili ülkenin dilinde sunulmuş olan kullanım kılavuzunun tamamen okunmasından ve anlaşılmamasından sonra izin verilir.

TR

**ZH – 注意：**只有在仔细阅读并完全理解了当地语言的使用说明后，才能使用 INNOTECH 公司的产品。

ZH

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## Warnings / Danger notices



For an IMMEDIATE danger, which could lead to severe injury or death.



For a POTENTIALLY dangerous situation, which could lead to severe injury or death.



For a POTENTIALLY dangerous situation, which could lead to injuries and property damage.



Wear protective gloves!



Wear protective glasses!



**Additional information/notice**



**correct**



**incorrect**



Follow the manufacturer's instructions/the respective user manuals.

# 3

# SAFETY INSTRUCTIONS

The following safety instructions and the latest technological standards must be taken into account.

## 3.1 GENERAL

- The safety system may only be assembled according to the latest technological standards and by an appropriately trained, competent professional who is familiar with the safety system.
- The protective equipment may only be installed or used used by persons who:
  - are trained in the use of "Personal Protective Equipment"(PPE),
  - are physically and psychologically fit(health restrictions such as heart/ circulatory problems, medication, alcohol consumption, etc. compromise the user's safety).
  - are familiar with the locally applicable safety regulations.
- All applicable accident prevention rules(e.g. those for work on roofs) must be followed during installation and use of the safety system.
- An emergency plan must be available which includes rescue measures for all possible emergencies.
- Before works begin, measures must be taken to ensure that no objects can fall down from the workspace. The area under the workspace (sidewalk, etc.) must be kept clear.
- The fall prevention system should be planned, installed and used in such a way that proper use of the personal protective equipment(PPE) makes a fall over the edge impossible. (See planning documents at [www.innotech.at](http://www.innotech.at)).
- The fall prevention system is subject to maximum load limits. These can be found on the type plate of the fall prevention system and may not be exceeded.
- The type plate of the fall prevention system is to be applied in a location which is easily visible for the user.
- The positions of the anchor points are to be visibly documented (e.g. with a sketch of the rooftop) at the access point to the roof safety system.
- After being subjected to the stress of a fall, the entire safety system is to be taken out of operation and inspected by a qualified professional (component parts, fastenings to the substructure, etc.).
- The safety system must not be altered in any way.
- If access to the safety system is granted to external contractors, their familiarity with this user manual is to be confirmed in writing.
- Should the equipment be sold to a customer abroad, the user manual is to be provided in the appropriate local language.
- Local lightning protection regulations are to be observed.



Should any confusion arise during installation, the manufacturer must be contacted.

# 3

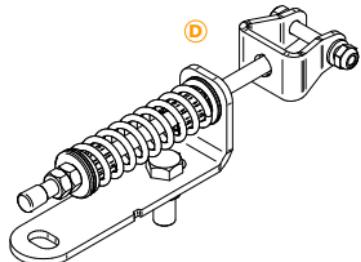
# SAFETY INSTRUCTIONS

## 3.2 FOR FITTERS: FOR SAFE INSTALLATION

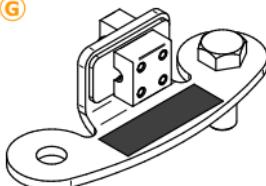
- All stainless steel screws are to be treated with an appropriate lubricant before installation (included: Weicon AntiSeize ASW 10000 or equivalent).
- Stainless steel may not come into contact with sanding dust or steel tools, as this can lead to corrosion.
- The fitters must ensure that the substructure is appropriate for the fastening of the anchoring materials. In case of doubt, consult a structural engineer.
- The roof covering must be sealed according to the appropriate regulations.
- In areas with significant snowfall, the fall prevention system is to be installed near the roof ridge.
- Proper fastening of the safety system must be documented with fastening reports and photos of the respective circumstances of installation.

## 3.3 FOR USERS: FOR SAFE USE

- To ensure safe entry/ascent to the fall prevention system, all necessary work safety regulations must be followed.
- Connection to the fall protection system is established with a stainless steel karabiner as per EN 362 along with personal protective Equipment as per EN 361 (safety harness) and EN 363 (fall arrester).
- If the cable length has been installed as a restraint system: when using the cable length, a cable shortener must be used to set the connecting element in such a way that a fall is impossible.
- The minimum free space necessary under the edge is calculated as follows: Deformation of the anchor device in case of stress + manufacturer's specification of the personal protective equipment used, including deflection of the cable + body height + 1 m safety margin.
- For horizontal use, only such connecting elements can be used which are designed for this purpose and tested for the respective edge type (sharp edges, trapezoidal sheet, steel girders, concrete, etc.).
- Proper use of the individual components, including the "Personal Protective Equipment" must be ensured, since the effectiveness of the fall prevention system is otherwise NOT guaranteed.
- Do NOT use fall arrest systems if wind speeds exceed normal parameters.
- After heavy storms, the metal roof system (substructure) is to be inspected before continued use of the fall prevention system.
- On slanted roofs, the proper snow-catching features must be added to prevent ice or snow from sliding from the roof surface.
- The fall protection system must NOT be used by children or pregnant women.

**A****C****B****D****E****A) Instruction manual****B) Lubricant:** Weicon AntiSeize ASW 10000**C) Protective cap****D) End fastener incl. spring loader:** stainless steel AISI 304**E) Clamp set:** aluminium

