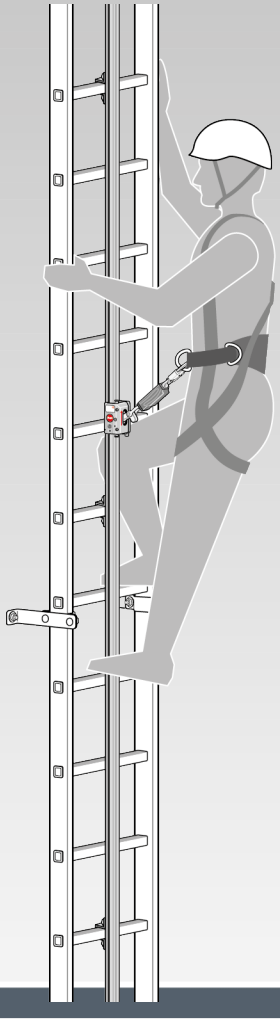
HIGH LEVEL ACCESS SOLUTIONS

Information brochure covering

- Assembly
- Usage
- Inspection

H-50.2 fall protection rail
System components

Professional access technology for building construction and wind turbine generators



UK CA CE 0158

Guided fall arrester including fixed guide – System H-50.2

DIN EN 353-1:2018 · AS/NZS 1891.3:2020 · ANSI Z359.16-2016
Information brochure - Original document

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Legal notice

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Revision history		Information brochure	Guided fall arrester including fixed guide – System H-50.2
Date	Version	List of changes	

Contents

1 System overview

1.1 Information about the order

Information provided by the manufacturer:

Hailo Wind Systems order number:	

1.2 Information about the location

To be completed by the operating company:

Name (operating company):			
Phone number:			
Address:			
Post code:		***Place:***	
E-mail:			
Date of first use:			
Date:			
Signature of the operating company:			

1.3 Information about the system

To be completed by the assembly supervisor:

Access equipment:		***Ladder version:***	
Ladder system (Hailo):	☐	***AL (aluminium)***	☐
Ladder system (on-site):	☐	***VA (stainless steel)***	☐
		ST (galvanised steel)	☐
		Other:	
Signature of assembly supervisor:			

2 About This Document

Preface

Fall arrester equipment is mandatory in high structures and for access to machinery from a fall height of≥ 5 m (in accordance with DIN 18799-1) or

≥ 3 m (in accordance with EN ISO 14122-4).

The H-50.2 fall-arrest system complies with the strictest safety requirements and is designed as for use as fall protection when using access ladders and crampons – both above and below floor level.

A fall protection rail is installed in the access ladders secured to the structure, which provides a fixed guide in the centre of the access ladder.

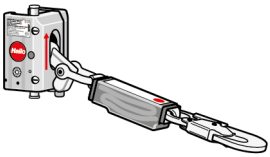

Fig. 1: Hailo PARTNER H-50.2 fall arrester

The Hailo PARTNER H-50.2 fall arrester that is guided along the fall protection rail is equipped with an energy absorbing lanyard and connected to the safety harness.

The fall arrester is only approved for securing the user.

Because it is easy to thread onto the fall protection rail, has a self-locking mechanism in the event of a fall, and slides smoothly along the fall protection rail without obstructing the user, it guarantees safe ascent and descent.

NOTE

Please read this information brochure in entirety and observe all safety instructions before starting assembly work and using the H-50.2 fall-arrest system.

Contents of the information brochure

This information brochure describes assembly, use, maintenance and inspection of the
H-50.2 fall-arrest system.

This information brochure in other languages

If the H-50.2 fall-arrest system is resold to a buyer in another country, it is necessary for the safety of the user that this information brochure be made available in the respective national language.

NOTE

The designations in this brochure and all related documents are used in accordance with DIN EN 353--1:2018, and “Guided type fall arrester including fixed guide” and “Fixed guide” have been replaced by “Fall-arrest system” and “Fall protection rail” for a better user understanding.

2.1 Classification of the warnings

Classification of the warnings

Warnings are introduced by signal words that express the extent of the hazard:

DANGER

DANGER indicates an imminently threatening dangerous situation which could lead to serious injuries or death if not avoided.

WARNING

WARNING indicates a potentially dangerous situation which could lead to serious injuries or death if not avoided.

CAUTION

CAUTION indicates a potentially dangerous situation which could lead to minor injuries if not avoided.

ATTENTION

ATTENTION indicates a possible dangerous situation which could lead to property damage if not avoided.

Presentation of important information:

NOTE

This symbol is used to draw your attention to important, useful or helpful information.

3 General instructions

3.1 Conformity

Declaration of conformity

The H-50.2 fall protection rail - System comonents complies with the requirements of the applicable European Regulation (EU) 2016/425 on personal protective equipment to prevent falls from a height.

The full EC Declaration of Conformity can be found in the appendix.

EU type examination certificate

The EU type examination certificate for the H-50.2 fall protection rail - System comonents was issued by a European notified body (see certificate in the appendix).

Inspection in accordance with ANSI

The inspection for the United States of America in accordance with ANSI was performed
by INTEREK, 3933 US Route 11, Cortland, New York.

UKCA

The full UK Declaration of Conformity can be found in the appendix.

3.2 Warranty and limitations of liability

Warranty

The manufacturer's warranty for the
H-50.2 fall protection rail - System comonents totals 1 year, provided that the technical documentation (operating instructions) is observed.

Limitation of liability

Infringements against the provisions presented here will render any warranty claims made to Hailo Wind Systems
null and void.

Hailo Wind Systems is not liable for damage that results from violations of the provisions described here.

3.3 Obligations of the operating company and the user

NOTE

The term "operating company" is used in this information brochure for the party that assumes the authority and responsibility for this system – usually a company or corporation.

The term "user" refers to the person who uses the fall-arrest system.

Responsibility of the operating company

It is the responsibility of the operating company:

- to ensure that this information brochure can be provided to the user at any time.
- to ensure that the fall-arrest system is correctly installed, used and maintained, and this work is only carried out by persons trained accordingly for these tasks.
- to provide a plan that factors in all potential emergencies – ones that can be occur during use of the fall-arrest system – and explains all rescue measures necessary.
- to perform a risk assessment in accordance with §4 and §5 of the Occupational Health and Safety Act before selecting and using personal protective equipment.
- To perform an assessment of the equipment available to choose from for rescue measures in accordance with §2 of the PPE Usage Regulation. Only personal protective equipment that is endorsed with the CE label may be selected for rescue measures.

Responsibility of the user

It is the responsibility of the user:

- to use the fall-arrest system in compliance with all safety instructions and procedures in this information brochure, and in compliance with all other safety precautions in the wind turbine generator.
- to wear personal protective equipment to prevent falls at workplaces that are difficult to access due to their height and location.
- to be informed of any side effects caused by taking medication and which can impair the user or lead to physical harm when accessing the system.
  The user must be mentally and physically able to access the respective system.

User of the fall-arrest system

Persons whose professional training, experience and knowledge of the relevant regulations enables them to carry out the tasks assigned to them and independently recognise and avoid possible dangers.

Number of personnel required At least two qualified persons must be present during the installation and use of the fall-arrest system. The persons in and on the system must be able to make an emergency call at all times.

Regulations and rules The Accident Prevention Regulations BGV A1 and BG Rules BGR/GUV 198/199 must be observed.

3.4 Standards and regulations

AS/NZS 1891.1	Industrial fall-arrest systems and devices Part 1: Harnesses and ancillary equipment
AS/NZS 1891.3	Industrial fall-arrest systems and devices Part 3: Fall-arrest devices
ANSI Z539.16-2	Safety Requirements for Climbing Ladder Fall Arrest Systems – Part 16
(EU) 2016/425	Regulation on personal protective equipment
BetrSichV	Ordinance on Industrial Safety and Health when using work equipment (Betriebssicherheitsverordnung, BetrSichV)
BGV A1	Accident prevention regulations 'Principles of Prevention'
BGI 694	Operation instructions for handling ladders and steps
BGR/GUV-R 198	Rules for the use of personal protective equipment for rescues from heights and depths
EN 353-1	Personal fall protection equipment: Guided fall arresters including fixed guide
EN 361	Personal fall protection equipment: Full body harnesses
EN ISO 14122-1	Safety of machinery – Permanent means of access to machinery Part 1: Choice of fixed means and general requirements of access
EN ISO 14122-4	Safety of machinery – Permanent means of access to machinery / Part 4: Fixed ladders
DIN 18799-1	Fixed ladder systems for construction works Part 1: Ladders with two uprights; safety requirements and tests
EN 795	Anchor devices
DIN CEN/TS 16415	Anchor devices: Recommendations for anchor devices for use by more than one person simultaneously
EN 50308	Wind turbines – Protective measures

4 Safety

4.1 Intended use

The H-50.2 fall protection rail - System comonents may only be used for the intended use described here.

- The H-50.2 fall protection rail - System comonents has been inspected and approved as a complete system.
- Prior to installation of the H-50.2 fall-arrest system, the respective user must be equipped with the Hailo PARTNER H-50.2 fall arrester.
- The number of fall arresters required depends on the number of users of the fall-arrest system.
- The guided Hailo PARTNER H-50.2 fall arrester may only be used for the ascent or descent of the H50.2.2 fall-arrest system. Any other use is expressly prohibited, as this may cause damage to and therefore failure of the fall arrester in the event of a fall.
- The Hailo PARTNER H-50.2 fall arrester may not be used for workplace positioning. If work positioning is required, use a separate system.
- The personal protective equipment (PPE) should remain the personal property of the respective person and only be used by this user.
  Use by an extended group of persons cannot be considered advisable.
- Compliance with all scheduled inspections and maintenance is mandatory.
- Local, regional and national regulations and ordinances must be observed and fully complied with.

The safety function of the H-50.2 fall-arrest system with a Hailo PARTNER H-50.2 fall arrester may be impaired by the use of climb assist systems (motor-driven or by means of a counterweight).

The operating company and the company that combines both systems (climb assist system with H-50.2 fall-arrest system) is responsible for ensuring use as intended.

Unrestricted safety and functionality of the H-50.2 fall-arrest system in combination with the respective climb assist system must be guaranteed and documented.

⚠ WARNING!

Impairment of the safety function due to the use of climb assist systems

Having a functional inspection performed by a notified inspection laboratory and certified by the subsequent issue of a declaration of no objection is mandatory.

4.2 Foreseeable misuse

DANGER!

Danger of falling due to disregarding specifications!
The specifications for safe use of the Hailo PARTNER H-50.2 fall arrester on the fall-arrest system must be observed.

The H-50.2 fall-arrest system may **not** be used:

- in the event of lack of awareness or non-observance of this information brochure.
- by insufficiently qualified personnel.
- without the Hailo PARTNER H-50.2 fall arrester.
- with system components made by other manufacturers.
  A combination with components made by other manufacturers is not permitted. If use of other components cannot be avoided, this requires the written permission of Hailo Wind Systems.
- if there is no potential equalisation on electrically conductive components.
- without the daily check of the H-50.2 fall-arrest system and the Hailo PARTNER H-50.2 fall arrester (using the relevant information brochure).
- in extreme climate conditions, exposure to chemicals or mechanical influences on the fall-arrest system (e.g. oil, thick ice, heavy soiling, sharp edges etc.)
- in the event of modifying or supplementing the equipment without the express written consent of the manufacturer.
- by persons who have not read and understood the rescue plan.

NOTE

No liability will be assumed for harm to persons or damage to equipment arising from violation of the provisions stipulated here or failure to observe the safety instructions.

4.3 Safety instructions

IMPORTANT!

Failure to follow these instructions may result in property damage.

