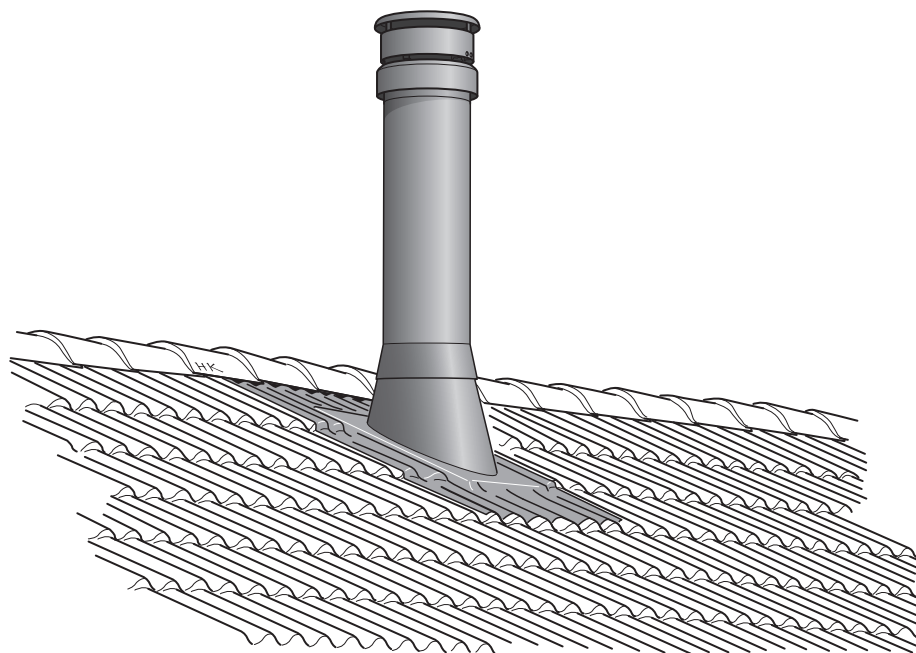
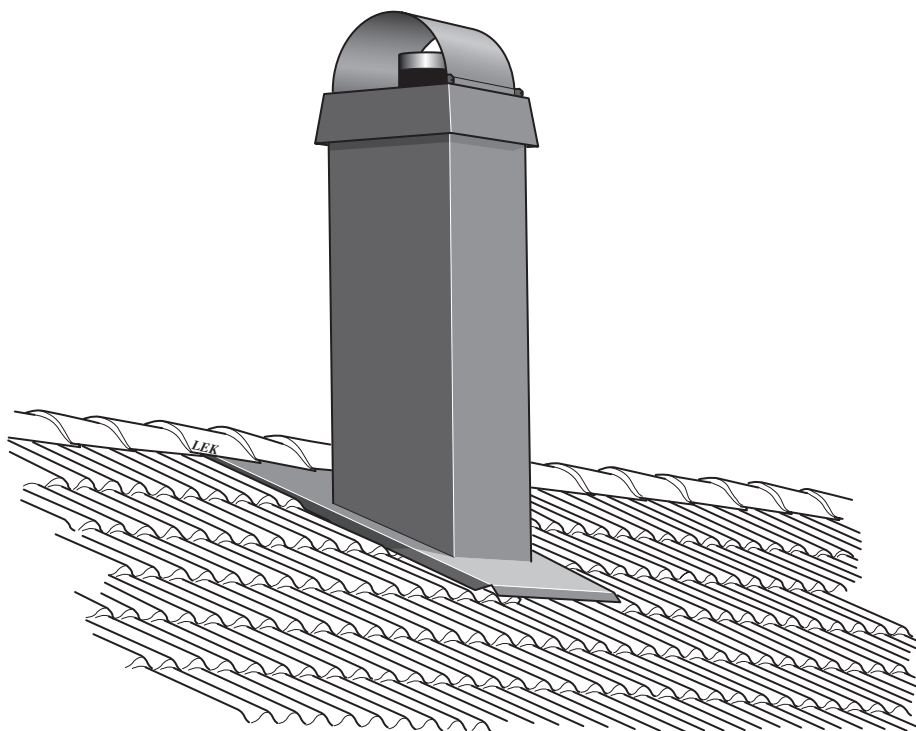


INSTALLATION INSTRUCTION

Chimney system

Premodul
by *Contura*



EN

PERFORMANCE DECLARATION

No. P450-CPR-130626-SE-1

Premodul
by *Contura*

PRODUCT

Product type Multi wall chimney system in metal, T450-N1-D-Vm-L50080-G50
 Type designation Premodul
 Intended use Chimney for fireplaces with a maximum flue gas temperature of 450°C
 Fuel Wood, gas
 CE declaration of conformity issued 2013

MANUFACTURER

Name NIBE AB / Contura
 Address Box 134, Skulptörvägen 10
 SE-285 23 Markaryd, Sweden

CHECKS

According to AVCP System 2+
 European Standard EN 1856-1:2009
 Notified body The SP Technical Research Institute of Sweden, NB 0402, has issued EC certificate 0402-CPD-220311

DECLARED PERFORMANCE

Essential characteristics	Performance	Harmonised technical specification
Minimum safe distance to combustible material	50 mm According to the given conditions in the installation instructions.	EN 1856-1:2009
Fire resistance	T450-G50	
Air tightness class	N1	
Resistance to chemicals	No	
Resistance to corrosion	NPD	
Resistance to chimney fire	Pass	
Compression strength	Up to 15 m chimney length	
Flow resistance	Chimney pipe 0.001 m, Bend 30°: 0.2, Bend 45°: 0.3	
Heat resistance	0.36 m ² K/W at 550°C	
Frost resistance	Pass	
Lateral routing	Maximum 4 m between mountings when side routing 27°/38°/45°.	
Tensile strength	0.5 kN	
Wind load	Max. length over the last support 2 m Max. distance between the supports 2.5 m	

The undersigned is responsible for the manufacture and for conformity with the declared performance.



Niklas Gunnarsson, Business Area Manager NIBE STOVES
 Markaryd, 1 June 2013



Congratulations on your choice of chimney!

We hope you will get a great deal of pleasure from your new fireplace and chimney system. The most important task of the chimney is to safely remove flue gases.

It is equally important that it works hand in glove with the fireplace and blends into the design of the house.

With the Premodul chimney system, you are safe on both counts.

Premodul is manufactured in Markaryd in Småland. It fits all stoves and fireplaces, meets CE conformity and is tested by SP, Swedish National Testing and Research Institute.

Read through these installation instructions carefully before starting installation.

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Manufacturer's declaration

Manufacture of the product has taken place in accordance with those documents which are the basis for the relevant type approval certification and the required manufacturing checks.

Marking

The type plate must be positioned on the outer mantle of the chimney system. Fill in the installation date and position the plate where it can be read.

Report the installation of a stove to your local authority.

The owner of the house is personally responsible for ensuring compliance with the mandatory safety requirements and must have the installation approved by a qualified inspector. Your local chimney sweep must also be informed about the installation as this will affect the routines for regular chimney-sweeping services. During installation there is a risk of falling from height. We therefore recommend the use of scaffolding or other safety equipment during installation.



Quality approval

The chimney has been tested by the Swedish National Testing and Research Institute and meets the applicable regulations for the CE declaration of conformity.

CE declaration of conformity number: 0402-CPD-220311

Test report: P105827, PX08598B, PX22094-01, PX23357, PX23357-01

General advice

General

We would ask you to read the instructions carefully and keep them safe for future use. This manual contains instructions about how the Premodul chimney system must be installed in a single family residence. Multi occupancy residences have requirements for fire separation cells, and must be carried out according to the relevant building regulations.

The chimney modules consist of an acid resistant inner flue of EN 10 088 1.4404 quality and formed compressed mineral wool insulation that is covered by an outer jacket of painted sheet steel. The chimney can be connected to fireplaces that burn wood or gas and the permitted flue temperature is 450°C.

No special tools are required for sweeping. The chimney is approved without a requirement for integration in an enclosed shaft. The chimney may be enclosed in a shaft if the conditions for safety distances and ventilation are met.

Sweeping

It must be possible to sweep the chimney through its whole length and any soot hatches must be easily accessible. Sweep with a flexible steel brush with a diameter of 150 mm.

Goods reception

Check that the goods address is correct and on delivery check that the goods have not been damaged during transport and that the number of packages corresponds to the delivery note. In the event of transport damage, follow the instructions on the delivery note.

Application to local authority

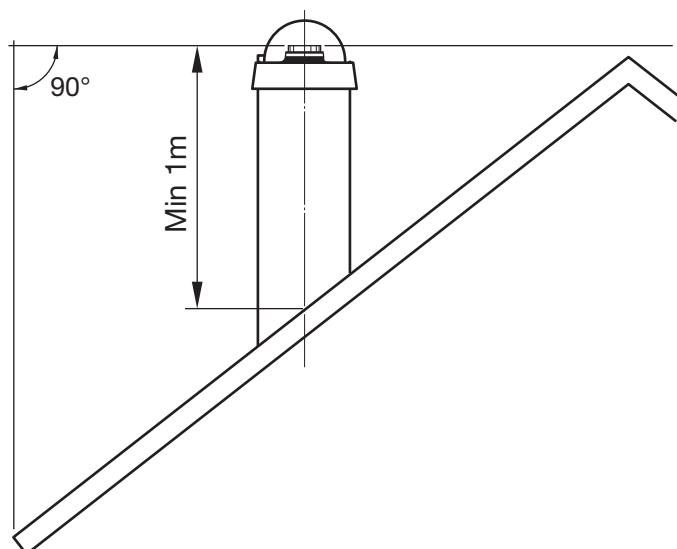
Before installing a firebox or erecting a chimney, it is necessary for you to make an application for permission to your local authority. Ask your local authority for advice regarding regulations and the application.

Structural support

Check that the wood joists are strong enough to bear the weight of the chimney and the stove. The stove and chimney can usually be placed on a normal wooden joist in a single occupancy house, if the total weight does not exceed 400 kg. If in doubt, have a structural engineer assess the weight bearing capacity.

Chimney height above roof level

Building regulations recommend that the mouth of the chimney is 1 m above the roof covering. If there are special conditions the height of the chimney can be established by calculation. A chimney sweep can usually provide this service.



Important!

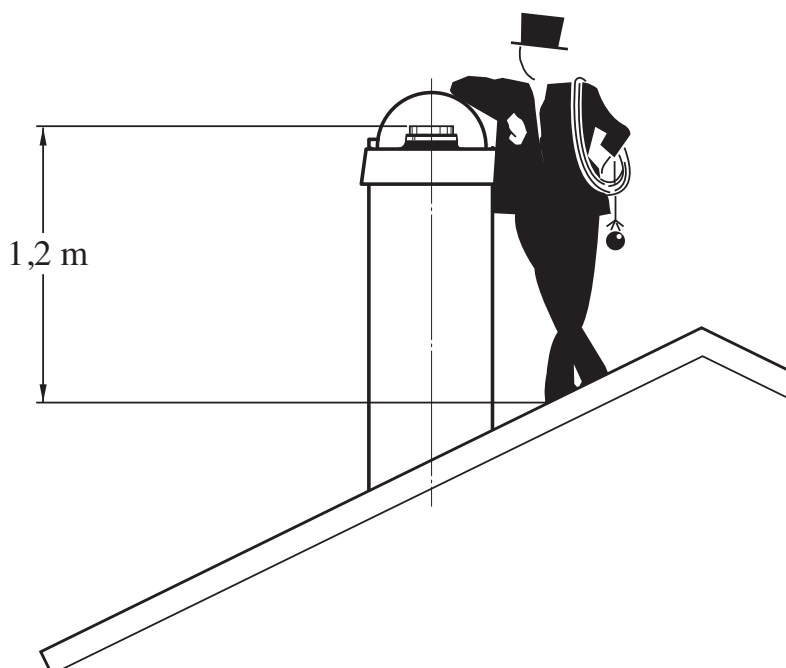
- Before deciding the location of the chimney, the joists in the ceiling and outer roof must be located.
- The minimum distance between the outer mantel of fully insulated chimney modules and combustible parts of the building must be at least 30 mm if the space is ventilated.
- Partially insulated chimney modules and start modules with outer diameters 226 mm may only be used in the same room as the fireplace. Minimum distance to combustible material is 75 mm. The transition to fully insulated chimney module may however be integrated in the joists.
- Before the chimney is used, it must be inspected by an authorised inspector.

Technical data and recommendations

- Internal diameter 150 mm, which gives a cross sectional area of 177 cm².
- Fully insulated chimney modules have an external diameter of 280 mm and classification code: T450-N1-D-Vm-L50080-G (50)
Partially insulated chimney modules have an external diameter of 226 mm and classification code: T450-N1-D-Vm-L50080-G (75)
- Weight 12.5 kg/m.
- Shortest recommended chimney length is 3.5 m.
- Maximum 1 m horizontal routing recommended, on the condition that the vertical chimney length is at least 5 m.

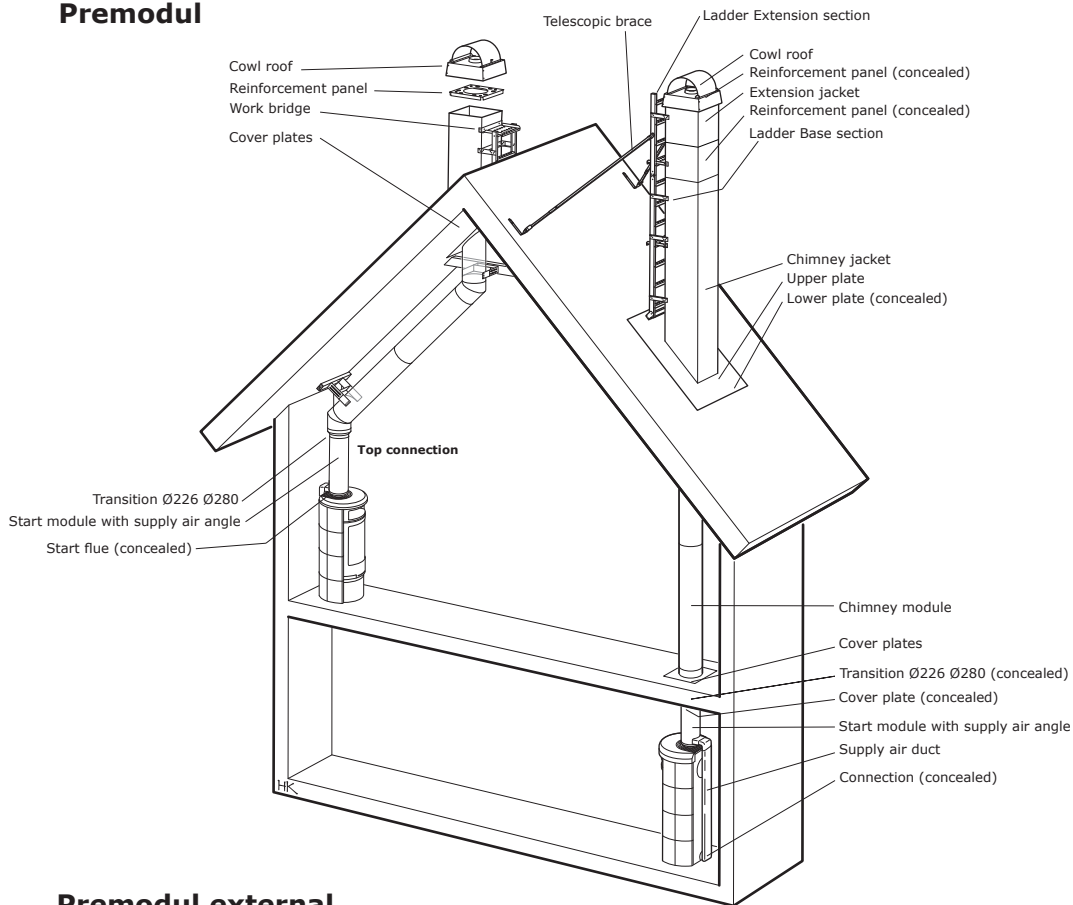
Climbing device

A work bridge must be installed if the chimney cowl is higher than 1.2 meters at the climbing location. When the top of the chimney cowl is more than 2 m above the roof, a ladder and braces must be installed.

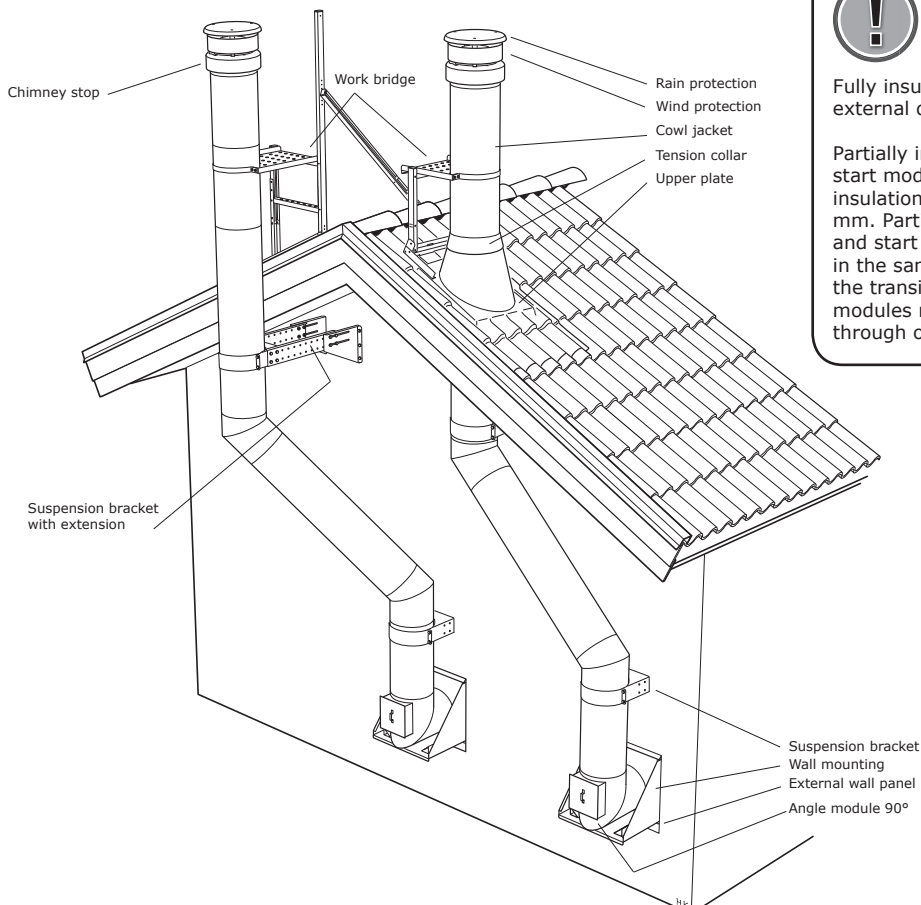


Overview Chimney designations

Premodul



Premodul external

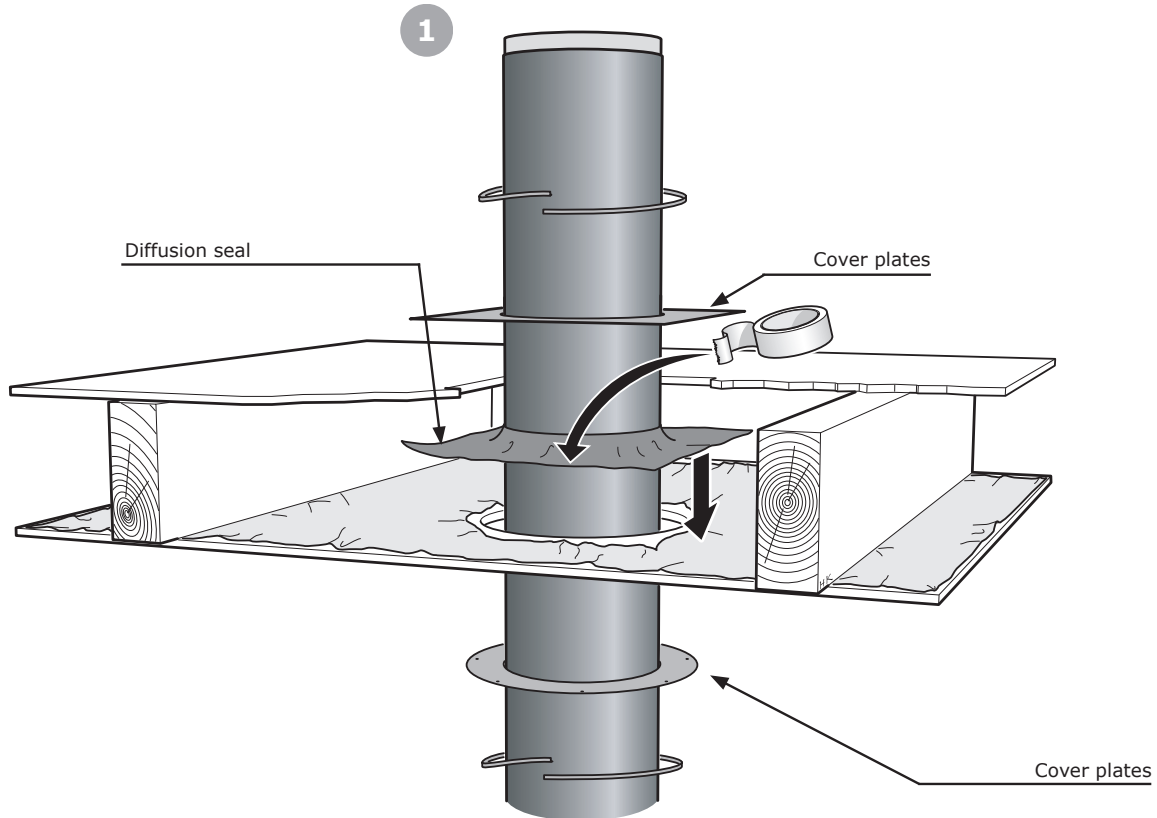


Fully insulated chimney modules have an external diameter of $\varnothing 280$ mm.

Partially insulated chimney modules and start modules have thinner flue casing insulation and external diameters of $\varnothing 226$ mm. Partially insulated chimney modules and start modules may only be installed in the same room as the fireplace and the transition to fully insulated chimney modules must occur before the first pass-through or at joist level

Passing through joists and wall constructions

When making a hole in the walls and roof the sealing layer of plastic film will be broken. In buildings with high standards of air tightness it is recommended that the enclosed diffusion seal is installed over the hole and secured to the plastic foil.