#### 4.1 OPTIONAL

**F) Installation sheet****G) End fastener AIO-ENDS-51:** stainless steel AISI 304**H) Protective cap****F****G****H**

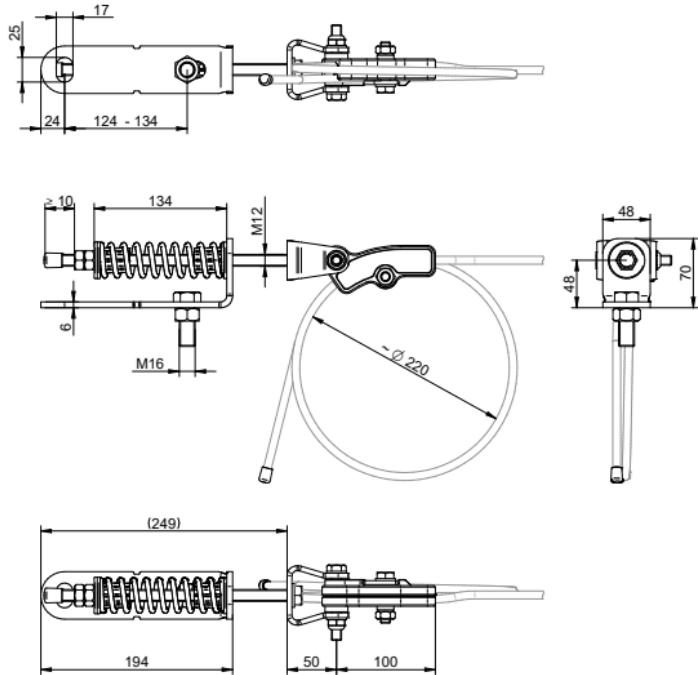
The warranty period for manufacturing defects on all components (under normal conditions of use) is 2 years from the date of purchase. The term is shortened if they are used in corrosive atmospheres.

If there is a strain (fall, weight of snow, etc.) the warranty claim is void for those components that have been designed to absorb energy or that may have been deformed.



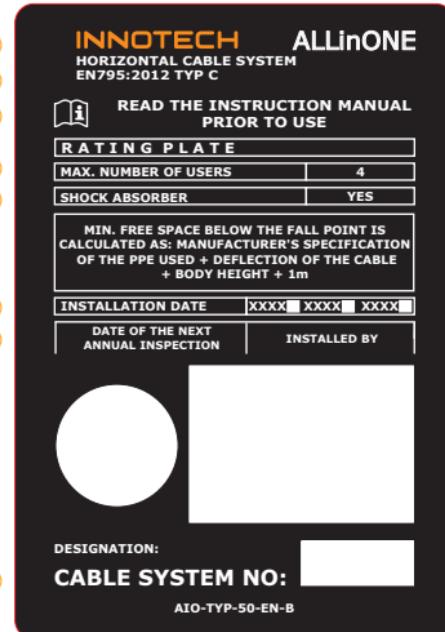
**For system installation and for components planned and installed under the responsibility of specialised professional installation companies, INNOTECH neither assumes responsibility nor is it bound by warranty in the case of improper installation.**

[mm]



## 7.1 AIO-ENDS-50/-51 TYPE PLATE EN 795:2012 TYP C

- A) Name or Logo of the manufacturer/seller:** INNOTECH  
**B) Type designation:** ALLinONE  
**C) Sign that the instruction manual must be followed:**   
**D) Maximum number of people who can be secured:** 4 (including 1 person for first aid administration)  
**E) Number of the applicable norm:** EN 795:2012 TYP C  
**F) Designation:** Cable type nr:  
**G) Shock absorber:** YES  
**H) Installation date:** Year of installation:   
**I) Date of the next annual inspection:** Date of the next annual inspection  
**J) Name & address of the fitting company:** Installed by

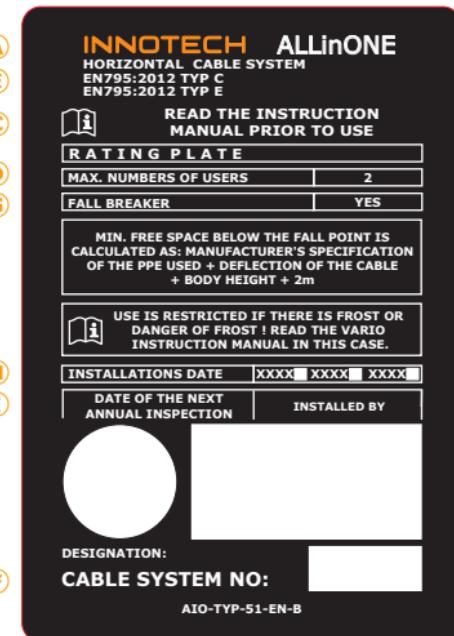


7

## SIGNS AND MARKINGS

7.2 AIO-ENDS-50/-51 TYPE PLATE EN 795:2012 TYP C AND E

- |  |   |
|--|---|
| A) Name or Logo of the manufacturer/seller:              | INNOTECH  |
| B) Type designation:                                     | ALLinONE  |
| C) Sign that the instruction manual<br>must be followed: |  |
| D) Maximum number of people who can be secured:          | 2 (including 1 person for<br>first aid administration)                            |
| E) Number of the applicable norm:                        | EN 795:2012 TYP C   |
| F) Designation:  | EN 795:2012 TYP E   |
| G) Shock absorber:                                       | Cable type nr:  |
| H) Installation date:                                    | YES   |
| I) Date of the next annual inspection:                   | Year of installation: <input checked="" type="checkbox"/>                         |
| J) Name & address of the fitting company:                | Date of the next<br>annual inspection<br>Installed by                             |



## 7.3 AIO-ENDS-50/-51 TYPE PLATE DIBT

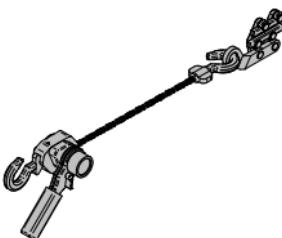
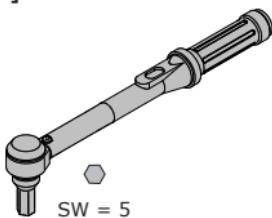
- A) Name or Logo of the manufacturer/seller:** INNOTECH  
**B) Type designation:** ALLinONE  
**C) Sign that the instruction manual must be followed:**   
**D) Maximum number of people who can be secured:** 3 (including 1 person for first aid administration)  
**E) Designation:** Cable type nr:  
**F) Shock absorber:** YES  
**G) Installation date:** Year of installation:   
**H) Date of the next annual inspection:** Date of the next annual inspection  
**I) Name & address of the fitting company:** Installed by  
**J) DIBT-certified:** Ü-sign



