STAKA

Roof access hatch installation instructions

11.05.2020

Table of contents

PLEASE RETAIN THESE INSTALLATION INSTRUCTIONS CAREFULLY FOR FUTURE USE!

Please contact your supplier for more information about the warranty terms and conditions. We also refer you to our General Terms and Conditions of Sales and Delivery which can be made available on request.
The manufacturer accepts no liability for damage or injury resulting from failure to follow these installation instructions and/or failure to take appropriate care in the transport, installation and use of the roof access hatch. Because we continuously strive to improve our products, it is possible that certain product details may deviate from the description in this manual. The instructions should therefore be considered as a guideline for installing the product described in this manual. The manufacturer has prepared this manual with the utmost care, however it can accept no liability for any errors that may occur in the manual nor the consequences of these errors.
All rights reserved. No part of this manual may be reproduced in any way whatsoever.

1. Introduction

This manual describes how to install and use your new roof access hatch. Please read these instructions carefully for best results and to ensure you can use the roof access hatch safely. Please follow the instructions in the manual carefully. Always perform the installation steps in the correct order.
Staka is not responsible for the consequences of faulty or incorrect installation. Store this manual in a safe and dry place. Should the manual be misplaced, a new copy can be ordered from Staka.

2. Safety precautions and warnings

Important: read the safety precautions and warnings carefully before installing the roof access hatch.

- Follow the instructions and guidelines exactly as they are described in this manual. Never change the order of the installation steps. Please contact Staka if there is any doubt about the instructions. Staka reserves the right to make technical changes without prior written notice.
- At least two qualified persons are required to install the roof access hatch.
- Check the contents of the delivery immediately upon receipt. Please contact Staka immediately in case of damaged or incomplete deliveries.
- Store the roof access hatch in a dry, well ventilated space.
- Cordon off the work area to ensure the safety of others.
- Do not install the roof access hatch in heavy winds or on a wet roof surface.
- Always wear appropriate protective clothing while working (work gloves, safety helmet, safety glasses, dust mask, anti-slip shoes, etc.).
- Open the packaging carefully. Make sure you do not damage the roof access hatch.
- The roof access hatch is delivered as a complete unit. For your own safety and to preserve of the quality of the roof access hatch, we recommend that you do not remove the cover from the upstand. If you do so regardless, you will void all warranties and liability for the product.
- Always use the handles to open and close the hatch and use the diagonal support to climb on and off the roof.
- **CAUTION!** Make sure you do not crush your fingers or other limbs between the roof access hatch and frame and/or the hinges.
- **CAUTION!** Always secure the hatch when it is in the open position so that it cannot accidentally fall closed (locking function on gas pressure spring).
- **CAUTION!** To prevent the risk of falling, we recommend closing the cover after passing through the hatch. Closing the cover will not lock the hatch, so the user cannot be locked out.
- Staka accepts no liability for damage or injury caused from failure to strictly follow the safety precautions and instructions in this manual or by negligence during the installation, use and/or maintenance of the product and any accessories.

## 3. Types of roof access hatches and product dimensions
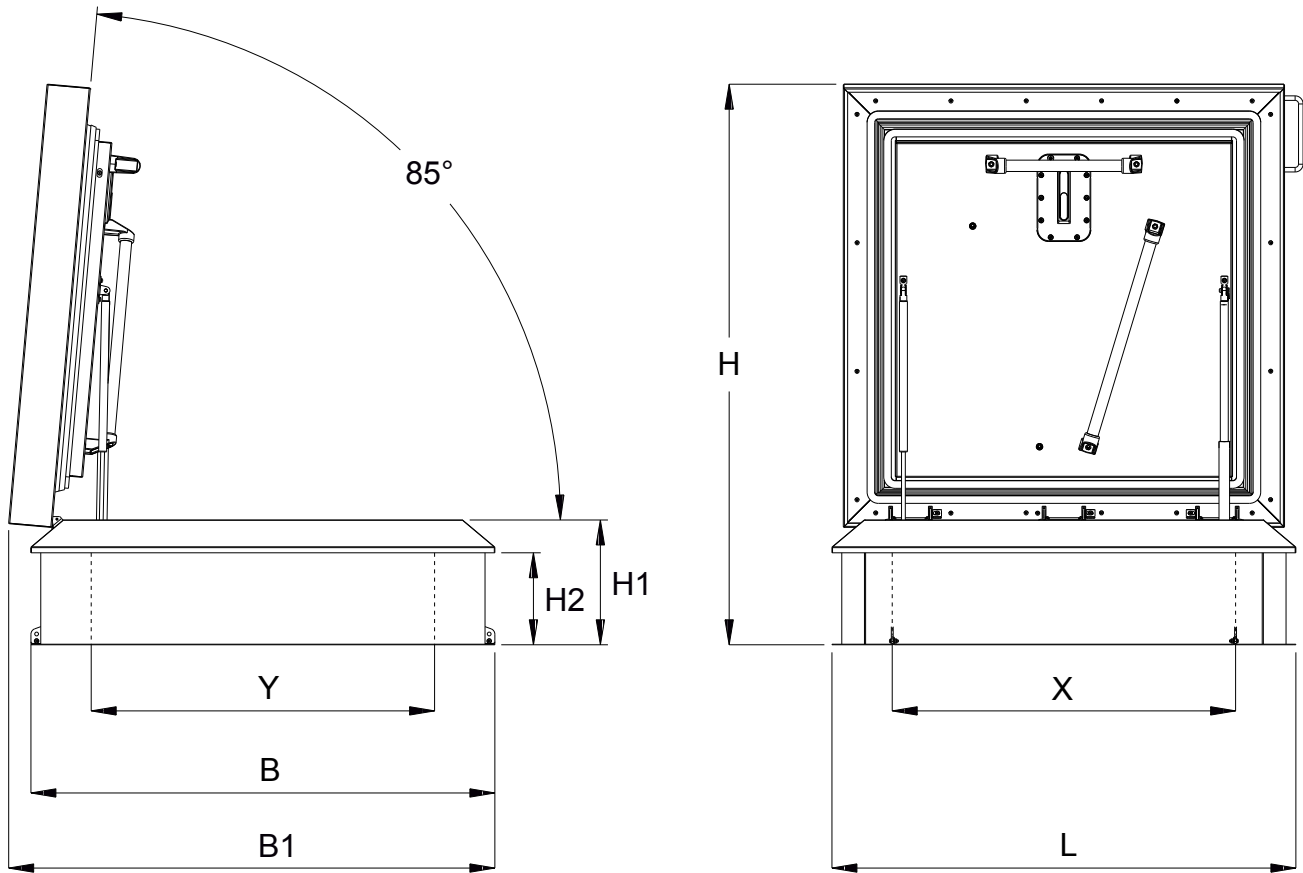
TopAccess roof access hatches (in mm)

Type	Clear Opening (X x Y)	L	B	B1	H	H1	H2	Weight
TOP97	± 900 x 700 mm	1227	1027	1085	1285	330	250	± 120 kg
TOP99	± 900 x 900 mm	1227	1227	1285	1485	330	250	± 135 kg
TOP147	± 1400 x 700 mm	1727	1027	1085	1285	330	250	± 150 kg
TOP159	± 1500 x 900 mm	1827	1227	1285	1485	330	250	± 175 kg
TOP249	± 2400 x 900 mm	2727	1227	1285	1485	330	250	± 235 kg

DL-series roof access hatches (in mm)

Type	Clear Opening (X x Y)	L	B	B1	H	H1	H2	Weight
DL 97	± 900 x 700 mm	1043	843	950	1190	330	290	± 65 kg
DL 99	± 900 x 900 mm	1043	1043	1150	1390	330	290	± 75 kg
DL 147	± 1400 x 700 mm	1543	843	950	1190	330	290	± 85 kg
DL 159	± 1500 x 900 mm	1643	1043	1150	1390	330	290	± 105 kg
DL 249	± 2400 x 900 mm	2543	1043	1150	1390	330	290	± 145 kg