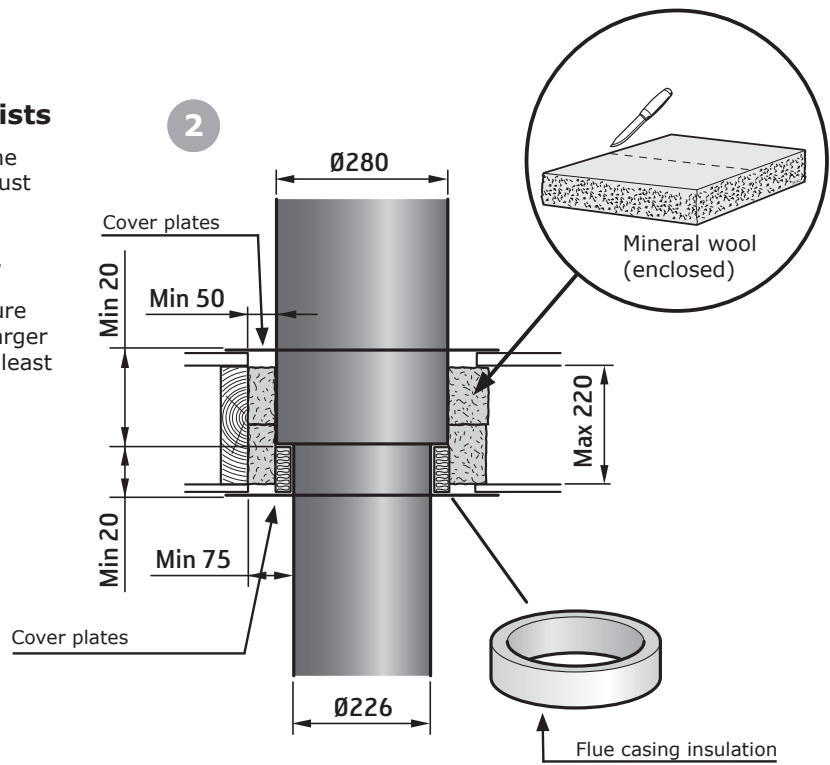


Passing through non-combustible material

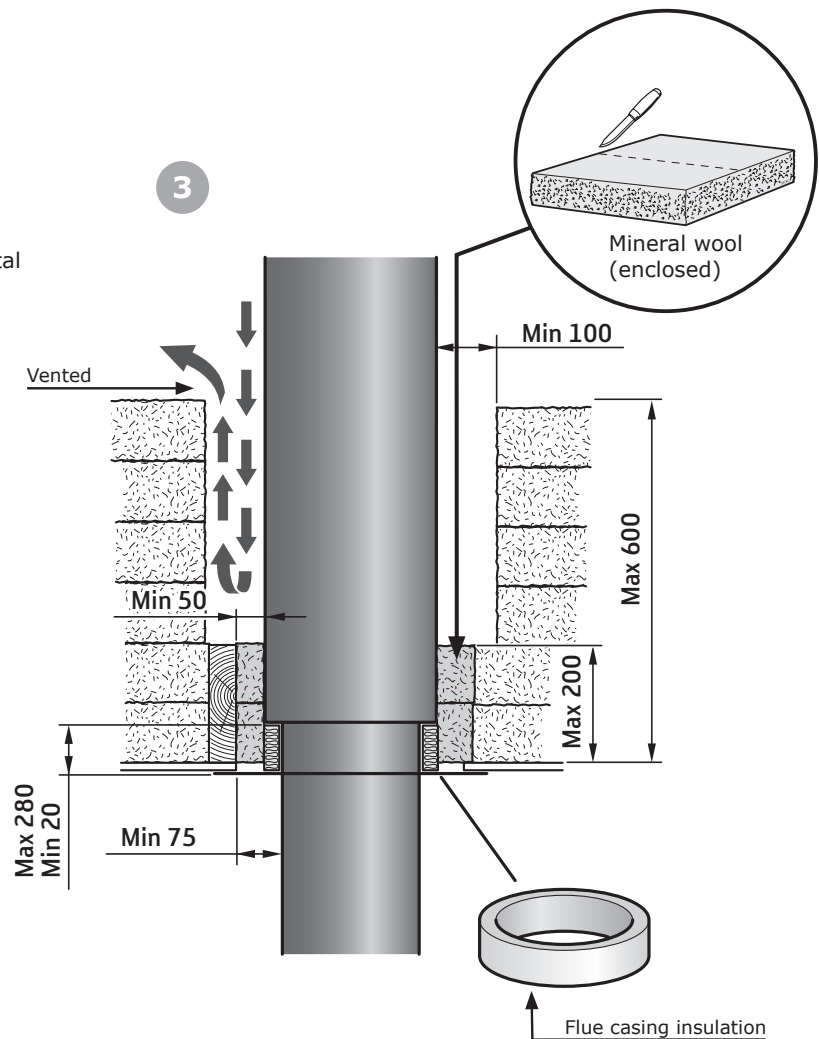
When passing through material that is not combustible and meets fire technical class EI60, no safety distance is required, only a small air gap for clearance is required.

Passing through combustible joists

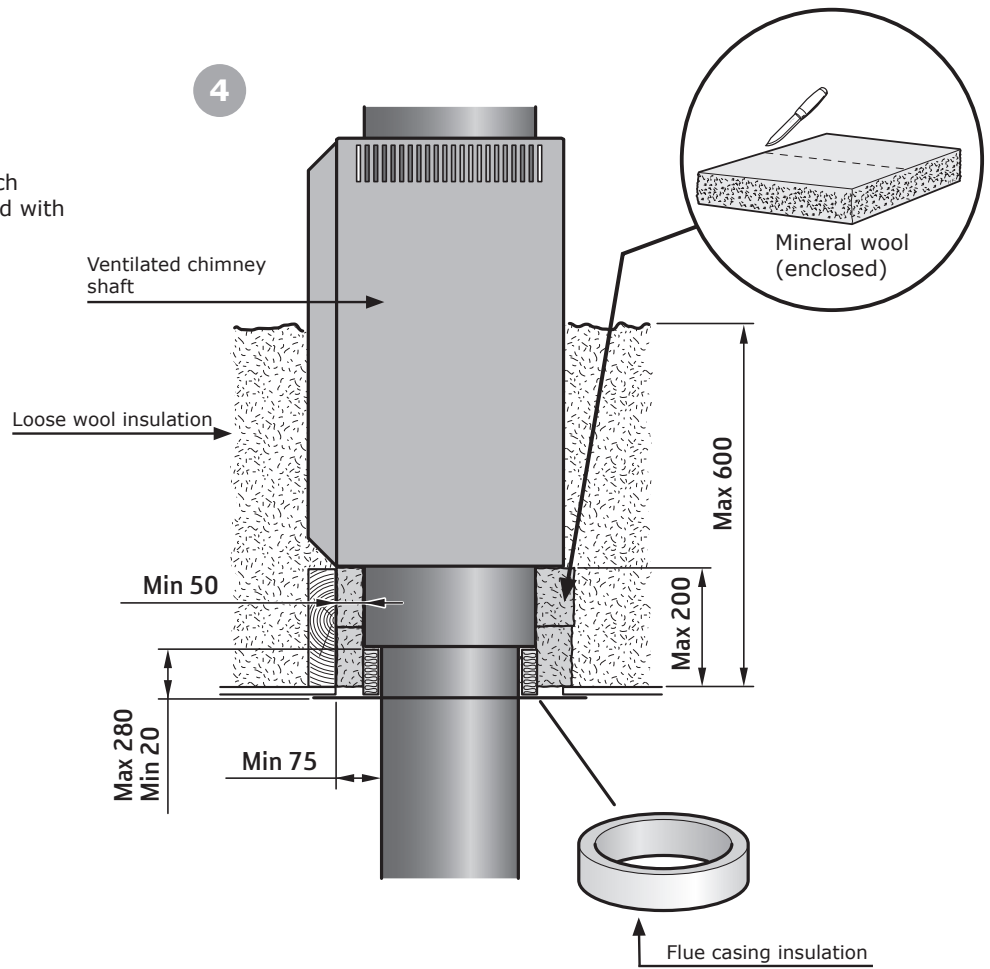
When Transition $\varnothing 226$ $\varnothing 280$ is installed in the joists, the insulation nearest the chimney must not be thicker than 220 mm. The partially insulated section must be insulated with the enclosed mineral wool flue casing insulation. Observe the minimum safety distance to combustible material in accordance with figure 2. The Transition between the smaller and larger diameter must be placed at a distance of at least 20 mm from the cover plates.



Insulation thickness can be increased to a total of 600 mm, if one ensures that it is vented adjacent to the chimney.

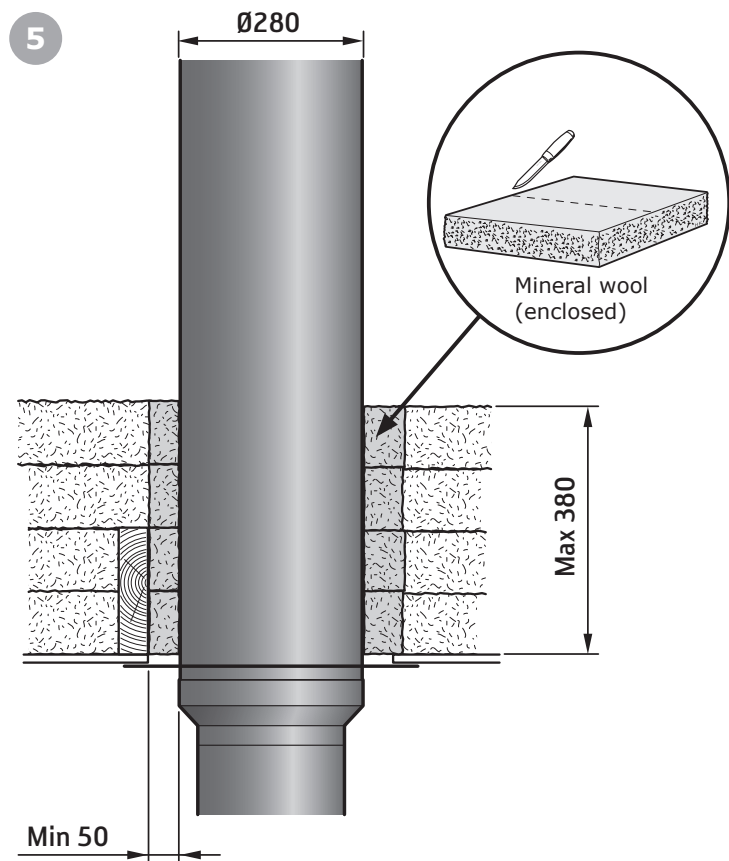


A ventilated chimney shaft is available as an accessory, which ensures venting when insulated with loose wool insulation.

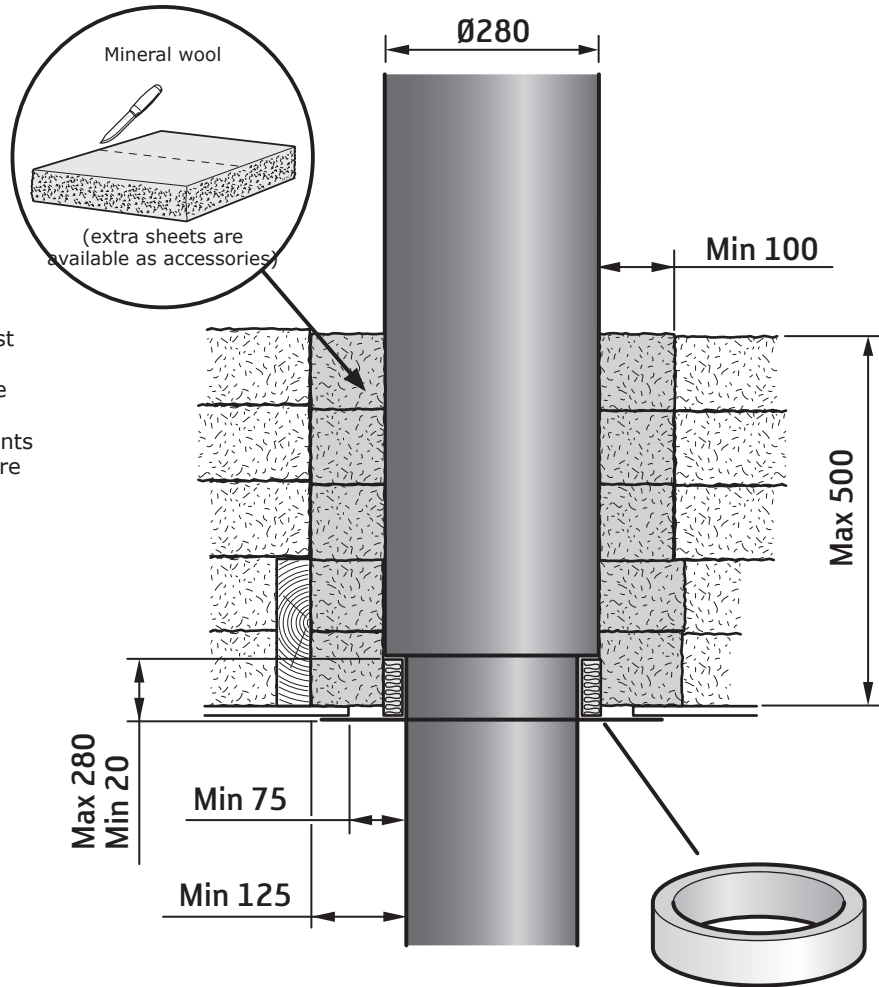


If the whole pass-through occurs with fully insulated chimney modules, the thickness of the insulation nearest the chimney is increased to 380 mm.

When Transition Ø226 Ø280 is installed under the ceiling, check that the upper edge of the transition cone which should be in the room does not reach the ceiling.



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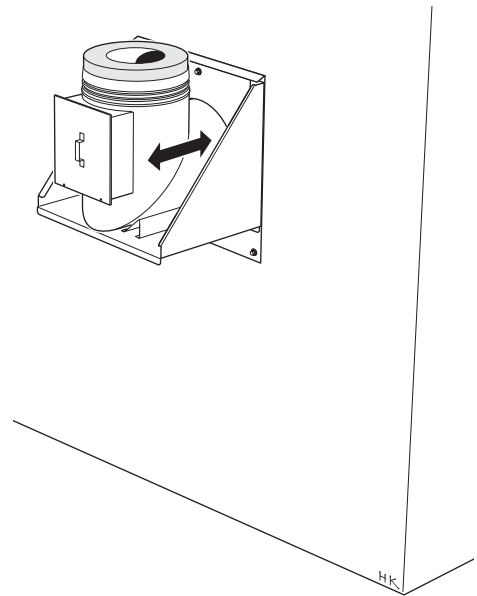
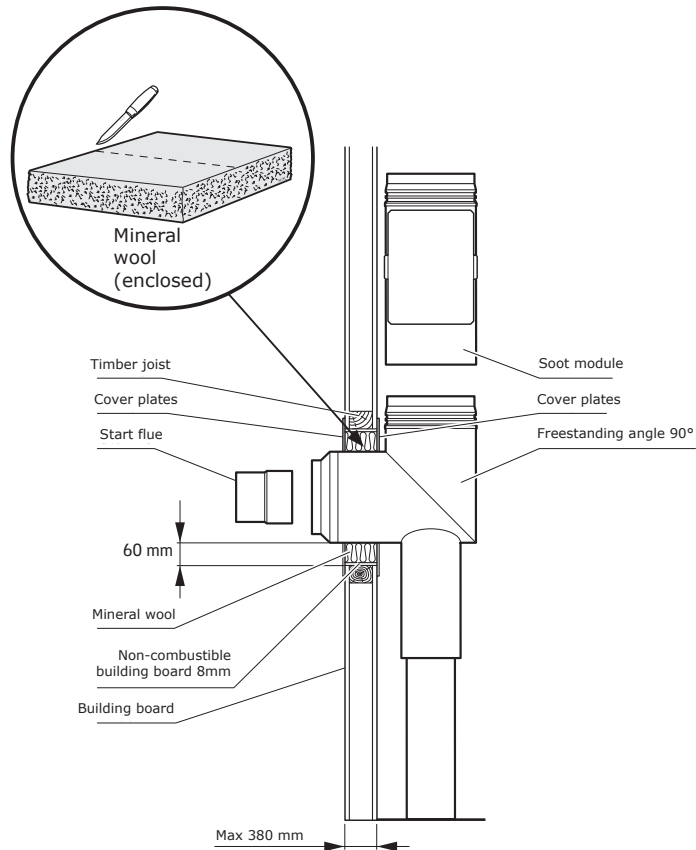


The thickness of the insulation nearest the chimney can be increased to 500 mm if the distance to the combustible material is at least 100 mm from the outer jacket. However, the requirements for distances to the ceiling cladding are unchanged. Three sheets of mineral wool are included as standard. Extra sheets are available as accessories.

Passing through combustible walls

For horizontal pass-throughs, combustible material must be protected by a non-combustible building board and be at a distance of at least 60 mm from the chimney jacket. Saw a square hole sized 400 x 400 mm in the wall and cover the sides along the pass-through with 8 mm thick

non-combustible building boards, for example Minerite or Masterboard. The area between the chimney jacket and the non-combustible building board must be insulated with the enclosed mineral wool insulation.



Making holes in the roof

Mark the centre point for making the hole in the roof using the installation instructions for the relevant fireplace and the requirements for safety distances etc. as a starting point.

The requirements for the size of the hole vary depending on the following conditions.

- The pitch of the roof affects the size of the hole.
- Round cover plate assumes a round hole. Stoves with a square metal jacket that surrounds the chimney all the way through the ceiling assume a square hole.

To obtain the correct size of hole in a pitched roof, it is recommended to cut out a piece of cardboard corresponding to the required size of hole on a flat roof. Then centre the cardboard disc above the marking for the centre of the chimney. Use a plumb line from the roof to the edge of the cardboard to obtain and mark the correct hole size in the pitched roof.



Locate the joists in the ceiling and outer roof before starting to make holes!

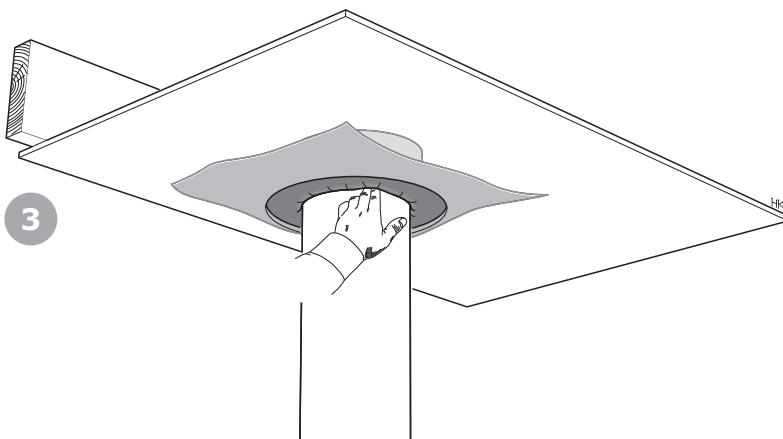
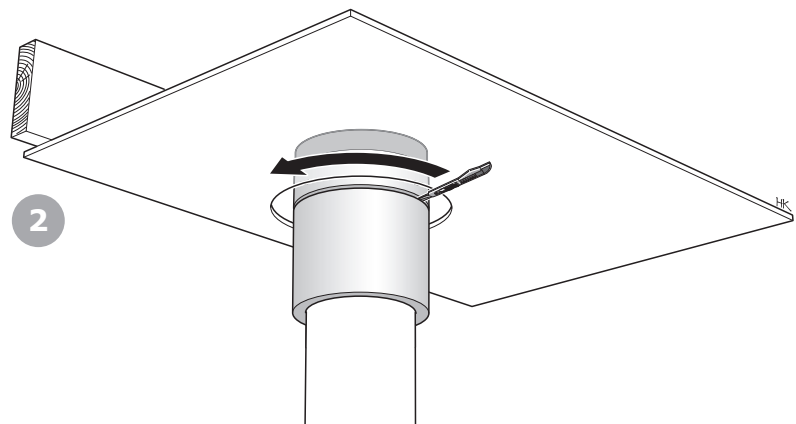
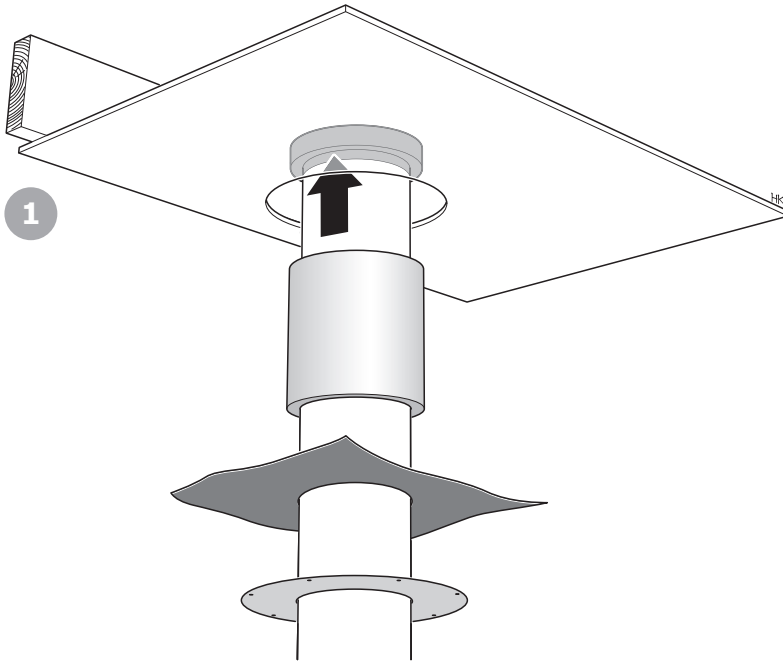
Cover panel and insulating transitions in joists

Thread the cover plate and the diffusion seal around the partially insulated chimney module. Push down the flue casing insulation that fits around the partially insulated chimney modules and install Transition Ø226 Ø280.

