

Assembly/Installation instructions

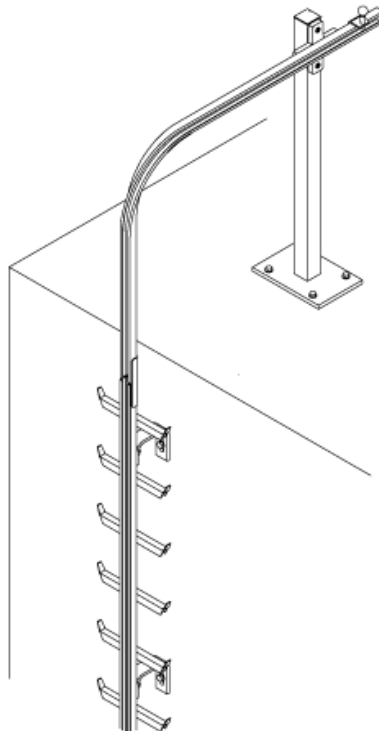
Operating Instructions

for

Söll fall protection systems

Typ „Söll-GlideLoc™“

twisted change overrail



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SE 28



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1. Introduction

General information

These instructions are intended to assist those using and installing this system to achieve trouble-free operation.

It is therefore necessary that these instructions are read thoroughly and clearly understood by all personnel responsible for using this installation.

The manufacturer will not accept any liability for damage caused by non-adherence to these instructions.

If, despite all precautions having been observed, there are still problems which cannot be solved with the help of these instructions, please contact us. Our staff will be pleased to be of assistance.

2. Equipment description

Due to its three-dimensional bending, the **twisted change overrail** enables the user to safely cross building projections (e.g. flat roof ledges) without having to remove the associated fall arrester from the route of ascent.

A climbing block (order no. 16571) is included in the scope of delivery to prevent inadvertent sliding out and wrong insertion of the fall arresters.

The **twisted change-over rail** can be used to connect vertical routes with horizontal anchorage devices.

Attention!

The glider must not be used for anchorage devices (order no. 15620)!

In order to provide the **roof transfer piece** with a second attachment point on the building, a support foot can be provided at the request of the customer (order no.: 17509), which can be mounted on the flat roof. The attachment cross **must be used** at the free end when installing the transfer piece.

3. Safety precautions

General safety precautions

Anyone working with or on SÖLL fall protection systems in accordance with EN 353/part 1 must be familiarized with these instructions prior to using the system.

Attention!

Use which is not in accordance with these instructions constitutes a risk to human life!

The operator of the fall protection system must ensure that these instructions are either

- retained in a dry and secure condition at the installation or
- retained by the operator, whereby he or she must ensure that the user is aware of the storage location of these instructions and that the documents are accessible at all times.

The operator must be able to present these instructions at the request of the manufacturer (Honeywell Fall Protection Deutschland GmbH & Co. KG or one of its authorised dealers).

The SÖLL fall protection system must be used in accordance with the instructions for the relevant SÖLL fall arrester.

The fitment and use of SÖLL accessories to such fall protection systems must strictly adhere to the relevant instructions for the fitment and use thereof.

In case of the use of further personal protective equipment, relevant instructions must be followed.

The accident prevention regulations BGV A1 and BGV D 36 as well as the "Rules for the use of personal protection equipment against fall or for arresting and saving" BGR 198 and 199 must be adhered to. UVV BGV C 22 as well as notice BGI 530 apply for assembly and/or installation. Always follow applicable local safety regulations.

Söll fall protection systems may only be fitted and used with original Söll components/elements. The combination with non-original components/elements may influence the safety of SÖLL fall protection systems. In such cases, Honeywell Fall Protection Deutschland GmbH & Co. KG and a dealer authorized by the same refuse to accept product liability. In addition, such systems are not properly approved and authorized since SÖLL fall protection systems are tested, approved and authorized as complete systems. Full liability will therefore rest with the operator.

Söll fall protection components, made of stainless steel grade 1.4571 are pickled. They should be stored and further processed in an appropriate way.

The checklist (chapter 8) must be filled in clearly and correctly by the construction manager of the building company using an indelible pen. A visual check for correct operation of the system must be carried out before and during each use of the installed fall protection system. When using attachment clamps, tightening of the clamp brackets may lead to slight deformation and cracks in the zinc coating in the vicinity of the deformation, but this will not have any effect on the safety and anti-corrosion capability of the equipment.