4. Parts overview
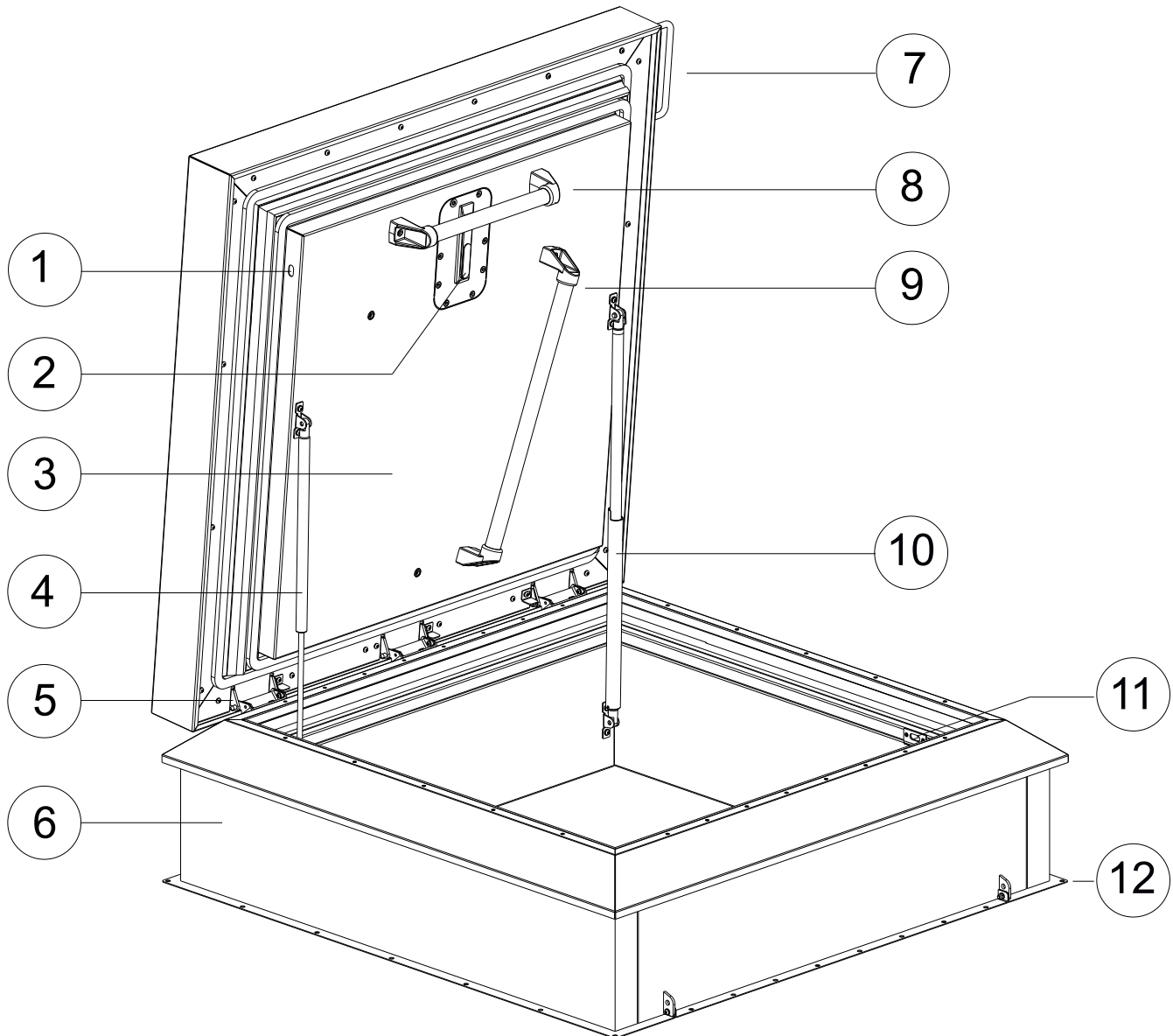
1. Locking pins
2. Two-point locking system with cylinder lock
3. Double-walled insulated stainless steel cover
4. Gas pressure spring
5. Stainless steel hinges
6. Stainless steel upstand (330 mm) with insulated cladding
7. Outside handle
8. Inside handle (1)
9. Inside support
10. Gas pressure spring with automatic locking in open position
11. Lock eyelets
12. Stainless steel mounting flange

5. Preparation

5.1 Installation conditions

Important: read the installation conditions carefully before installing the roof access hatch.

- The roof must be in good condition and sufficiently strong enough to bear the weight of the roof access hatch, including the associated wind and snow loads. Check the stability of the roof and strengthen the roof or structural supports where necessary. Always call in a structural designer when in doubt. Make sure that the load-bearing capacity of the roof is not exceeded (locally and entire roof).
- Do not install the roof access hatch if the roof pitch is more than 40°. If the roof pitch is more than 40° then the pitch of the roof access hatch will need to be adjusted with the upstand.
- Install roof access hatches, at least those with a window (glass), over the long side at a pitch of 5°. This minimizes the chance of dirt build-up on the lid/glass.
- Ensure the roof is clean, dry and free of dust etc. before installing the roof access hatch.
- The roof access hatch is delivered as a complete unit. For your own safety and to preserve of the quality of the roof access hatch, we recommend that you do not remove the cover from the upstand. If you do so regardless, you will void all warranties and liability for the product.
- Adding or removing parts to the roof access hatch can impede its operation and is strongly discouraged! If you do so regardless, you will void all warranties and liability for the product.
- Follow the guidelines in the handbook 'Working safely on roofs' (Veilig werken op daken).
- The type of fixing required to attach the roof access hatch to the roof will depend on the material of the roof (concrete, wood or steel). The installer must determine which fixings are appropriate (these are not supplied with the roof access hatch as standard).
- Tighten all fixings securely during installation. Regularly check that all fixings are securely tightened throughout the useful life of the roof access hatch.
- When installing a roof access hatch with a retractable ladder, the roof floor (including any lowered ceiling) must be at least 280 mm thick so that the retractable ladder does knock against the roof access hatch in folded position. If the roof is less than 280 mm thick, you will need to install an additional structural upstand. Make sure that the upstand protrudes at least 120 mm above the roof surface.
- The retractable ladders are suitable for a maximum ceiling height of 3250 mm.

Standards, rules and regulations

To prevent accidents, always follow the installation instructions and the corresponding standards when installing the roof access hatch.

Pay special attention to the following standards, rules and regulations:

- National building regulations
- National regulations for personal protective equipment
- DIN 1055 Actions on structures
- DIN 18299 General rules for all construction sectors.

5.2 List of tools

The following tools and equipment are required:

Ø8

M8
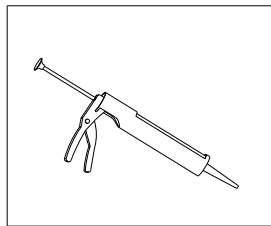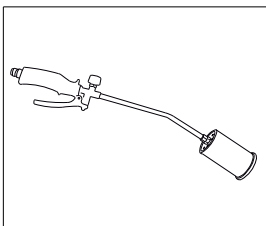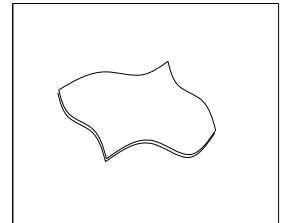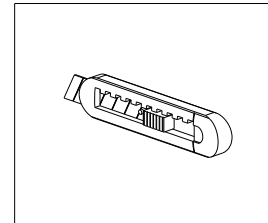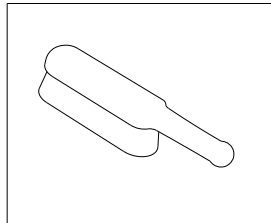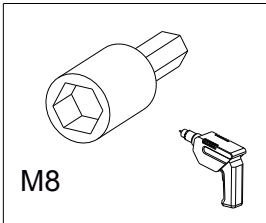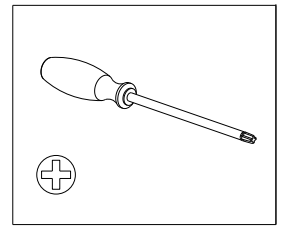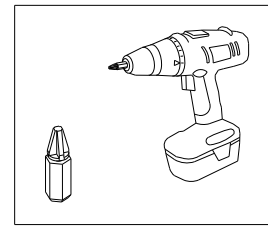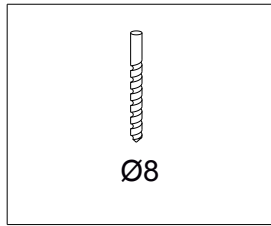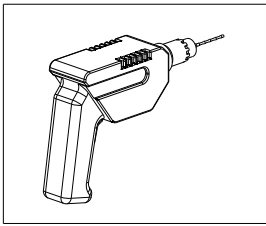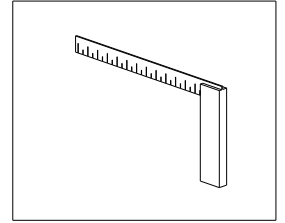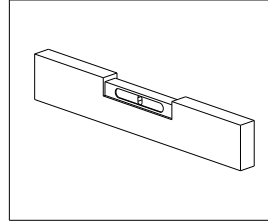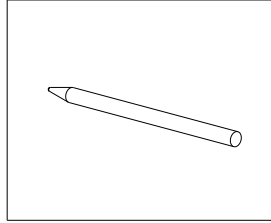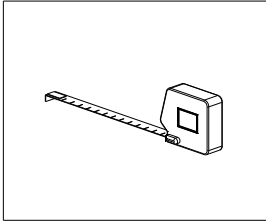
## 5.3 Cleaning the roof

Clean the roof with a brush.
Remove dust, debris etc. to ensure the roof surface is as even as possible.