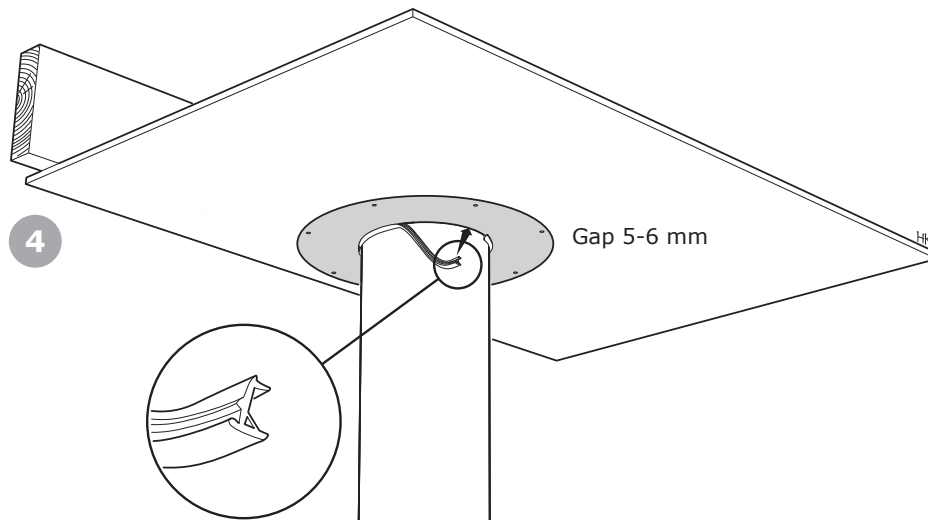
1. Push the flue casing insulation up to the transition.

2. Cut off the flue casing insulation level with the underside of the roof.

3. Push up the diffusion seal and press up the inner edge of the diffusion seal between the flue casing insulation and the outer jacket.



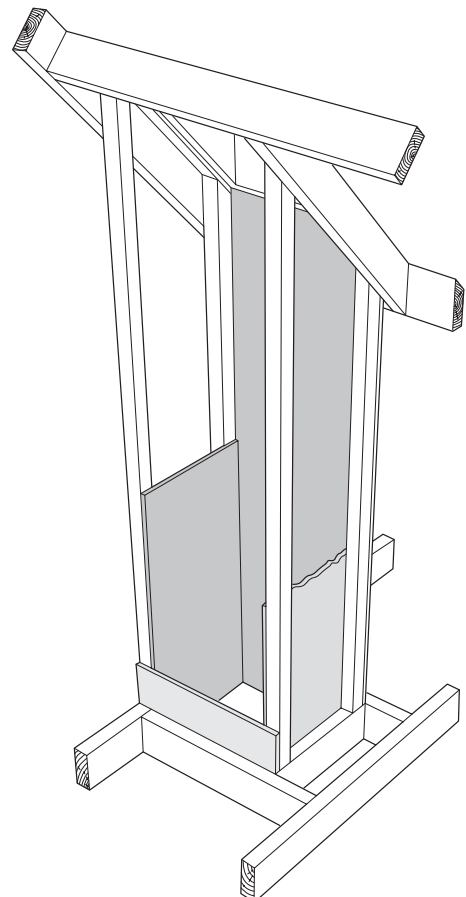
4. Screw the cover plate into place so that a gap of 5-6 mm is maintained to the outer jacket around the chimney. Turn the fins on the compression trim towards the outer jacket and press the trim into place in the gap around the outer jacket. Dampen the trim strip with soapy water to facilitate installation.



Installation in enclosed shafts

Partial or complete integration of the chimney in an enclosed shaft is permitted. At least two sides of the shaft must be uninsulated and the sides of the shaft may consist of combustible building boards. There should be a vent with an opening of at least 30 cm² in the lower section of the shaft. The distance between the outer jacket of the chimney and the inside of the shaft must be 50 mm. If the shaft joins to the cowl on the outer roof, venting is via a gap under the cowl roof. If the shaft does not join to the cowl, a vent with an opening of 30 cm² must be installed high up on the shaft for venting.

An inspection hatch, measuring 300x300 mm, must be installed in an easily accessible location in the shaft wall to allow inspection of the chimney.

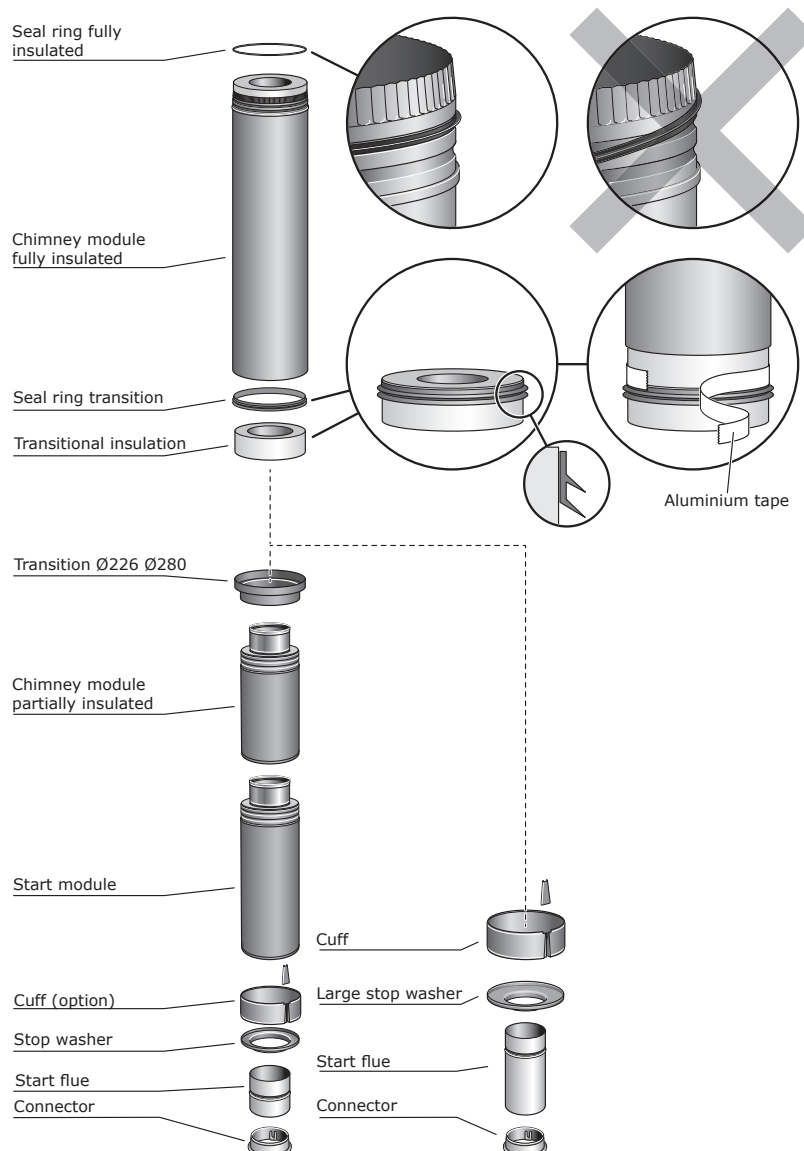


Installing chimney modules

On delivery the parts of each chimney modules are loosely assembled. To facilitate installation, it is recommended that the parts are separated and installed individually by section. The collared end of the inner flue and the grooved end of the outer jacket must always be turned upwards. Check that all connection joints are free of dirt and that there is no damage on the chimney modules.

1. Install the start flue in the connection sleeve. The start flue is available in several standard lengths. When the chimney is ordered together with a Contura stove a standard length is provided that is adapted for the Contura model. If the chimney is ordered for another stove, the start flue may require cutting and a ball stop may need to be installed. See page 15 for Adaptation of the start flue.
2. On certain stoves with a visible connection, a cuff is installed to protect the wall behind from heat radiation. The cuff can also be used to conceal the start flue if it is visible under the stop washer.
3. If the chimney must be fully insulated from the start, place stop washer Ø280 and the transition insulation directly on the start flue and continue the installation according point 9.

4. For most stoves, a partially insulated start module is used that contains stop washer Ø226. Position the stop washer on the start flue and install the start module. Note that the start module's outer jacket has a groove in the bottom edge that fits the stop washer. Twist the outer jacket so that the lengthways joint is at the back.
5. If necessary, install partially insulated chimney modules to achieve the desired height.
6. Install transition Ø226 Ø280. If the transition is installed in joists, the flue casing insulation that is enclosed with the transition and fits around the partially insulated chimney modules must be used. See page 12.
7. Install "seal ring transition" on the outside of the transition insulation as illustrated and position these in transition Ø226 Ø280.
8. Install inner flue and flue shell insulation. Tape "seal ring transition" and the joint between the flue shell insulation with enclosed aluminium tape. Carefully push the outer jacket past the seal ring and down into the transition until it stops.
9. The seal rings must be installed on the upper groove of the outer jackets for the fully insulated modules. See figure. Seal rings are not required for external installation along outside wall.

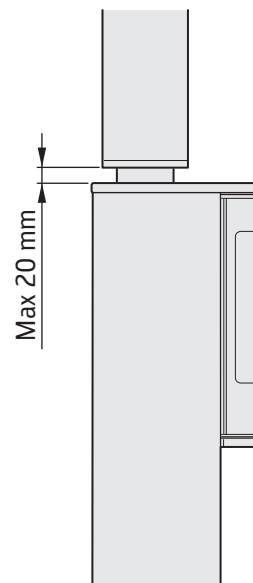
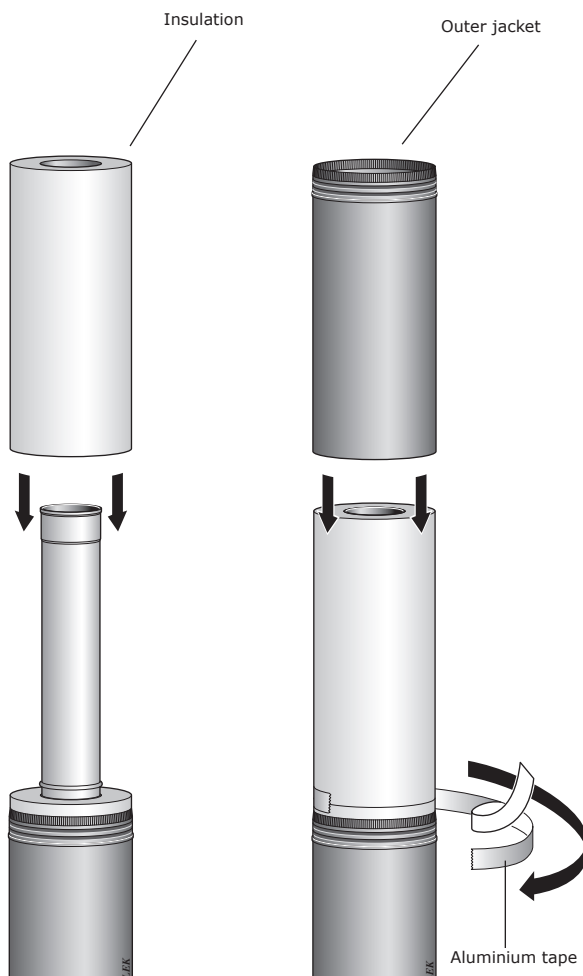


10. Install inner flue and flue shell insulation. The joints between the flue shell insulation in fully insulated modules must be taped with the enclosed aluminium tape. Partially insulated modules and end modules do not need to be taped. Push the outer jacket down after taping and twist it so that the lengthways joint is at the rear.
11. To obtain the right height, one or more end modules are installed at the top. Note that these must always be installed inside the chimney cowl on the outer roof and therefore do not have a painted outer jacket.

Adapting the start flue

Adaptation may be required if the chimney is ordered for a stove other than a Contura stove. If the seal is missing from the stove's connection sleeve, heat-resistant sealant can be used to seal the connection. If the ball stop in the stove is missing a ball stop should be installed in the start flue (accessory). When ordering the chimney, state the connection height and stop washer height. This information is in the installation diagram in the delivery documentation and forms the basis for information on how much the start flue must be cut, which is also in the installation diagram. The start flue must be cut to length at the lower edge, so that the height from the floor to the underside of the stop washer corresponds with the information in the installation diagram.

If the distance from an uninsulated flue to a combustible part of the building is less than 300 mm a Cuff is required if the exposed length is greater than 20 mm.



Installing angle modules at lateral routing of the chimney

To maintain the necessary stability when routing laterally, the joints between the outer jackets must be fixed with 4x panel screws per joint. All joints between the upper and lower angle must be secured with screws.

The suspension bracket must always be installed in proximity to the upper angle module. For angles with smaller inclines than 45°, a chimney module with soot hatch must be installed easily accessible between the angles. Note that the surface under the soot hatch, in conjunction with cleaning, must be non-combustible and be able to gather falling soot.

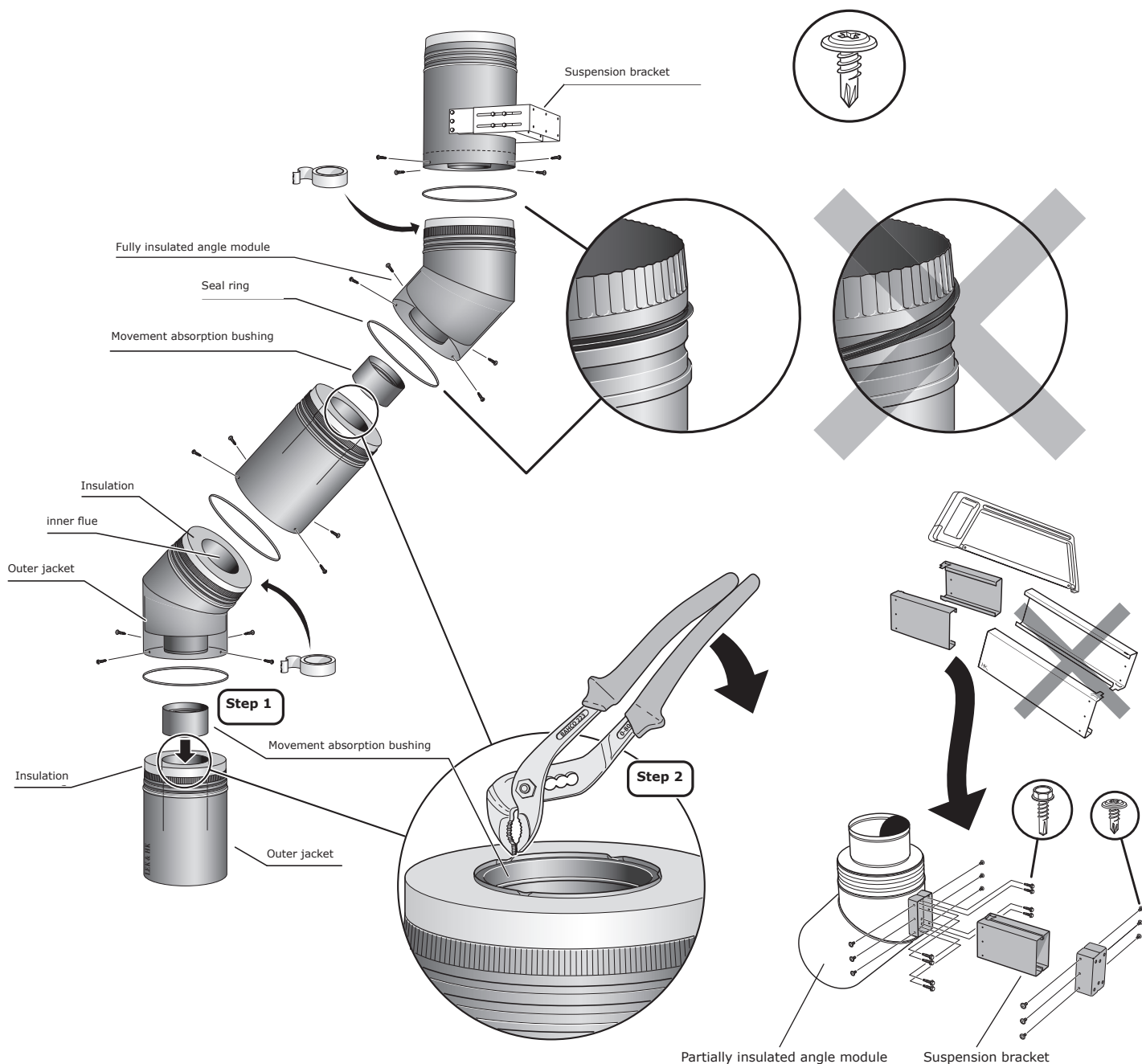
1. Before an angle is installed, a movement absorbing bushing must be positioned in the lower chimney module, or the angle. The bushing must remain 3-4 mm below the edge of the flue. Then bend the panel edge over the bushing in 4 places (see step 2 in the figure), so that the bushing is secured in the flue.

2. Before installation, place a seal ring in the upper groove of each outer jacket, see figure. Seal rings and aluminium tape are not used on partially insulated angle modules.

3. Install the angle, find and place the male section in the flue bushing, press the angle down carefully past the seals until the outer jackets meet.

4. Install a suspension bracket near the upper angle and secure it in a weight bearing part of the building. In cases where the lateral offset is more than 0.5 m and the distance from the cover plate in the pass-through to the joint of the lower angle exceeds 1 m, a suspension bracket must also be installed near the lower angle.

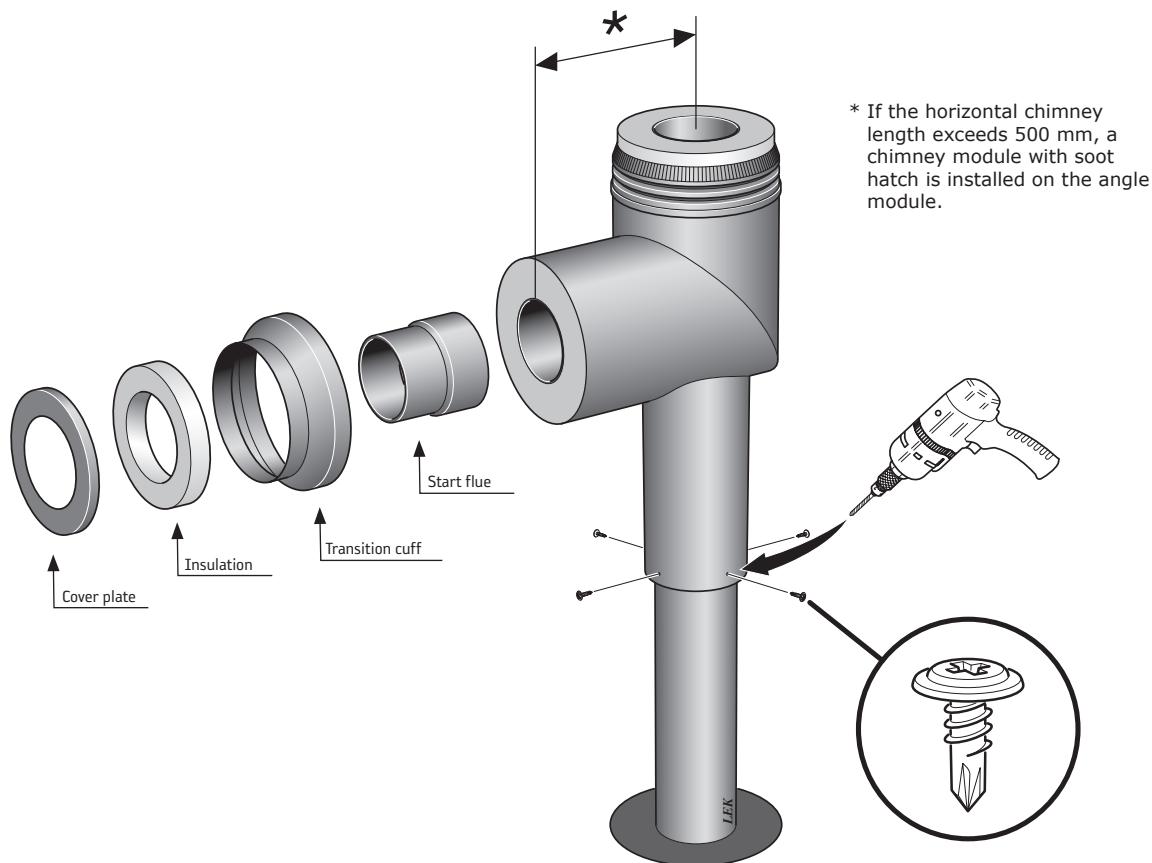
5. With suspension brackets for partially insulated chimney modules, if the lateral offset is more than 1 m the upper suspension bracket may stretch max 200 mm between the angle module and weight bearing part of the building, because the suspension bracket partially carries the chimney's weight.



Installing freestanding 90° angle module

When the stove is connected through a combustible wall to a freestanding 90° angle module, the pass-through in the wall must be carried out according to the instructions on page 11 "Pass-throughs in combustible walls".

1. Install the telescopic base pillar on the angle and adjust the height so the angle is centred to the connector on the stove. Drill \varnothing 3.5 mm holes in the base pillar through the four holes for the angle support pillar and screw the base pillar into place using 4 x panel screws.
2. Install any chimney modules for extending the lateral routing. Do not forget to join the insulation section using the enclosed aluminium tape. If necessary the length of the chimney module can be adapted by cutting the smooth end with plate shears. Mount the cover on the wall nearest the angle. Position the angle so that the correct distance to the adjacent walls and stove is maintained. The conical end connection must always be outside the wall and to the back plate of the stove.
3. Insulate the space in the pass-through between the outer jacket and the non-combustible building board using mineral wool. Screw the cover plate over the pass-through in the wall nearest the stove.
4. Install the start flue with the thin insulation in the angle. Move the stove into position and connect the connector sleeve to the start flue. Make sure that the gasket on the connection is in the correct position.
5. When selecting the chimney module with a soot hatch, it must be installed vertically and easily accessible nearest the angle, before other chimney modules are installed.