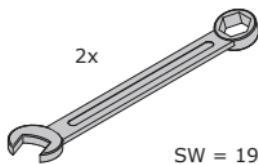
# 8

# INSTALLATION TOOLS

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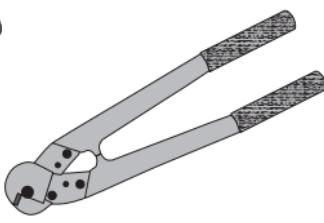
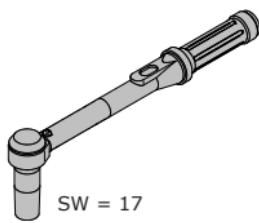


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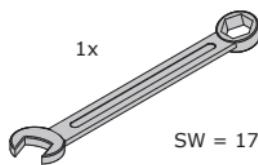


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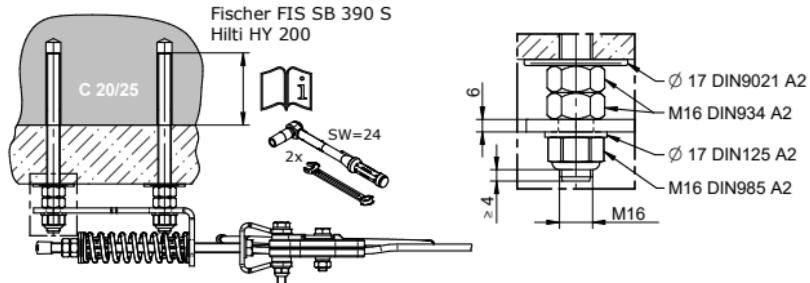
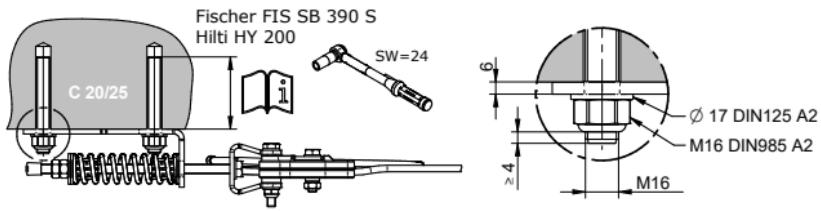
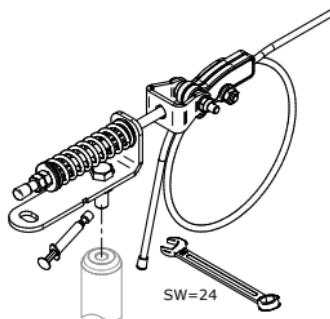
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## 9.1 FASTENING

[mm]

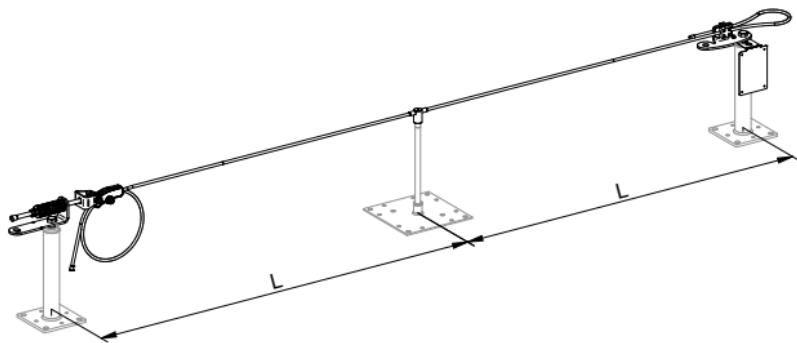


## 9.2 FASTENING GAP

Post systems: **L = max. 15 m**

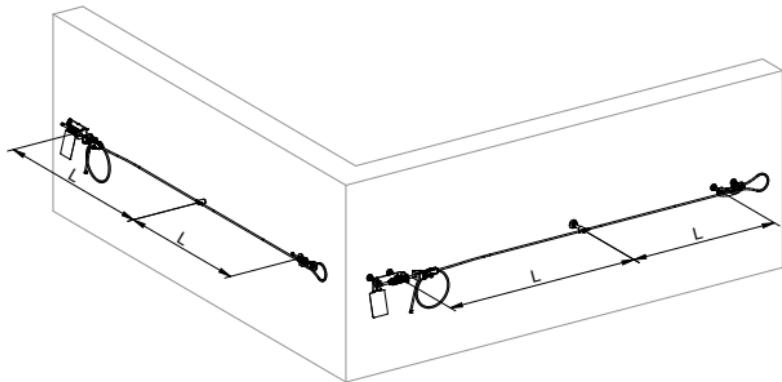
max. cable deviation = 3 m (STA-10-600)

EN



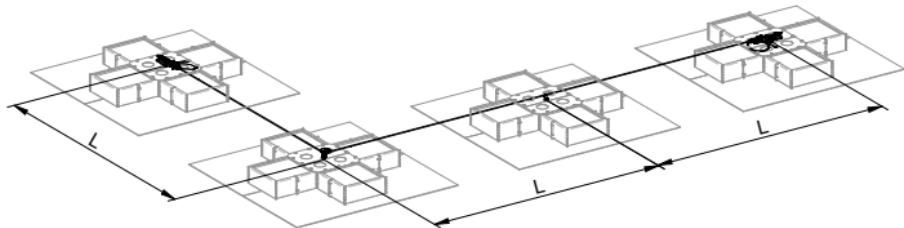
Façade systems: **L = max. 7,5 m** (Recommendation)

max. cable deviation = 1,2 m



Self-supporting systems: **L = max. 10 m**

max. cable deviation = 3,5 m (If the VARIO shifts)



Follow the respective instruction manuals.



Calculation bases/load tables - [www.innotech.at](http://www.innotech.at)

# 10

# INSTALLATION AIO-ENDS-50



## DANGER OF DEATH if NOT installed properly.

- INNOTECH "AIO-ENDS-50" must be installed correctly according to the instruction manual.
- Follow the INNOTECH "AIO-ENDS-50" instruction manual.



## RISK OF INJURY from sharp edges on components.

- Wear protective gloves for installation works.