6. Installing the roof access hatch (with extension ladder, staircase, or caged ladder/wall ladder)

6.1 Creating the roof opening

Check the dimensions of the roof opening (X and Y) required for your roof access hatch using the table on page 4. The dimensions of the roof opening must be the same as the clear opening of the roof access hatch.
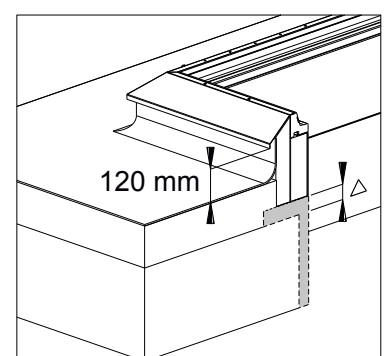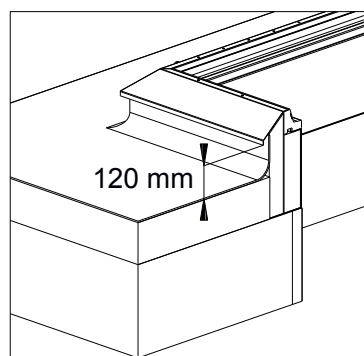Create the roof opening.
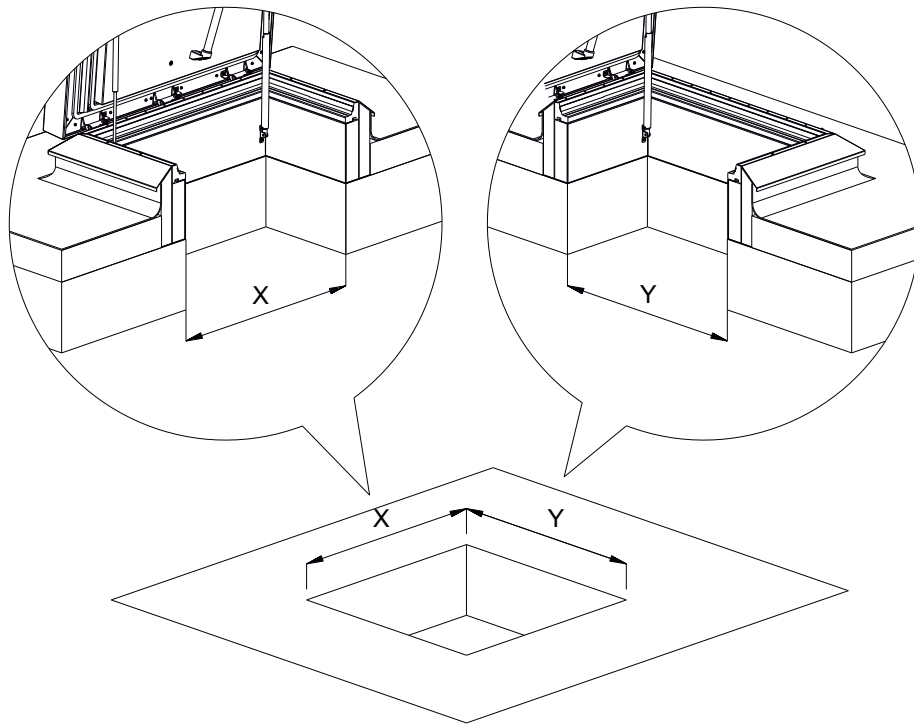
Boarding
If boarding is to be installed, the roof opening must be increased on all sides by the thickness of the boarding material, e.g. 18 mm-thick multiplex (boarding may be maximum 20 mm thick).
The boarding must fit flush to the underside of the mounting flange.
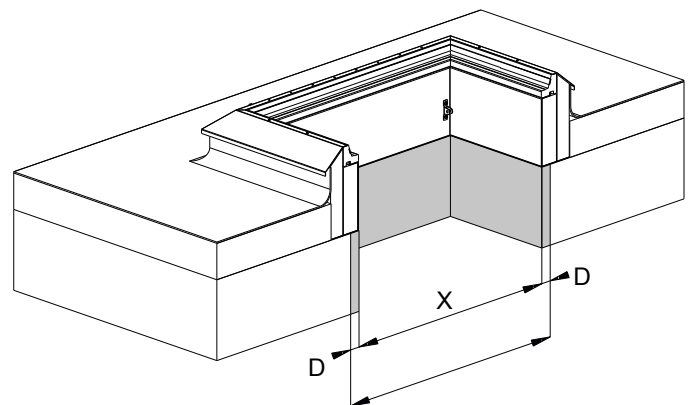
6.2 Installing the upstand to height

Ensure that the upstand protrudes at least 120 mm above the roof surface to ensure water-proof installation of roof hatch.
Install an additional structural upstand if necessary.

6.3 Aligning the roof hatch and roof opening

Determine the placement of the roof access hatch relative to the roof opening. Verify that the hinges are on the correct side required for purpose.
Place the roof access hatch over the opening. With the cover open, check whether the roof access hatch is positioned correctly in relation to the roof opening. Make sure the roof access hatch is properly centred. Align the roof access hatch with the roof opening from the inside.
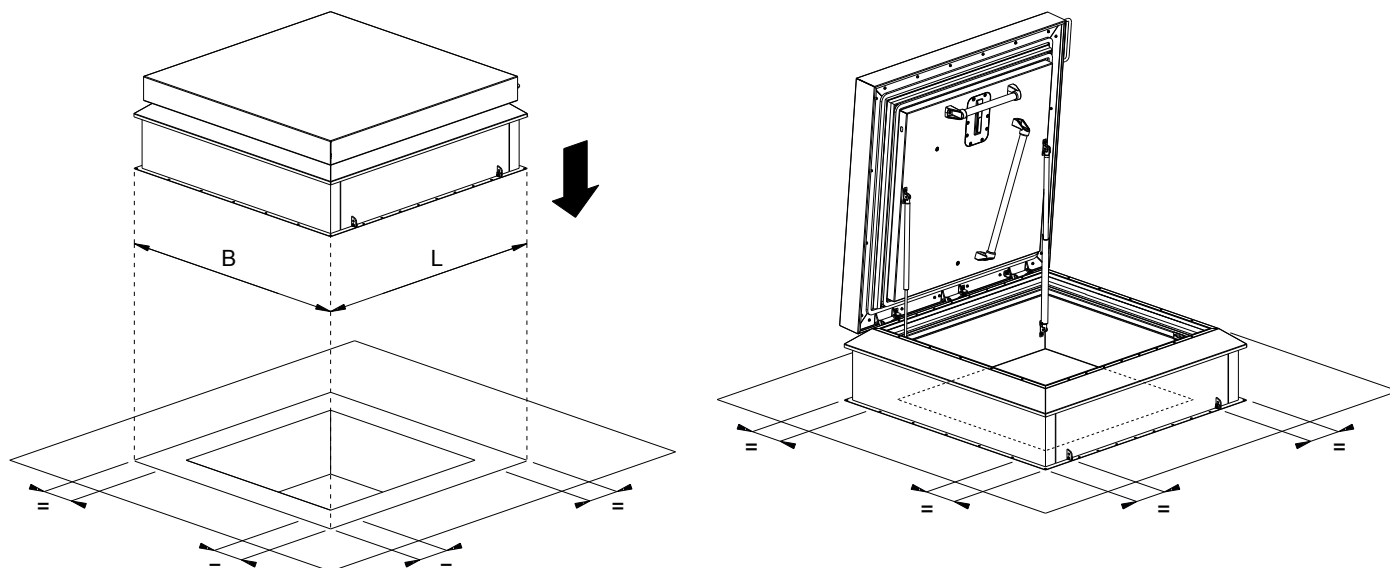

6.4 Installing the roof access hatch

Ensure that the mounting flange of the roof access hatch is perpendicular to the roof surface on all four sides. Fill any gaps.
The roof access hatch and the mounting flange must sit flush on the roof surface. Place the roof access hatch so that it cannot bend or tilt.

1. Mark out the drill holes for the mounting flanges.
2. Drill the holes for the mounting flanges.
3. Attach the four mounting flanges to the roof surface using appropriate fixings.
4. Verify that the fixings are tightly fastened.
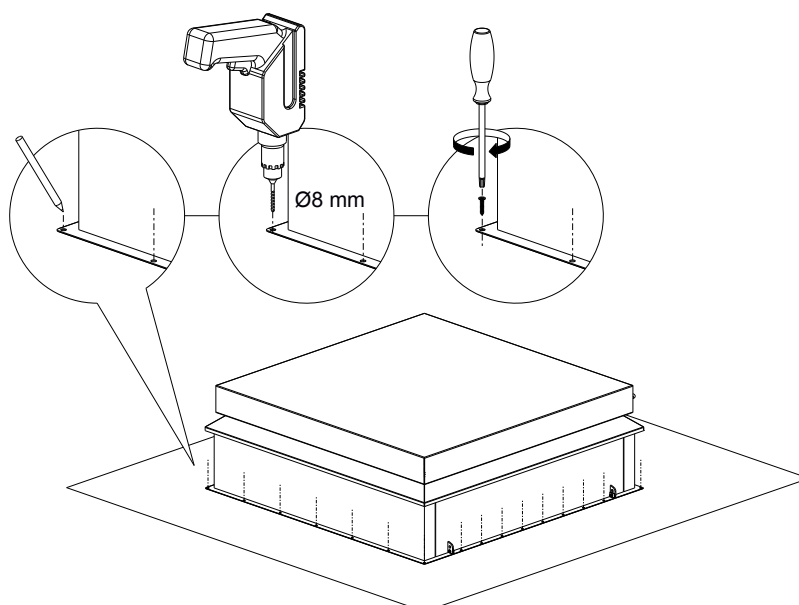
6.5 Fitting the insulation layer