Therefore:

- Before using the H-50.2 fall-arrest system, read the information on assembly, use, and maintenance and inspection in this information brochure carefully and in entirety, and also observe the instructions in the information brochure for the Hailo PARTNER H-50.2 fall arrester.
- The Hailo PARTNER H-50.2 guided fall arrester may only be used on the Hailo H-50.2 fall-arrest system.
- Pay particular attention to the safety instructions.

IMPORTANT!

Wear personal fall protection equipment!

Protection against falls from above a minimum height.

- The personal fall protection equipment must be properly selected, used and checked.
- Personal fall protection equipment may only be used for the intended purpose and by persons who have been instructed on how to use it safety and have the corresponding knowledge!
- Only safety harnesses in accordance with EN 361 (Europe) and AS/NZS 1891.1:2007 (Australia/New Zealand) are permitted in combination with the Hailo PARTNER H-50.2 fall arrester on the H-50.2 fall-arrest system.
- If a combination of equipment components is used (e.g. connection of user-specific safety harnesses to the Hailo PARTNER H-50.2 guided fall arrester), it is imperative that this does not lead to impairment of the overall system. Impairment can lead to failure of the fall arrester in the event of a fall.

Carry communication equipment with you (mobile phone, radio unit)

When in or on the wind turbine generator, constant voice contact must be ensured between the people involved. Ensure contact between persons using mobile phones or radios.

Wear a helmet

Head protection from falling objects and impacts from falls or in confined spaces.

IMPORTANT!

Wear safety footwear

Foot protection from heavy falling objects, slipping, or stepping on sharp-edged parts that are lying around.

Wear safety gloves

Hand protection against friction, abrasions, stabs and cuts.

DANGER!

Disregarding the safety instructions may result in a fall and therefore lead to serious injury or death.

Therefore:

- The fall-arrest system must be inspected for damage by an expert or authorised person
- The result of this inspection must ascertain the safe condition and safe function of the system beyond any doubt.
  If this is not the case, the corresponding repair measures must be performed correctly.
- The combination with components from other manufacturers can lead to failure of the entire system. The safe function of an item of equipment or assembled equipment may be impaired.
- The H-50.2 fall-arrest system may only be used for its intended purpose; any use for other purposes is expressly prohibited.
- Observe the accident prevention regulations BGV A1 as well as the BG Rules BGR/GUV-R 198/199.

DANGER!

Improper operation may cause serious injury or property damage.

Therefore:

- Before using the H-50.2 fall-arrest system each time, perform a functional check of the fall-arrest system and the Hailo PARTNER H-50.2 fall arrester using the relevant information brochure.
- The Hailo PARTNER H-50.2 guided fall arrester is approved for a total weight (body weight of the user including clothing and equipment) of 50 to 136 kg.
- The fall protection rail (material: aluminium) may only deviate from the vertical by -3° – +15°.
- A maximum of 10 persons may climb the fall-arrest system at the same time at a minimum interval of 6 m.
  Less than the minimum interval between persons is permitted in the event of an emergency or rescue.
- When using the H-50.2 fall-arrest system near moving machinery and electrical systems, more caution is required.

IMPORTANT!

Dates and intervals for inspection and maintenance

- Observe the specified intervals for regular inspections/maintenance!
- The proper condition of the access equipment and the attachment points must be checked at least once a year by a competent and qualified person.
- The check list for the inspection can be found in the appendix to these instructions.

4.4 Markings and information on the H-50.2 fall-arrest system

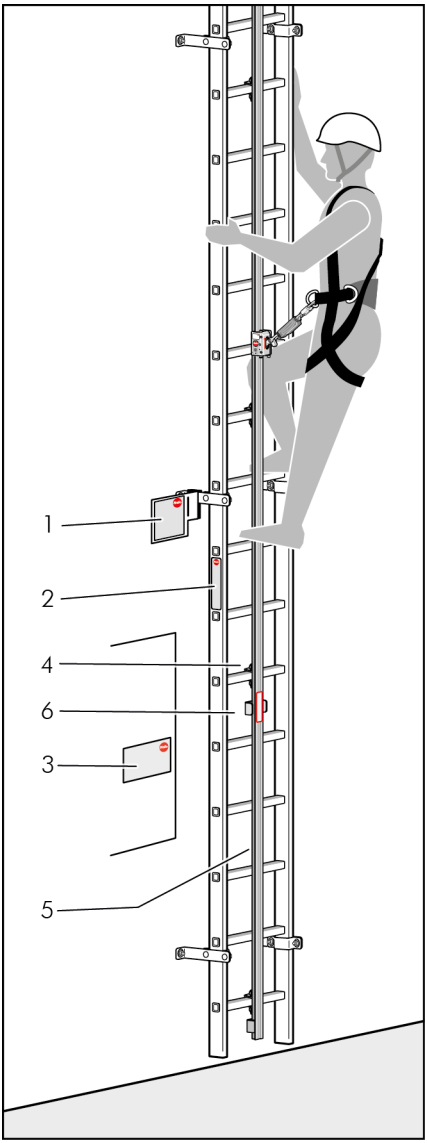

Fig. 2: Markings and information

Pay particular attention to all labels, stickers with safety instructions and safety regulations.

1 Information on the H-50.2 fall-arrest system
Safety instructions for the use of the fall arrester and use of the H-50.2 fall-arrest system.

2 Access ladder nameplate
Material and dimensional specifications and information on access ladder loads.

3 Ladder identification plate
Information on the H-50.2 fall-arrest system.
Inspection of the access ladder at least once a year by an expert, documented by an inspection tag.

4 Nameplate for the H-50.2 fall protection rail

5 Fall protection rail batch number

6 Marking for the barrier for non-approved fall arresters (at a height of max. 3 m above the access level).

IMPORTANT!

The H-50.2 fall-arrest system must be marked by a nameplate at the access point, which indicates which fall arresters must be used on the H-50.2 fall-arrest system.

When using new types of fall arresters, the operating company must ensure that this information is visible to the user.

NOTE

Customer-specific safety and information signs may also be used which are neither described nor shown here.

1

H-50.2 System **gemäß DIN EN 353-1:2018, ANSI Z359.16-2016 und AS/NZS 1891.3:2020**

Darf ausschließlich mit dem Auffanggerät Hailo PARTNER H-50.2 in Verbindung mit Auffanggurten nach EN 361 (Europa), OSHA/ANSI (Nordamerika) oder AS/NZS 1891.1:2007 (Australien, Neuseeland) genutzt werden.

Achtung!
- **Die Schutzwirkung des Auffanggerätes ist ab 3 m Steighöhe über Zugangsebene gegeben! (Sicherheitsabstand = 3 m)**
- **Zwischen 2 steigenden Personen ist ein Abstand von mindestens 6 m einzuhalten.**
- **Max. 10 Personen dürfen das System gleichzeitig benutzen.**

CE 0158

H-50.2 System *according to DIN EN 353-1:2018, ANSI Z359.16-2016 and AS/NZS 1891.3:2020*

May only be used with fall arrester Hailo PARTNER H-50.2 in conjunction with EN 361 (Europe), OSHA/ANSI (North America) or AS/NZS 1891.1:2007 (Australia, New Zealand) compliant safety harness.

ATTENTION!
- *The safety harness provides protection from a height of 3 m above the access level! (Safety margin = 3 m)*
- *There should always be a gap of at least 6m between any two peolpe on the fall arrest system.*
- *No more than 10 persons may use the system at the same time.*

H-50.2 Système **Conforme à DIN EN 353-1:2018, ANSI Z359.16-2016 et AS/NZS 1891.3:2020**

Doit être utilisé exclusivement avec l'antichute Hailo PARTNER H-50.2 et avec des harnais de sécurité selon EN 361 (Europe), OSHA/ANSI (Amérique du Nord) ou AS/NZS 1891.1:2007 (Australie, Nouvelle-Zélande).

Attention!
- **L'effet protecteur de l'antichute n'est réalisé qu'à partir de 3 m de hauteur au-dessus du niveau d'accès! (distance de sécurité = 3 m)**
- **Entre deux personnes utilisant l'accès, une distance d'au minimum 6 m doit être respectée.**
- **10 personnes au maximum peuvent utiliser en même temps le système.**

Informationsbroschüre beachten!
Follow manufacturer`s instructions included at time of shipment!
Lire attentivement le manuel d'information!

Zutreffendes bei der Montage eintragen bzw. ankreuzen.
For assembly, enter or tick as applicable.
Pour le montage, entrez ou pointez selon le cas.

Montiert
Assembled
Monté

Nächste Prüfung
Next inspection
Prochaine inspection

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35708 Haiger, Germany
www.hailo-windsystems.com

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CE 0158
Typ: H-50.2 Aluminium
Type: H-50.2 Aluminium

3

ACHTUNG! Aufstieg nur mit einem zum Führungsseil oder zur Führungsschiene zugelassenem Auffanggerät. Nur Auffanggurte der Standards EN 361 (Europa), OSHA/ANSI (Nordamerika), AS/NZS 1891.1:2007 (Australien, Neuseeland) oder NBR 15.836 (Brasilien) verwenden!

ATTENTION! Ascent only using a fall arrester suitable for the guiding cable or guide rail. Use only safety harnesses acc. to EN 361 (Europe), OSHA/ANSI (North America), AS/NZS 1891.1:2007 (Australia, New Zealand) or NBR 15.836 (Brazil).

ATTENTION! Ne montez sur l'échelle que si elle est munie d'un système antichute adapté au câble ou au rail de guidage. Utilisiez exclusivement des harnais de sécurité aux normes EN 361 (Europe), OSHA/ANSI (Amérique du Nord), AS/NZS 1891.1:2007 (Australie, Nouvelle-Zélande) ou NBR 15.836 (Brésil).

Zulässige Belastung Gewicht = 150 kg
Permitted load Weight = 150 kg
Charge max. autorisé Poids = 150 kg

DIN EN 353-1:2018
AS/NZS 1891.3:2020
ABNT NBR 14.627/2010
ANSI Z359.16-2016

Leiter entspricht: **OSHA 1926.1053**
Ladder complies to: **OSHA 1910.23**
ANSI 14.3 (Parts)
L'échelle satisfait aux normes: **EN ISO 14122-4: 2016**
AS 1657 (nur/only/seul 72x25 & 60x20)

Zugang nur für im Steigschutz unterwiesene Personen.
Access only permitted for persons trained in fall protection.
Accès réservé aux personnes au courant du système antichute.

Montiert
Assembled
Monté

Nächste Prüfung
Next inspection
Prochaine inspection

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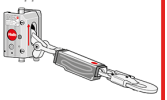
6

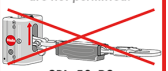
H-50.2 System

Zugelassenes Auffanggerät:
Approved fall arrester:



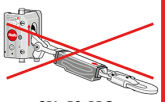
Hailo PARTNER H-50.2

Auffanggeräte des H-50 Systems sowie Auffanggeräte anderer Hersteller sind nicht zulässig!
Fall arresters of the H-50 system and fall arresters from other manufacturers are not permitted!