4. Assembly/Installation

Note

All mounting parts supplied are made of hot-dipped galvanised steel.

4.1 The installation kit consists of:

- (1) Transfer piece, right, (order no. 16315) or
- (2) Transfer piece, left, (order no. 16292)
- (3) Attachment part (support foot on request, order no. 17509)
- (4) Profile connecting part with attachment components
- (5) Climbing block (order no. 16571)
- (6) Attachment cross
- (7) Auxiliary plate for twisted change overrail

4.2 Equipment required for easy mounting:

2 open wrenches, SW 19

4.3 For mounting to existing structures

- 2 fall arresters
- 2 full body harnesses according EN 361
- 1 cantilever arm with pulley (for a max. load of 20 kg) purchase order no. 17563, for lifting and lowering of ladder sections.
- 1 ope for cantilever arm, maximum diameter 12 mm, length as required
- 1 toolbox
- 2 walkie-talkies

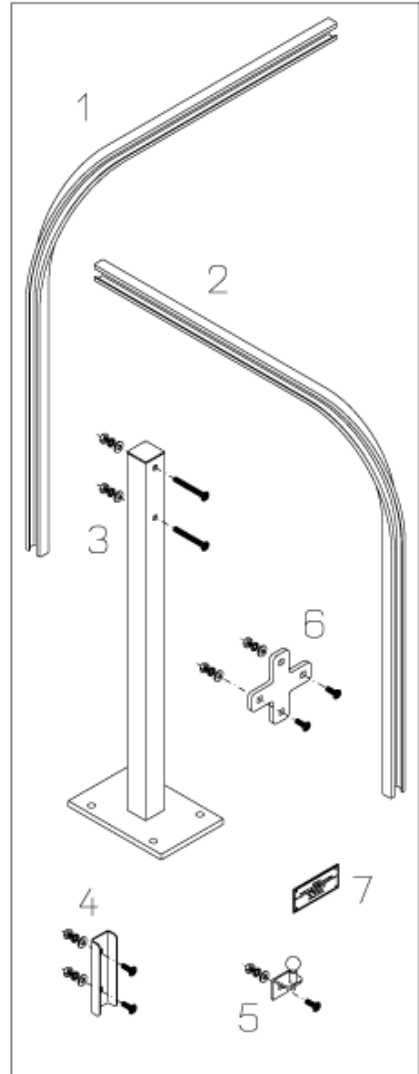
Min. 1 additional safety lanyard according to EN 354/355 with energy absorber to protect the mounting person against falls from height during the installation.

4.4 Personnel required for installation

two persons

Attention!

The roof transfer piece **must** be secured to at least 2 attachment points **before** use!



4.5 General assembly instructions

- Components must be handled carefully. Do not throw away the guide rails.
- Before installation, ladder sections must be cleaned from dirt - in particular on connecting surfaces. They should not come into contact with cement, mortar or similar substances. Remnants of mortar must be wiped off immediately. Especially the sliding surfaces for the fall arrester on the inside and outside of the guide-rail must be free of dirt.
- Damaged parts may neither be used nor repaired but must be replaced by new ones.

4.6 Minimum bolt dimensions for the installation of ladders:

The minimum bolt size is M 12. According to DIN 18799-3, the bolts used on chimneys must be of stainless steel A 4 DIN ISO 3506-1, at least M 20 or, when used for anchoring, 1.25 m M 12 bolts. Ordering of the mounting brackets must be based on the minimum dimensions.

4.7 Instructions for assembling ladders

We specifically stress that only those dowels may be used which are permitted by site inspection engineers.

4.8 Permissible arrester equipment

The twisted change-over rail may only be used in conjunction with fall arrester Compact/Comfort or Söll-Fall arresters, which have been included into the delivery programme after March 2003.

The twisted change-over rail may only be used in conjunction with fall arresters of Söll-GlideLoc™ fall protection devices. The additional plate states that „Universal“ and „Standard“ fall arresters must not be used!

Note:

If using a guided-type fall arrester in horizontal guide rails, the snap hook must always be connected with the eye of the safety harness. **An extension between the safety harness and the guided-type fall arrester is not permitted!**

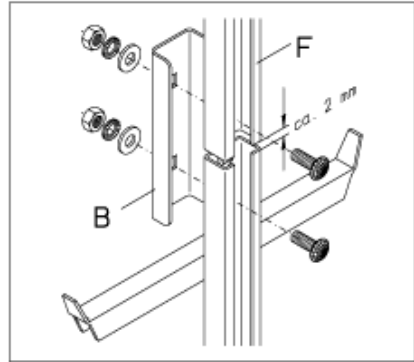
Attention!