Install the insulation layer on the roof. Fill the insulation up to the upstand. Make sure that the upstand pro-trudes at least 120 mm above the insulation layer.
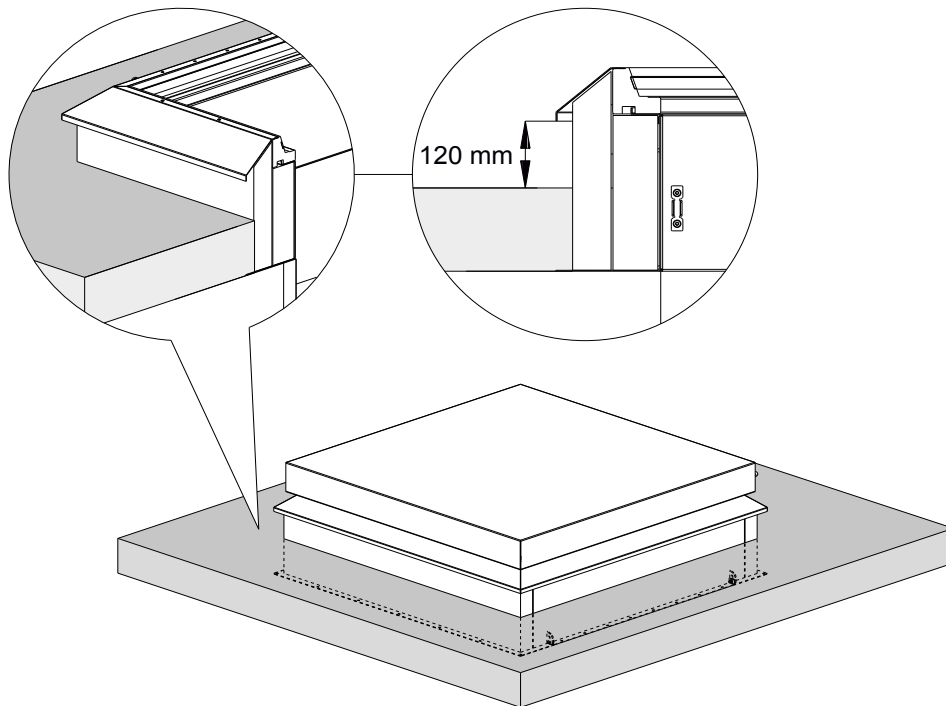
6.6 Fitting the roofing material

Seal the roof access hatch in place. Place the roofing material against the upstand up to just below the water trap.
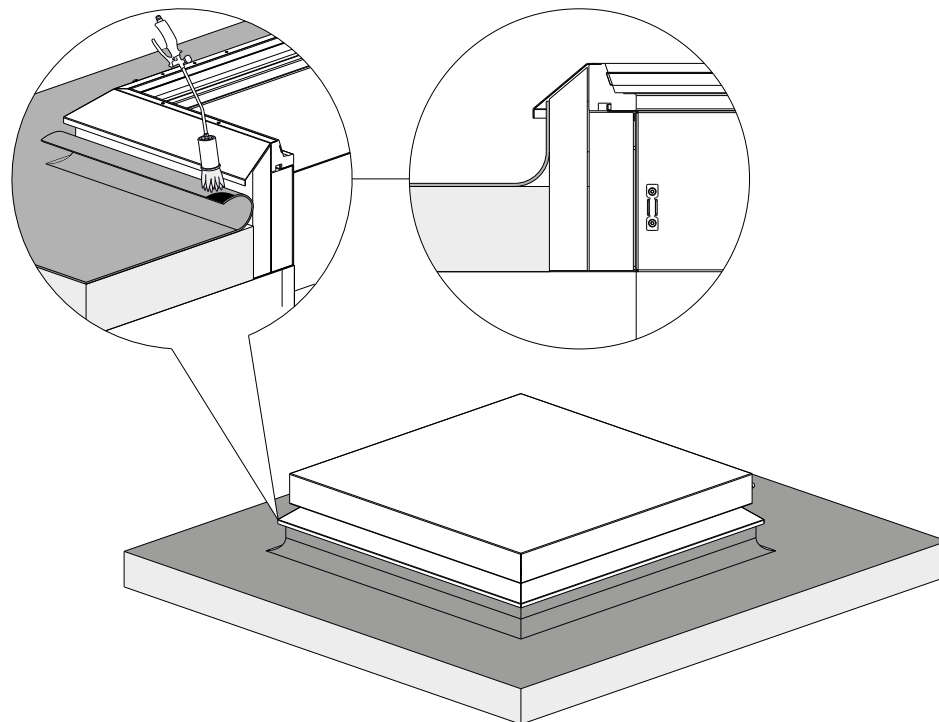
If further construction work is to be carried out near the roof access hatch then ensure to cover the entire hatch to prevent damage to the hatch and/or the coating.

# 7. Installing a roof access hatch with retractable ladder

7.1 Creating the roof opening

Check the dimensions of the roof opening (X and Y) required for your roof access hatch using the table on page 4.

For a roof access hatch in combination with a retractable ladder, the roof opening dimensions will differ from the clearance of the hatch because the retractable ladder is smaller.

CAUTION! Ensure that the clearance of the roof opening (Z) is smaller on the entry side than the clearance of the roof access hatch. Now, create the roof opening.
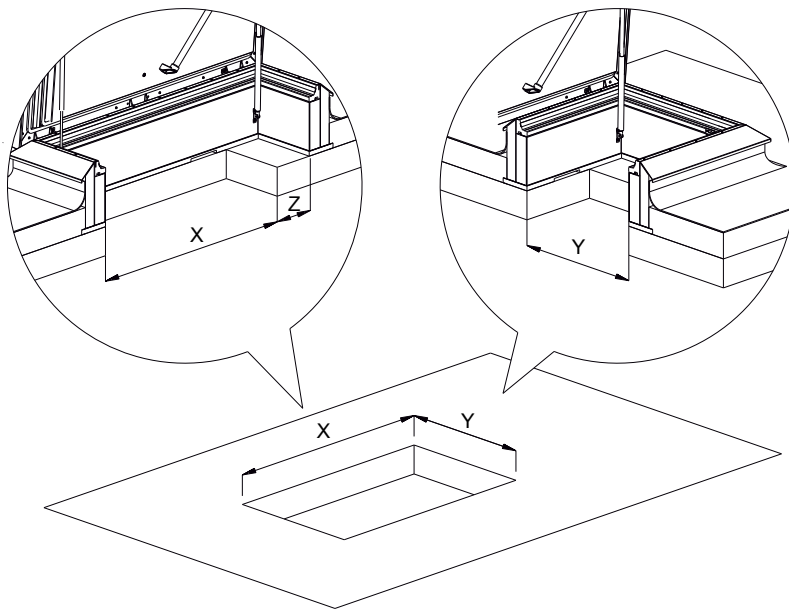
| Roof Hatch	Dimensions of roof opening (X and Y)	Z
900x700	800x700	100
1400x700	1200x700	200
1500x900	1300x900	200

7.2 Installing the upstand to height

If the roof structure (including any lowered ceiling) is not at least 280 mm thick, you will need to install an additional structural upstand to ensure that the retractable ladder does not knock against the roof access hatch in folded position. Ensure that the upstand protrudes at least 120 mm above the roof surface to enable installation of the flashing. Install an additional structural upstand if necessary.
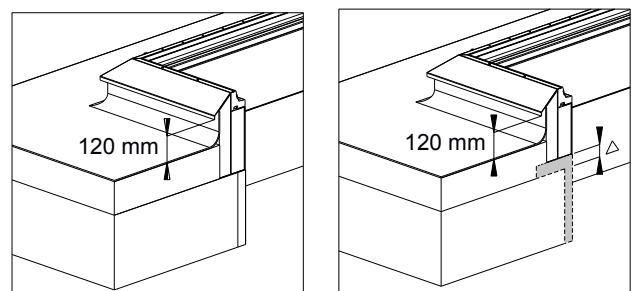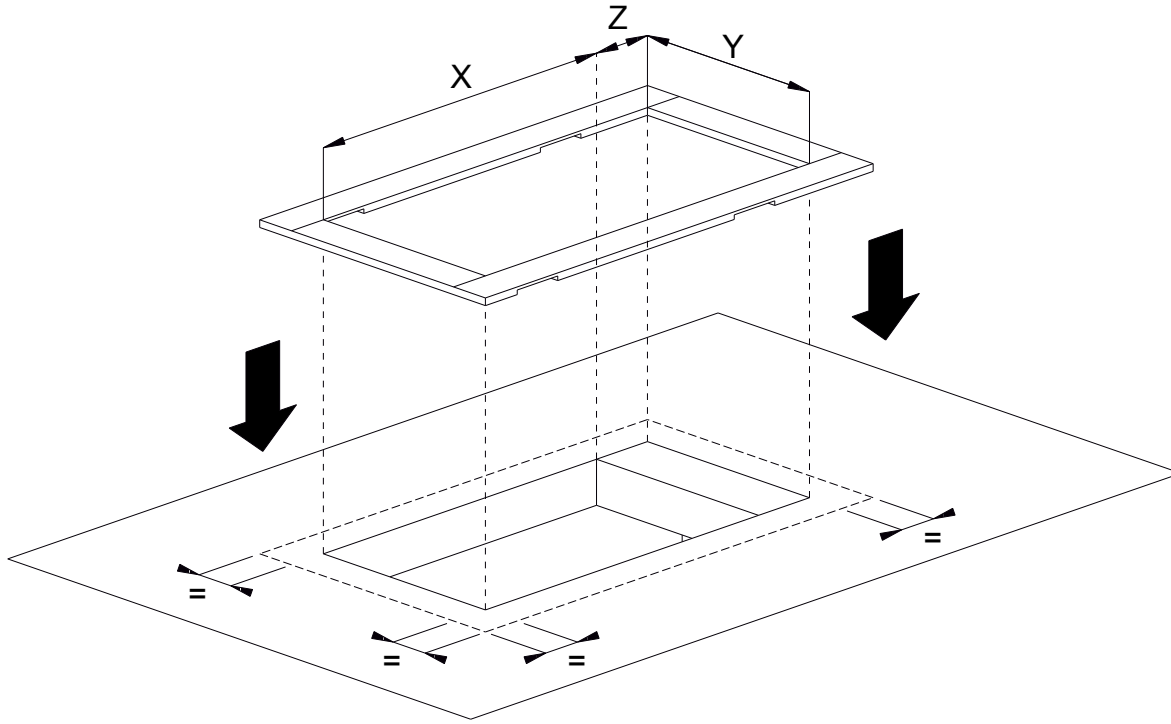