SPL-50-R3

Hailo PARTNER R1
1122999 • 06/2021



SPL-50-PRO

4.5 Safety intervals on the system

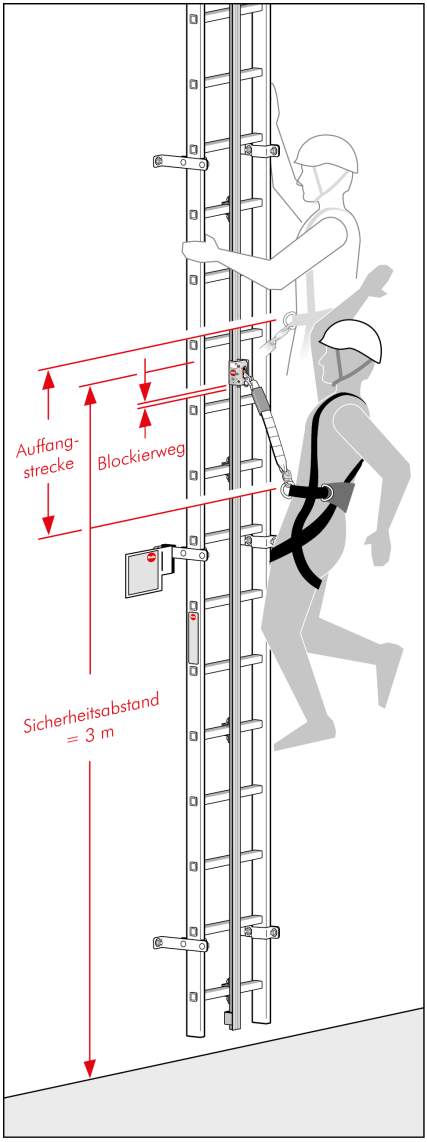


Fig. 3: Safety intervals

A safety interval of 3 m for the H-50.2 fall-arrest system was calculated using the performance data and the area necessary to suspend a person in the event of a fall.

WARNING!

Failure of the protective function of the fall arrester

The protection afforded by the Hailo PARTNER H-50.2 fall arrester cannot be guaranteed if the user is at the bottom area of the access equipment
(<3 m from the upper edge of the access level).

NOTE

The operating company using the system must affix a corresponding warning notice (see chapter Markings and information on the H-50.2 fall-arrest system, Page 16) to the structure which explains the safety interval to the user beyond any doubt.

The access point of the H-50.2 fall-arrest system must be marked with a nameplate (see chapter Markings and information on the H-50.2 fall-arrest system, Page 16) that indicates which fall arrester must be used on the fall-arrest system.

When using new fall arresters, the operating company must ensure that this information is visible to the user.

5 Assembly

5.1 Safety instructions for assembly

During assembly, maintenance or repair work, it must be ensured that no scaffolding, platforms or other objects can potentially protrude into the fall area and could thereby present an additional hazard in the event of a fall.

The instructions enclosed with any accessory parts for this system must be observed accordingly during assembly and use.

If the operating company retrofits a fall-arrest system, the relevant standards must be satisfied (see Standards and regulations, Page 10).

If an H-50.2 fall-arrest system is retrofitted to a previously installed ladder system that is compliant with the EN ISO 14122-4, DIN 18799-1 or EN 14396 standard, then in cases of doubt, e.g. a smaller cross-section, corrosion, a non-load bearing rail-rung connection or poor structural anchorage, safe use must be guaranteed by planning and assessment by an engineering agency that factors in the technical rules. It must also ensured that in the event of a fall, the dynamic load of 6 kN and static load of 15 kN that are produced can be absorbed by the overall system.

If the required verifications (of safe absorption of forces on the structure) are not kept, then a claim of manufacturer liability in the event of damage will become difficult to assert.

The operating company then assumes liability.

5.2 Transport and storage

All parts must be checked for a flawless condition prior to assembly of the fall-arrest system.

There must be no transport damage (e.g. bent fall protection rails) to system components.

All components of the system must be secured so that no impairment of their function occurs and all components are in a perfectly safe condition.

⚠ WARNING!

Danger of falling due to damaged system components

If there are any doubts about the safe condition of components of the system, the components or the system must be replaced with immediate effect. This must be performed by the manufacturer or by another expert person.

5.3 Overview of system components

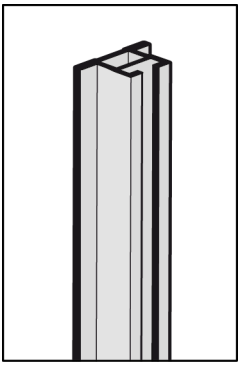


Fig. 4: Fall protection rail

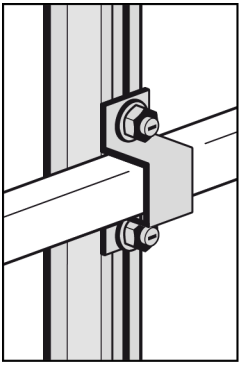


Fig. 6: Fall protection rail assembly kit

1 Fall protection rail
2 Fall protection rail assembly kit
3 Hinged rest platform
4 Rail connector
5 Barrier for non-approved fall arresters
6 End stop at top and bottom

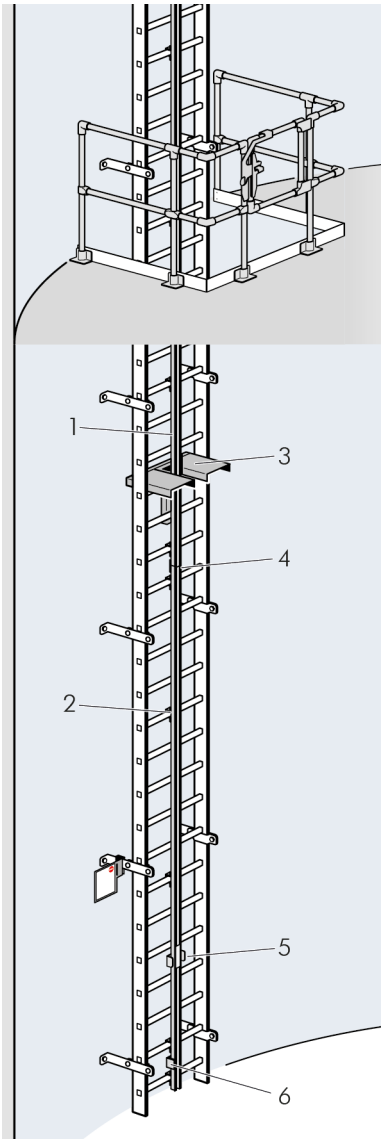


Fig. 5: System components

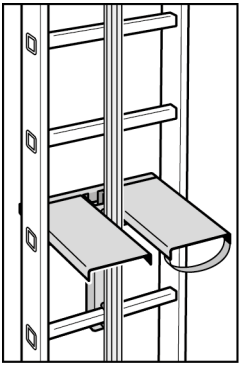


Fig. 7: Hinged rest platform

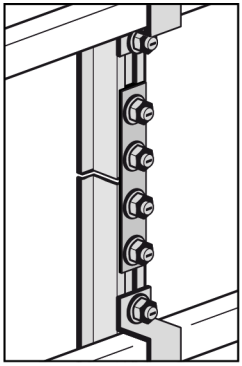


Fig. 8: Rail connector

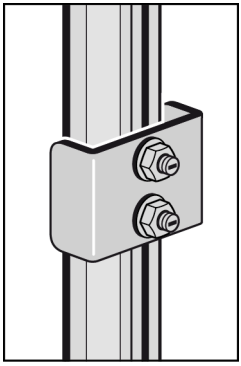


Fig. 9: Barrier for non-approved fall arresters

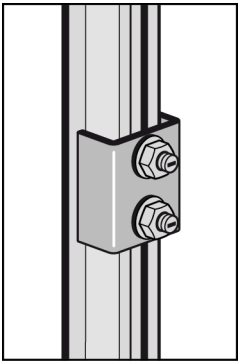


Fig. 10: End stop at top and bottom

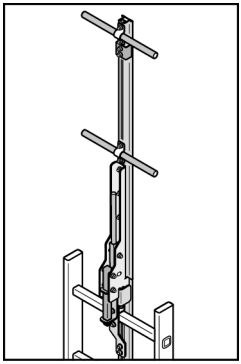


Fig. 11: Plug-in access aid

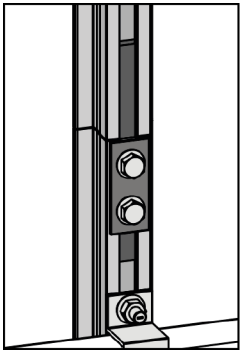


Fig. 12: Flexible rail connector

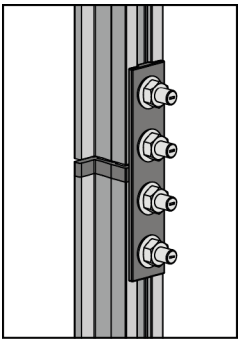


Fig. 13: Rail connector compensation piece

NOTE

The figures are examples and depending on the version, the images shown may be different.

More information about the version and article no. of the individual products can be found at www.hailo-windsystems.com.

5.4 Information on assembly

Preliminary information

- Before beginning assembly, ensure that the loads being placed on the structure can be absorbed.
- If no corresponding information (documents) is available, then a structural appraisal that factors in the load-bearing capacity required will be necessary, and verification must be provided.
- If the required verifications (of safe absorption of forces on the structure) are not kept, then a claim of manufacturer liability in the event of damage will become difficult to assert.
  The operating company then assumes liability.

Assembly personnel

- At least two persons are required for assembly of the fall-arrest system.
- The assembly personnel may not be secured to the system being installed.
- An approved attachment point on the building or another structure must be used in accordance with EN 795.

Information on assembly on concrete structures

- Only anchor plugs approved under the building regulations may be used for concrete structures.
- In the case of undefined substrata, the attachment system must be implemented in consultation with the structural engineer.
- Requirement for concrete:
  a minimum concrete grade of C20/25 is required.

Information on assembly on masonry

- Only anchor plugs approved under the building regulations may be used for masonry.
- In the case of undefined substrata, the attachment system must be implemented in consultation with the structural engineer.
- Anchorage using a through hole with counterplate is also conceivable. This must be agreed with the structural engineer, and verification must be provided.

NOTE

Prior to assembly of the access ladder, it must be ensured that the load transmission to the load-bearing structure is guaranteed with sufficient certainty (consultation with the structural engineer).

Observe the assembly instructions issued by the plug manufacturer!

Assembly procedure

1. ▶ Only use absolutely clean and flawless system parts.
2. ▶ Pay particular attention to ensuring rail run surfaces are flawless.

   ⇨ Damaged parts must be replaced with new parts.
3. ▶ Inspection plan and documentation for the H-50.2 fall-arrest system can be found at (see Inspection plan for recurring inspections of the H-50.2 fall-arrest system, Page 48)
4. ▶ The assembly log for the H-50.2 fall-arrest system can be found at (see H-50.2 fall-arrest system assembly log, Page 44).

Assembly log

5. ▶ The assembly supervisor for the H-50.2 fall-arrest system must concluded by documenting assembly in clear and indelible writing in the assembly log.

5.5 Tightening torques

Value for tightening torque (unless otherwise specified)			
	Stainless steel screw Max. tightening torques M_A (Nm) at a total friction coefficient of μ=0.10 (μ=0.10 is equivalent to a dry surface without oil)	Steel screw Max. tightening torques M_A (Nm) at a total friction coefficient of μ=0.08 (μ=0.08 is equivalent to a dry surface without oil)	
	A2 and A4 Strength class 70	Strength class	
		8.8	10.9
	[Nm]	[Nm]	[Nm]
M8	14.5	17.9	26.2
M10	30	36	53
M12	50	61	90
M16	121	147	216
M20	244	297	423
	Strength class 70 corresponds to cold-pressed treatment up to nominal lengths 8xd and a yield strength utilisation of R_P 0.2=90%		

5.6 Access ladder assembly (dimensional specifications)

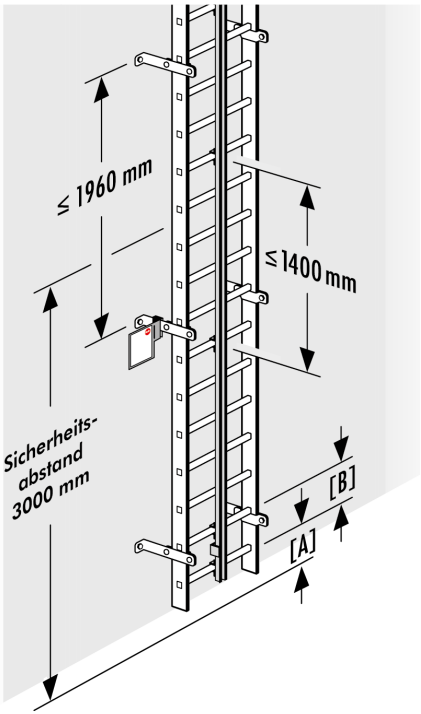


Fig. 14: Access ladder with fall protection rail installed in the middle

The H-50.2 fall-arrest system is intended for installation on Hailo access ladders. However, it can also be installed on other access equipment

(ladders of equivalent quality made by other manufacturers) that complies with the respective standards and regulations, see fig. Access ladder with fall protection rail installed in the middle, Page 24.