## RISK OF EYE INJURY from dust/splinters/liquids.

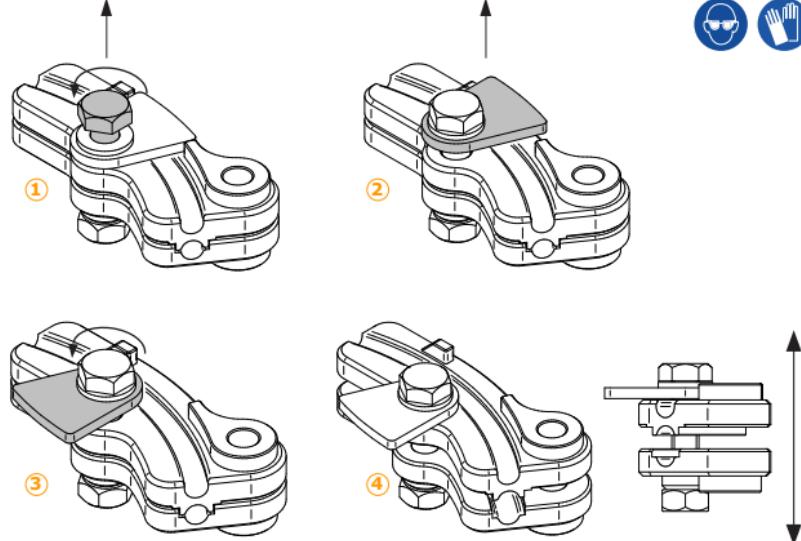
- Wear eye protection/protective glasses for installation works.



## 10.1

### INNOTECH "AIO-ENDS-50"

1.



# 10 INSTALLATION AIO-ENDS-50

2.

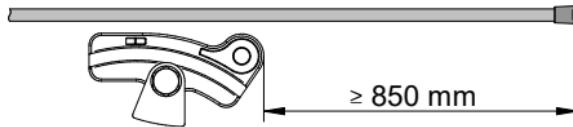


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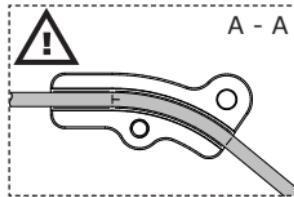
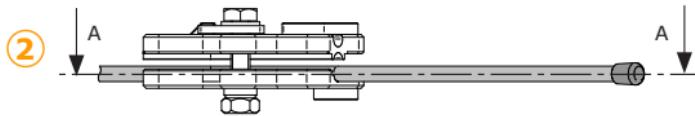


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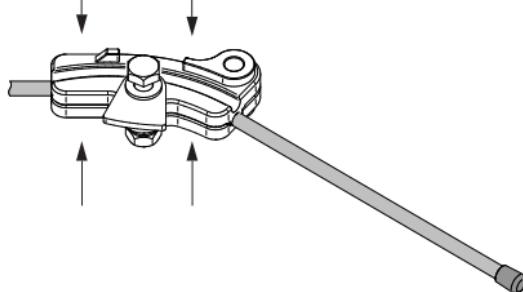
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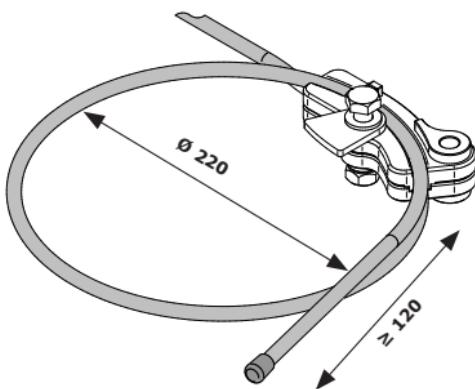
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# 10 INSTALLATION AIO-ENDS-50

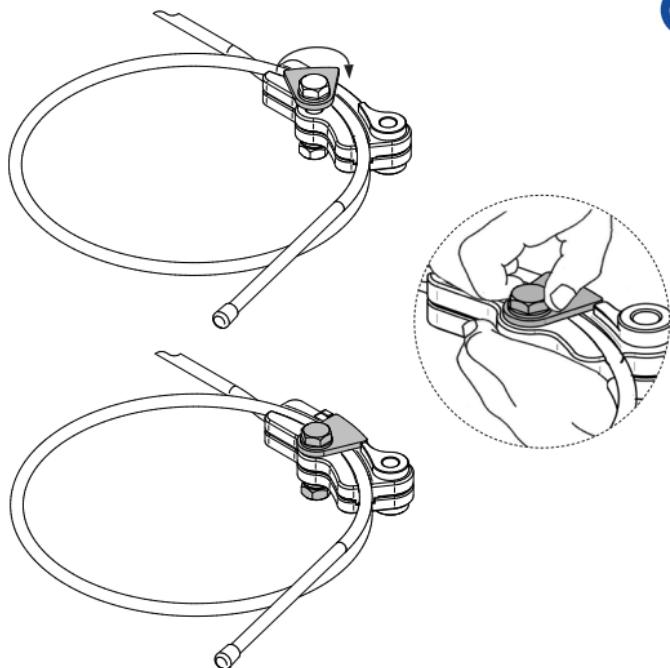
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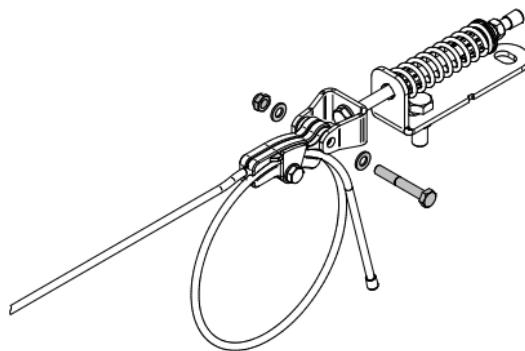


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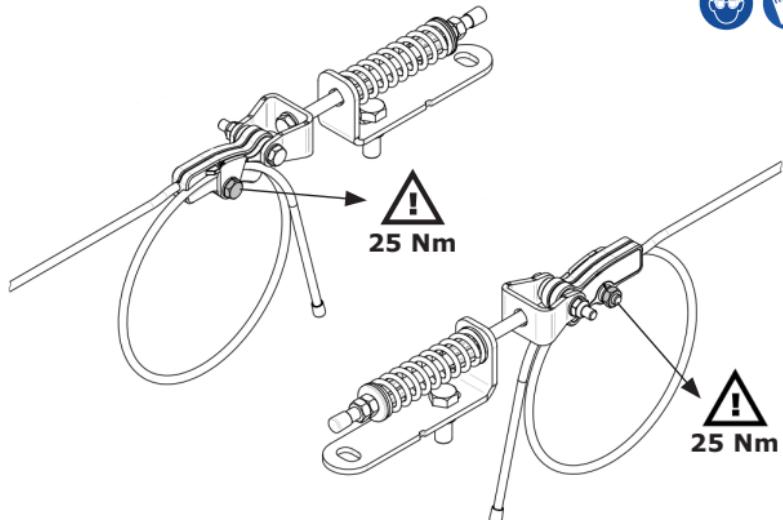