7.3 Preparing the installation frame

Position the four planks of the installation frame. Fit the planks together using the connectors.
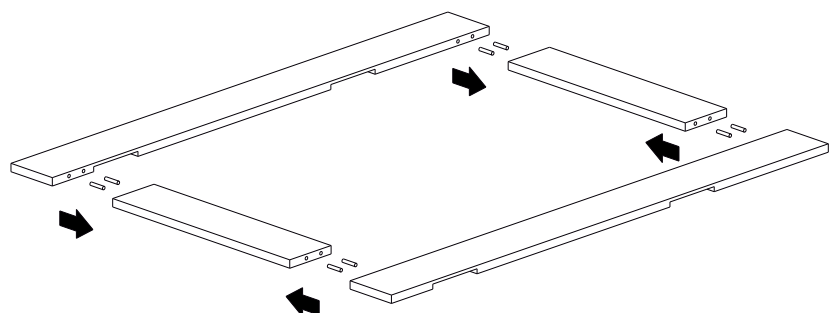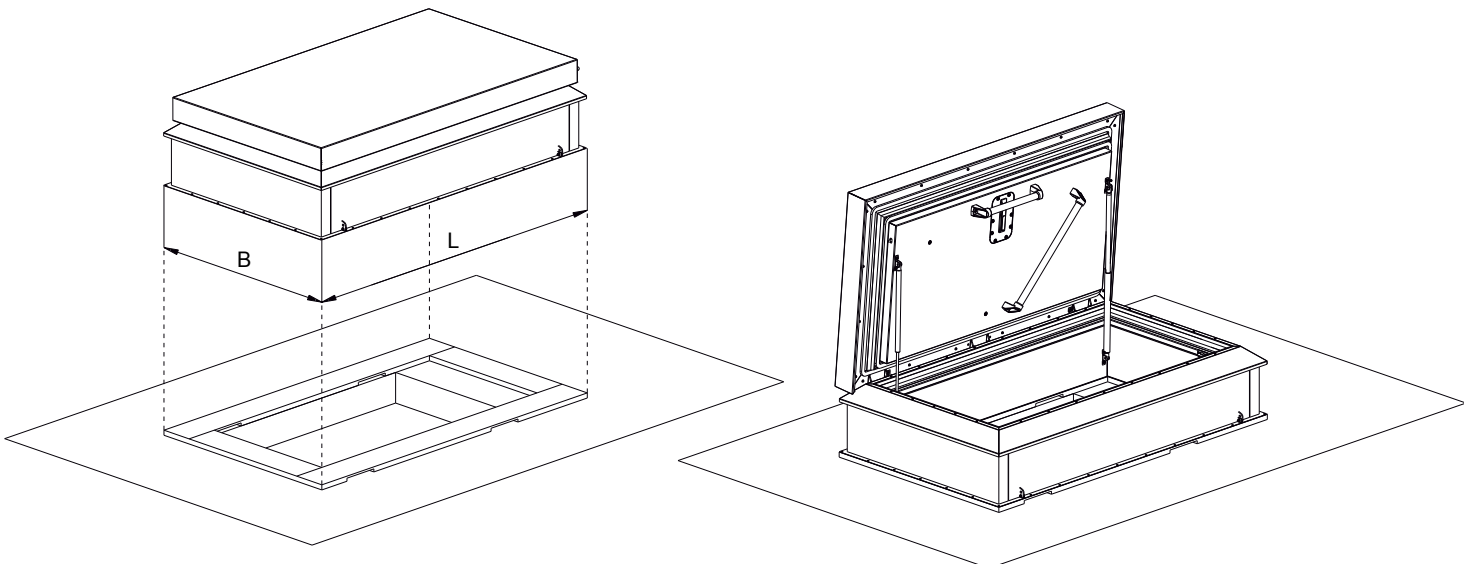
7.4 Installing the frame in the roof

Determine the orientation of the installation frame relative to the roof opening.
Place the wooden installation frame on the roof surface or structural upstand.
The wooden installation frame must be perpendicular to the roof surface on all four sides.

7.5 Fitting the roof access hatch in the frame

Determine the orientation of the roof access hatch relative to the installation frame. Verify that the hinges are on the correct side required for purpose.
Place the roof access hatch on the installation frame. Ensure that the mounting flange of the roof access hatch is aligned with the installation frame.
With the cover open, check whether the roof access hatch is positioned correctly in relation to the roof opening. Make sure the roof access hatch is properly centred.
Align the roof access hatch with the roof opening from the inside.

7.6 Installing the roof access hatch

Ensure that the mounting flange of the roof access hatch is perpendicular to the wooden installation frame on all four sides. Fill any gaps.
The installation frame and mounting flange of the roof access hatch must both sit flush to each other.
Place the roof access hatch so that it cannot bend or tilt.

1.   Mark the drill holes for the mounting flanges.
2.   Drill the holes in the installation frame and the roof surface.
3.   Attach the four mounting flanges to the roof surface using appropriate fixings.
4.   Verify that the fixings are tightly fastened.
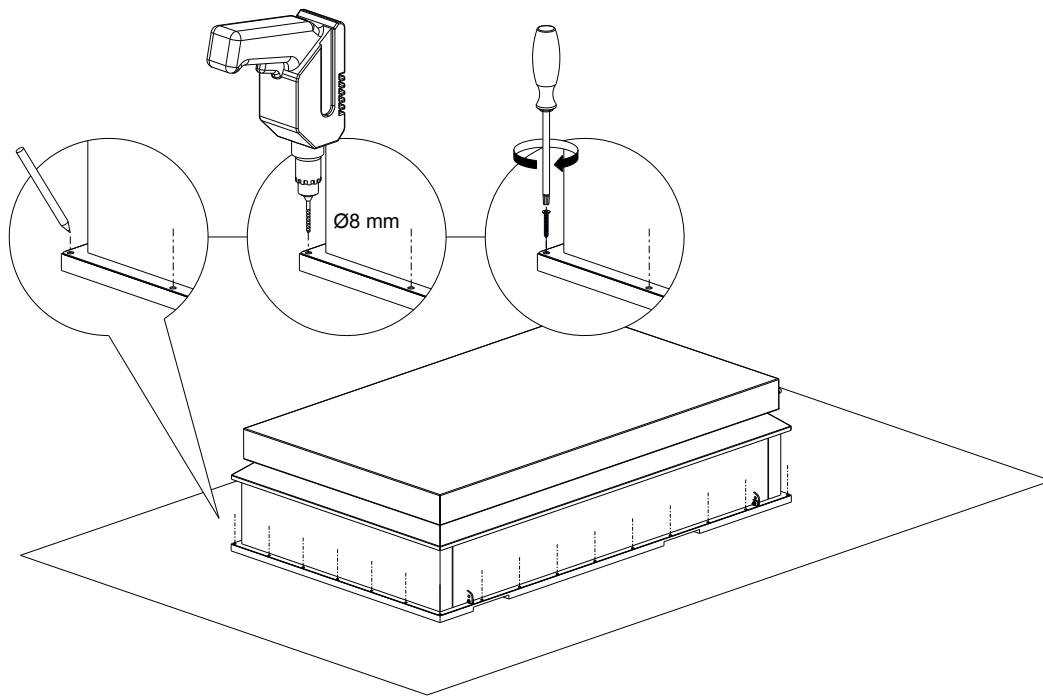
7.7 Fitting the insulation layer