If vertical routes are connected with horizontal guide rails, the glider for anchorage devices (order no. 15620) must not be used!

4.9 Assembling the twisted change-over rail

When assembling from new, assemble the ascent route in accordance with the relevant assembly instructions. The free ladder projection at the upper end must not exceed 380 mm. If it is greater, an additional retaining bracket must be fitted.

- Fit the connecting piece (B) on the uppermost ladder element.
- Bolt the twisted change-over rail (F) to the connecting piece. Set the guide rail joint to about 2 mm. (Fig. 2)
- Use the attachment cross (F1) to mount the twisted change-over rail (F) at a sufficiently dimensioned fixing point (e.g. support foot, order no. 17509) at the free end. When doing so, make sure that all fixing holes of the attachment cross (F1) are used (2x fixing on change-over rail, 2x fixing on structure). (Fig. 3)



Attention!

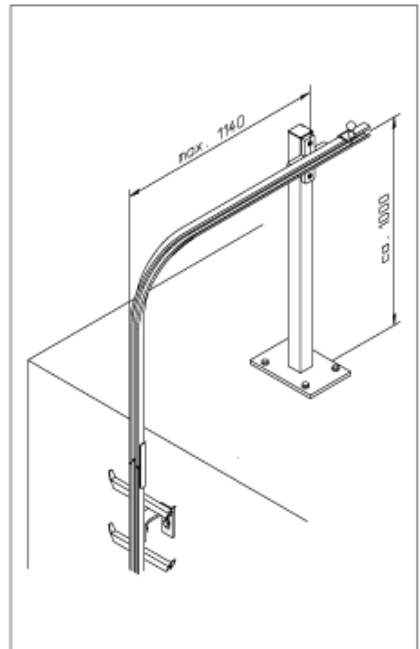
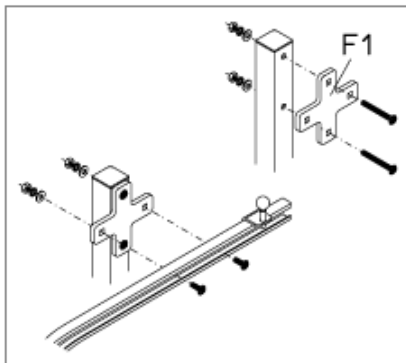
The distance between the front edge of the twisted change-over rail and the fixing point must not exceed 1,140 mm! (Fig. 4)

Note:

The catch noses of the twisted change-over rail must always point upwards when vertical.

Attention!

The twisted change-over rail must be securely mounted on at least 2 fixing points before being used.



4.10 Installation of the climbing block

Attention!

It is absolutely essential that a climbing block is fitted to the end of the twisted change overrail system!

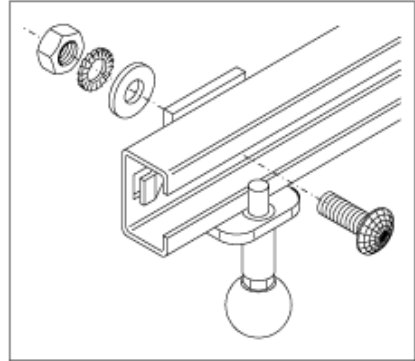
Depending on the type of roof transfer piece, the climbing block can be mounted in a different way (right or left version). The installation position of the climbing block can be seen in the illustration on the right. You must ensure that the ascending lock prevents the fall arrester from being incorrectly attached.

Attention!

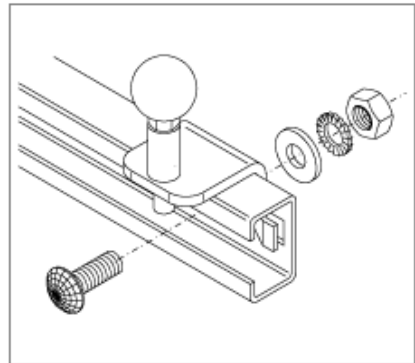
Incorrect assembly could result in falls!

Note:

The combination with a turntable (order no. 11607/20349) is only permitted with a clockwise twisted change-over rail (order no. 16315).