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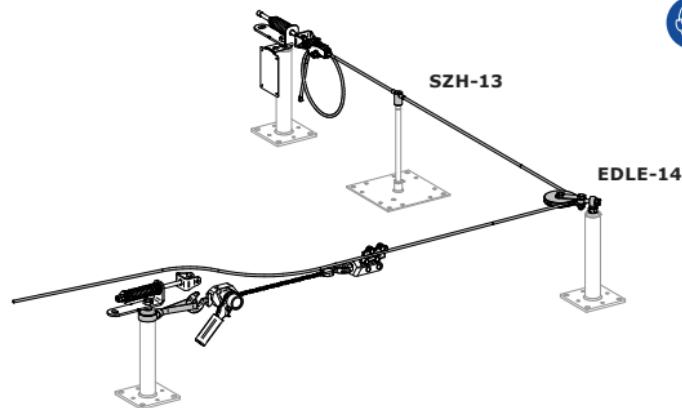
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-  SW = 17



## 10.2

## PRELOAD MONTAGE ENDS-50

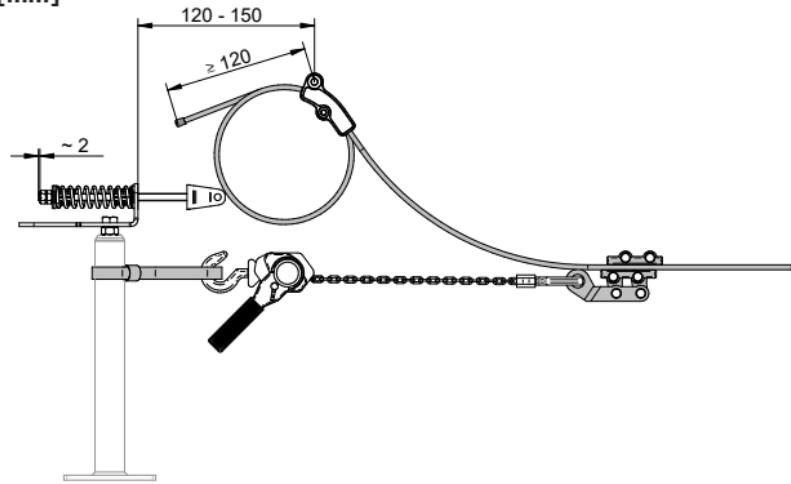
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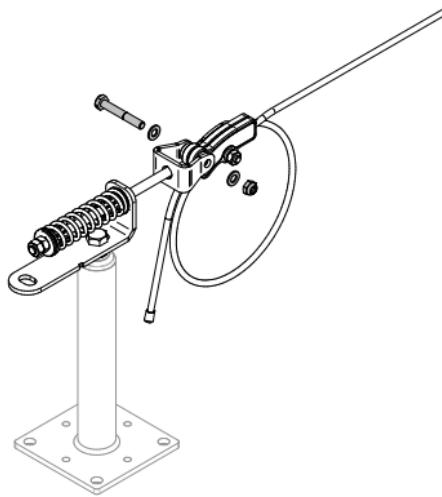
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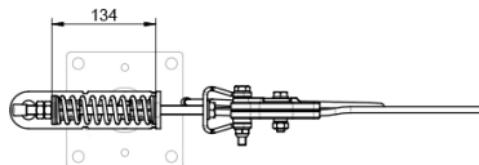
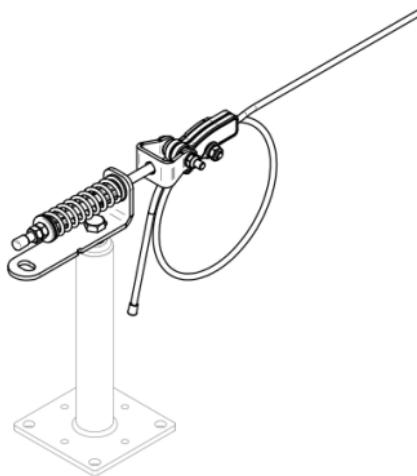


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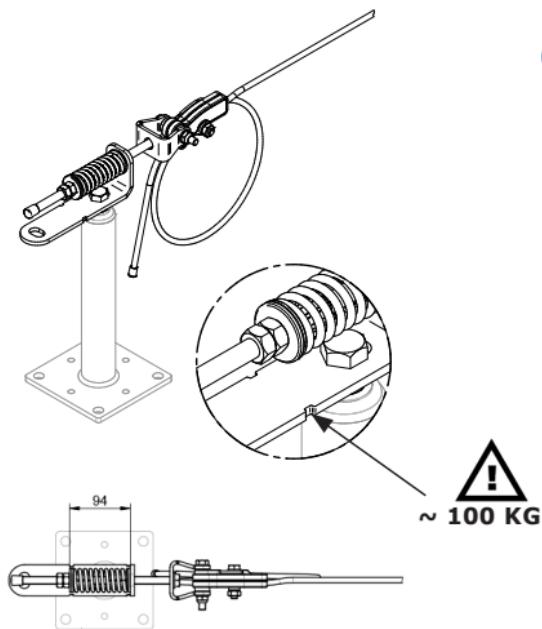
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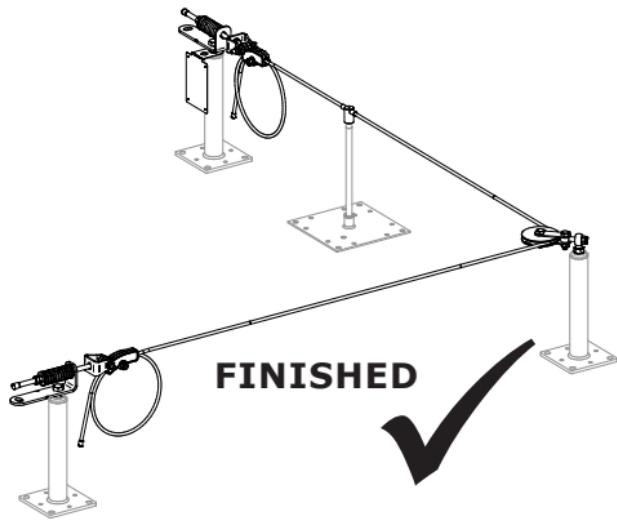
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# 11