Install the insulation layer on the roof. Fill the insulation up to the upstand. Make sure that the upstand protrudes at least 120 mm above the
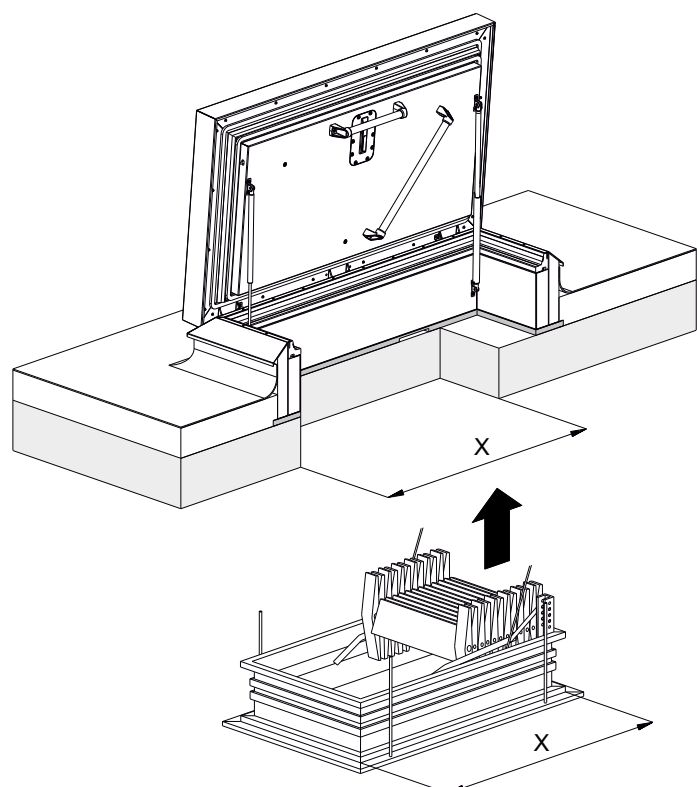insulation layer.
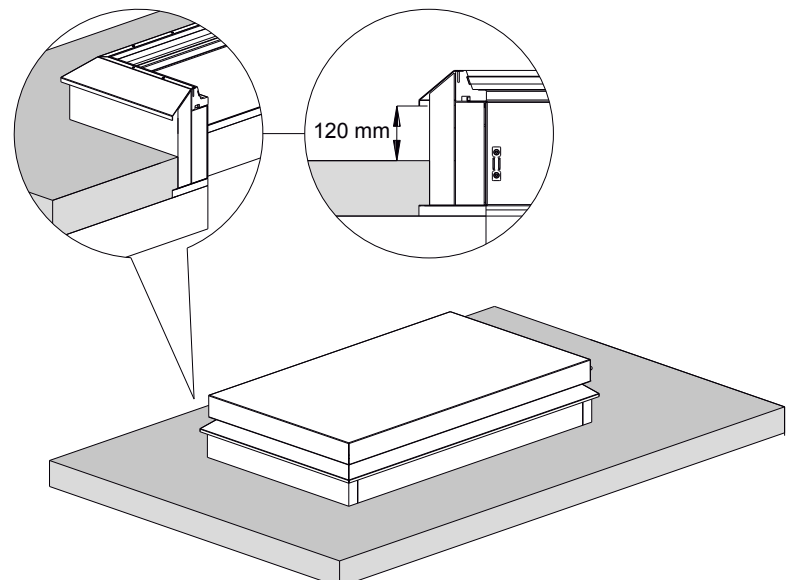
7.8 Fitting the roofing material

Seal the roof access hatch in place. Place the roofing material against the upstand up to just below the water trap.
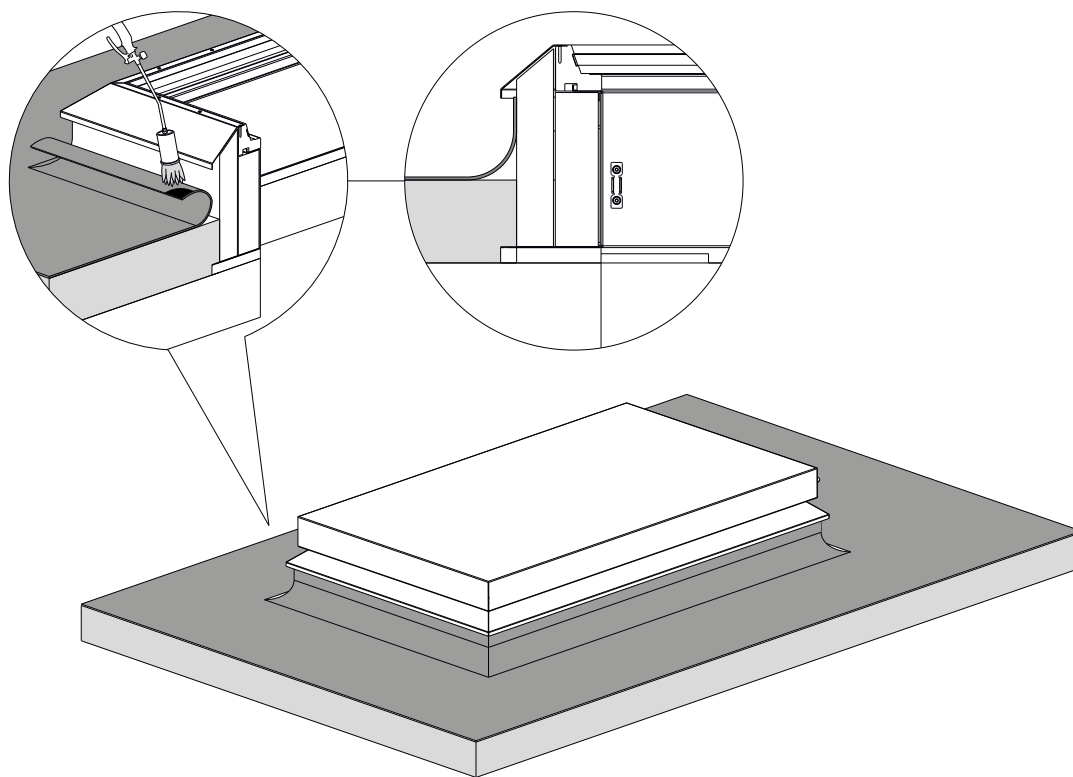
7.9 Positioning the retractable ladder under the hatch
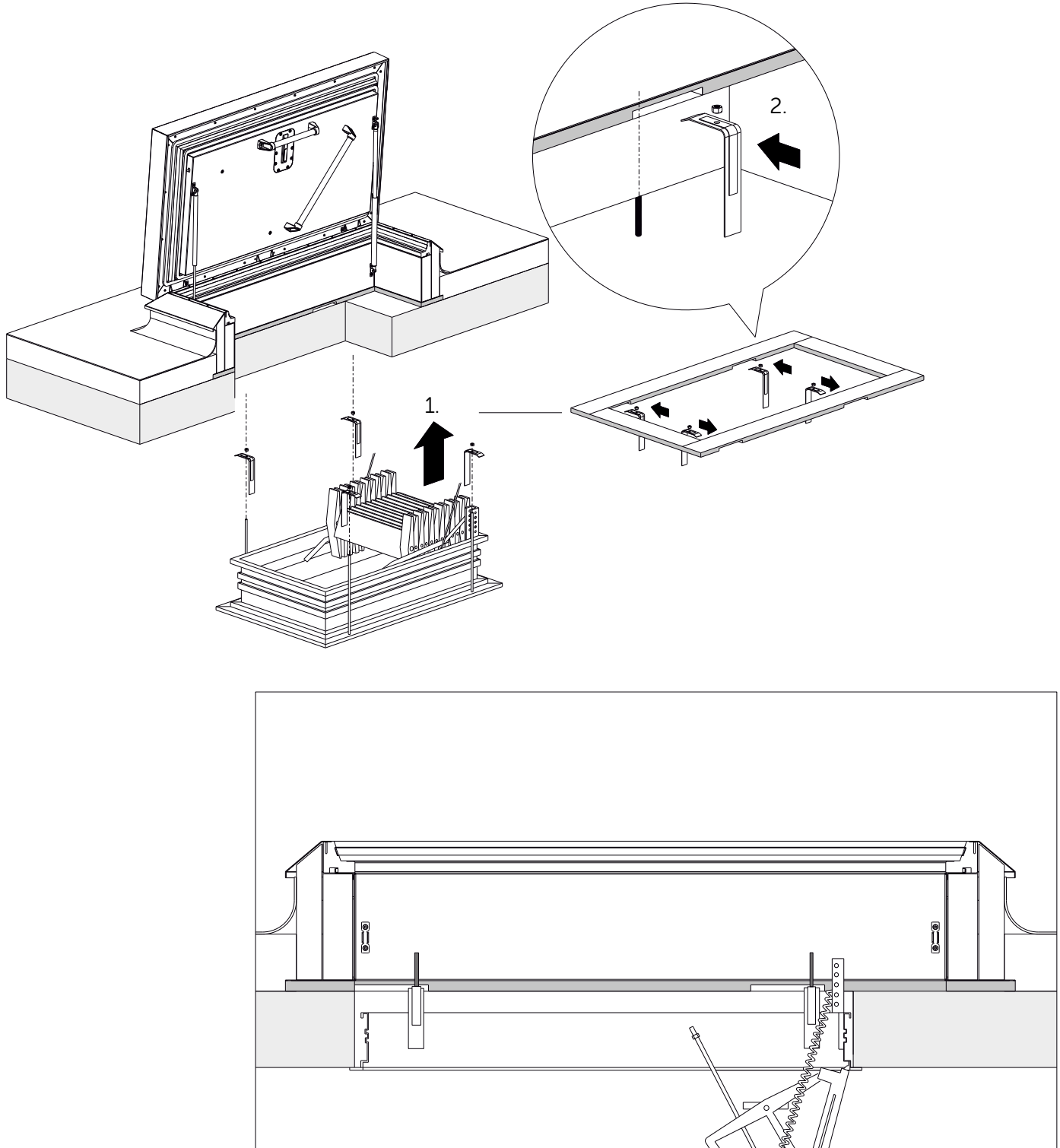
Position the retractable ladder in the clear opening. Make sure that the ladder and the hatch opening are on the same side.