In the event of installing H-50.2 fall protection rails on ladders made by other manufacturers, the specifications of page 28 (attachment interval) must be observed. (chapter Standards and regulations, Page 10)

The following specifications apply for distance [A]:

- EN ISO 14122-4: [A] = The distance between access surface and first rung may not exceed the distance between two consecutive rungs.
- DIN 18799-1: [A] = Max. rung interval totals [B] + 100 mm, min. rung interval totals 1/2 [B]

5.7 Information on attachment of the access ladder to the structure

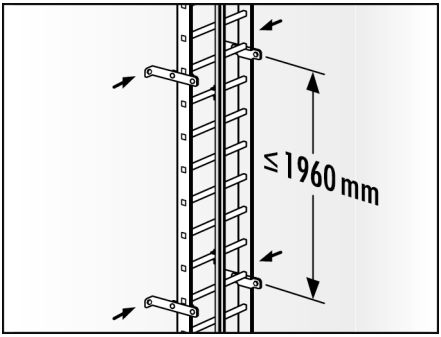


Fig. 15: Distance between anchorage points

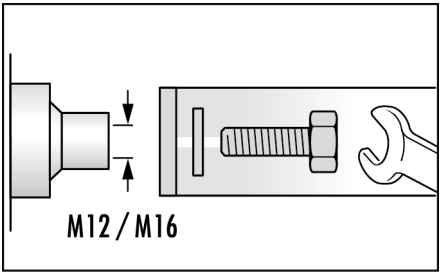


Fig. 16: Access ladder assembly on threaded bush M12/M16

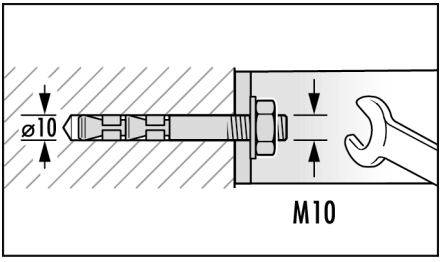


Fig. 17: Anchor plug attachment in concrete (min. C20/25)

- The anchorage points and their connections (brackets, means of attachment) must be able to absorb the loads.
- When dimensioning the ladder bracket and the anchorage points, it must be ensured that a dynamic load of 6 kN and a static load of 15 kN can be absorbed by the overall system.
- The anchorage points must not exceed a maximum vertical interval of 2,000 mm.
  Advisable is 1,960 mm for a rung spacing of 280 mm fig. Distance between anchorage points, Page 25. Larger intervals must be agreed beforehand with Hailo Wind Systems.
- The anchorage points must be positioned in pairs at the right and left of the ladder respectively at the same level.
- The substrate for the structure for the anchorage points must be sufficiently dimensioned, and be suited for the aforementioned loads.
- Suitable substrates are:
  Steel structures with threaded bushes (min. M 12) fig. Access ladder assembly on threaded bush M12/M16, Page 25or screw connections using though holes, anchor plug attachment to concrete structures with a minimum concrete quality of C 20/25, whereby only plugs approved under building regulations may be used fig. Anchor plug attachment in concrete (min. C20/25), Page 25.
- Masonry is not suitable as a substrate for anchor plug attachment. In these cases, an anchorage using a through hole with counterplate in the masonry is conceivable. However, it is essential that an engineering agency plan this and provide the corresponding verification.

5.8 Access ladder assembly (example)

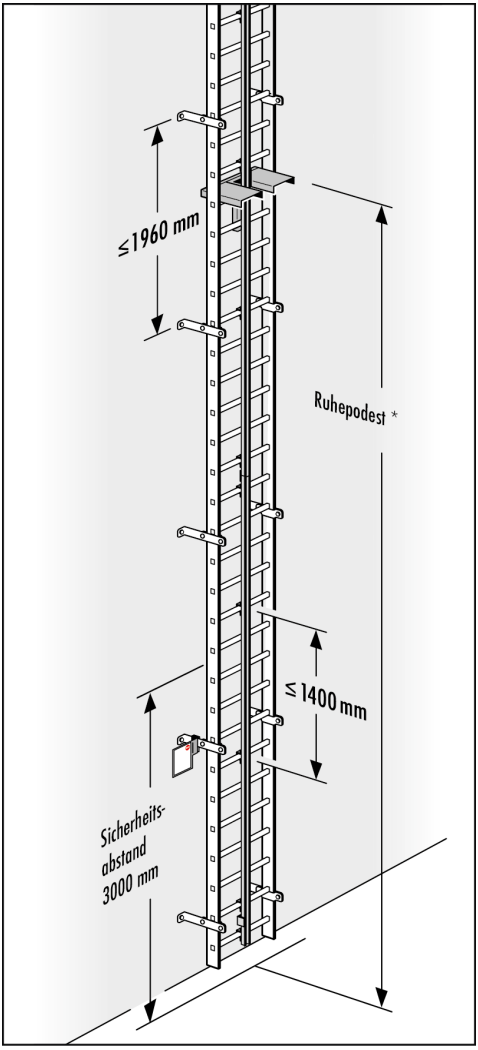


Fig. 18: Assembly on a ladder rung (middle)
Example: Above-ground structure

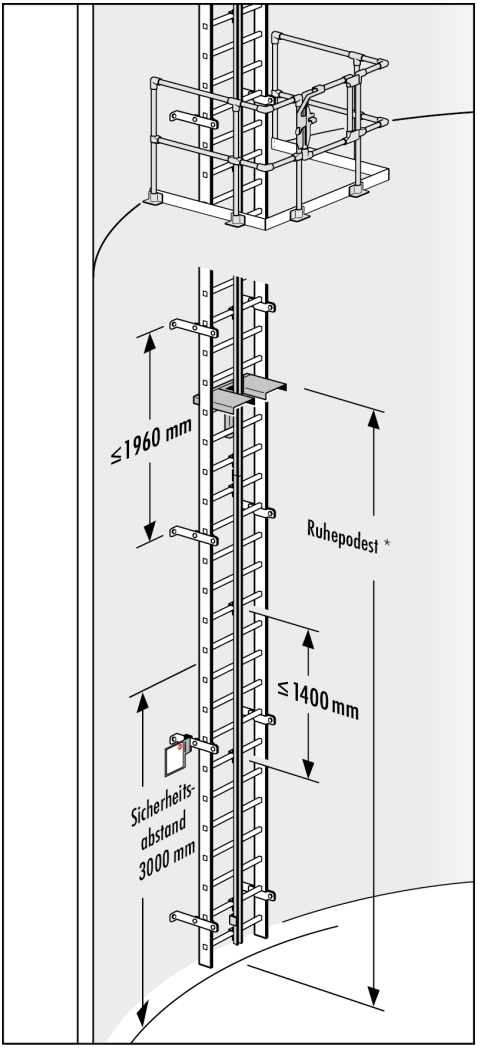


Fig. 19: Assembly on a ladder rung (middle)
Example: Wind turbine generator

*Intervals for the rest platforms:
EN ISO 14122-4 = 12 m |DIN 18799-1 = 10 m | EN 503308 = 9 m (wind turbine generators)

5.9 Assembly using hammerhead screw

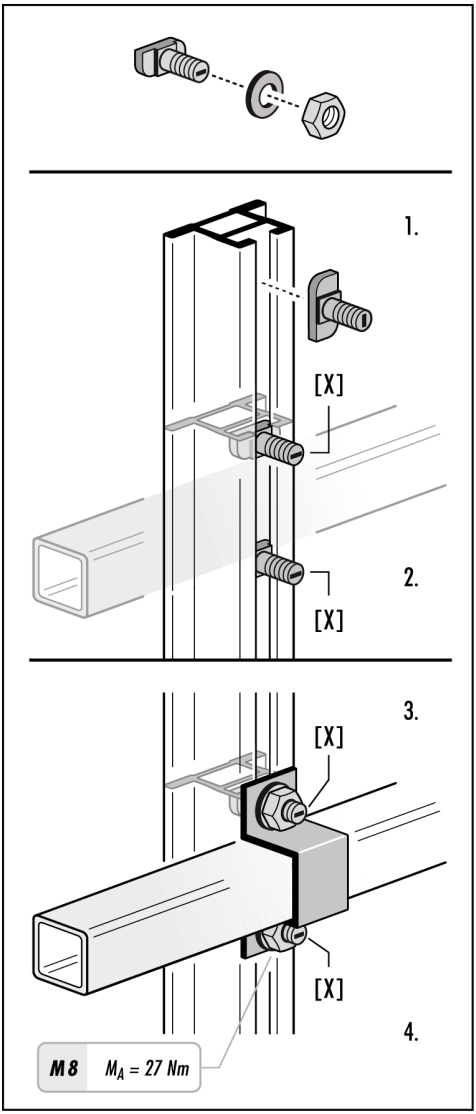


Fig. 20: Assembly using hammerhead screw

During assembly of the fall protection rail and other system components using hammerhead screws, please observe the following procedure:

1. ▶ Insert the hammerhead screw in the opening in the rail profile.
2. ▶ Turn the hammerhead screw by 90° in the fall protection rail profile and position the square neck of the hammerhead screw in the opening in the rail profile.

   ⇨ Only this way is a secure connection guaranteed.
3. ▶ Check that the slot mark on the hammerhead screw [X] is in a horizontal position.
4. ▶ Tighten both nuts.

   ⇨ The minimum tightening torque for the nuts during initial assembly totals 27 Nm.

IMPORTANT!

- The fall protection rail (material: aluminium) may only deviate from the vertical by -3° – +15° once installed.
- During the annual fall protection rail inspection, ensure that all screw connections exhibit a tight fit.
- Check that the slot mark on the hammerhead screw [X] is in a horizontal position.
- If a nut has become loose, retighten it with a minimum tightening torque of 27 Nm.

5.10 Attachment to a ladder rung (example)

To assemble the fall protection rail on a Hailo access ladder, an attachment interval of ≤ 1,400 mm is, as a rule, permitted. A maximum attachment interval of 1,120 mm is permitted when installing the fall protection rail to ladders made by other manufacturers or to ladder systems in accordance with EN ISO 14122-4, DIN 18799-1 which have been retrofitted with the H-50.2 fall-arrest system. All ladder must satisfy the respective standards and regulations, see chapter Standards and regulations, Page 10.

Assembly on ladder rung (aluminium access ladder)

Assembly of the fall protection rail using hammerhead screw and rung clamp in the middle of the access ladder, see chapter Assembly using hammerhead screw, Page 27.