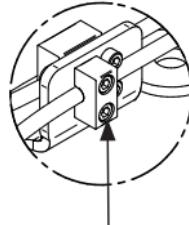
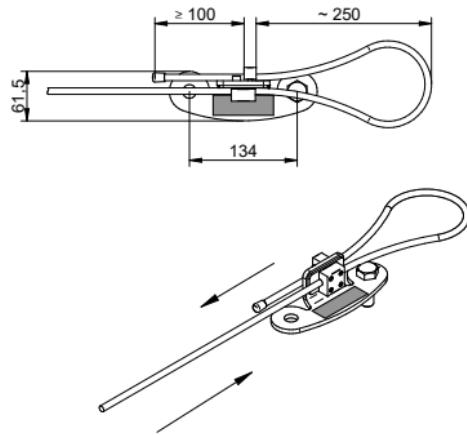
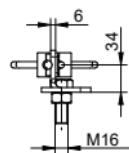
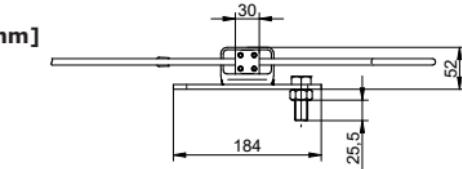
# INSTALLATION AIO-ENDS-51

## 11.1

## INSTALLATION ENDS-51

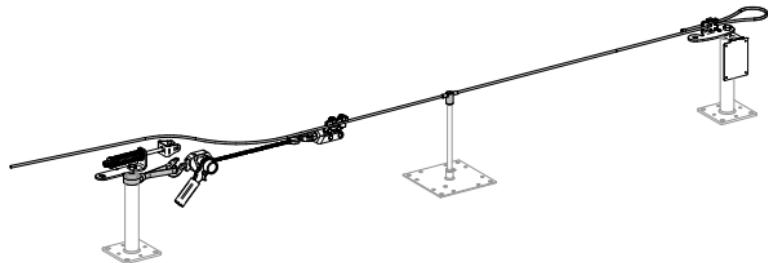
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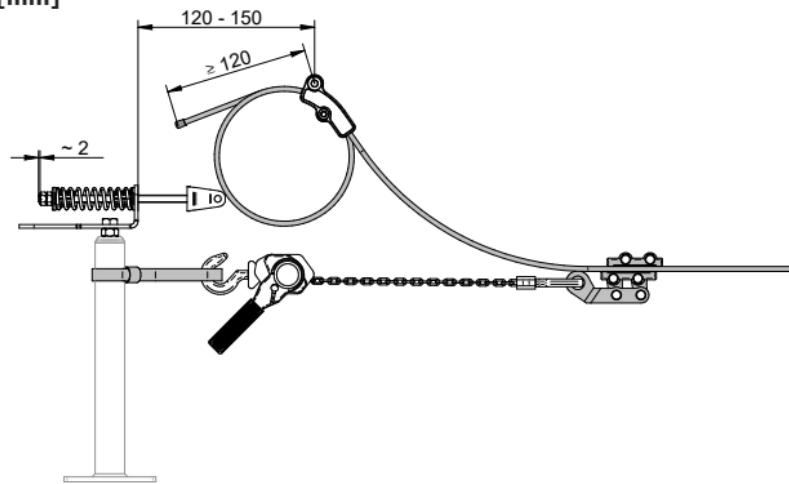
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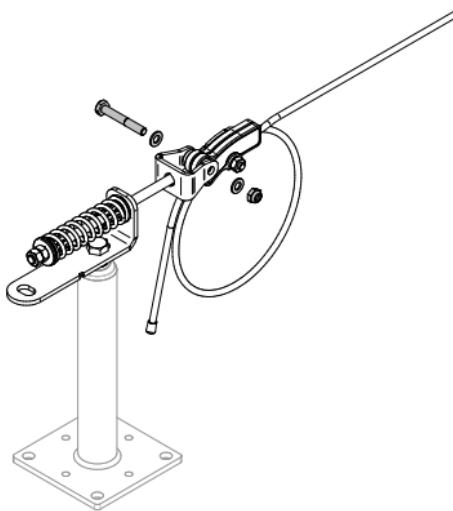
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EN

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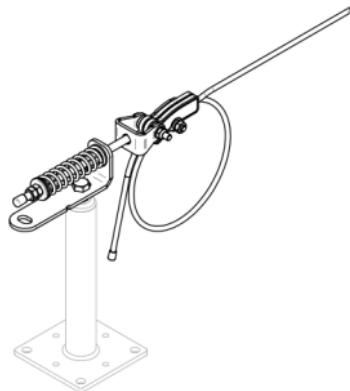
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# 11

# INSTALLATION AIO-ENDS-51

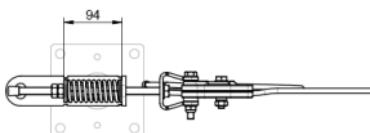
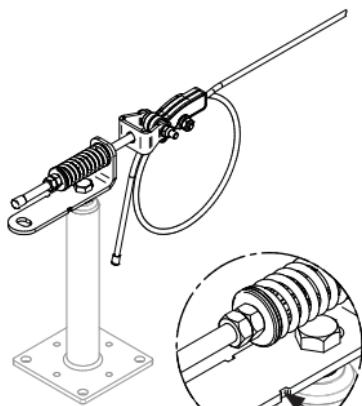
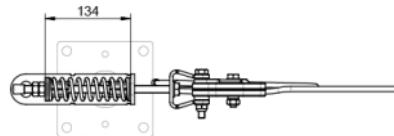
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# 11