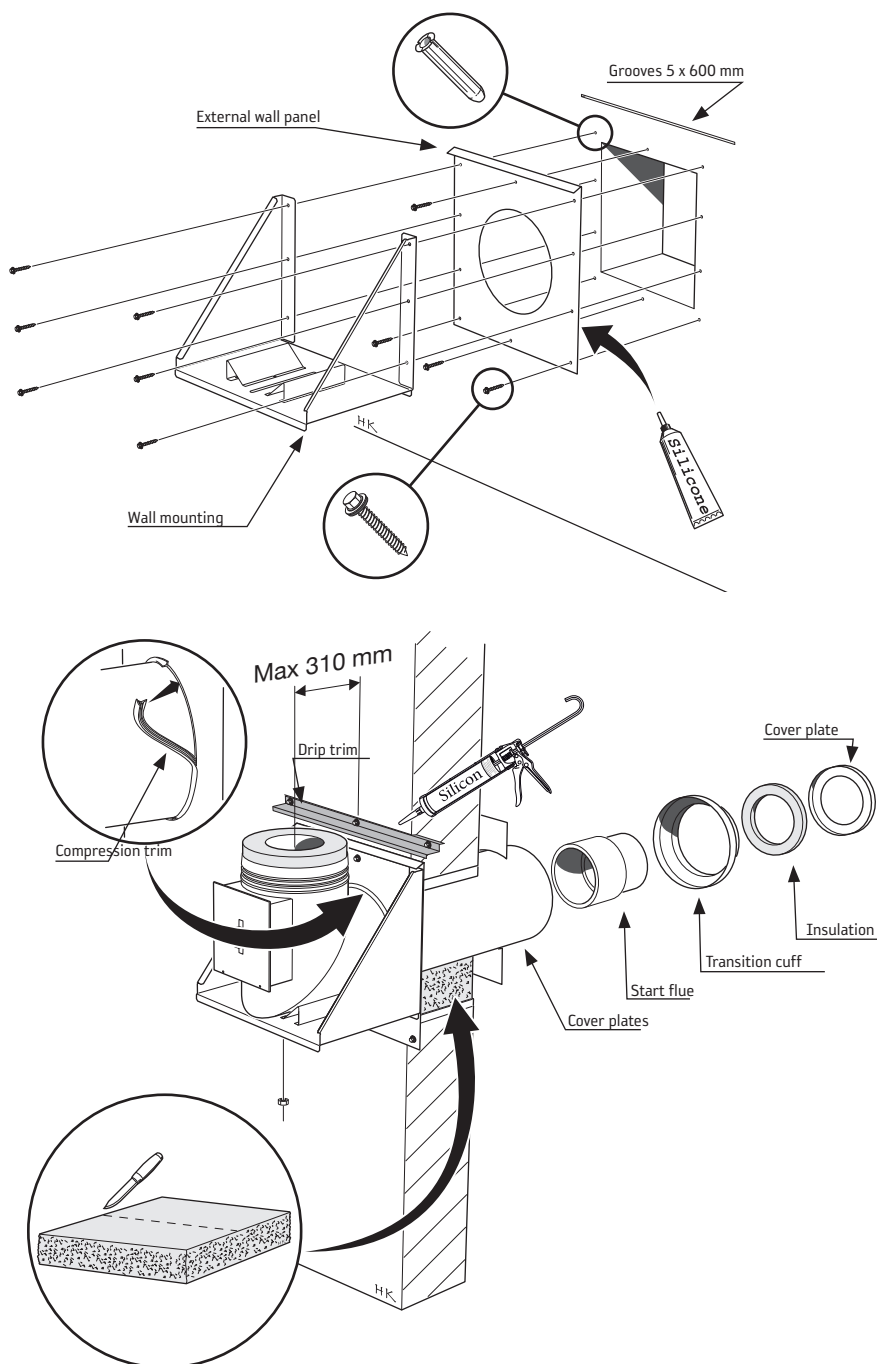
Installing wall mounted 90° angle module

When the stove is connected through a combustible wall to a wall mounted 90° angle module, the pass-through in the wall must be carried out according to the instructions on page 11 "Pass-throughs in combustible walls".

1. Apply a bead of silicone to the reverse of the outside wall plate and screw it into place so that the hole centres on the connector of the fireplace. Then screw the wall mounting to the outside wall plate.
2. Saw/grind a groove that is approx. 5 mm deep and approx. 600 mm long outside the outside wall plate. Press the drip trim into the groove and screw it into place. Apply silicone along the upper side of the drip trim.
3. Install any chimney modules for extending the lateral routing. If necessary the length of the chimney module can be adapted by cutting the smooth end with plate shears. Position the angle module so that the correct distance to the adjacent walls and stove

is maintained. Secure the angle module in the correct position using the stainless steel nut under the wall mounting. Install the compression trim in the gap between the outside wall plate and the outer jacket. The transition cuff must be installed inside the wall and against the back plate of the stove.

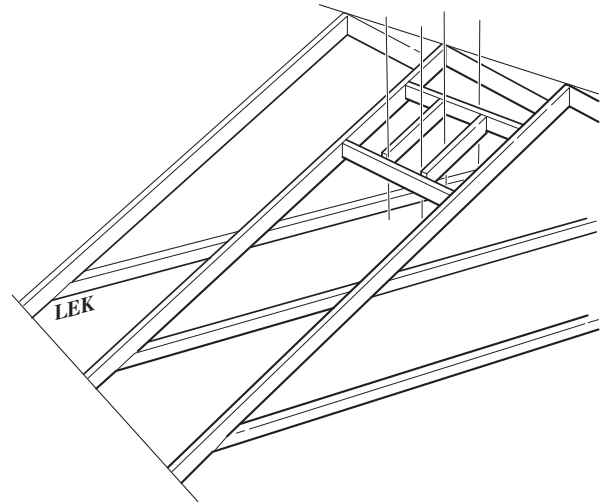
4. Insulate the space in the pass-through between the chimney jacket and the non-combustible building board using mineral wool. The pass-through on the inside of the wall is concealed by a cover plate. Screw the cover plate into place so that a gap of 5-6 mm is maintained to the outer jacket around the chimney. Turn the fins on the compression trim towards the outer jacket and press the trim into place in the gap around the outer jacket.
5. Install the start flue with the thin insulation in the angle. Move the stove into position and connect the connector sleeve to the start flue. Make sure that the gasket on the connection is in the correct position.



Installing the lower plate for square chimney cowl

Securing

The lower plate must be secured to the lower roof in a weight bearing and strong mounting. If the lower roof is made of roof boards or similar material, a timber frame (95 x 45 mm) must be built between the rafters. Mark the centre for making a hole in the lower roof using a plumb line from the centre of the chimney. Measure internal dimensions in the lower plate and saw a corresponding hole in the lower roof.

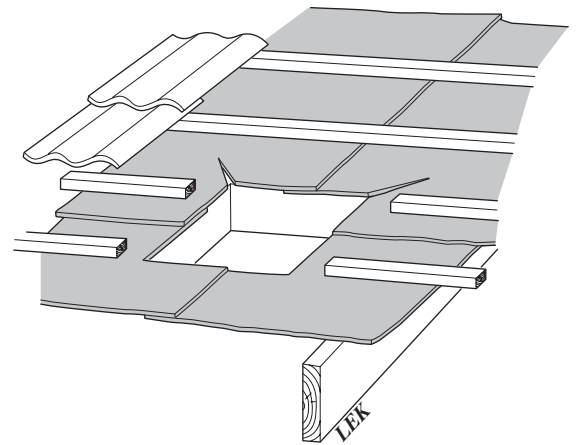


Roof cladding with a lower roof of felt or roof boards

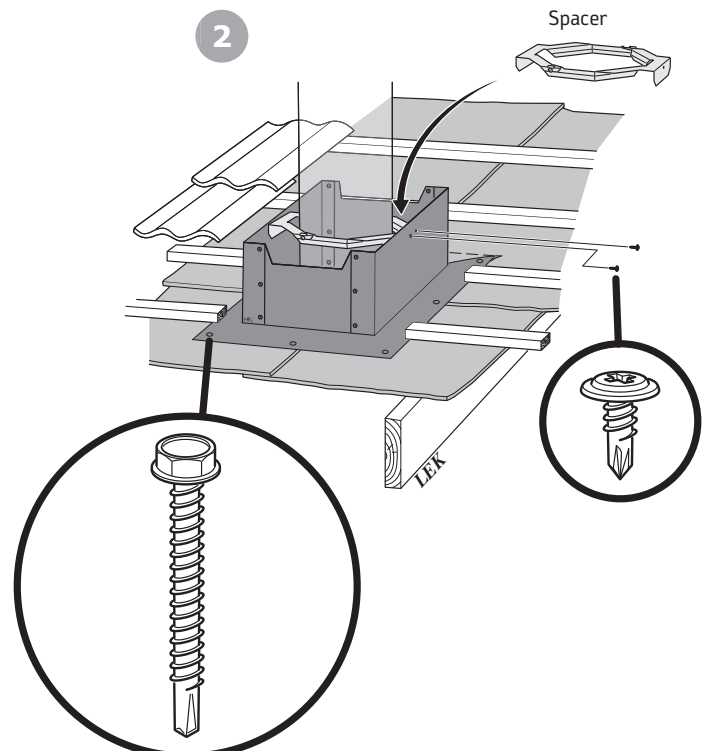
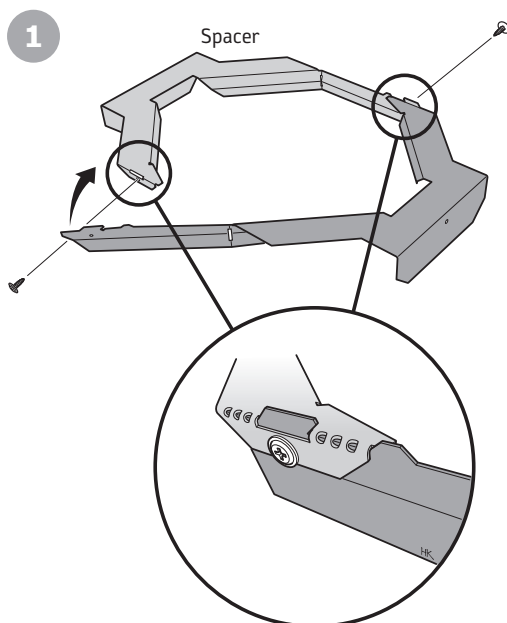
Remove, alternatively cut a hole in, the lower roof cladding and saw off the battens. Cut the roofing felt or roof boards as illustrated and slide under the lower plate at the top edge.

Centre the lower plate over the chimney and secure it against the lower roof.

Assemble the spacer as illustrated. Secure it loosely in the holes on the lower plate. Centre the chimney and screw the spacer into place.



Check that any water that runs down the lower roof cannot run under the lower plate. For certain installations it may be appropriate to apply sealant between the lower plate and the lower roof.

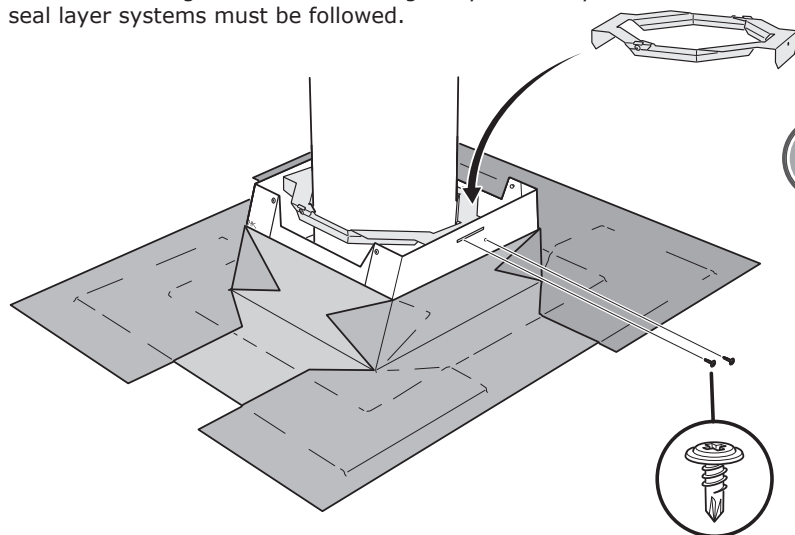


Low pitch felt roof

When selecting seal layer system (roofing felt) for roof pitches less than 10°, consideration must be made of the following:

- The seal layer system must be adapted for pass-throughs at the actual roof pitch.
- No upper plate is used, only the lower plate is used.
- At a pass-through the seal layer goes up on the lower plate sides and seal as illustrated.
- Instructions or guidelines for existing 1-layer or 2-layer seal layer systems must be followed.

Make a hole in the roof for the chimney. Centre the lower plate over the chimney and secure it using screws or nails. Screw the spacer together as illustrated on page 19. Screw it loosely into place in the holes on the lower plate. Centre the chimney and screw the spacer into place. Lay roofing felt around the lower plate and a little up at the sides so that it is sealed according to the supplier's instructions.



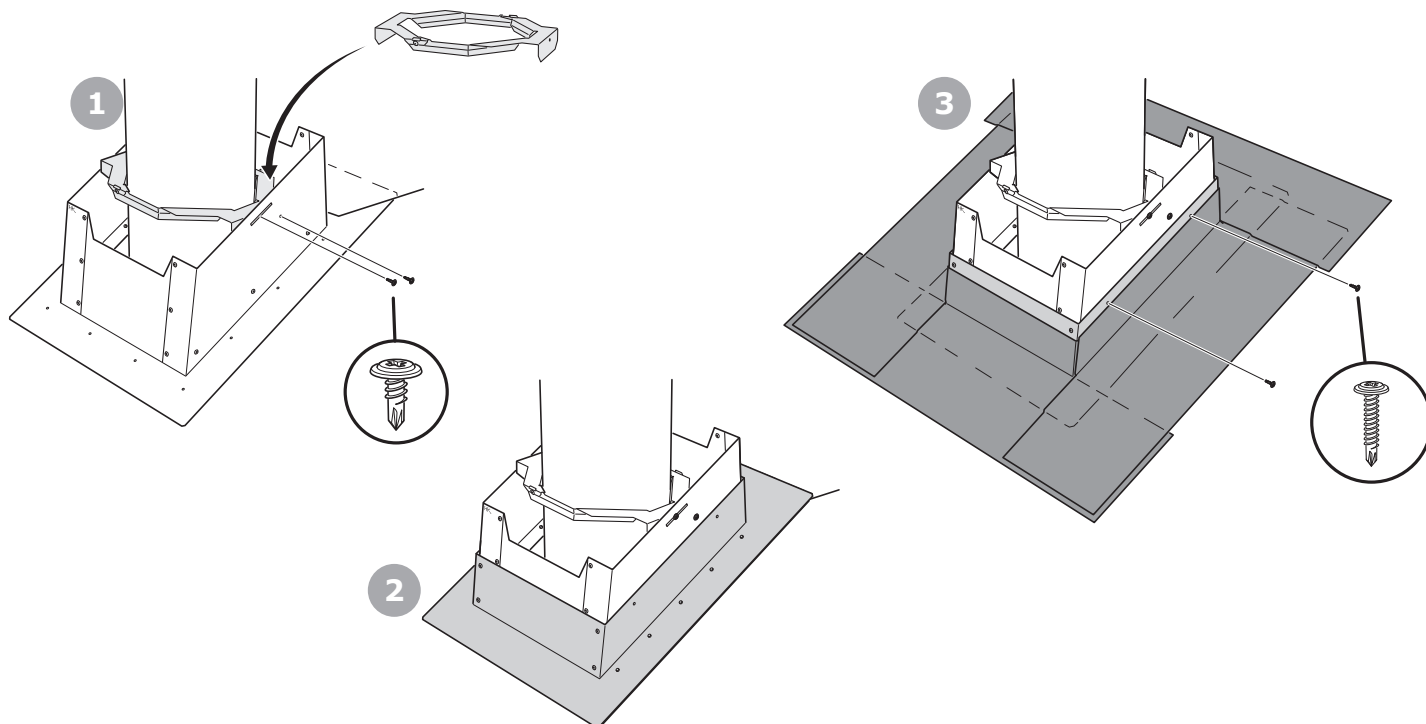
The illustration only shows symbolically how the roofing felt is applied. The work with roofing felt must be carried out by a tradesman in line with the applicable regulations.

Steep felt roof

When selecting seal layer system (roofing felt) for roof pitches greater than 10°, consideration must be made of the following:

- The seal layer system must be adapted for pass-throughs at the actual roof pitch.
- Both lower plate and upper plate are used.
- When making a pass-through, an approved seal must be maintained by the seal layer being laid on the upper side of the plate as illustrated and without the seal layer going up at the sides.
- Instructions or guidelines for existing 1-layer or 2-layer seal layer systems must be followed.

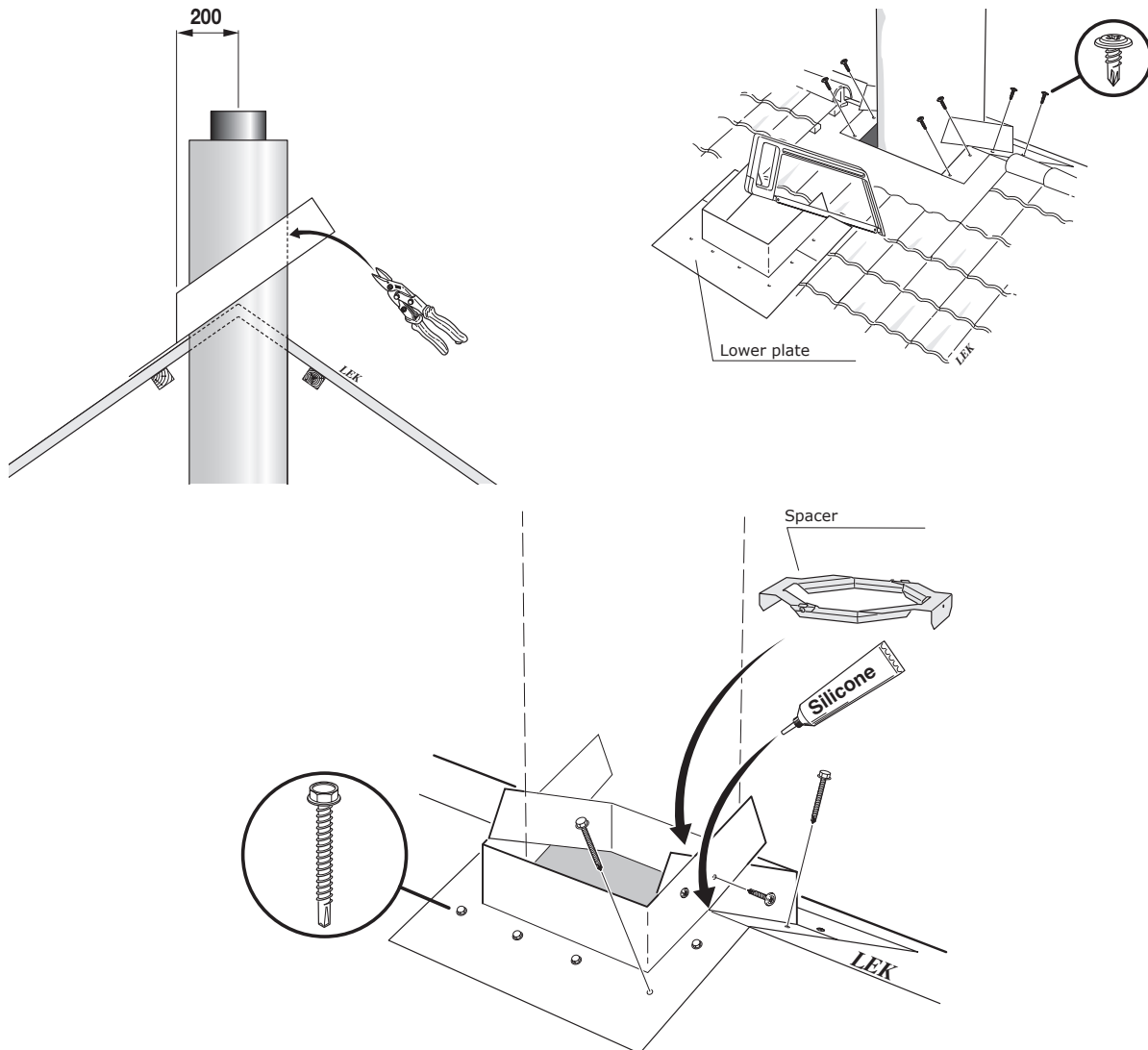
Make a hole in the roof for the chimney. Cut the roofing felt as illustrated and slide under the lower plate at the top edge. Centre the lower plate over the chimney and secure it using screws or nails. Screw the spacer together as illustrated on page 19. Screw it loosely into place in the holes on the lower plate. Centre the chimney and screw the spacer into place. First place the roofing felt on the lower plate section down to the eaves. Centre the upper plate over the lower plate and secure it using two screws per side. Get a qualified tradesperson to install the roofing felt around the upper plate, as illustrated.



Ridge installation

The lower plate for ridge installation is supplied in two parts. Each part is aligned so that the connector of the lower plate ends up 200 mm from the ridge. Mark the ridge and saw along the bowed edge to the marking. Bend the excess metal over the ridge and screw the lower plate against the lower roof. Install the second part with

the legs overlapping, screw the legs together and cut off any excess metal using shears. Seal the gap at the cutting point with silicone. Screw the spacer together as illustrated on page 19. Centre the chimney and screw the spacer into place.



Installing the upper plate for square chimney cowl

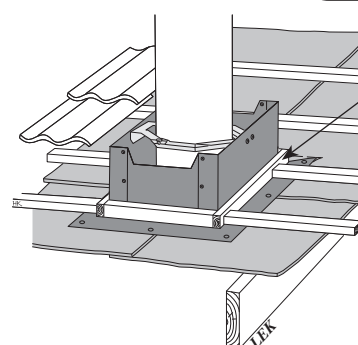
Nail a timber support around the connector on the lower plate. The height of the support frame must be level with the upper side of the roof cladding.

Replace and secure the sawn off batten. If the work bridge or ladder is to be installed, check that the upper plate has support from the roof cladding directly below the ladder. If the support is missing, cut some timber to size to the height of the roof cladding and secure against the roof.

Cover tape must be installed at the front edge of the upper plate as protection against snow blowing in. Cut the enclosed cover tape to the profile of the roof cladding and secure it against the underside of the upper plate.