7.10 Installing the retractable ladder (situation without lowered ceiling/plenum space bridging)

Install the retractable ladder using the supplied brackets, nuts, and any extension sets (x 4) in the recess of the wooden installation frame.


1.

2.

7.11 Installing the retractable ladder (situation with lowered ceiling/plenum space bridging)

Install the supplied plenum space bridging element on the roof and in the roof recess.
Install the retractable ladder using the supplied brackets, nuts, and any extension sets (x 4) in the recess of the wooden installation frame.

CAUTION! If your roof access hatch is 1400 x 700 or 1500 x 900 mm, then you must install the retractable ladder 85 mm back from the roof recess (to make room for the plenum bridging element).
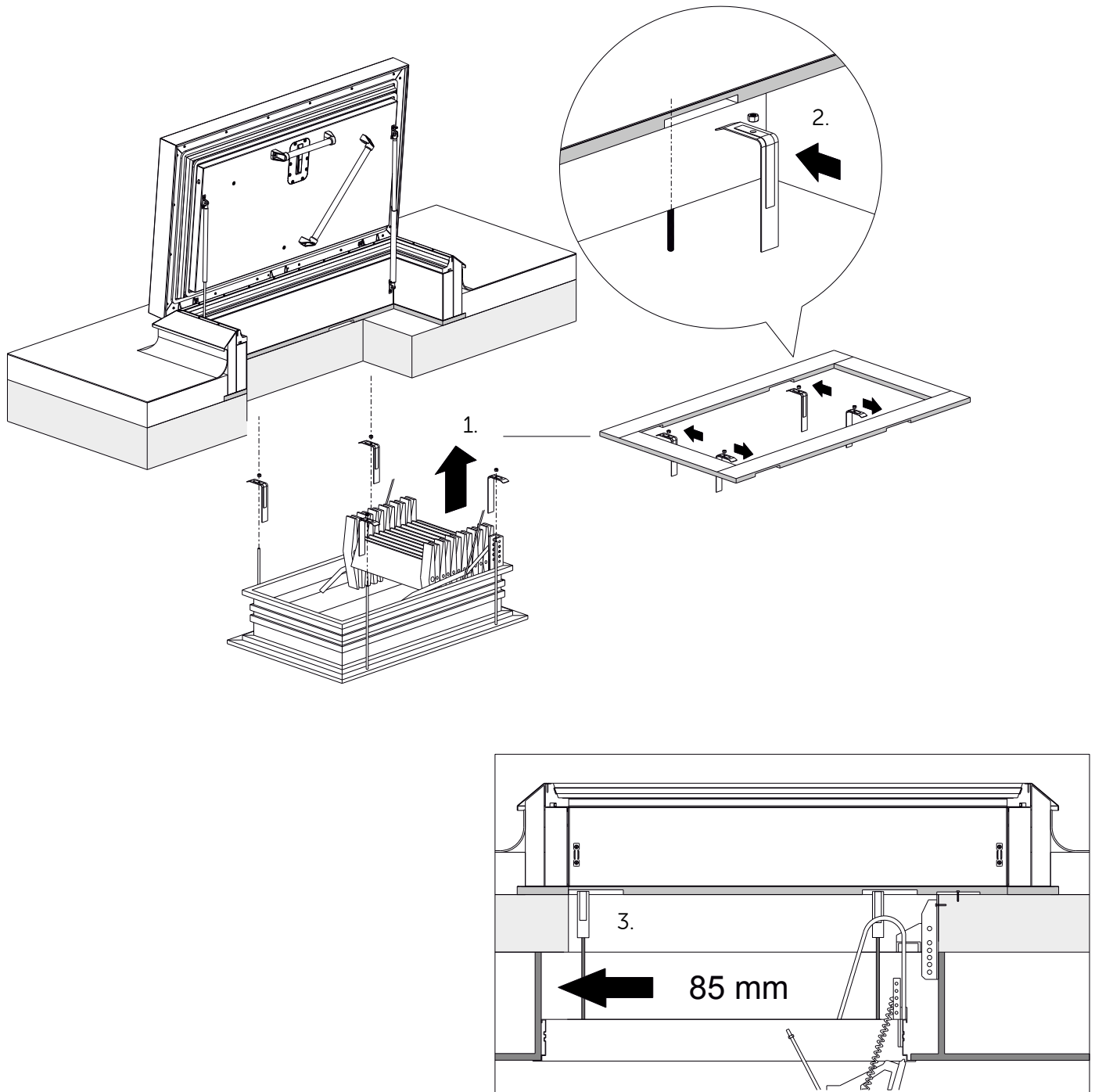
If further construction work is to be carried out near the roof access hatch then ensure to cover the entire hatch to prevent damage to the hatch and/or the coating.

8. Adjustments and replacements

8.1 Switching over the gas pressure spring

CAUTION! When switching or replacing the gas pressure springs, never open the cover further than 85^0. Always change the gas pressure spring with two persons (one person to firmly hold the hatch in place).

The gas pressure spring with locking function and the standard gas pressure spring can easily be switched.
1. Unclip the locking pins from each end of the gas pressure spring and remove the hinge pins from the pinholes. Repeat the same process on the other gas pressure spring.
2. Now you can switch the gas pressure springs. CAUTION! Make sure that the thick black rod is on top.
3. Replace the hinge pins in the pin holes. Click the locking pins into the ends of the gas pressure springs.
4. Done!
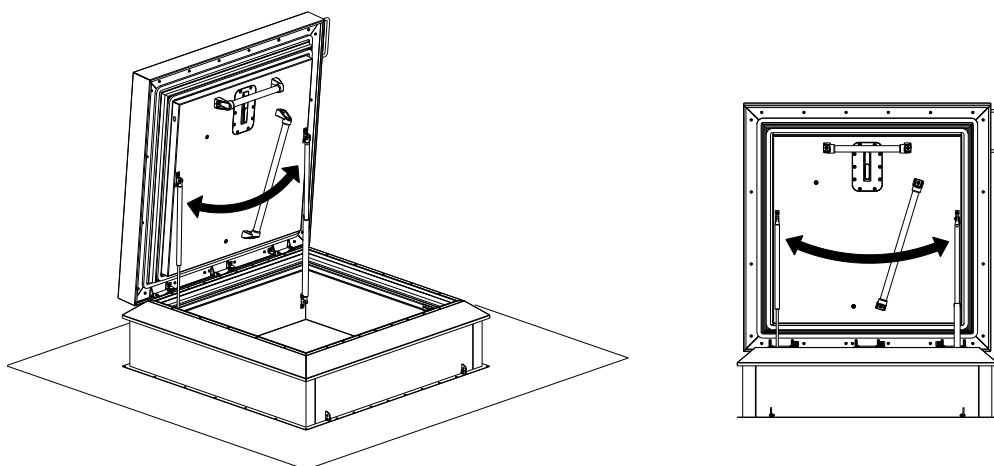
8.2 Switching the support

The diagonal support in the cover can be switched to the other corner.
1. Remove the 2 bolts that secure the support to the cover.
2. Reattach the support with the 2 bolts in the opposite corner.
3. Attach the support to the cover with the 2 bolts.
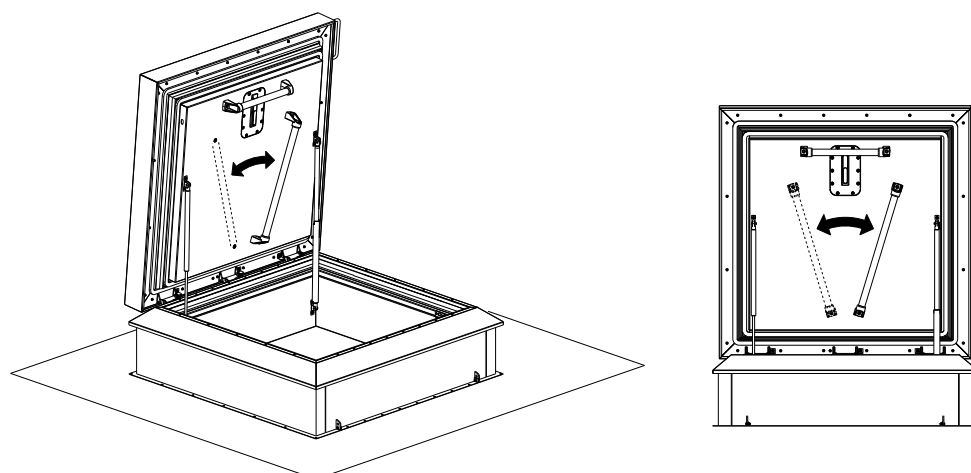
8.3 Replacing a cylinder
The cylinder in the two-point closure can easily be replaced with an alternative half euro profile cylinder or half knob cylinder. The cylinder has a total length of 40 mm and the screw hole is located 30 mm from the front face. To function correctly, the cylinder cam must be at three o'clock or nine o'clock.