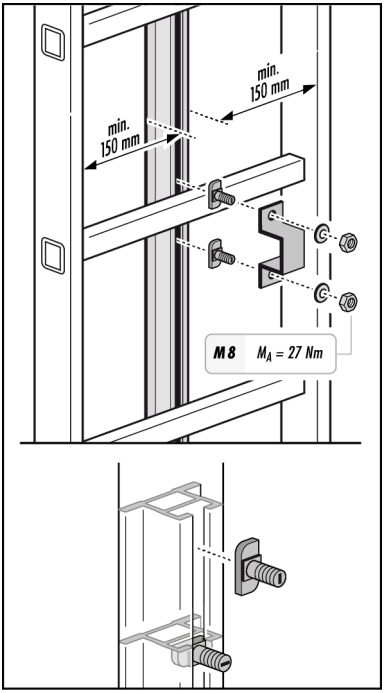


Fig. 21: Assembly on ladder rung (aluminium access ladder)

Assembly on ladder rung (steel/stainless steel access ladder)

Assembly of the fall protection rail using hammerhead screw and rung clamp in the middle of the access ladder, see chapter Assembly using hammerhead screw, Page 27.

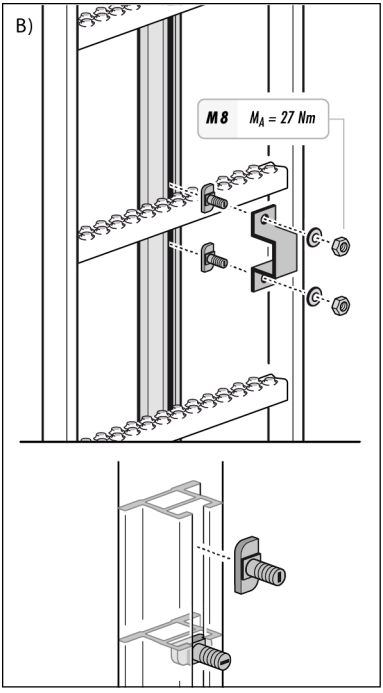


Fig. 22: Assembly on ladder rung (steel/stainless steel ladder)

Overhang of the fall protection rail on the ladder rung

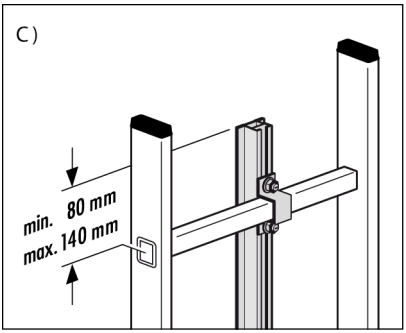


Fig. 23: Dimension for overhang of the fall protection rail on the ladder rung

The minimum overhang of the H-50.2 fall protection rail, measured from the middle of the ladder rung, must total 80 mm. The maximum overhang of the H-50.2 fall protection rail, measured from the middle of the ladder rung, may not exceed 140 mm.

These specifications refer to the first rung after the beginning of the rail or end of the rail at the top and bottom respectively.

IMPORTANT!

The fall protection rail must be attched to the access ladder on the first rung after the beginning of the rail or end of the rail at the top and bottom respectively.

The attachment intervals in between must be adhered to, even if they are smaller than the maximum specifications permitted. A replacement rail section within the access route must be installed on the ladder at a minimum of two attachment points.

An access route must exhibit a minimum of 5 attachment points in any case. This must also be ensured when the access route consists of only one fall protection rail.

Properly installed sections of fall protection rail can be considered a continuous fall protection rail.

5.11 Installation of the hinged rest platform

Installation example

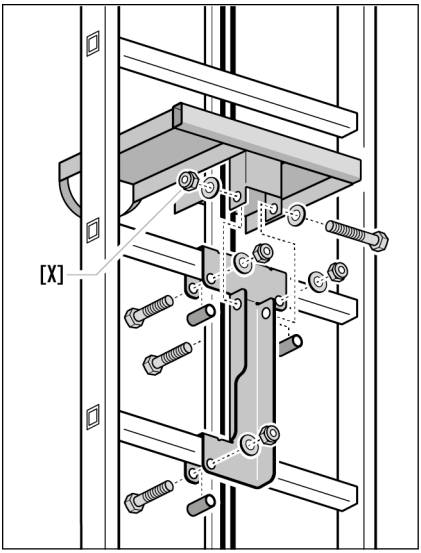


Fig. 24: Installation of the hinged rest platform

A hinged rest platform must be installed at a maximum height of 10 m above the access lever for system heights ≥ 10 m in accordance with DIN 18799-1.

Another hinged rest platform must be installed on the access ladder every additional 10 m.

A maximum distance of ≤ 9 m between 2 resting folding platforms is permitted in wind turbine generators in accordance with DIN 50308.

A maximum distance of ≤ 12 m is permitted between 2 hinged rest platforms in accordance with EN 14122-4.

Installation of the hinged rest platform – two-section surface –on the ladder rung. (Aluminium access ladder,
inside ladder dimension > 370 mm)

NOTE

Tighten the hexagonal nut [X] only so far that the hinged rest platform can still pivot smoothly.

5.12 Installation of the rail connector

Installation at rail joint

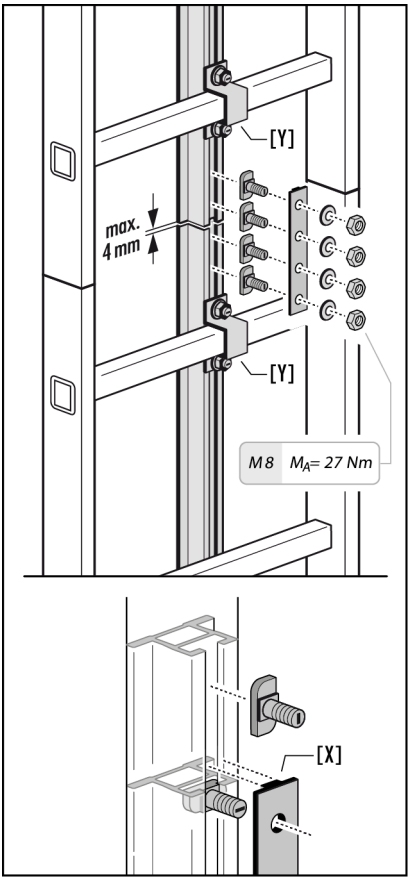


Fig. 25: Rail connector assembly

Assembly of two fall protection rails using a rail connector.

The hammerhead screw must be rotated in the profile of the fall protection rail and positioned with the square neck in the opening of the rail profile. The lug protruding from the rail connector [X] must also be positioned in the opening of the rail profile.

This is the only way to ensure a secure connection, see chapter Assembly using hammerhead screw, Page 27.

Interval between the fail protection rails (rail joint) = 0 mm to max. 4 mm.

A maximum air gap of 4 mm can be left at the rail joint to allow for length compensation due to temperature fluctuations.

IMPORTANT!

At each rail joint, the fall protection rails must be joined together with a rail connector.

At each rail joint, the fall protection rails must be attached to the ladder rungs using a rung clamp [Y] at the end of the bottom and beginning of the top fall protection rail.

5.13 Installation of a flexible rail connector

Flexible rail connector

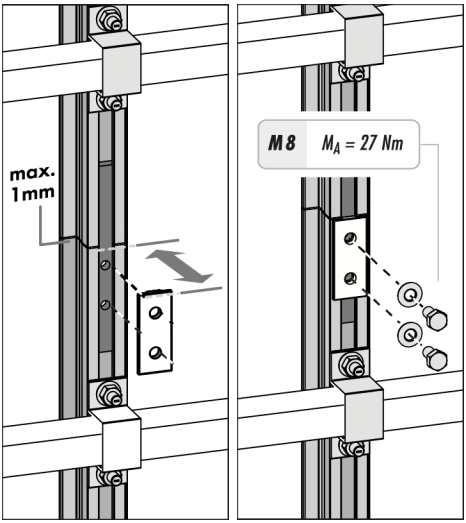


Fig. 26: Installation of a flexible rail connector

Prerequisites:

- A rung connector must be installed on the rung above and below.
- At least 5 rung clamps must be installed below the flexible rail connector.
- The flexible rail connector may not be installed on the first fall protection rail from the bottom.
- The ladder section on which a flexible rail connector is used must be attached by at least one ladder bracket (e.g. not a flange transition piece).
- Gap upon installation of the flexible rail connector max. 0–1 mm.

The use of the flexible rail connector is recommended for long ladder routes (> 100 m) or towers that sway significantly. Installation should be performed around half way along the access route.

1. ► Insert the flexible rail connector into the fall protection rail from above.
2. ► Apply the counterplate in a way that ensures it connected flush with the bottom fall protection rail, and screw both parts together.

   ⇨ The gap between the two fall protection rails must be kept as small as possible during installation (0–1 mm) so that a maximum gap compensation of 4 mm is possible in the event of fall protection rail fluctuation.

5.14 Installation of rail connector compensation piece

Installation example

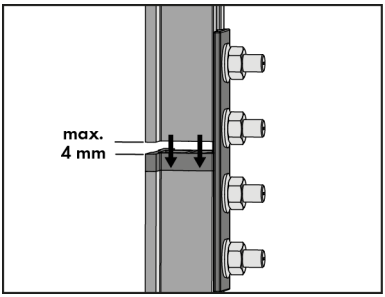


Fig. 27: Compensation piece gap

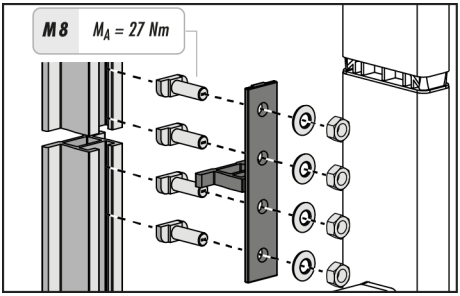


Fig. 28: Installation of compensation piece

The compensation piece is available in lengths of 4, 8 and 12 mm and can be used between the fall protection rails instead of a normal rail connector when the gaps are too large.

1. ▶ Turn the hammerhead screw in the fall protection rail profile and use the square neck of the hammerhead screw to position it in the opening in the rail profile.
2. ▶ Insert the rail connector with the lug protruding from it into the same opening.
3. ▶ Position the rail connector so that the compensation piece is supported by the bottom fall protection rail.

   ⇨ There may then be a maximum gap of 4 mm to the upper fall protection rail above the compensation piece.

5.15 Installation of the end stop

Installation of the end stop

An end stop is always used at the beginning or end of a fall protection rail and is installed directly on the fall protection rail.

The hammerhead screw must be rotated in the profile of the fall protection rail and positioned with the square neck in the opening of the rail profile. This is the only way to ensure a secure connection, see chapter Assembly using hammerhead screw, Page 27.

Positioning of the end stop

The end top [X] can be positioned so that it is located between the first two rungs of the access ladder – both at the top and the bottom – after the beginning of the rail.

Alternatively, the end stop [X] can be positioned so that it is attached before the first rung at the beginning of the top rail and after the last ladder rung at the bottom.

Installation of the barrier for non-approved fall arresters

An optional barrier for devices made by third parties can be used. If necessary, the barrier is installed at the beginning of a fall protection rail (at a height of approx. 1.5 m from the beginning of the rail).

The marking (label) on the barrier may be affixed at a maximum distance of 3 m from the access level (floor).

The hammerhead screw must be turned in the profile of the fall protection rail and positioned with the square neck in the opening

of the rail profile. This is the only way to ensure a secure connection, see chapter Assembly using hammerhead screw, Page 27.

⚠ WARNING!

Danger of falling due to the fall arrester sliding out of the fall protection rails

An end stop must be installed at the beginning and end of an access route as well as at each removal point or break in the fall protection rail to prevent the fall arrester from inadvertently slipping out.

Safety stop during installation

⚠ WARNING!

Danger of falling due to the fall arrester sliding out of the fall protection rails during installation

A safety stop to prevent unintentionally exiting the fall-arrest system must be installed at the top end of the rail in each section. This safety stop is removed against once installation work is complete.