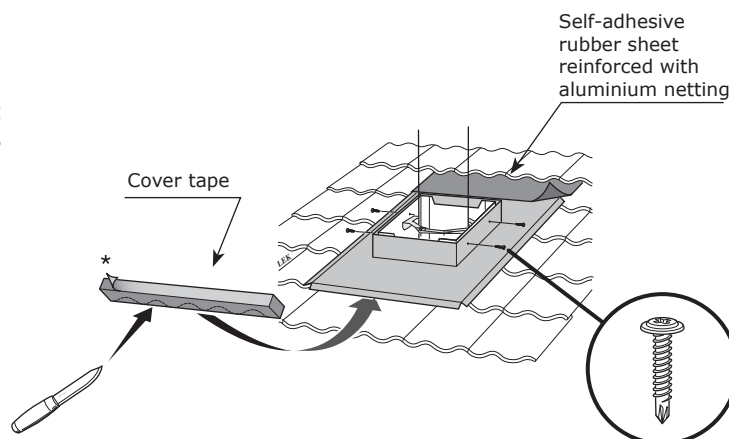


A support frame for the upper plate must be nailed into place around the connector sleeve on the lower plate. Follow the instructions in the text.



Tiled roof

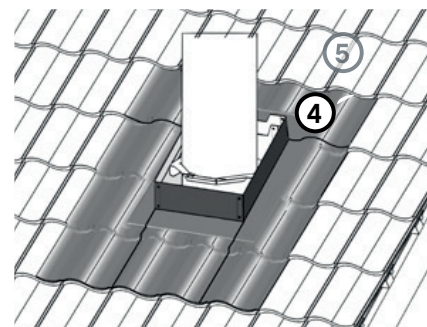
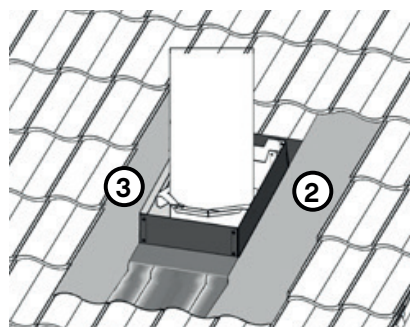
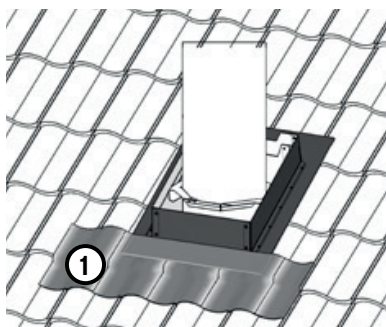
Adapt the size of the roof tiles and lay them back against the support frame around the lower plate. Centre the upper plate over the lower plate and adjust the roof tiles so that the best possible seal is obtained. Adapt the length of the upper plate up to the ridge so that the self-adhesive rubber sheet reinforced with aluminium netting extends under a row of roof tiles when it is secured in the upper edge of the upper plate. Screw the upper plate into the lower plate using two screws per side. Brush any dirt and loose materials off the roof tiles and wipe any dust off the upper plate. Remove the protective foil and press the aluminium reinforced rubber sheet towards the tops of the roof tiles and to the upper plate. The sheet is reinforced with aluminium netting, which makes it easy to shape to the roof tiles. Relay the row of tiles above the aluminium reinforced rubber sheet.



Tiled roof with aluminium reinforced rubber sheet around

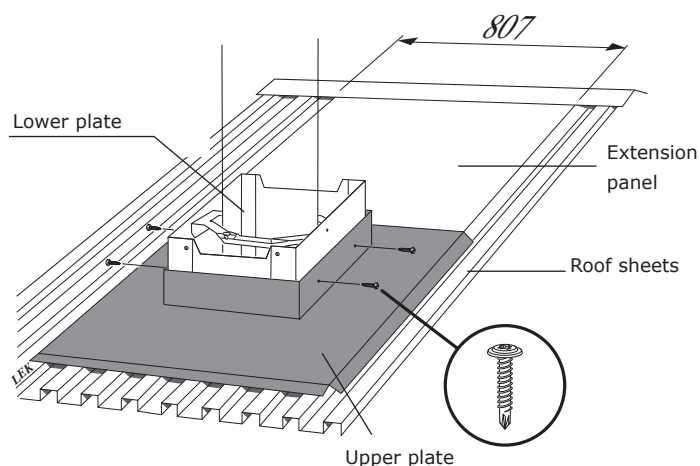
It is possible to order a smaller upper plate with self-adhesive rubber sheet reinforced with aluminium netting around it as an accessory. In that case the cover tape is not used. Adapt the size of the roof tiles and lay them back against the support frame around the lower plate. Centre the upper plate over the lower plate and screw the upper plate into the lower plate using two screws per side. Brush any dirt and loose materials off the roof tiles and wipe any dust off the upper plate. Cut off 840 mm aluminium reinforced rubber sheet and start to install the bottom first, no. 1. Remove the protective foil and

press the aluminium reinforced rubber sheet towards the tops of the roof tiles and to the upper plate. The sheet is reinforced with aluminium netting, which makes it easy to shape to the roof tiles. Cut off two 1040 mm long strips of aluminium reinforced rubber sheet and install on the sides, no. 2 and no. 3. Cut off 1040 mm and install the upper, no. 4. If the aluminium reinforced rubber sheet does not extend under a row of roof tiles, an additional strip of aluminium reinforced rubber sheet is installed, no. 5, so that it extends under the roof tiles.



Metal roof

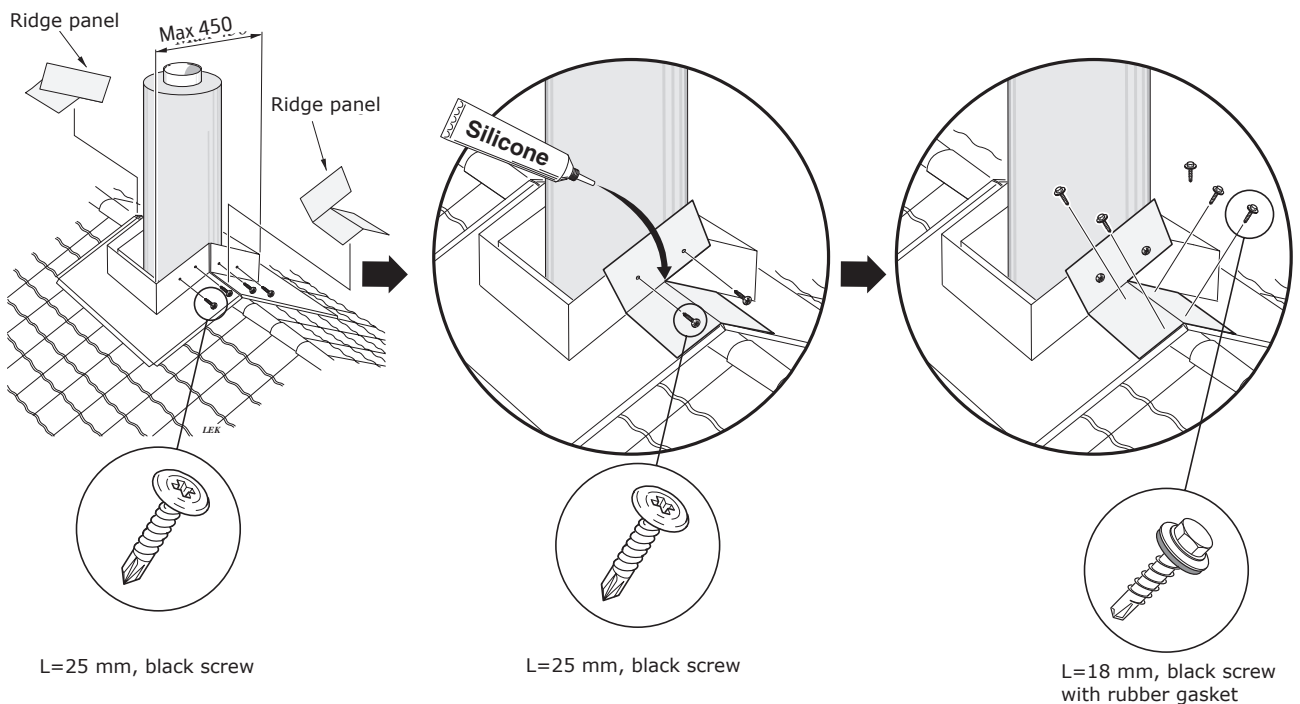
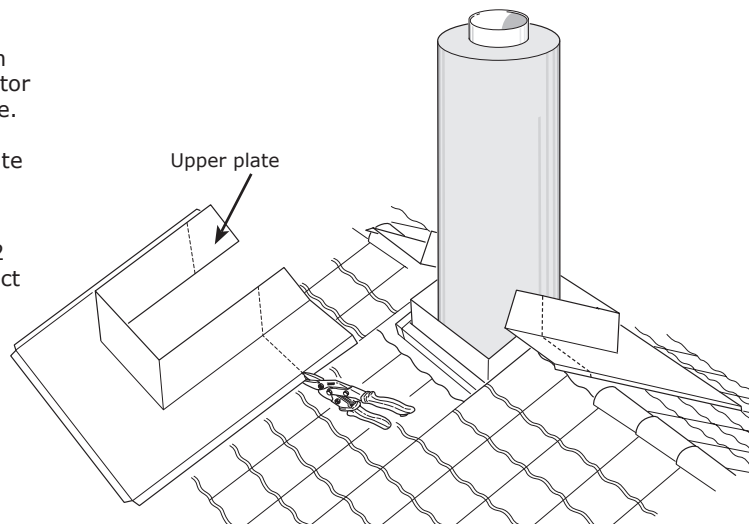
Centre the upper plate over the lower plate. Screw the upper plate into the lower plate using two screws per side. Install an extension panel (accessory) from the upper plate up to the ridge.



Ridge installation

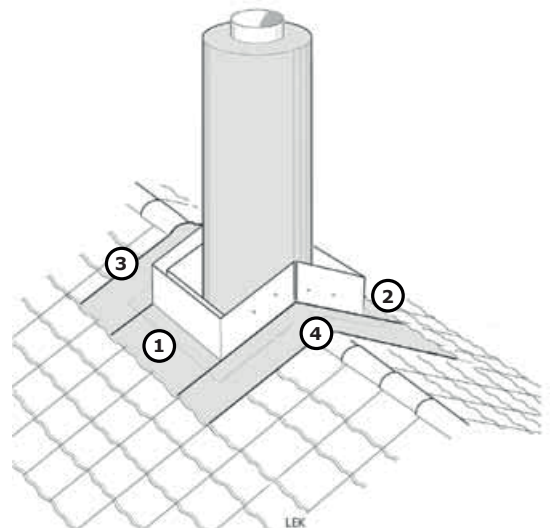
The upper plate for ridge installation is supplied in two parts. Each part is aligned so that the connector of the upper plate ends up 225 mm from the ridge. Mark the centre of the ridge and cut along the marking. Screw the upper plate into the lower plate using 4x screws per side.

The joint between the parts must be covered by 2 x ridge panels. Bend the ridge panels to the correct roof pitch and screw them into place in the upper plate using panel screws. Seal the gap at the cutting point with silicone.



Ridge installation of aluminium reinforced rubber sheet around it

It is possible to order a smaller upper plate with self-adhesive rubber sheet reinforced with aluminium netting around it as an accessory. In that case the cover tape is not used. Brush any dirt and loose materials off the roof tiles and wipe any dust off the upper plate. Cut off two 840 mm long strips of aluminium reinforced rubber sheet and install them in the bottom edges, no. 1 and no. 2. Cut off two 900-1400 mm long strips of aluminium reinforced rubber sheet and install on the sides. The lengths depend on the pitch of the roof.

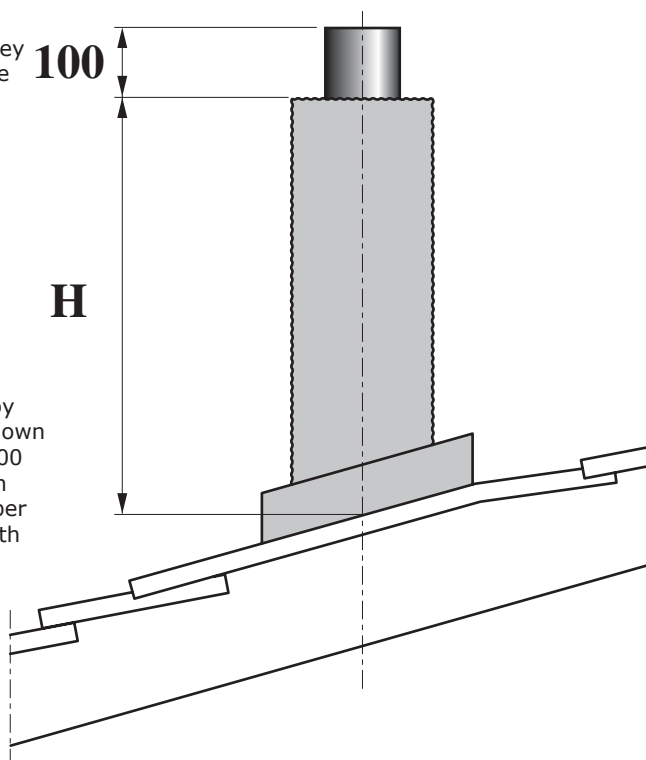


Installing square chimney cowl

The roof cowl is assembled with four loose jacket sides. Extension sections of 1 m in length are supplied for chimney cowl over 2 m in height. The cowl jacket is adapted to the pitch of the roof and desired length at the site.

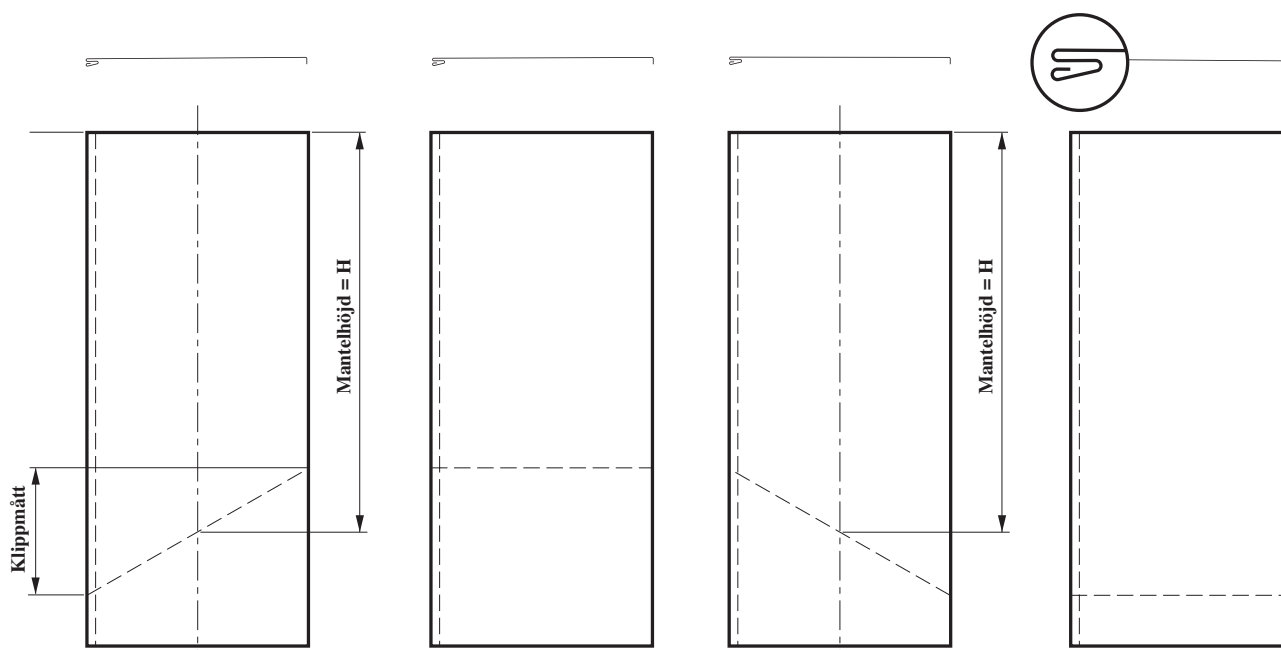
Cutting the length and angle of the jacket sides

1. The necessary length of the cowl jacket is established by measuring the distance from the end of the inner flue down to the upper plate and reducing the measurement by 100 mm (H-measurement). The length should be adapted in conjunction with cutting the angle of the end to the upper plate. If necessary, there is nothing to prevent the length being adapted at the cowl roof end.



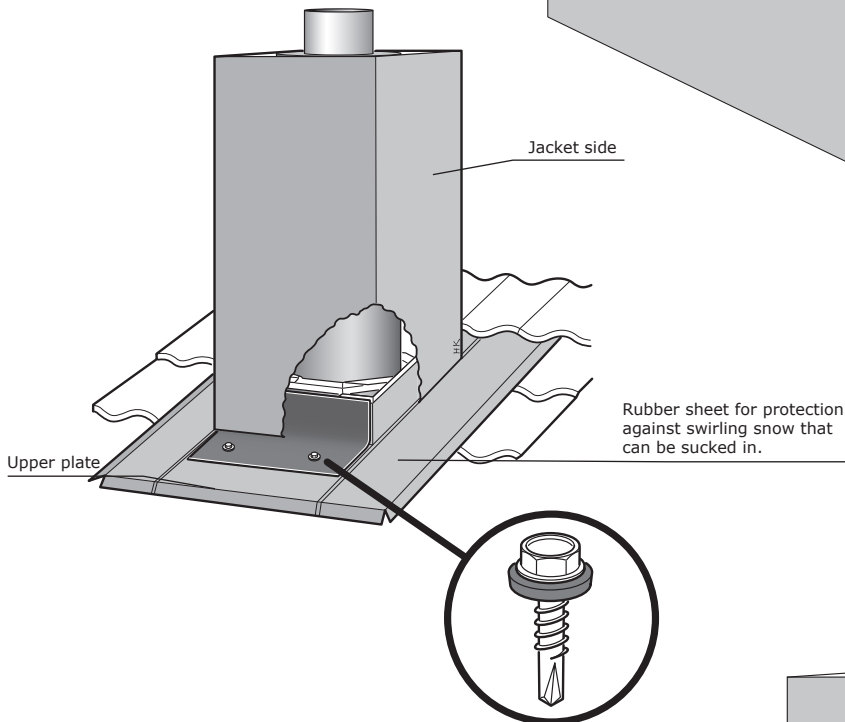
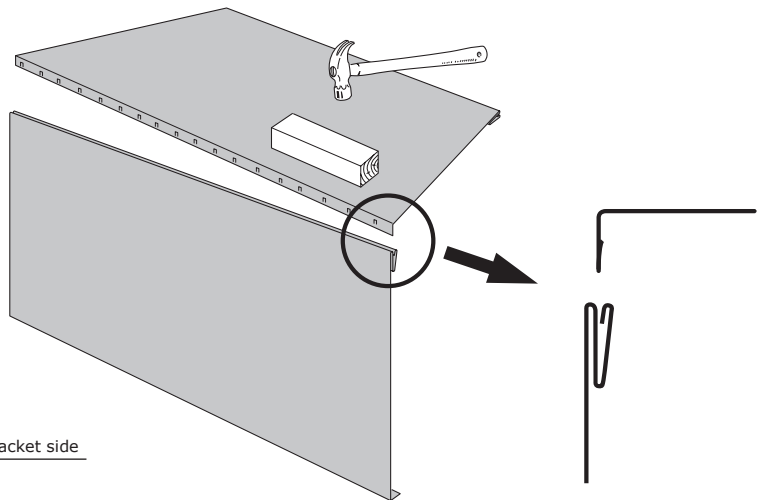
2. Position the jacket sides with the black side up as illustrated. Mark the H dimension in the jacket's centre line and draw out the roof pitch using the dimensions table. Saw through the flange using the hacksaw and then cut off the jacket using shears.

Pitch of roof	Cutting dimensions
10°	81 mm
15°	123 mm
20°	167 mm
25°	215 mm
30°	265 mm
35°	322 mm
40°	386 mm
45°	460 mm



Installing jacket sides

Position the jacket sides vertically opposite each other. Join the jacket sides at the flanges, use a rubber mallet or place a wood block as spacer when the jackets are hit. Ensure that the corners of the jacket sides are level with each other.

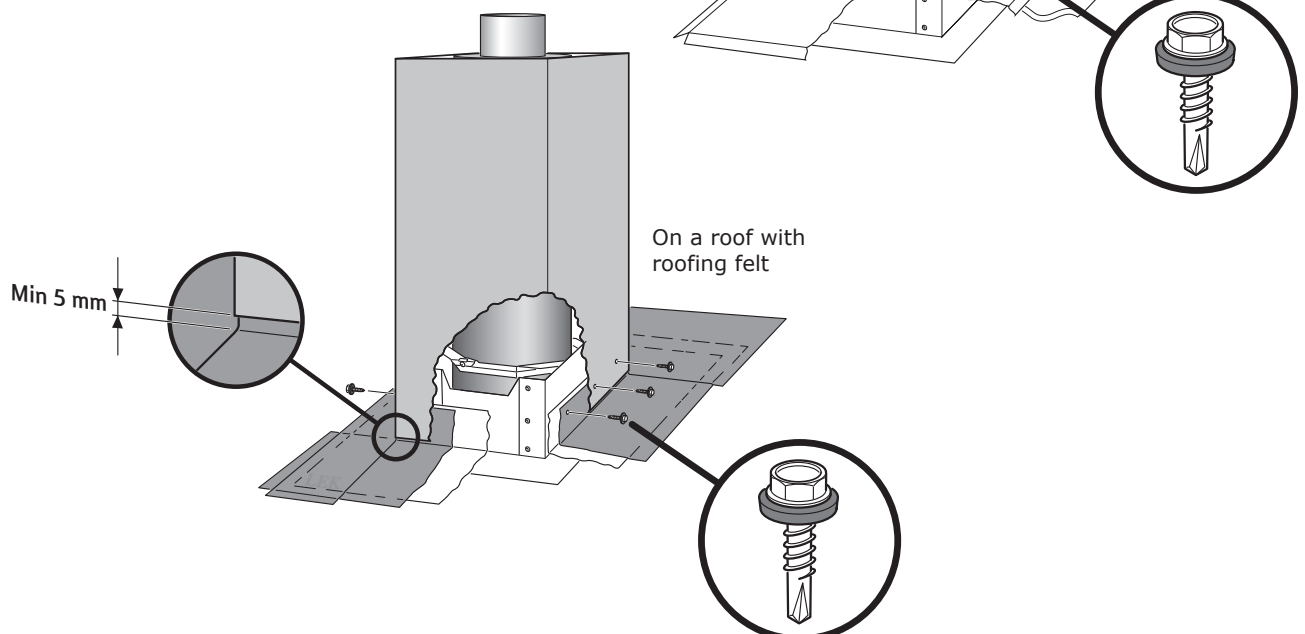


Installing the rubber sheet

Clean the surfaces where the rubber sheet is to be applied. Remove the protective foil and press the aluminium reinforced rubber sheet at the bottom edge against the reverse of the long jacket side. Secure it 60 mm in on the panel. After the cowl jacket has been secured, the other end of the rubber sheet is secured to the upper plate.