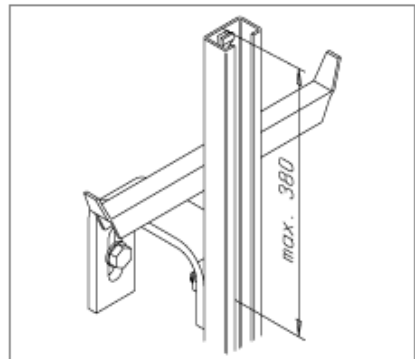
Installation of the climbing block to a left roof transfer system



Installation of the climbing block to a right roof transfer system

4.11 Retrofitting the roof transfer system to an existing climbing system

- Remove the existing climbing block.
- Check that the free ladder projection at the upper end is no more than 380 mm, otherwise an additional retaining bracket must be fitted.
- Fit the connecting piece on the uppermost ladder element.
- Bolt the roof change-over rail to the connecting piece. Set the guide rail joint to about 2 mm.
- Fit the roof transfer piece to the second attachment point (if necessary, fit support foot), use the attachment cross. Do not exceed 1,140 mm! (for assembly, see also Points 4.9 and 4.10 and Figs. 2 - 4)



4.12 Torque ranges:

When tightening mounting screws in **steel quality 8.8** used in combination with tooth lock washers the following tightening torque range is recommended:

Bei:	M 10	M 12	M 16	M 20
	20 Nm	25 Nm	60 Nm	120 Nm

When tightening mounting screws in **stainless steel quality 1.4571** in combination with Söll supplied auto-locking nuts (DIN 985) the following torque range is recommended:

Bei:	M 10	M 12	M 16	M 20
	40 Nm	45 Nm	85 Nm	150 Nm

5. Inspection and approval

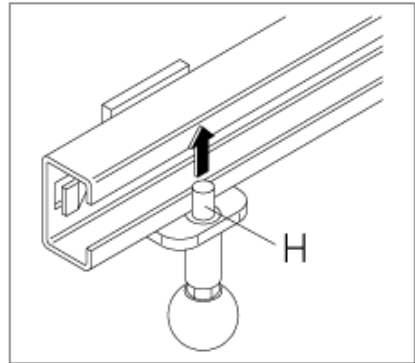
Both before and during use, consideration should be given to how rescue operations can be performed safely and effectively.

A fall protection device according to EN 353 Part 1 should only be used by persons who

- have been trained and/or are otherwise proficient in its use,
or
- are under the direct supervision of a person who has been trained and/or is otherwise proficient in its use.

The following points must be observed for the purposes of acceptance:

- The anticlockwise/clockwise change-over rail must be flush with the ascent route.
- The guide rail joint between the route and the change-over rail must be approx. 2 mm.
- The distance between the front edge of the change-over rail and the fixing point must be 1,140 mm.
- All fixing holes on the attachment cross must be used.
- All screwed connections must be inspected. They must be tight and secured against loosening (see Point 7).
- Even bolts pre-assembled in the factory must be checked and secured where appropriate.
- The stop bolt (H) of the ascending lock must be forced into the starting position by spring resistance.



6. Maintenance

Attention!

For safety reasons it is not recommended that independent repairs are carried out to the twisted change overrail. Mechanically damaged twisted change overrails, e.g. after a fall, must be exchanged.

A fall protection system which has been used during a fall must be taken out of use immediately and kept out of use until the perfect condition of the fall arrester system has been checked and ascertained by a specialist.

Twisted change overrails should be checked as necessary by a specialist for perfect condition.

According to BGI 691 the guide rails of fall protection systems fitted to chimneys must be checked by a specialist as necessary, but at least every 2 years.

Competent person is a:

One who is knowledgeable of manufacturer's recommendations and instructions on manufactured components and is capable of identifying existing and predictable hazards in any component of a personal fall protection system and related equipment used in the work environment and who has authorization to take prompt corrective measures to eliminate or control the hazards. He must be familiar with the relevant guidelines, national and international safety regulations and generally acknowledged rules of safety technology (e.g., EN standards).

Fall arresters must be examined by a competent person at least once a year and after every fall incident. In such cases refer to the relevant instructions of the fall arrester.

It is necessary to check for correct operation of all components before or at the time of using a fall protection system.

The end stop (point 4.10) at the end of the twisted change overrail must have been installed.