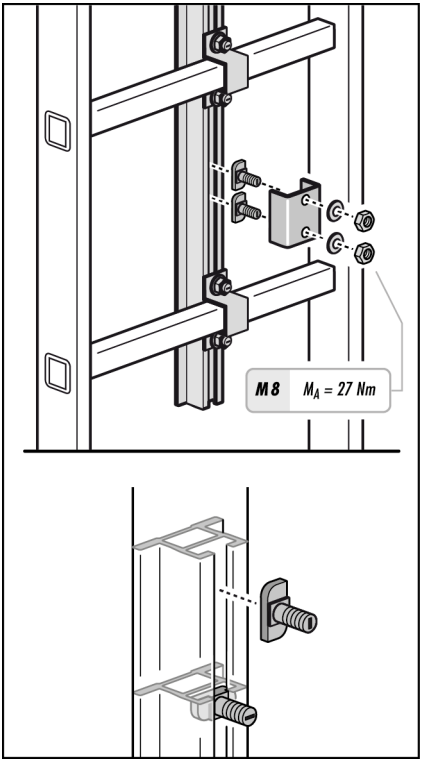


Fig. 29: Installation of the end stop

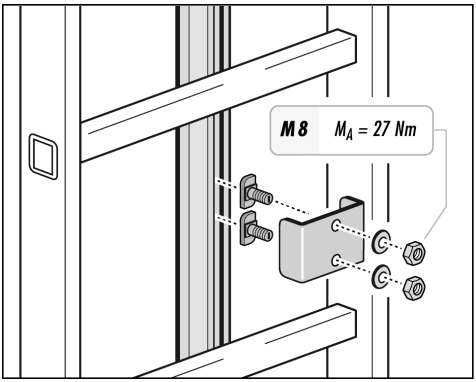


Fig. 30: Barrier for non-approved fall arresters

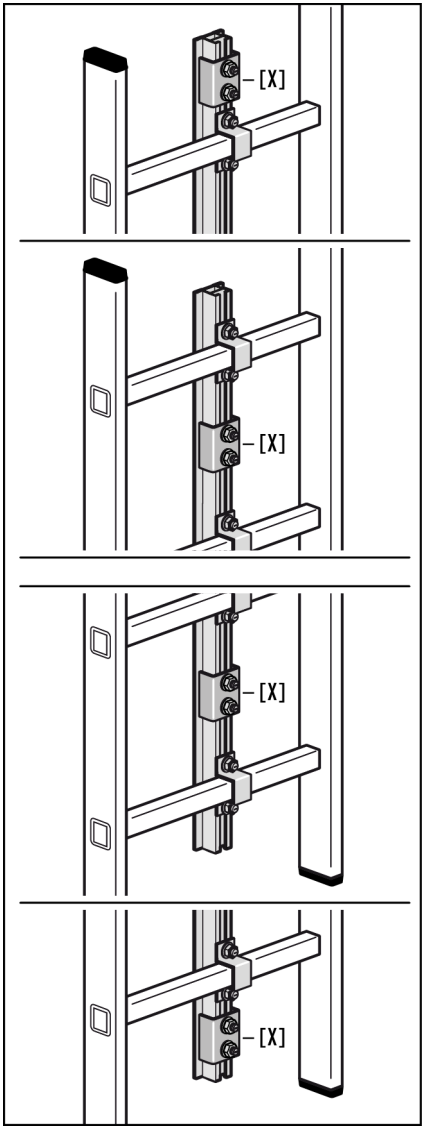


Fig. 31: Positioning of the end stop

5.16 Assembly and use of the plug-in access aid

Information about the plug-in access aid:

- The H-50.2 access aid is only intended for use in the H-50.2 fall-arrest system, and may only be used in combination with a H-50.2 fall protection rail.
- If only one H-50.2 plug-in access aid [Z] will be used for several H-50.2 fall-arrest systems, the coupling unit [X] must also be installed on each vertical ladder to do so.

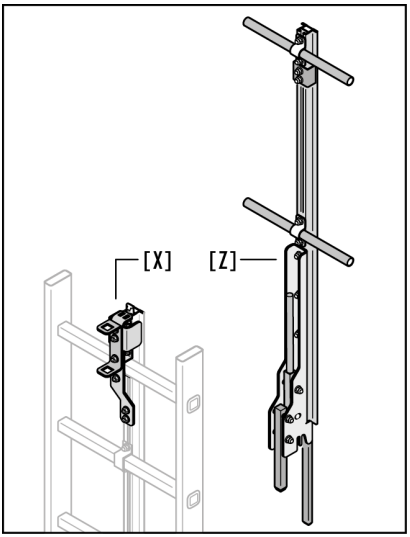


Fig. 32: Installation of the plug-in access aid

Installation of the coupling unit [Y] on the fall protection rail:

- The fall protection rail must protrude 125 mm above the top ladder rung.

1. ▶ Insert the connector [X-1] into the fall protection rail [Y] and use 4 grub screws to secure it.
2. ▶ Use a rung clamp on the top ladder rung to attach the fall protection rail when doing so.
3. ▶ Then screw the distance bolts [X-8] by hand.
4. ▶ Insert the end stop [X-2], the pressure springs [X-3] and the reinforcement [X-4].
5. ▶ Place the cover [X-5] on it and additionally secure the cover with 2 hammerhead screws [X-6].
6. ▶ Attention!
   The top edges of the cover [X-5] and the fall protection rail [Y] must be flush
7. ▶ Screw the entire coupling unit together with the cover [X-5] and the bracket [X-7] to the fall protection rail or the ladder rung.

Insertion of the plug-in access aid:

1. ▶ Insert the access aid into the bracket [X-7] and into the profile of the fall protection rail [Y] as shown.
2. ▶ Pull the lever [Z-1] so that both snap hooks [Z-2] can be guided into the opening in the cover [X-5].

   ⇨ The lever [Z-1] locks in place automatically when released, and secures the access aid.
3. ▶ Check that the access aid fits tightly before use.

Removal of the plug-in access aid:

1. ▶ Operate the lever [Z-1] to unlock the two snap hooks [Z-2] and to pull the access aid upwards to remove it.

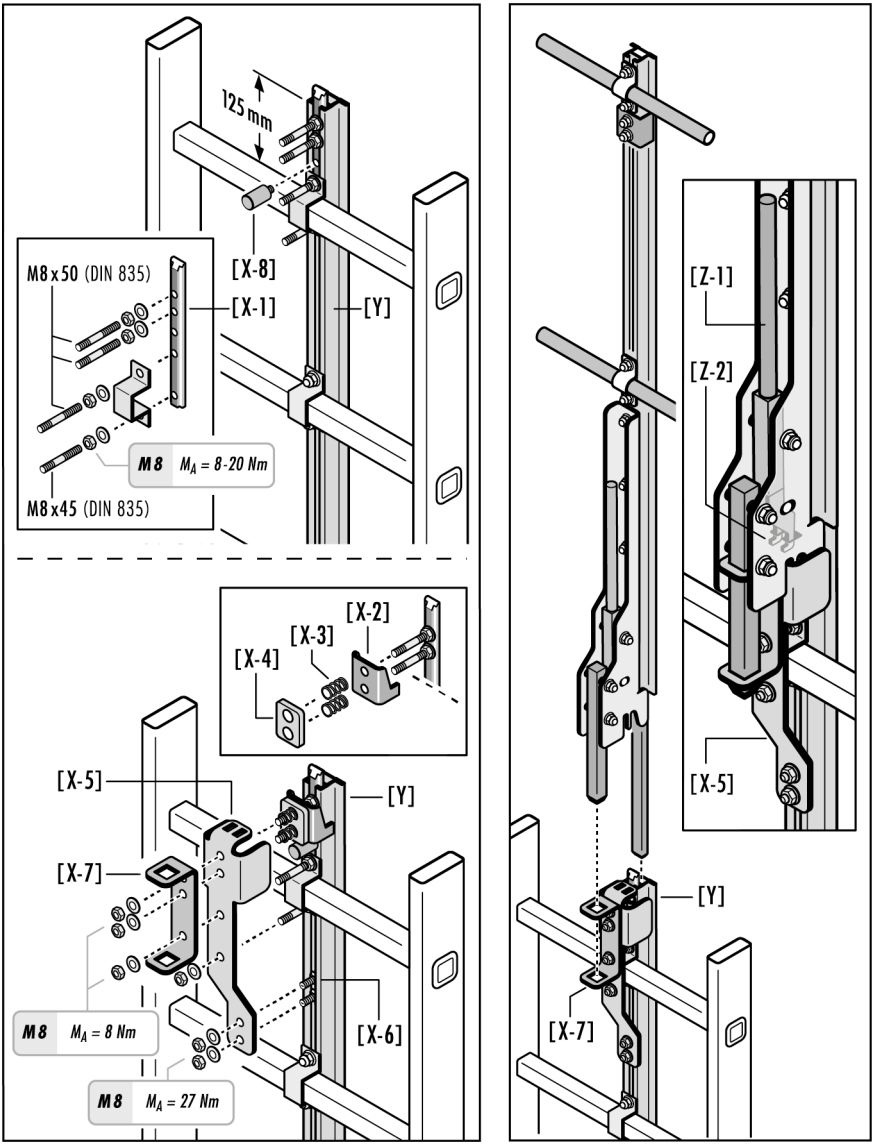


Fig. 33: Assembly and use of the plug-in access aid

6 Operation

6.1 Safety instructions for use

Permitted temperature range

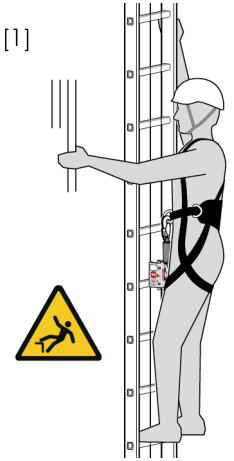
- The H-50.2 fall-arrest system is designed for use in a temperature range of -40°C to +60°C.
- Any other extreme climate conditions, for example temperatures <-40°C and >+60°C,
  heavy rain, snow and ice can impair the function of the fall arrester.
  Use of the fall-arrest system is not permitted in this case.

Information on use of personal protective equipment

- Personal protective equipment for used for rescue operations from heights and depths are components of rescue systems with which persons can be rescued by being pulled out, or abseiling up or down in an emergency situation. These include, for example:
  Rescue harnesses, rescue loops, rescue hoists, descender devices, shock absorbers, connectors and anchorage systems.
- Only approved rescue harnesses may be used.
  Safety harnesses in accordance with EN 361 (for Europe), AS/NZS 1891.1:2007 (for Australia/New Zealand) and OSHA/ANSI (North America) can also be used as rescue harnesses. Rescue harnesses feature at least one attachment point for connection of a shock absorber or snap hook. These attachment points can be two rescue eyelets in the shoulder area, the rear support eyelet or the fall arrester eyelet. The positioning rings present on the side are not approved for rescue operations.
- The user should neither touch nor operate the guided fall arrester during ascent or descent. This could impair or prevent the functioning of the brakes. To ensure safety of the user, it is essential that the guided fall arrester is only grasped or operated during ascent or descent from a safe position – without risking a fall.

6.2 Position of the user on the fall protection rail and fit of the safety harness

Position on the fall protection rail



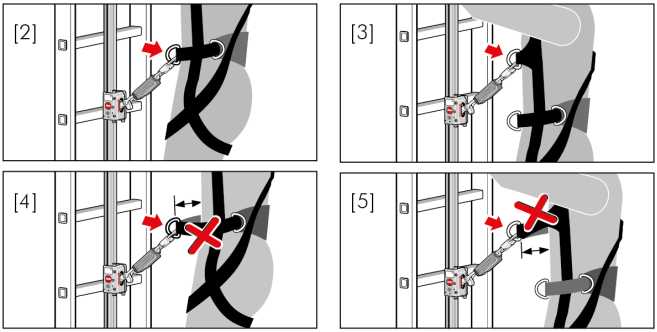
WARNING!