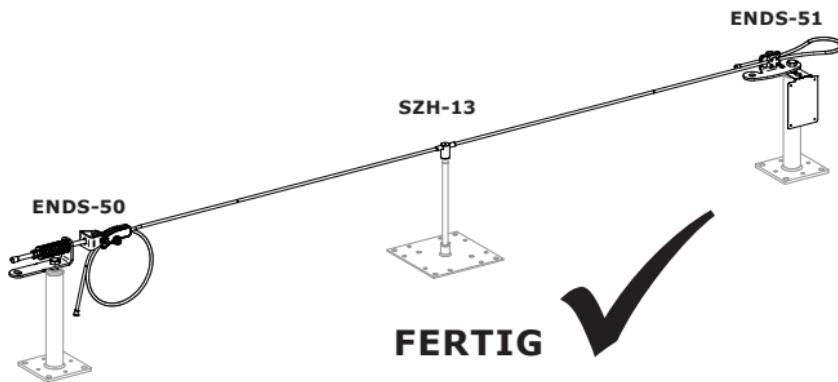
# INSTALLATION AIO-ENDS-51

## 11.2

## INSTALLATION AIO-ENDS-50 + AIO-ENDS-51



EN



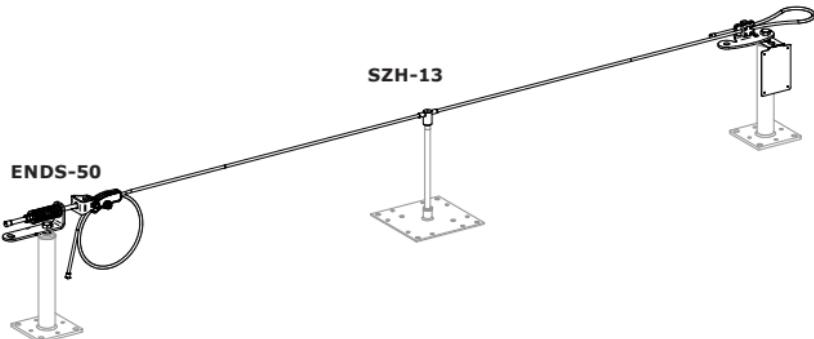
# 12

# SYSTEM OVERVIEW

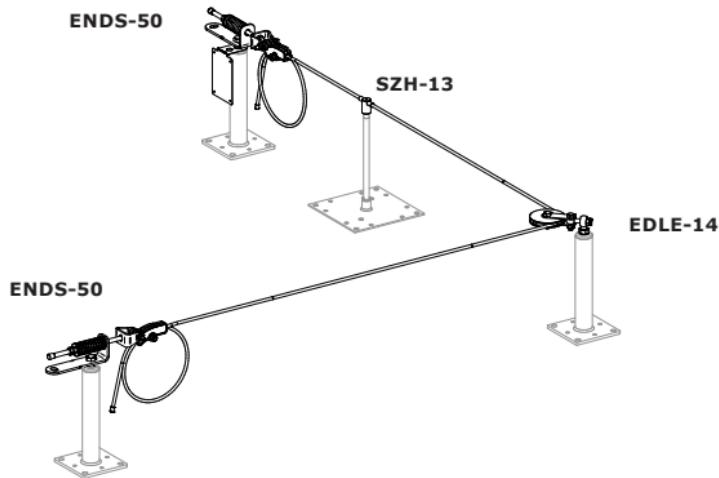
## 12.1

## EXAMPLE APPLICATION

ENDS-51



For a straight lifeline system, use AIO-ENDS-50 + AIO-ENDS-51.



**For a lifeline system with a corner formation, use 2x AIO-ENDS-50.**

Do NOT dispose of the fall protection system in the house waste. Following national requirements, gather the used parts and dispose of them in an environmentally responsible fashion.

## ACCEPTANCE REPORT NR. \_\_\_\_\_ (PART 1/2)

HORIZONTAL LIFELINE SYSTEM AS PER EN 795 TYP C

CONTRACT NUMBER:

## PROJECT:

**CUSTOMER:** Specialist: 

Company address:

**CONTRACTOR:** Specialist: 

Company address:

**INSTALLATION: HORIZONTAL LIFELINE SYSTEM** as per EN 795 TYP C**DESIGNATION:** Cable type nr.: \_\_\_\_\_ 

Specialist:

Company address:

**INSTALLATION: Fastening points** of the horizontal lifeline systemSpecialist: 

Company address:

## DOCUMENTATION OF FASTENINGS/PHOTO-DOCUMENTATION

**PRODUCT:**  Pcs. \_\_\_\_\_ Year /Serial nr.: \_\_\_\_\_  
(Type designation of fastening point)**INSTALLATION SUBSTRUCTURE:**

(e.g solid concrete grade: C20/25; wood, rafter dimensions; for sheet roofs: roof manufacturer, profile, material, sheet thickness, etc.)

Date:	Location:	Anchor type: Fastening/ adhesive type	Seat depth: [mm]	Drill Ø: [mm]	Tightening torque:	Photos: (Save directory)
			mm	mm	Nm	

VARYING FASTENINGS /FASTENING POINTS (TYPES, INSTALLATION  
SUBSTRUCTURES, SERIAL NUMBERS, ETC. MUST BE LISTED SEPARATELY!)**PRODUCT:**  Pcs. \_\_\_\_\_ Year/Serial nr.: \_\_\_\_\_  
(Type designation of fastening point)**INSTALLATION SUBSTRUCTURE:**

(e.g solid concrete grade: C20/25; wood, rafter dimensions; for sheet roofs: roof manufacturer, profile, material, sheet thickness, etc.)

Date:	Location:	Anchor type: Fastening/ adhesive type	Seat depth: [mm]	Drill Ø: [mm]	Tightening torque:	Photos: (Save directory)
			mm	mm	Nm	

## ACCEPTANCE REPORT NR. \_\_\_\_\_ (PART 2/2)

HORIZONTAL LIFELINE SYSTEM AS PER EN 795 TYP C

VARYING FASTENINGS / FASTENING POINTS (TYPES, INSTALLATION  
SUBSTRUCTURES, SERIAL NUMBERS, ETC.) MUST BE LISTED SEPARATELY!