The locating bolt (H) on the side of the guide rail must move on its own into the home position and so prevent the arrester unit from running out of the rail.

Guide-rails must always be free of dirt.

Any bolt connections must be tightly fastened and secured, see section 7.

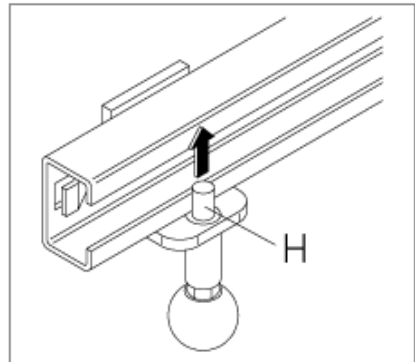
A durable and sufficiently large identification plate must be fitted at every inlet and outlet point and must show the following information:

- Year of manufacture
- Manufacturer, supplier or importer of the ladder
- Type of fall protection system according to DIN EN 353-1
- Note: „Use the ladder only with arrester harness and arrester unit“!

An additional plate for the roof transfer piece must also be fitted at each inlet and outlet point.

Note:

Durable means, for instance, a stamped/coated aluminium identification plate.



7. Bolt connections/securing of bolts

At use of hot dip galvanised screws the tooth washer ensures satisfactory securing of the screw/nut connection.

At use of stainless steel screws self-locking nuts (nyloe or similar) shall be used.

8. Check list

The two pages of this checklist must be filled out completely by the installation manager of the building firm, using an indelible pen. The installation manager of the building firm is responsible for the correctness of all details. Points checked which are faulty or deviate from the specified details must be entered in the list with „Room for remarks“ on the second page.

Control Activity :

yes no

- | | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | The twisted change overrail is secured to the Söll fall protection system and to a sufficiently sized attachment point on the roof (e.g. support foot, see point 4.9) using the attachment cross. |
| <input type="checkbox"/> | <input type="checkbox"/> | The distance between the front edge of the twisted change-over rail and the fixing point is no greater than 1,140 mm. |
| <input type="checkbox"/> | <input type="checkbox"/> | The gaps at the guide-rail joints comply with point 4.9. |
| <input type="checkbox"/> | <input type="checkbox"/> | The mounting elements are correctly installed and all bolt connections are tightly fastened. (For tightening torques see Point 4.12) |
| <input type="checkbox"/> | <input type="checkbox"/> | Even the screwed connections pre-assembled in the factory were inspected (for tightening torques see Point 4.12). |
| <input type="checkbox"/> | <input type="checkbox"/> | All bolt connections are secured against loosening in accordance with section 7. |
| <input type="checkbox"/> | <input type="checkbox"/> | An ascending lock is fitted at the end of the twisted change-over rail in accordance with Point 4.10. |
| <input type="checkbox"/> | <input type="checkbox"/> | In accordance with point 4.9 and 4.11 there are no rail projections of more than 380 mm without extra reinforcement. |
| <input type="checkbox"/> | <input type="checkbox"/> | The twisted change-over rail and the guide rails/ladders are free of dirt. |
| <input type="checkbox"/> | <input type="checkbox"/> | Only anticorrosive, or hot dip galvanized mounting elements and bolt connections have been used. |
| <input type="checkbox"/> | <input type="checkbox"/> | The SÖLL fall arrester can only be inserted into the guide-rail in the direction in which it travels |
| <input type="checkbox"/> | <input type="checkbox"/> | Only original components from Honeywell Fall Protection Deutschland GmbH & Co. KG were used |
| <input type="checkbox"/> | <input type="checkbox"/> | The auxiliary plate for the twisted change overrail has been fitted. |
| <input type="checkbox"/> | <input type="checkbox"/> | Test climbing has taken place. |
| <input type="checkbox"/> | <input type="checkbox"/> | No defects or shortcomings found. |
| <input type="checkbox"/> | <input type="checkbox"/> | This manual was handed over to the operator. |

Installation Site: _____

Owner: _____ Installing company: _____

Street: _____ Street: _____

City: _____ City: _____

Telephone: _____ Telephone: _____

Fax: _____ Fax: _____

Manual handed over to: _____
name (site operator or representative) signature

Chief engineer of the installing company: _____
name signature

Place: _____ Date: _____

Defects, irregularities and deviations from the checklist must be noted here:

Noted defects/shortcomings	competent person/installer	signature	date