Danger of falling

There is a risk of falling if the user is incorrectly positioned on the fall protection rail.

Avoid a position on the fall protection rail directly above the fall arrester (see Fig. 1).

Safety harness fit



WARNING!

Danger of injury

A loose safety harness that has not been fitted tight to the body (Fig. 4+5) may cause injury to the user when using the fall-arrest system.

Ensure that the safety harness fits the body tightly and has been fitted correctly (see Fig. 2+3).

6.3 Daily check

Before using the fall-arrest system with the fall arrester, the function of the system must be checked daily; proceed as follows to do so:

1. ► Perform a visual inspection:
   - ⇨ Check that the fall protection rail is in a flawless, clean condition.
   - ⇨ Dirty or damaged equipment affects the function of the fall-arrest system.
   - ⇨ Contact with oils, acids or other corrosive liquids should be avoided.
   - ⇨ If there are signs of thick ice or soiling on the fall-arrest system, use of the system is not permitted.
2. ► Before each usage, check whether the free space required at the workplace below the user has been ensured so that no impact with an obstacle is possible in the event of a fall.
3. ► Observe the safety interval of 3 metres, see chapter Safety intervals on the system, Page 18.
   - ⇨ The protection afforded by the system cannot be guaranteed if the user is at the bottom area of the access ladder.
4. ► Before starting work, find out about an emergency plan with any rescue measures required, and how to initiate and implement them, from the operating company.
5. ► Also find out about the local circumstances to allow any potential danger spots to be identified.

After successfully completing the daily check, the fall-arrest system is ready for use.

6.4 Cleaning and maintenance

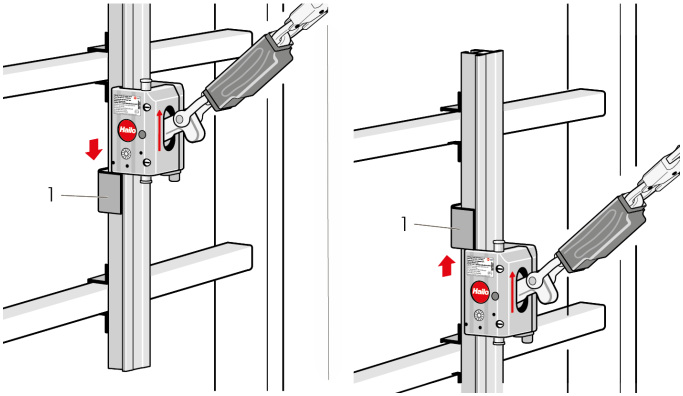
If components of the fall-arrest system (and the fall protection rail in particular) are soiled by concrete dust, sand, earth or other substances, clean the fall-arrest system as follows:

1. ► Clean the fall-arrest system using warm water (max. 40°C) and acid-free detergent.

NOTE

The fall arrester may only be used, cleaned and stored in accordance with the specifications in the information brochure on the Hailo PARTNER H-50.2 fall arrester with integrated BFD-50-136 energy absorbing lanyard.

6.5 Entry and exit points of the fall-arrest system



1 End stop at the entry and exit points

WARNING!

Danger of falling due to the fall arrester sliding out of the fall protection rails

Each position on the fall-arrest system at which the fall arrester can unintentionally slide out of the fall protection rail must be secured using an end stop.

All entry and exit points must be accessible from a safe position; if necessary, the user must be secured to prevent falling either collectively or by means of a securing system!

Upon entry and exit from the fall-arrest system, secure yourself to an approved attachment point (in accordance with EN 795).

There are entry and exit points at the beginning and end of the access route, as well as at the platforms along the fall-arrest system in accordance with local circumstances.

The Hailo PARTNER H-50.2 fall arrester is used to enter and exit the fall-arrest system directly at the fall protection rail.

There is an end stop [1] at the entry and exit points at the beginning and end of the access route. The end stops prevent the fall arrester from unintentionally sliding out of the fall protection rail.

Additional shock absorbers: e.g. when exiting the H-50.2 fall-arrest system

- The lengths of the connections to additional safety systems must be kept as short as possible to limit the fall height accordingly in the event of a fall.
- Additional shock absorbers, e.g. Y-connectors, may only be secured to the intended attachment points (in accordance with EN 795).

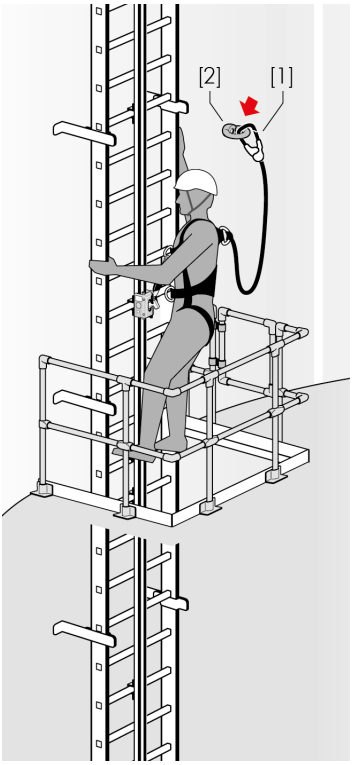
6.6 Attachment devices

WARNING!

Danger of falling due to unsecured entry into the fall-arrest system or when exiting the fall-arrest system.

Secure yourself against falling to an approved attachment point in accordance with the local circumstances.

To do so, the snap hook [1] of the shock absorber (in accordance with EN 363) is hooked into either an approved attachment point [2] (in accordance with EN 795) on the building or another structure.



1 Snap hook
2 Attachment point

The system operator is responsible for a sufficient number of attachment points.

- The position of attachment points and attachment devices using within an access system must be chosen so that the freefall and the fall height are kept to a minimum.
- The attachment point must be within the radius of action of the user still secured to the fall-arrest system.

1. ▶ Only choose attachment devices or attachment points that are above you
2. ▶ Check potential attachment points and attachment devices prior to each use.

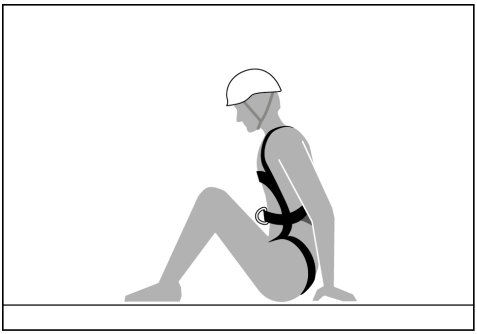
6.7 Conduct following a fall

In the potential event of a fall, start by taking the measures necessary in accordance with the system operator's emergency plan.

A system or part of a system (e.g. the H-50.2 fall protection rail) that has been subjected to a load caused by a fall must be inspected by an expert person before further use and, if necessary, be repaired or replaced.

- The fixed guide (fall protection rail H-50.2) must be inspected by an expert/qualified person prior to further use.
- Any repairs must be carried out in compliance with the procedures specified by the manufacturer.
- By principle, send the Hailo PARTNER H-50.2 fall arrester to the manufacturer for an inspection or for repair
- Only original parts may be used on the Hailo PARTNER H-50.2 fall arrester. Defective or worn parts may only be replaced with Hailo Wind Systems spare parts.

Information on first aid measures



1 Crouched position

IMPORTANT!

Arrange for a medical examination and care for the person injured with immediate effect to assess their state of health.

Notification of a physician using EMERGENCY CALL!

In the event of a fall, a prolonged period of hanging motionless in the safety harness (>15 minutes) may pose significant health risks.

DANGER!

Acute danger to life due to excess strain on the heart and kidney failure due to suspension trauma (orthostatic shock)

Avoid sudden horizontal positioning by placing the rescued person in a crouched position (see Fig. 1), even if there are no external signs of injury.

7 H-50.2 fall-arrest system assembly log

Assembly company (address):	
Assembly supervisor:	

- The assembly supervisor is responsible for proper assembly of the access equipment and the H-50.2 fall-arrest system.
- The following check list must be completed in full in indelible and legible writing.
- This check list is a component of assembly, and must be presented to the manufacturer or a testing institution upon request.

Items to check after H-50.2 fall-arrest system assembly	OK	Not OK
1. Load-bearing capacity of the substructure (e.g. access ladder) in accordance with specifications	☐	☐
2. Fall protection rail attached in the middle of the access ladder	☐	☐
3. Fall protection rail overhang at the top/bottom ladder rung min. 80 mm/max. 140 mm	☐	☐
4. Attachment interval of the Hailo H-50.2 fall protection rail to a Hailo access ladder, ≤ 1,400 mm (= 5 rung intervals)	☐	☐
5. Attachment interval of the Hailo H-50.2 fall protection rail to an access ladder already installed, ≤ 1,120 mm (= 4 rung intervals)	☐	☐
6. Installation of the rail connectors in accordance with the specifications; gap permitted between two fall protection rails in accordance with specifications	☐	☐
7. Installation of the end stop at each entry and exit point in accordance with specifications	☐	☐
8. Rails attached at the beginning and end of each respective ladder section	☐	☐
9. Rails attached before and after each rail joint	☐	☐
10. Coupling for access aid in accordance with specifications (if installed)	☐	☐
11. Barrier for non-approved fall arresters in accordance with specifications (if installed)	☐	☐
12. Inspection of all screw connections. Positioning/tightening torque in accordance with specifications	☐	☐

H-50.2 fall-arrest system assembly log

Items to check after H-50.2 fall-arrest system assembly	OK	Not OK
13. Potential equalisation of electrically conductive parts installed	☐	☐
14. Inspection of the flexible rail connector (if installed): Gap max. 1 mm	☐	☐
15. Inspection of the compensation piece (if installed): Gap max. 4 mm	☐	☐
16. Test run using the Hailo PARTNER H-50.2 fall arrested performed without problems	☐	☐
17. Marking: see fig. Markings and information on the H-50.2 fall-arrest system, Page 16		
• Ladder identification plate	☐	☐
• Designation of the H-50.2 fall protection rail	☐	☐
• H-50.2 fall-arrest system sticker	☐	☐
• Sticker for the approved fall arrester (if any)	☐	☐
18. Inspection tag affixed	☐	☐

Comments:	
Place, Date	
Signature of installation supervisor	

8 Inspection and maintenance

8.1 Information on inspection and maintenance

Fall-arrest systems must be inspected at least once a year by an expert/qualified person to ensure their proper condition and functionality.

NOTE

Expert/qualified person is:

A person who, due to technical training (see DGUV 312-906 / TRBS 1203) and personal experience, has the knowledge required for this safety system.

An expert/qualified person is familiar with the generally accepted rules of technology and with the relevant guidelines and regulations and can therefore assess a condition safe for use and proper use.

- This recurring inspection and maintenance of the Hailo Partner H-50.2 fall-arrest system must be conducted in accordance with the inspection and maintenance plan listed, see chapter Inspection plan for recurring inspections of the H-50.2 fall-arrest system, Page 48and must be performed in exact compliance with the specifications at all times.
- Documentation is required for all components, and for every system part or system.
- In addition, a recurring inspection according to the environmental conditions that prevail respectively must be carried out.
- This may result in inspection and maintenance intervals that are correspondingly shorter.
- If a fall occurs, the H-50.2 fall protection rail - System comonents must be checked by the manufacturer before further use with immediate effect.
- It is the operating company's responsibility to ensure that scheduled inspections and maintenance are carried out.

NOTE

The respective national regulations for operation and inspection must be observed.