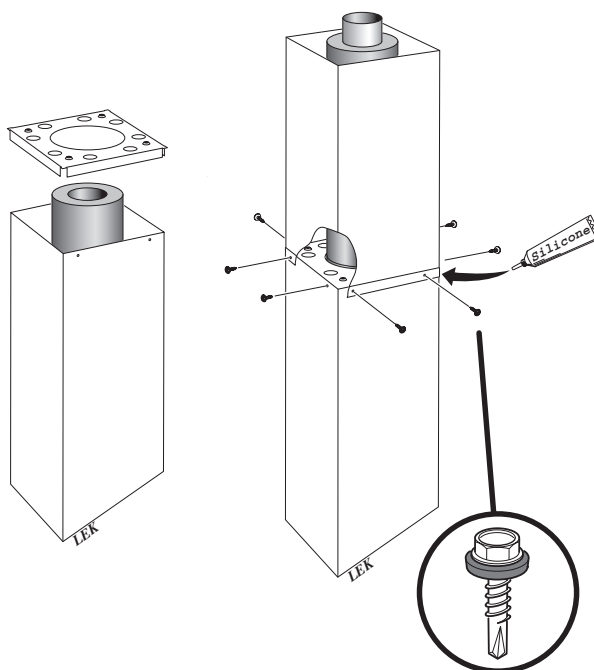
Installation of cowl jacket

Lift the cowl jacket over the chimney modules and thread it over the upper plate. Align the cowl jacket using a spirit level. Drill ($\text{Ø}3.5 \text{ mm}$) through the plates and screw the cowl jacket with three panel screws per side. Use panel screws with sealing rubber gaskets.



Installation of extension jacket

1. Position the jacket sides vertically opposite each other. Join the jacket sides at the flanges, use a rubber mallet or place a wood block as spacer when the jackets are hit. Ensure that the corners of the jacket sides are level with each other.
2. Place the reinforcement panel inside the cowl jacket, resting on the flange in the corner.
3. Install the extension jacket with the bowed out end over the cowl jacket. Align the extension jacket using a spirit level. Drill ($\text{\O}3.5\text{ mm}$) through the panels and screw the extension jacket into place in the joint with two panel screws per side. Use panel screws with sealing rubber gaskets.
4. Seal the corners of the joint between the cowl jacket and extension jacket with a dab of silicone.



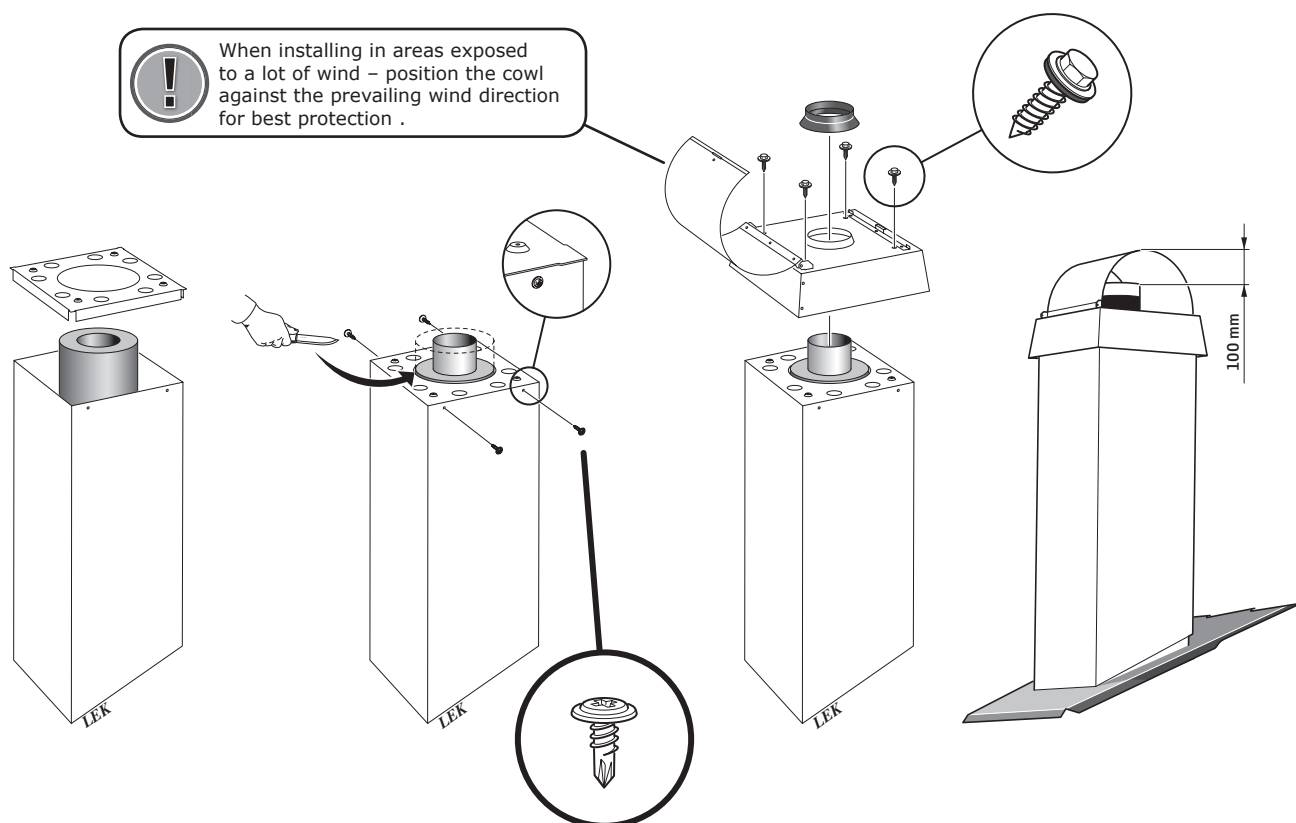
Installation tip when installing high cowls

We recommend that scaffolding is used when installing high cowls. As an alternative, the ladder, including braces, can be installed after the first cowl jacket has been installed. The ladder can then be used as an aid for further installation of chimney modules and extension jackets. Be aware that use of the ladder to aid installation is at YOUR own risk. Safety ropes must always be used because there is a risk of falling to the ground.

Installation of cowl roof

1. Install the reinforcement panel inside the cowl jacket, resting on the flange in the corner. Screw the reinforcement panel into the cowl jacket using 2 x screws per side on two opposing sides.
2. Cut off excess insulation around the inner flue, level with the reinforcement panel.
3. Position the cowl mounting and screw it into the reinforcement panel using four screws. Use panel screws with sealing rubber gaskets.
4. Thread the rubber connector over the inner flue and press it down towards the cowl roof.

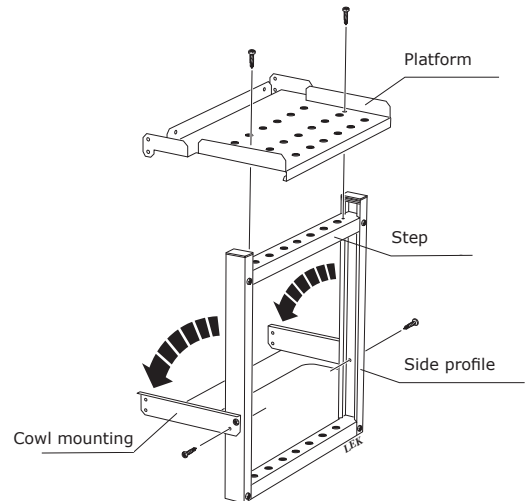
! When installing in areas exposed to a lot of wind – position the cowl against the prevailing wind direction for best protection .



Climbing device for square chimney cowl

Installing work bridge

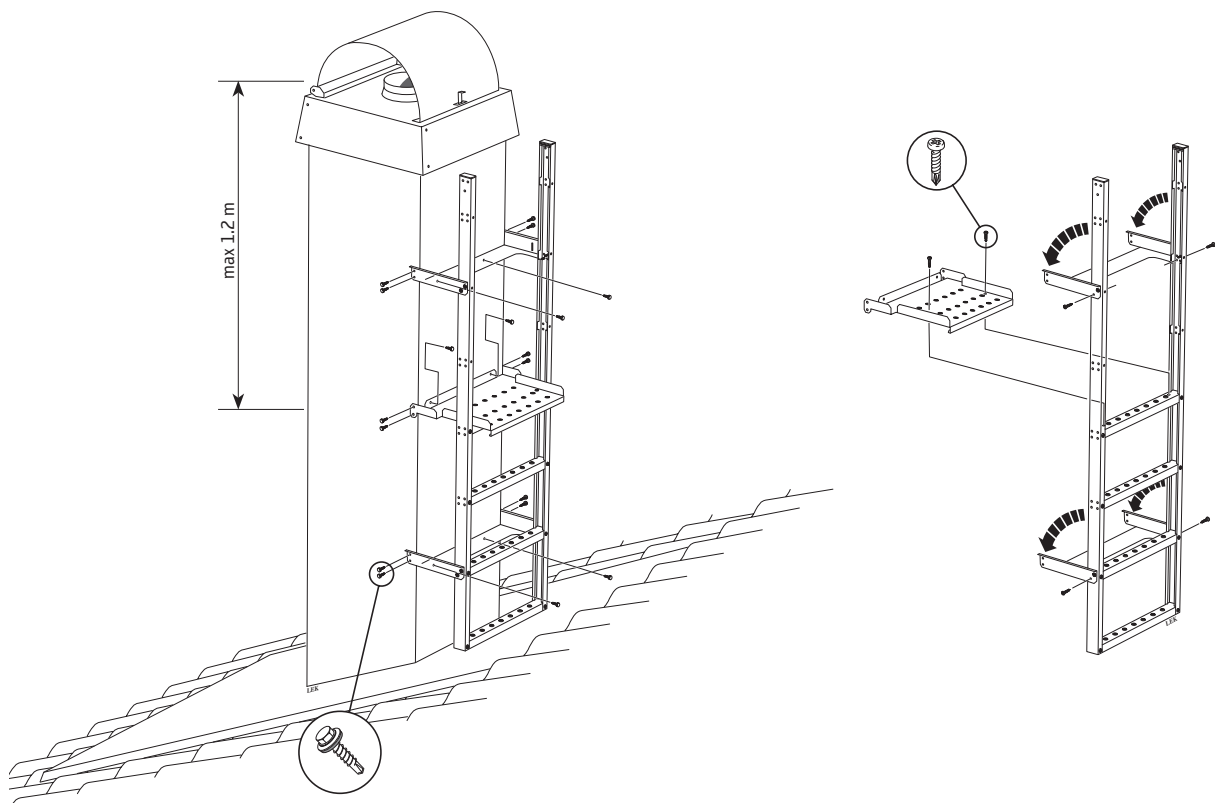
1. Bend out the cowl mounting and screw it into place in the side profiles with 2 x panel screws per side.
2. Install the platform on the top step using 2 x panels screws.
3. Install the work bridge against the cowl jacket with the lowest step resting against the upper plate. Screw the cowl mounting and platform into the cowl jacket. Use panel screws with sealing rubber gaskets.
4. Install the plastic plug in the end of the side profile.



Installing the ladder

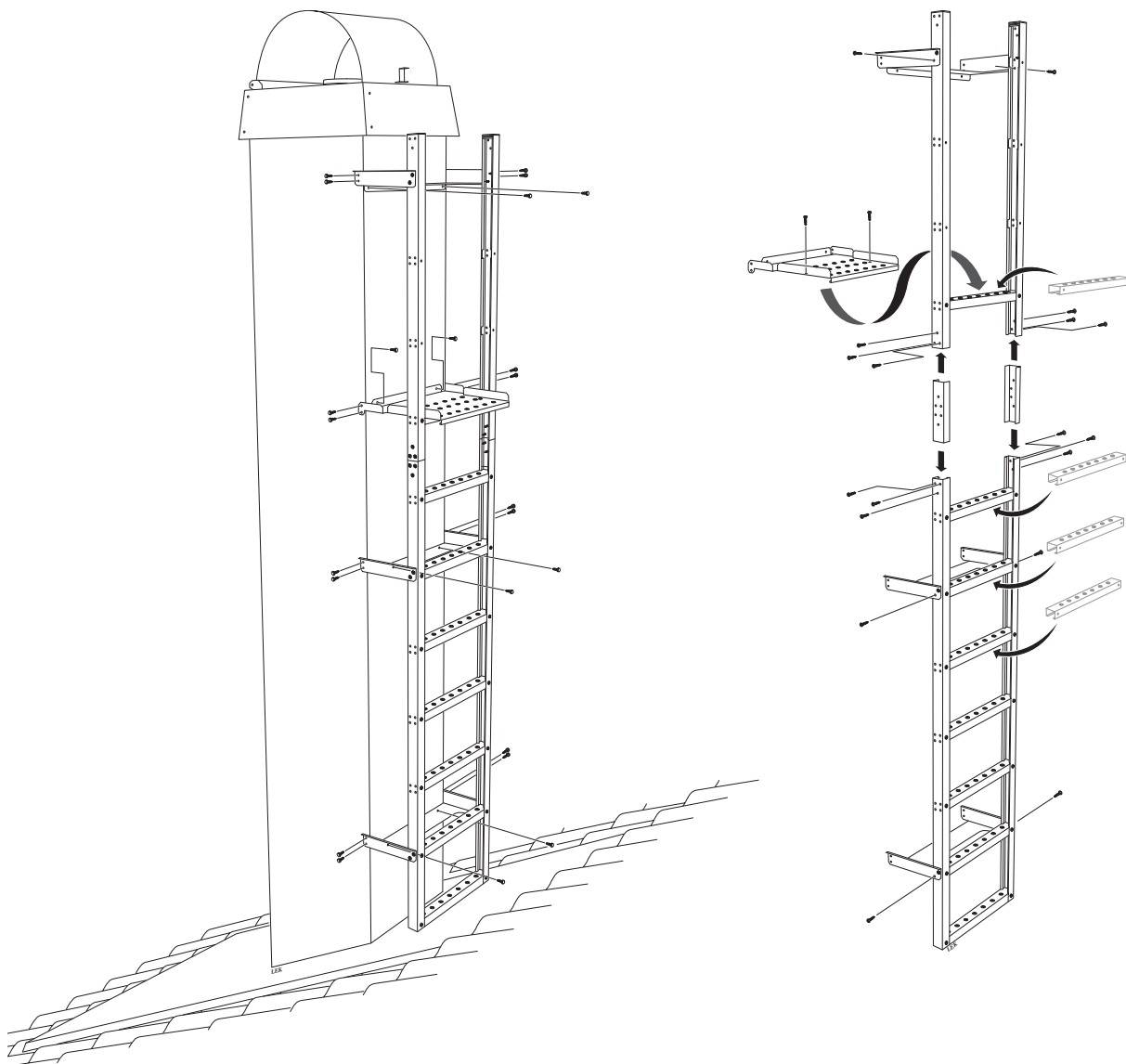
1. Bend out the cowl mounting and screw them into place in the side profiles with 2 x panel screws per side in each cowl mounting.
2. Screw the platform into place on the top step using 2 x panel screws.
3. Position the ladder against the cowl jacket with the bottom step resting against the upper plate. Screw the cowl mountings and platform into the cowl jacket. Use panel screws with sealing rubber gaskets.
4. Install the plastic plug in the end of the side profile.

The distance between the platform and the end of the inner flue must not exceed 1.2 m.



Extending the ladder

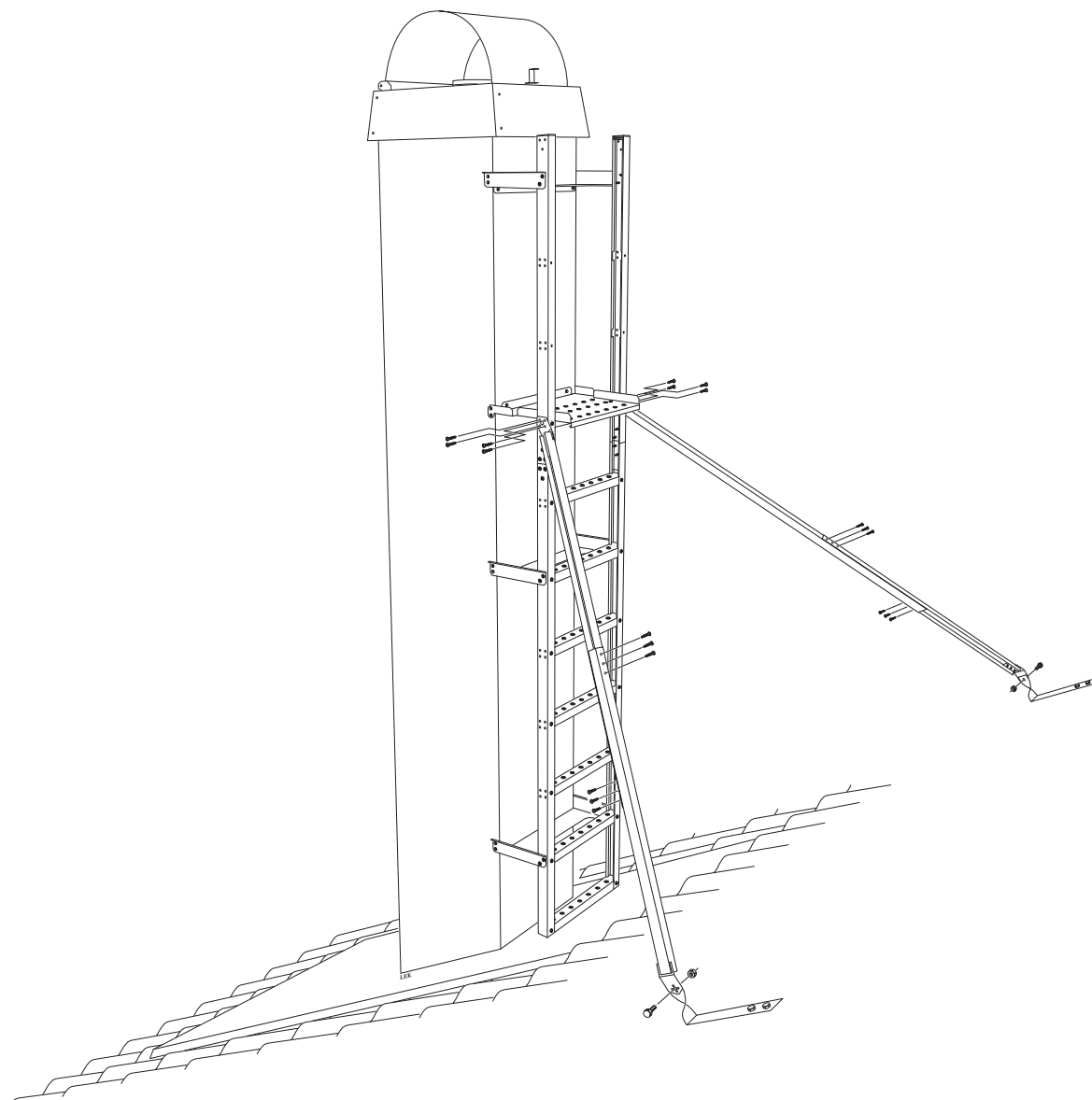
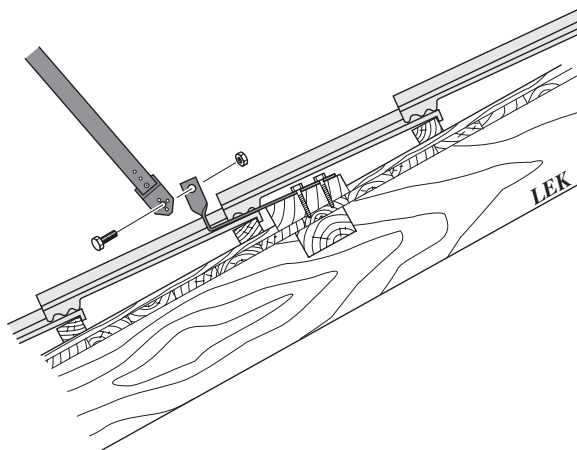
1. Unscrew one of the side profiles on the ladder.
2. Screw the joint plate inside the end of the side profile. Then extend the side profiles by screwing the extension profile into the joint plate.
3. Install the extended number of steps and then screw the side profile back into place.
4. The extra cowl mounting is installed near the cowl roof or at the top of the extension section where possible.



Bracing chimney cowl and ladder

Chimney cowls taller than 2 m and the associated ladder must always be braced to the house roof. The braces are telescopic and do not normally require cutting. If the length needs adjusting, the brace can be easily cut using a hacksaw. The brace profiles must overlap each other in the joint by at least 20 cm.