**PRODUCT:**  Pcs. \_\_\_\_\_ Year/Serial nr.: \_\_\_\_\_  
 (Type designation of fastening point)

**INSTALLATION SUBSTRUCTURE:**

(e.g solid concrete grade: C20/25; wood, rafter dimensions; for sheet roofs: roof manufacturer, profile, material, sheet thickness, etc.)

Date:	Location:	Anchor type: Fastening/ adhesive type	Seat depth: [mm]	Drill Ø: [mm]	Tightening torque:	Photos: (Save directory)
			mm	mm	Nm	

The undersigned installation company ensures the correctness of their work (edge spacing, inspection of the substructure, proper cleaning of drill holes, observation of hardening times, working temperature and screw manufacturer guidelines, etc.). The customer accepts the services of the contractor. The instruction manuals, fastening documentations/ photo-documentations, and inspection reports were given to the customer (building owner) and are to be made available to the user. At the point of access to the fall prevention system, the positions of the anchor points are to be documented by the building owner by means of plans (e.g. sketches of the rooftop).

**The contractor, a qualified professional who is familiar with the fall prevention system, confirms that the installation was performed correctly, up to the latest technological standards and according to the manufacturer's instruction manual. The reliability and safety is confirmed by the contracting company.**

**Delivery of:** (e.g. cable sliders, personal protective equipment (PPE), fall arrester (HSG), storage cabinet, etc.)

Pcs. \_\_\_\_\_  Pcs. \_\_\_\_\_  Pcs. \_\_\_\_\_  Pcs. \_\_\_\_\_

Incorporated into existing lightning protection system?  Yes

No

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

Name: \_\_\_\_\_  
Customer

Fitter of fastening points

Date, company seal, signature

Date, company seal, signature

Fitter of horizontal lifeline system

Date, company seal, signature

**INFORMATION ON THE FALL PREVENTION SYSTEM**

The building owner is to make this notice visible at the system access point!

Use of the system must be up to technological standards  
and the instruction manuals.

Instruction manuals, inspection reports, etc. are kept in:

Overview of the area with the position of anchor point:

**Areas where falling through could occur (e.g. skylights and/or strip lights) must be marked!**

The maximum load capacities of the anchor points are stated in the respective instruction manuals or the type plate of the fall prevention system.

If subjected to the stress of a fall or in case of doubt, the anchor point is to be removed from use immediately and sent to the manufacturer or a qualified repair facility for inspection and repair.  
This also applies to damages to the fastening components.

## INSPECTION REPORT NR. \_\_\_\_\_ (Part 1/2)

HORIZONTAL LIFELINE SYSTEM AS PER EN 795 TYP C

CONTRACT NUMBER: \_\_\_\_\_

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

PRODUCT: Horizontal lifeline system Cable type nr. \_\_\_\_\_

ANNUAL SYSTEM INSPECTION COMPLETED ON: \_\_\_\_\_

ANNUAL SYSTEM INSPECTION TO BE COMPLETED BY: \_\_\_\_\_

CUSTOMER: Specialist: 

Company address:

CONTRACTOR: Specialist: 

Company address:

INSPECTION POINTS:	OBSERVED DEFECTS: (Description of defect/ Measures to be taken)
<input checked="" type="checkbox"/> checked and in order!	

**DOCUMENTATION:**

- |  |  |
|--|--|
| <input type="checkbox"/> Instruction manual  |  |
| <input type="checkbox"/> Acceptance report/Documentation of fastenings / photo-documentation |  |

**PPE (Personal Protective Equipment for fall protection) :**

Inspection according to manufacturer's instructions

- |  |  |
|--|--|
| <input type="checkbox"/> Date of expiry                      |  |
| <input type="checkbox"/> routine annual inspection conducted |  |
| <input type="checkbox"/> not inspected (no authorisation)    |  |

**ROOF SEAL:**

- |                                       |  |
|---------------------------------------|--|
| <input type="checkbox"/> no damage    |  |
| <input type="checkbox"/> no corrosion |  |

**VISIBLE PARTS OF THE FASTENINGS**

- |  |  |
|--|--|
| <input type="checkbox"/> no deformation                        |  |
| <input type="checkbox"/> no corrosion                          |  |
| <input type="checkbox"/> screw fastenings secure               |  |
| <input type="checkbox"/> tightening torque of screw fastenings |  |
| <input type="checkbox"/> firmly positioned                     |  |

**STAINLESS STEEL CABLE:**

- |  |  |
|--|--|
| <input type="checkbox"/> optical check |  |
| <input type="checkbox"/> cable strands |  |
| <input type="checkbox"/> ...           |  |

# 16 COPY TEMPLATE INSPECTION REPORT

TEMPLATE

TEMPLATE

TEMPLATE

TEMPLATE

## INSPECTION REPORT NR. \_\_\_\_\_ (Part 2/2)

HORIZONTAL LIFELINE SYSTEM AS PER EN 795 TYP C

**INSPECTION POINTS:** checked and in order!**OBSERVED DEFECTS:**

(Description of defect/ Measures to be taken)

**INTERMEDIATE BRACKETS:**

- no deformation
- welding seams
- screw fastenings secure

**CORNER FASTENINGS:**

- no deformation
- welding seams
- ...

**END FASTENINGS:**

- no deformation
- welding seams
- ...

**END LOCK FASTENINGS:**

- head sufficiently wrapped
- indicator clamp
- cable pretension of 75 to 120 kg
- inspection of welding points (crevice corrosion)
- ...

**SLIDERS:** Type: INNOTECH "AIO-GLEIT-..."

- screw fastenings secure
- sliding gap (see corresponding "AIO-GLEIT-..." instruction manual)
- original INNOTECH carabiner (as per EN 362)
- ...

**INCORPORATION IN THE LIGHTNING PROTECTION SYSTEM:**

(according to applicable lightning protection regulations):

- screw fastenings secure
- clamps
- not inspected
- ...

**Result of acceptance:** The safety system matches the manufacturer's instruction manual and the latest technological standards. Its safety and reliability is hereby confirmed.

**Comments:** \_\_\_\_\_Name: \_\_\_\_\_  
Customer

Inspection: Contractor (Qualified professional familiar with the fall prevention system))

Date, company seal, signature

Date, company seal, signature

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[www.innotech.at](http://www.innotech.at)