The accident prevention regulations must be observed!
BGI 778 – BGR/GUV-R 198 – GUV 6.4 – GUV 16.11

- Inspection intervals in accordance with BGR/GUV-R data sheet 198. Additional inspection intervals due to local/operational circumstances (the company/operating company must define the additional inspection intervals).
- Exception:
  Fall arrest equipment on chimneys must be inspected by a qualified person at least once a year in accordance with BGI 691. The time intervals for the inspection are, in particular,

based on frequency of use, the load applied during use and the relevance and severity of defects identified in preceding inspections.

- The results of the inspection and maintenance must be documented in the inspection log.
- Proof of regular inspection is required for warranty claims.

IMPORTANT!

Regular inspection of the equipment is mandatory.
The safety of the user depends on the effectiveness and durability of the equipment.

8.2 Inspection plan for recurring inspections of the H-50.2 fall-arrest system	
	Inspection
	Date (month/year)
	Result
1. Rail attachment	Technical condition, positioning in the middle of the access ladder, firmly secured
2. Surfaces of fall protection rails	Technical condition
3. Attachment of the fall protection rails Interval/overhang	Attachment interval Hailo access ladder = ≤ 1,400 mm Attachment interval access ladder already installed = ≤ 1,120 mm Overhang at the top/bottom rung = min. 80 mm, max. 140 mm Rail attachment at the beginning and end of a ladder section
4. Rail connectors (including flexible rail connector/compensation piece, if installed)	Technical condition, firmly secured
5. Rail joint (transitions)	Distance between rails: max. 4 mm Rail attachment before and after each rail joint
6. End stops	Attachment (secure positioning), technical condition, firmly secured, installed on each entry and exit point
7. Barrier for non-approved fall arresters (if installed)	Attachment (positioning) and safety function
8. Access aid (if installed)	Technical condition (corrosion), firmly secured, function of end stop at coupling, function of lever (engagement and release)
9. Screw connections	Technical condition, firmly secured
10. Original marking	All markings present and easy to read?
11. Functional test	Use with Hailo PARTNER H-50.2 fall arrester
12. Documentation	Inspection correct and fully documented?

8.3 Results

1. Inspection		2. Inspection		3. Inspection		4. Inspection		5. Inspection	
/		/		/		/		/	
OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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Inspection plan for recurring inspections of the H-50.2 fall-arrest system	
	Inspection
	Date (month/year)
	Result
1. Rail attachment	Technical condition, positioning in the middle of the access ladder, firmly secured
2. Surfaces of fall protection rails	Technical condition
3. Attachment of the fall protection rails Interval/overhang	Attachment interval Hailo access ladder = ≤ 1,400 mm Attachment interval access ladder already installed = ≤ 1,120 mm Overhang at the top/bottom rung = min. 80 mm, max. 140 mm Rail attachment at the beginning and end of a ladder section
4. Rail connectors (including flexible rail connector/compensation piece, if installed)	Technical condition, firmly secured
5. Rail joint (transitions)	Distance between rails: max. 4 mm Rail attachment before and after each rail joint
6. End stops	Attachment (secure positioning), technical condition, firmly secured, installed on each entry and exit point
7. Barrier for non-approved fall arresters (if installed)	Attachment (positioning) and safety function
8. Access aid (if installed)	Technical condition (corrosion), firmly secured, function of end stop at coupling, function of lever (engagement and release)
9. Screw connections	Technical condition, firmly secured
10. Original marking	All markings present and easy to read?
11. Functional test	Use with Hailo PARTNER H-50.2 fall arrester
12. Documentation	Inspection correct and fully documented?

Results									
6. Inspec-		7. Inspection		8. Inspection		9. Inspection		10. Inspection	
/		/		/		/		/	
OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK
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8.4 H-50.2 fall-arrest system inspection log

H-50.2 fall protection rail - System comonents	
Batch number/serial number:	
Year of manufacture/expiration:	
Manufacturer:	Hailo Wind Systems GmbH & Co.KG Kalteiche-Ring 18 35708 Haiger – Germany info@hailo-windsystems.com

Date	Reason for inspection		Inspection result
1. Inspection	Recurring inspection	☐	
	Repair	☐	
2. Inspection	Recurring inspection	☐	
	Repair	☐	
3. Inspection	Recurring inspection	☐	
	Repair	☐	
4. Inspection	Recurring inspection	☐	
	Repair	☐	
5. Inspection	Recurring inspection	☐	
	Repair	☐	

(Use this double page as a template to copy for additional entries)

Date of purchase:	
Date of first use:	
Other information:	

Repair performed Comment	Inspector and company, signature	Next inspection date

H-50.2 fall protection rail - System comonents	
Batch number/serial number:	
Year of manufacture/expiration:	
Manufacturer:	Hailo Wind Systems GmbH & Co.KG Kalteiche-Ring 18 35708 Haiger – Germany info@hailo-windsystems.com

Date	Reason for inspection		Inspection result
6. Inspection	Recurring inspection	☐	
	Repair	☐	
7. Inspection	Recurring inspection	☐	
	Repair	☐	
8. Inspection	Recurring inspection	☐	
	Repair	☐	
9. Inspection	Recurring inspection	☐	
	Repair	☐	
10. Inspection	Recurring inspection	☐	
	Repair	☐	

(Use this double page as a template to copy for additional entries)

Date of purchase:	
Date of first use:	
Other information:	

Repair performed Comment	Inspector and company, signature	Next inspection date

9 Appendix

9.1 EU-Declaration of Conformity

EU-Konformitätserklärung

EU-Declaration of Conformity

Der Hersteller oder sein in der Gemeinschaft niedergelassener Bevollmächtigter:
The manufacturer or his authorised representative established within the company:

Hailo Wind Systems GmbH & Co. KG
Kalteiche-Ring 18
35708 Haiger
Deutschland · *Germany*

erklärt hiermit in alleiniger Verantwortung, dass das auf den Folgeseiten beschriebene mitlaufende Auffanggerät einschließlich fester Führung „System H-50.2“ den einschlägigen Harmonisierungsrechtsvorschriften der Verordnung (EU) 2016/425 sowie der harmonisierten Norm EN 353-1:2014 + A1:2017 (DIN EN 353-1:2018) entspricht.

hereby declares in sole responsibility that the guided type fall arrester including a rigid anchor line „H-50.2 System“ described on the following pages complies with the relevant harmonization legislation Regulation (EU) 2016/425 as well as the harmonized standard EN 353-1: 2014 + A1: 2017 (DIN EN 353-1: 2018).

Die notifizierte Stelle / *The notified body*
DEKRA Testing and Certification GmbH
Handwerkstraße 15, 70565 Stuttgart, Germany
Certification Body Adress:
Dinnendahlstraße 9, 44809 Bochum
Deutschland / Germany
0158, Europäisch notifizierte Stelle / *Notified Body of the EU*

hat die EU-Baumusterprüfung gemäß „Modul B“ durchgeführt und die EU-Baumusterprüfbescheinigung ausgestellt.
has carried out the EU type examination according to „Module B“ and the EU type examination certificate ssued.

ZP/B173/22

Die PSA unterliegt den Konformitätsbewertungsverfahren Modul C2 unter Überwachung der notifizierten Stelle Dekra Testing and Certification GmbH mit der Kennnummer 0158.
The PPE is subject to the conformity assessment procedure in accordance with „Module C2“ under the supervision of the notified body Dekra Testing and Certification GmbH with the identification no. 0158.

Haiger, 28.11.2022
Ort, Datum / *Place, Date*

Unterschrift der bevollmächtigte Person
Signature of authorized person (Johannes Weg, executive director)

9.2 UK Declaration of Conformity

UK CA

Declaration of Conformity
In accordance with UK Government guidance

The manufacturer or his authorised representative established within the company:

Hailo Wind Systems GmbH & Co. KG
Kalteiche-Ring 18
D-35708 Haiger
Germany

hereby declares in sole responsibiltiy, that the guided type fall arrester including rigid anchor line „H-50.2 System“ describes in the following pages complies with the provisions of the relevant UK designated standard BS EN 353-1:2014+A1:2017 as well as the equivalent EU harmonised standard EN 353-1:2014+A1:2017

The Object of the declaration described above is in conformity with the relevant UK Statutory instuments (and their amendments): Regulation 2016/425 on Personal protective equipment as brought into UK Law and amended.

The notified body
DEKRA Testing and Certification GmbH
Handwerkstraße 15, 70565 Stuttgart, Germany
Certification Body Adress:
Dinnendahlstraße 9, 44809 Bochum
Identifiation no. 0158
has carried out the EU type examination in accordance with „Module B“ and issued in

EU-Type Examination Certificate No. ZP/B173/22

The PPE is subject to the conformity assessment procedure in accordance with „Module C2“ (Declaration of Conformity to type based on internal production control plus supervised product checks at random intervals) under the supervision of the notified body DEKRA Testing and Certification GmbH with the identification no. 0158.

Haiger, 28. November 2022

Place, Date

Signature of authorized person
(Johannes Weg, ececutive director)

9.3 EU type examination certificate

TRANSLATION

(1) EU-Type Examination Certificate

according to Module B Paragraph 6.1 of PPE Regulation (EU) 2016/425

(2) Regulation of the European Parliament and of the Council of 9 March 2016 relating to personal protective equipment (PPE) - Regulation (EU) 2016/425

(3) No. of EU-Type Examination Certificate: **ZP/B173/22** replaces ZP/B036/21

(4) Product: **Guided-type fall arrester including a rigid anchor line**
Type: Hailo PARTNER H-50.2

(5) Manufacturer: **Hailo Wind Systems GmbH & Co. KG**

(6) Address: **Kalteiche-Ring 18, 35708 Haiger, Germany**

(7) Risk category: **III**

(8) The design and construction of this personal protective equipment and any acceptable variation thereto are specified in the appendix to this EU type-examination certificate.

(9) The certification body of DEKRA Testing and Certification GmbH, Notified Body No. 0158 according to Chapter V of Regulation (EU) 2016/425 of 9 March 2016, certifies that this personal protective equipment has been found to comply with the essential Health and Safety Requirements given in Annex II to the Regulation. The evaluation results are recorded in report PB 22-194. Other possibly applicable Union legislations applicable to the specified personal protective equipment have not been taken into account in this EU-type examination certificate.

(10) The essential Health and Safety Requirements are assured in consideration of

DIN EN 353-1:2018

(11) This EU type-examination certificate relates only to the design, examination and tests of the specified personal protective equipment in accordance to Regulation (EU) 2016/425.
For category III personal protective equipment, this EU type-examination certificate may only be used in conjunction with one of the conformity assessment procedures referred to Article 19 (c).

(12) When applying the CE Marking according to Article 16 and 17 of Regulation (EU) 2016/425 to the products that conform to the types examined, the client is obliged to add, in accordance with the attached pattern, the identification number of the Notified Body engaged in the conformity assessment according to Module C2 or D.
Furthermore, the manufacturer is obliged to issue an EU declaration of conformity in accordance with Article 15 of Regulation (EU) 2016/425 and to enclose it with the personal protective equipment, or to indicate the Internet address in the manual and in the instructions in Annex II, point 1.4., at which the EU declaration of conformity can be accessed.

(13) This EU-Type Examination Certificate is valid until 2027-11-27.

DEKRA Testing and Certification GmbH
Bochum, 2022-11-28

Signed: Krökel
Managing director

We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

Managing director

DEKRA Testing and Certification GmbH, Handwerkstraße. 15, 70565 Stuttgart, Germany
Certification Body: Dinnendahlstraße 9, 44809 Bochum, Germany
Telephone +49.234.3696-400, Fax +49.234.3696-110, DTC-Certification-Body@dekra.com

Notes

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E-mail: info@hailo-windsystems.com • www.hailo-windsystems.com