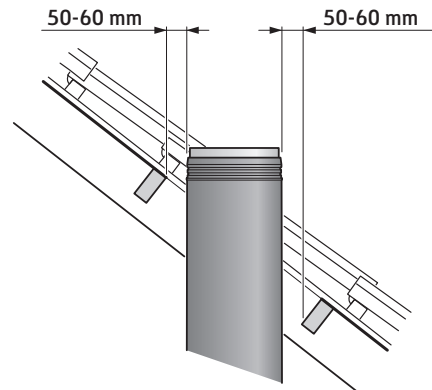
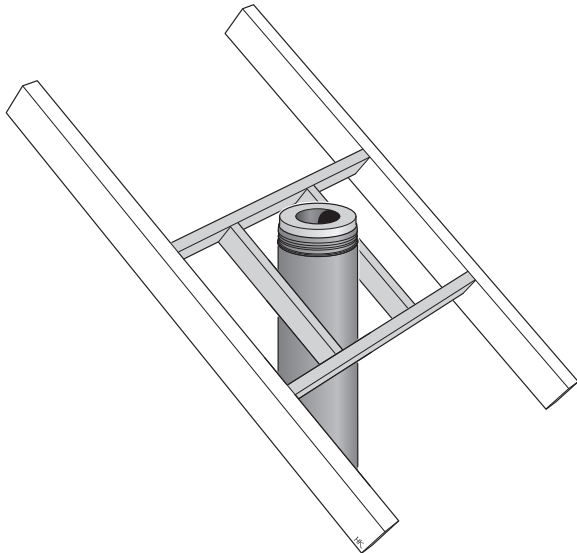
1. If the ladder is installed without the extension section, the braces must be screwed into place in the side profile approximately 1.5 m up the ladder. If the ladder is installed with the extension section, the brace must be screwed into place near the platform. The distance from the cowl roof to the mounting for the brace must not exceed 2 m. Secure the brace in the side profile using four panel screws.
2. Angle out the brace 45° from the ladder and mark a suitable position for the securing bracket against the house roof.
3. Screw the securing bracket to the lower roof using two hexagonal wood screws. Check that the mounting is weight bearing and sufficiently thick for hexagon screws. When the mounting is considered insufficient for hexagonal screws, it is recommended that M8 through-screws with washers and nuts are used instead.
4. Screw the brace into the securing bracket using an M10 screw and nut.
5. Secure the length of the brace by screwing the brace profiles together at the joint. Install three plastic screws on the upper side and a further three on the underside in the three stamped holes in the brace profile.



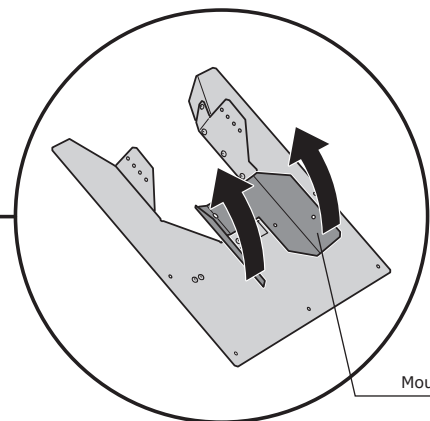
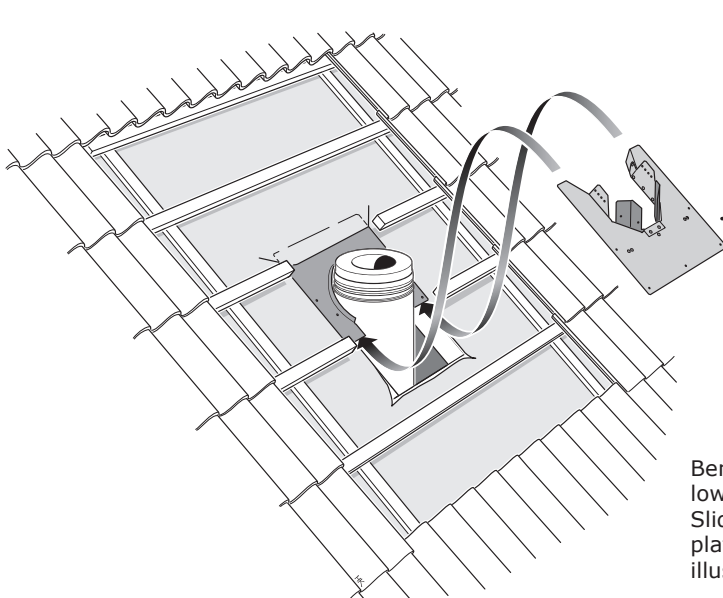
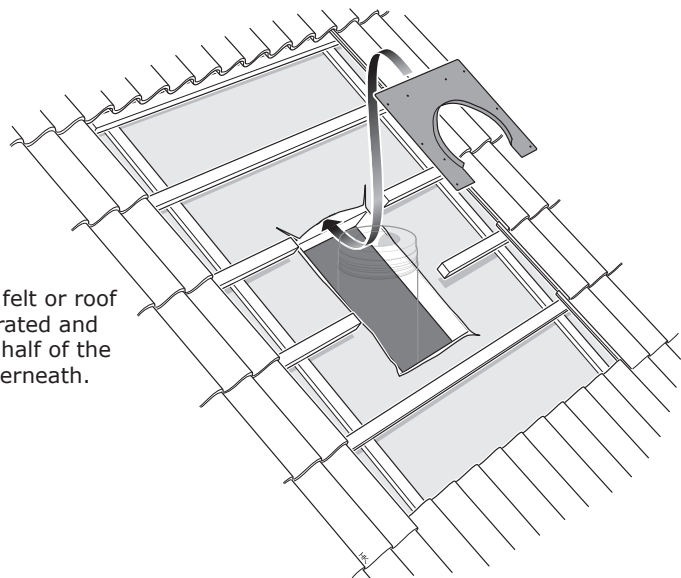
Installing the lower plate for round chimney cowl

The lower plate must be secured to the lower roof in a weight bearing and strong mounting. Cut off the batten, make the hole in the lower roof and build a timber framework (95 x 45 mm) between the rafters. Framework and

holes must be made so that there is 50-60 mm laterally between the timber and the chimney jacket. Minimum distance from the chimney jacket to combustible material is 50 mm.



Cut the roofing felt or roof boards as illustrated and slide the upper half of the lower plate underneath.



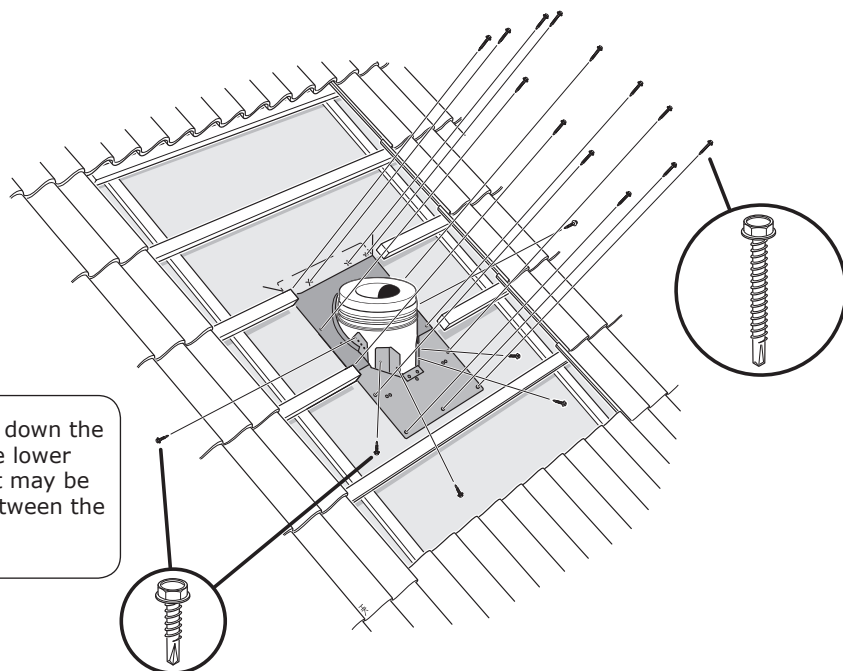
Mounting

Bend up the mounting on the lower half of the lower plate. Slide the lower half of the lower plate under the upper half as illustrated.

Screw the lower plate into the chimney jacket and lower roof.



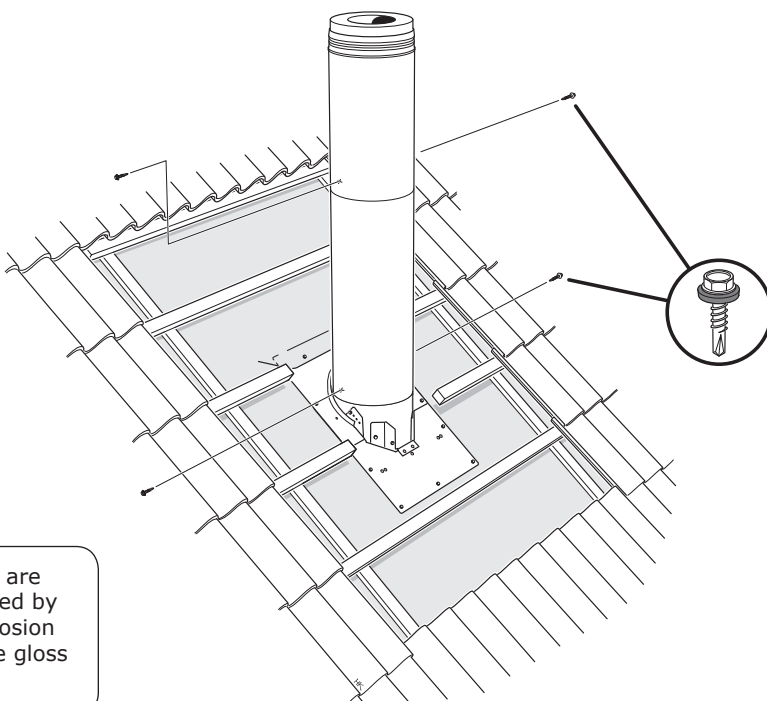
Check that any water that runs down the lower roof cannot run under the lower plate. For certain installations it may be appropriate to apply sealant between the lower plate and the lower roof.



The chimney modules are fixed above the lower plate with two screws in each joint. Secure the screws so that they do not interfere with the seal and the tension collar (see page 34).



Note that the chimney modules that are installed outdoors and are not covered by the upper plate have reinforced corrosion protection and are recognised by the gloss exterior paint.

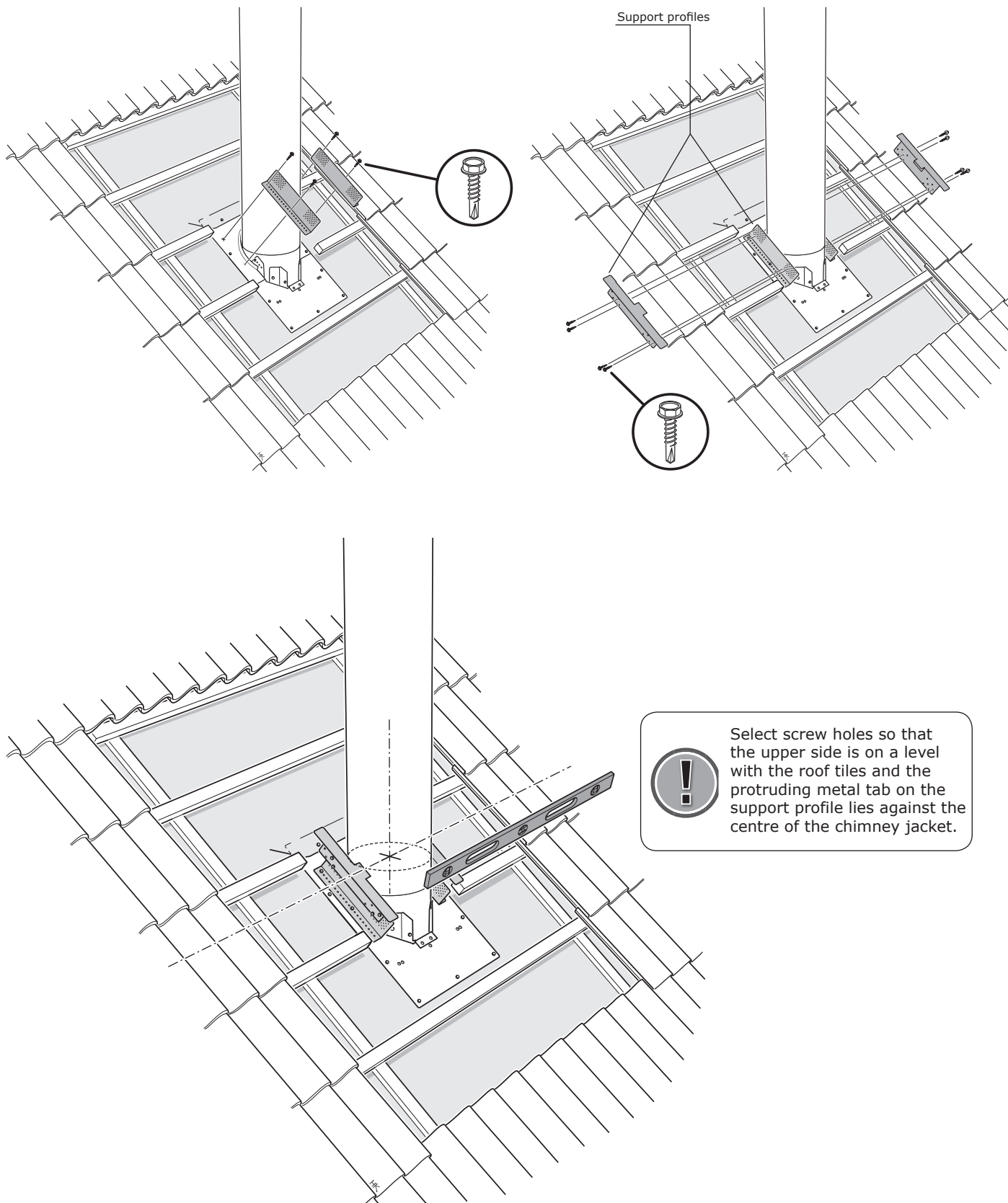


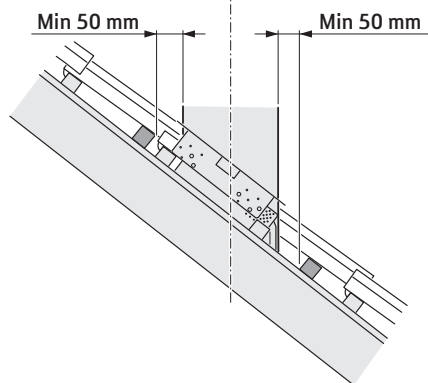
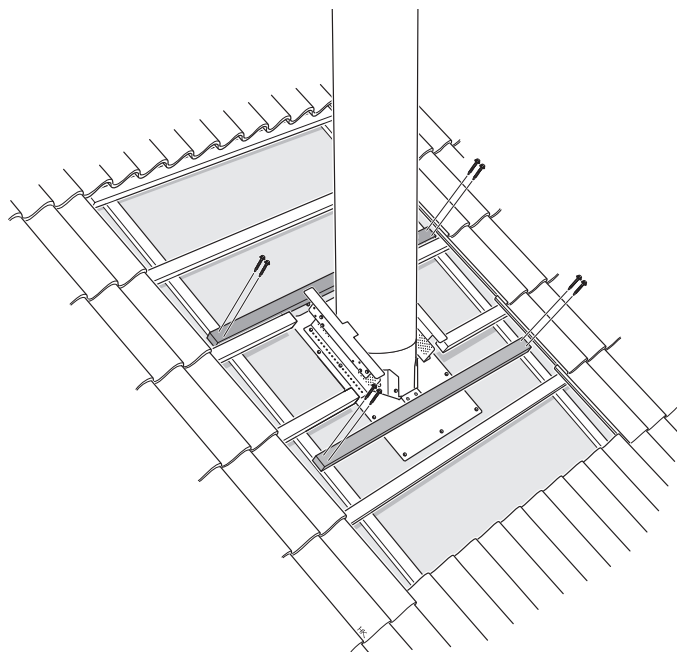
Installing the upper plate for round chimney cowl

Tiled roof

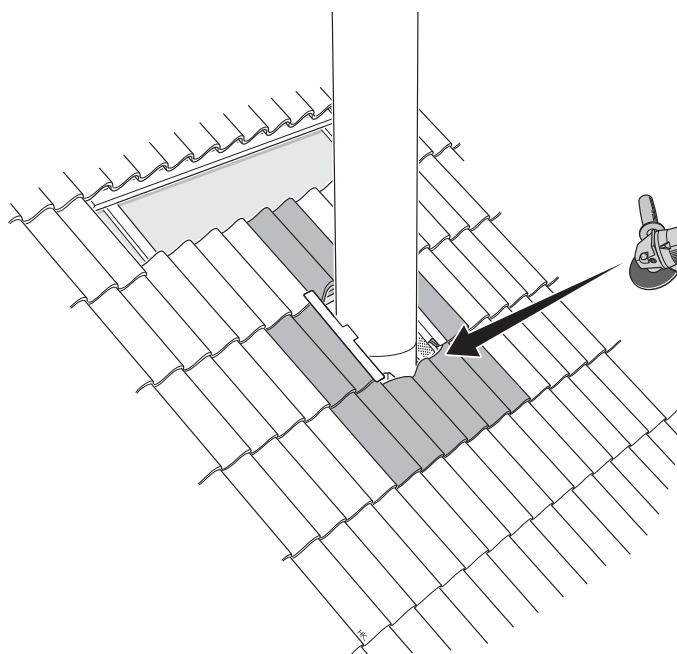
Roofs with roof tiles or metal roofs that are similar to roof tiles use an upper plate that consists of a self-adhesive aluminium reinforced rubber sheet and a metal cuff.

Screw the support profiles into place in the lower plate.

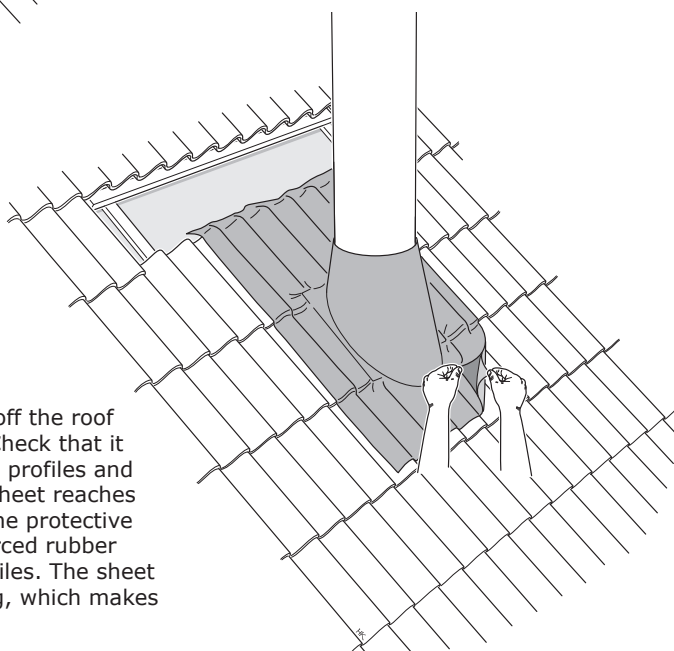




If necessary install extra battens.



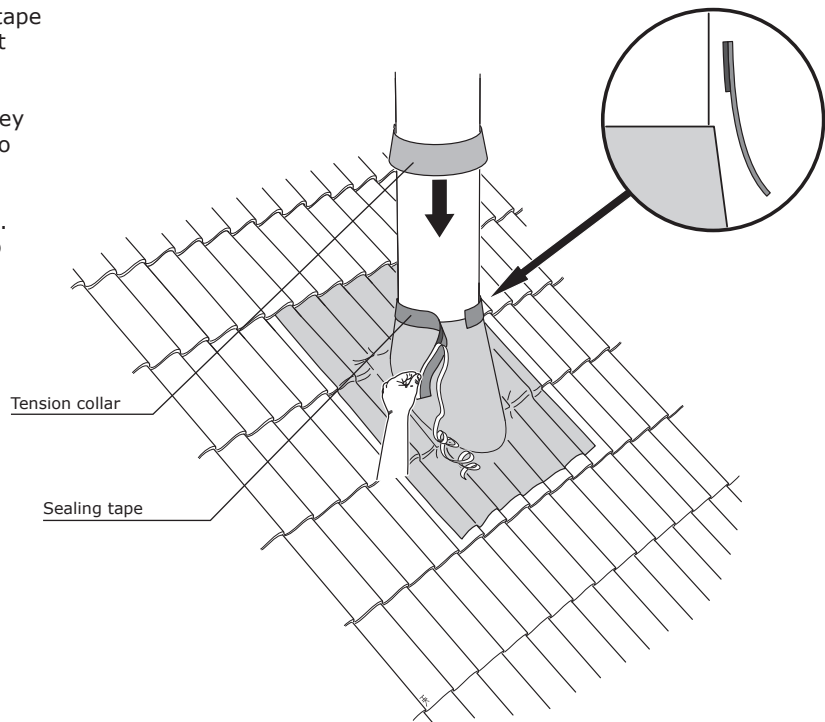
Adapt the roof tiles and lay them closely around the chimney.



Brush any dirt and loose materials off the roof tiles and position the upper plate. Check that it gets good support from the support profiles and that the upper edge of the rubber sheet reaches under a row of roof tiles. Remove the protective foil and press the aluminium reinforced rubber sheet towards the tops of the roof tiles. The sheet is reinforced with aluminium netting, which makes it easy to shape to the roof tiles.

Remove the backing paper from the sealing tape and secure as illustrated. Start at the highest point of the metal cuff and let the seal reach down over the cuff. Stretch the sealing tape slightly when it is installed around the chimney jacket. Press at the joint under the overlap so that it seals.

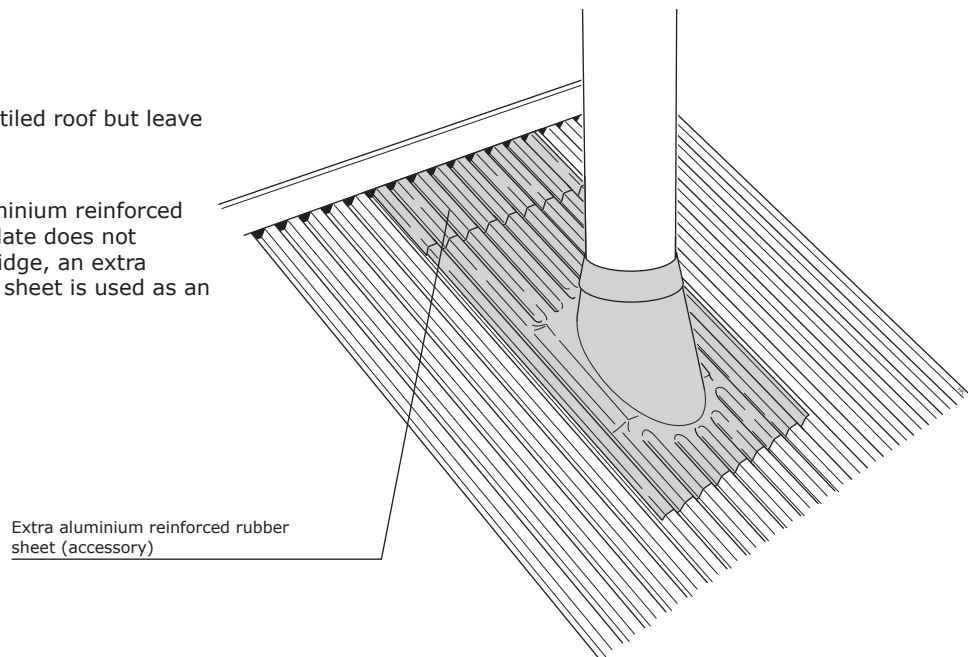
Place the tension collar over the sealing tape. The upper edge of the tension collar must go a little below on the sealing tape so that it squeezes the adhesive (5-15 mm). Carefully tighten the screws in the tension collar.