9. Use

9.1 Unlocking and opening the hatch

Follow these steps to unlock and open the roof access hatch:

1. Slide the cover off the keyhole.
2. Use the key to open the lock.
3. The handle will automatically slide out.
4. Turn the handle a quarter turn.
5. The locking pins of the side locks will disengage and the hatch can now be opened.
6. Open the hatch using the handles on the inside of the cover.

CAUTION! To prevent the risk of falling, we recommend closing the cover after passing through the hatch. Closing the cover will not lock the hatch, so the user cannot be locked out.
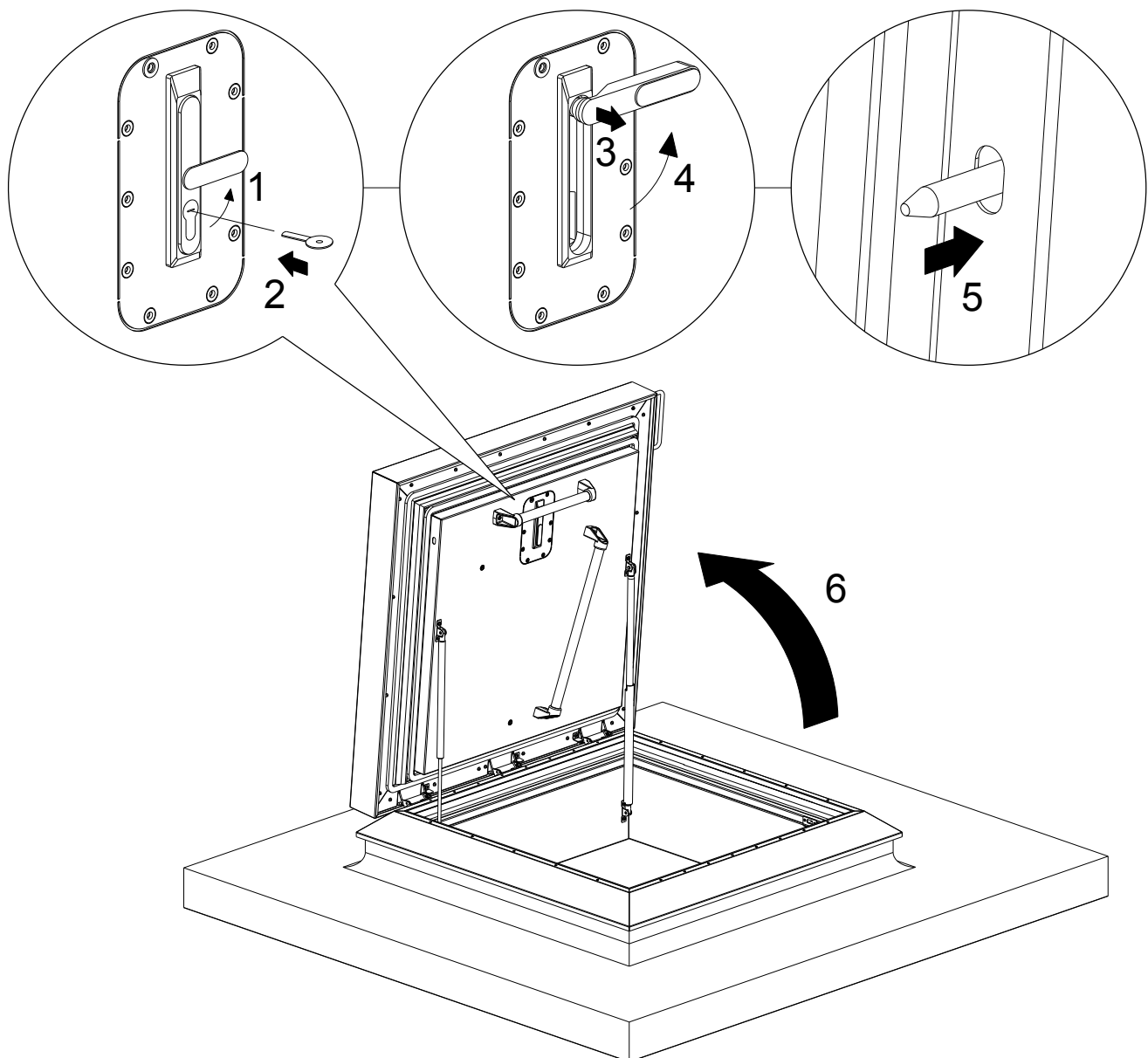
9.2 Locking and closing the hatch

CAUTION! The gas pressure spring with locking function must first be unlocked before closing the cover.

Follow these steps to close and lock the roof access hatch:

1. Disengage the locked gas pressure spring by pushing it inwards.
2. Close the hatch using the handles on the inside of the cover.
3. Turn the handle a quarter turn and push it into its recess.
4. The locking pins of the side locks will engage to close the hatch.
5. Lock the hatch with the key and slide the cover over the keyhole.
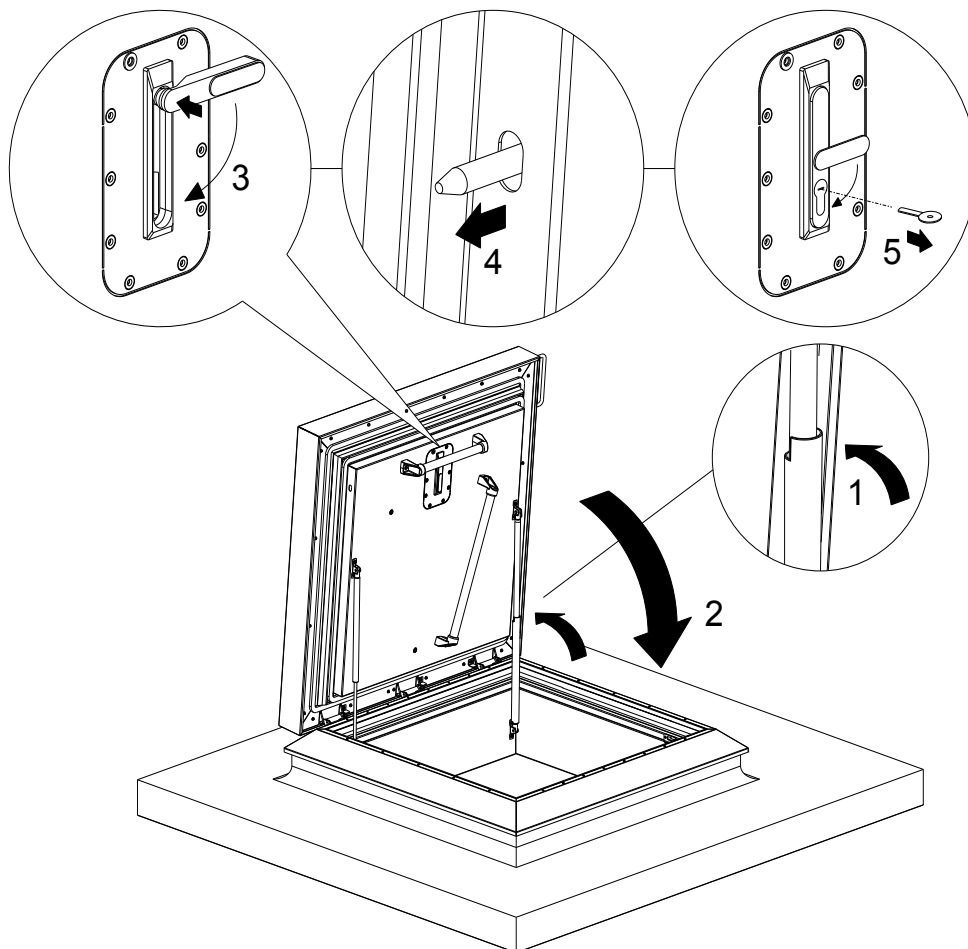
10. Maintenance and cleaning

The roof access hatch must be cleaned regularly to ensure it continues to function properly. Do not use a high pressure water spray, abrasive sponge and/or aggressive cleaning products. Clean both the inside and outside of the hatch only with lukewarm water, household soap and a soft sponge.

- Repair any damage to the powder coating promptly with paint in the appropriate RAL colour.
- Apply penetrating oil to the hinges as necessary.

11. Waste disposal

Dispose of the product according to your local disposal laws and regulations.

12. Contact

Staka Bouwproducten B.V.
Warwick Enterprise Park
Wellesbourne
Warwick
CV35 9EF

T. 01789 330558

uksales@staka.com
www.roofaccesshatches.co.uk