Metal roof

Install in the same way as a tiled roof but leave out the support profiles.

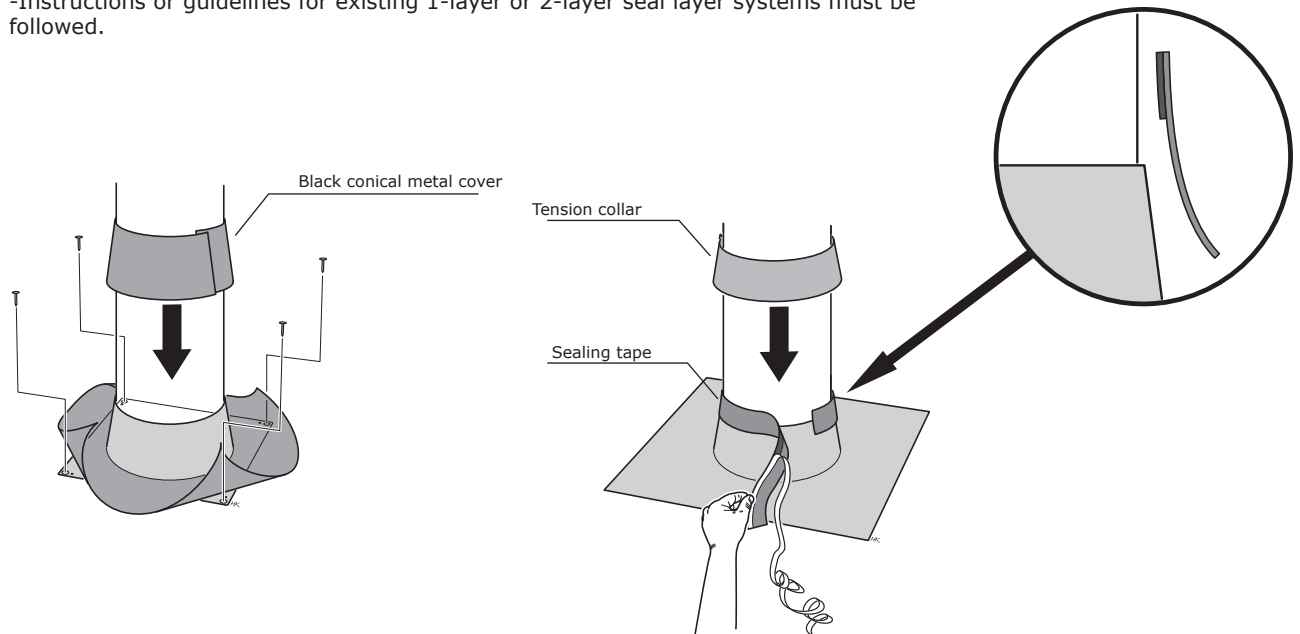
If the upper edge of the aluminium reinforced rubber sheet for the upper plate does not extend under a joint or the ridge, an extra aluminium reinforced rubber sheet is used as an extension (accessory).



Low pitch felt roof

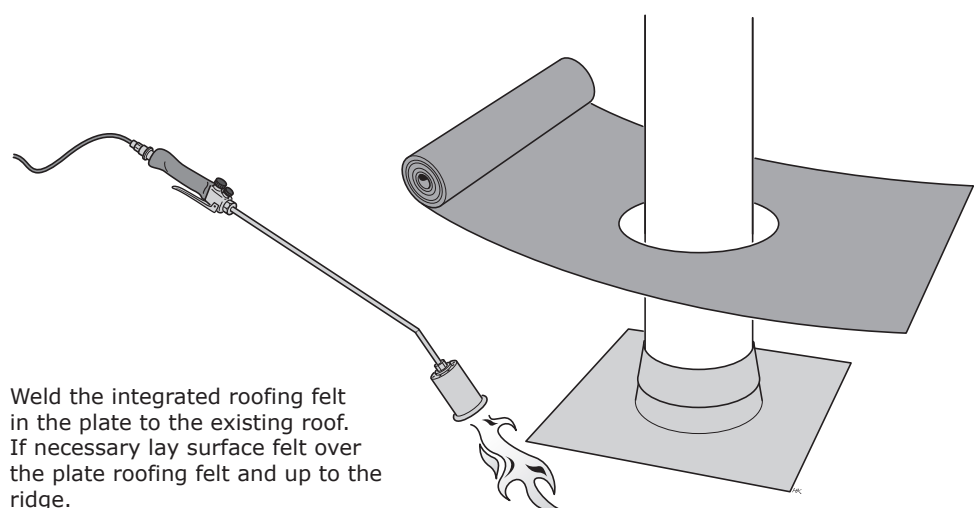
When selecting seal layer system (roofing felt) for roof pitches less than 10°, consideration must be made of the following:

- The seal layer system must be adapted for pass-throughs at the actual roof pitch.
- New roofing felt can be welded to the existing felt because the upper plate consists of a stainless steel cuff with an integrated piece of welded roofing felt.
- Instructions or guidelines for existing 1-layer or 2-layer seal layer systems must be followed.



Centre the upper plate over the chimney and secure it using screws or nails. Place the black conical metal cover around the upper plate.

Remove the backing paper from the sealing tape and secure as illustrated. Start at the highest point of the metal cuff and let the seal reach down over the cuff. Stretch the sealing tape slightly when it is installed around the chimney jacket. Press at the joint under the overlap so that it seals. Place the tension collar over the sealing tape. The upper edge of the tension collar must go a little below on the sealing tape so that it squeezes the adhesive (5-15 mm). Carefully tighten the screws in the tension collar.



Weld the integrated roofing felt in the plate to the existing roof. If necessary lay surface felt over the plate roofing felt and up to the ridge.

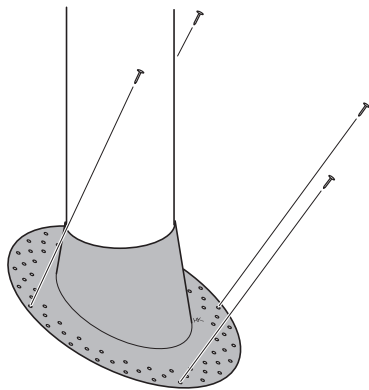


The illustration only shows symbolically how the roofing felt is applied. The work with roofing felt must be carried out by a tradesman in line with the applicable regulations.

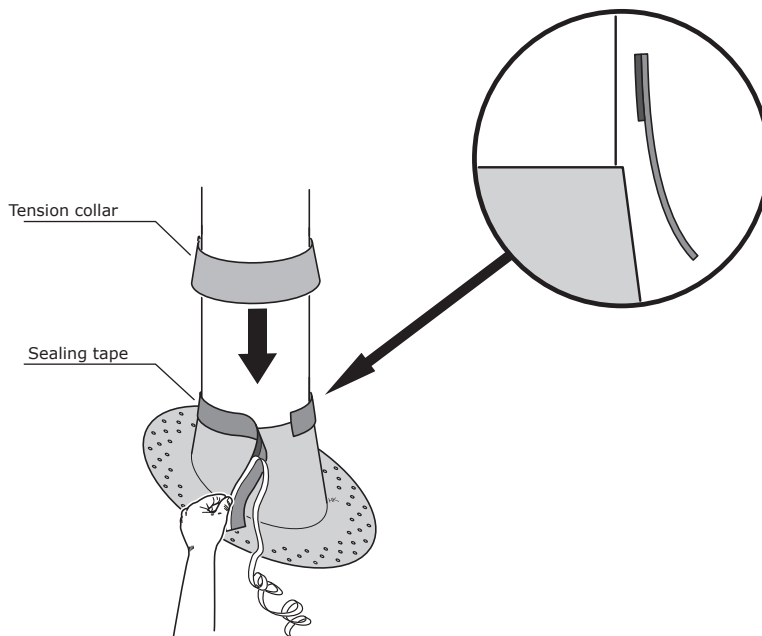
Steep felt roof

When selecting seal layer system (roofing felt) for roof pitches greater than 10°, consideration must be made of the following:

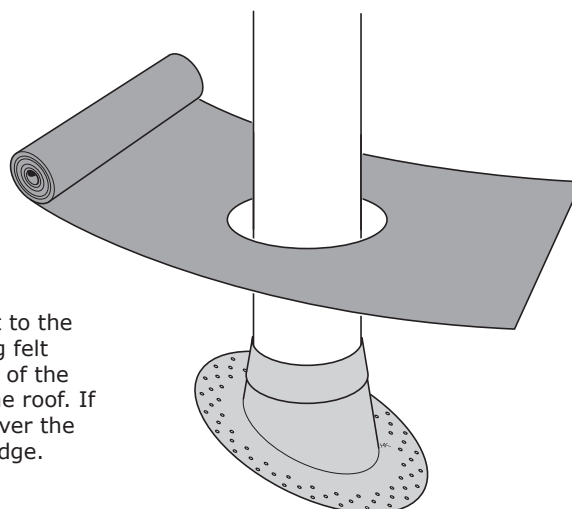
- The seal layer system must be adapted for pass-throughs at the actual roof pitch.
- When making a pass-through, an approved seal must be maintained by the seal layer being bonded to the perforated aluminium surface of the upper plate, as shown in the images and without the seal layer going up at the sides.
- Instructions or guidelines for existing 1-layer or 2-layer seal layer systems must be followed.



Centre the upper plate over the chimney and secure it using screws or nails.



Remove the backing paper from the sealing tape and secure as illustrated. Start at the highest point of the metal cuff and let the seal reach down over the cuff. Stretch the sealing tape slightly when it is installed around the chimney jacket. Press at the joint under the overlap so that it seals. Place the tension collar over the sealing tape. The upper edge of the tension collar must go a little below on the sealing tape so that it squeezes the adhesive (5-15 mm). Carefully tighten the screws in the tension collar.



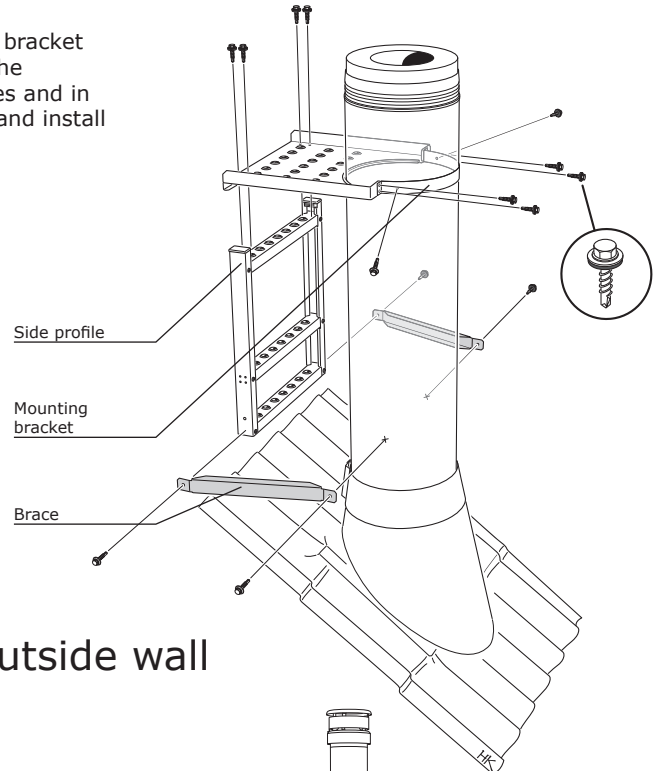
Adapt a hole in the roof felt to the metal cuff and place roofing felt over the perforated surface of the upper plate and out onto the roof. If necessary lay surface felt over the roofing felt and up to the ridge.



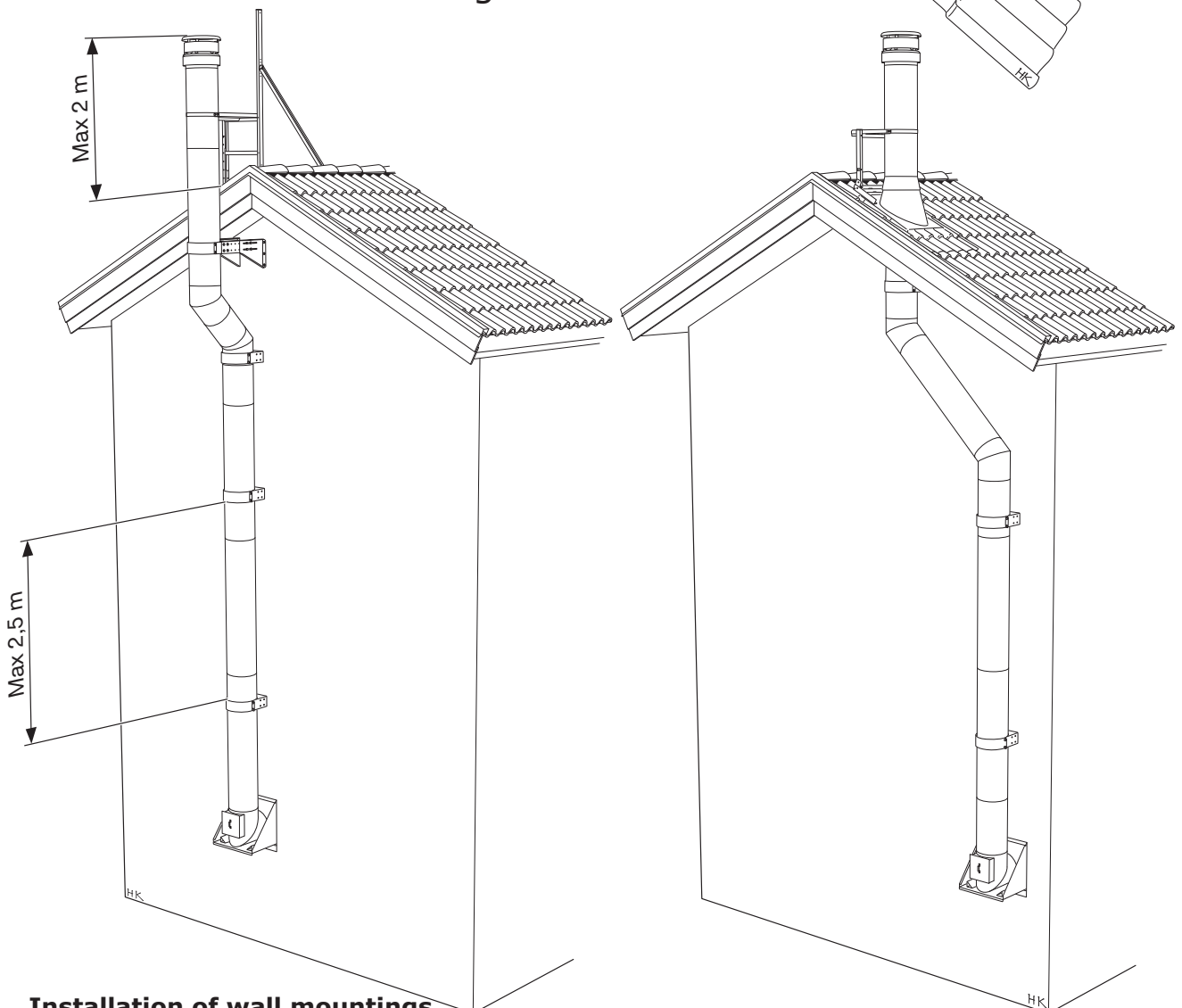
The illustration only shows symbolically how the roofing felt is applied. The work with roofing felt must be carried out by a tradesman in line with the applicable regulations.

Installing the work bridge for round chimney cowls

Assemble the platform and ladder. Pre-bend the mounting bracket around the chimney jacket and screw the work bridge to the chimney. Secure the brace using a screw in the side profiles and in the chimney jacket. Screw the other screws as illustrated and install plastic plugs in the metal profiles.



External installation along an outside wall



Installation of wall mountings

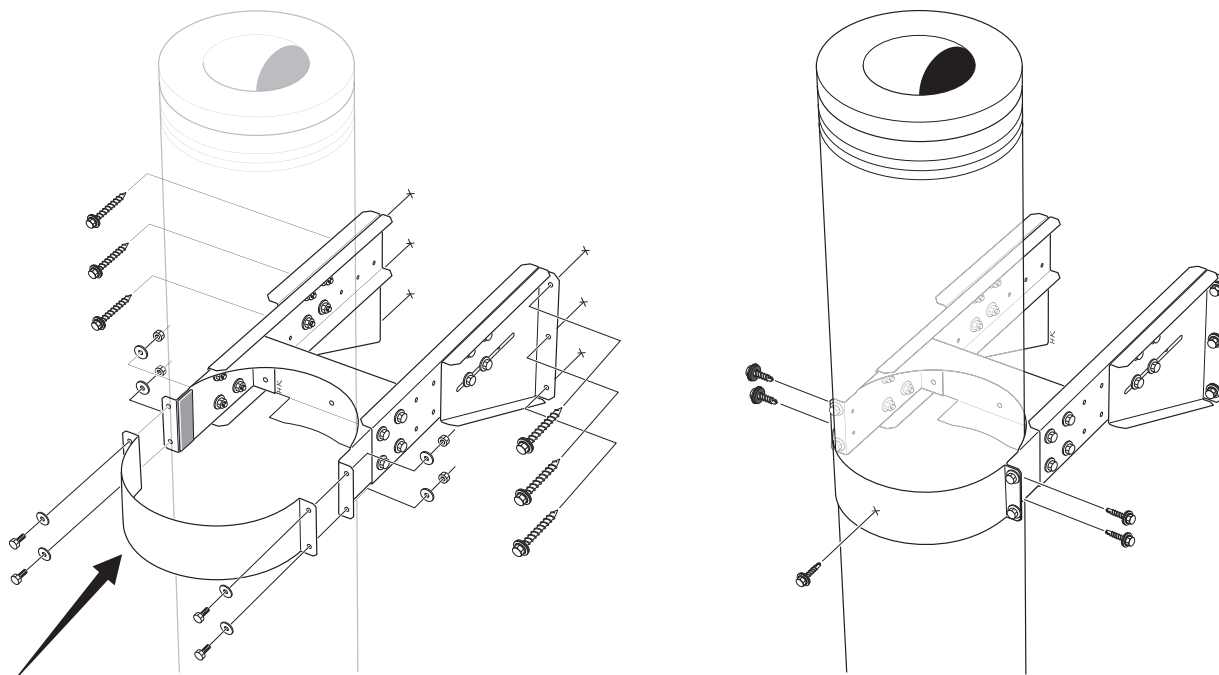
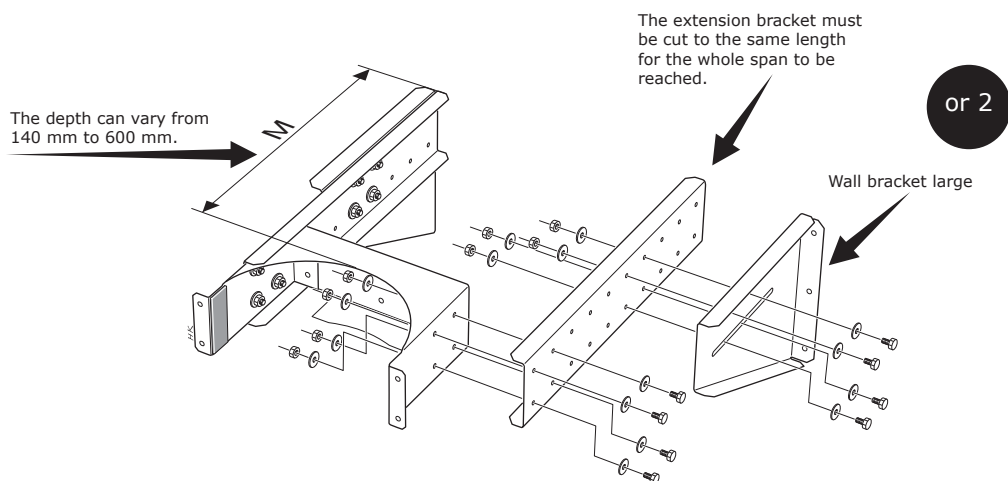
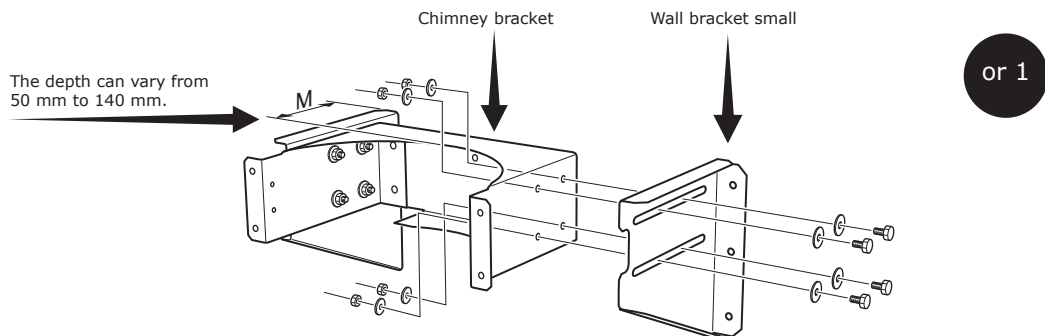
The wall mountings must be equally spaced at a maximum interval of 2.5 m. At lateral offset of the chimney, the wall mountings must be installed just below

the lower angle and just above the upper angle. We recommend that some form of scaffolding is used during installation.

Installing wall mountings

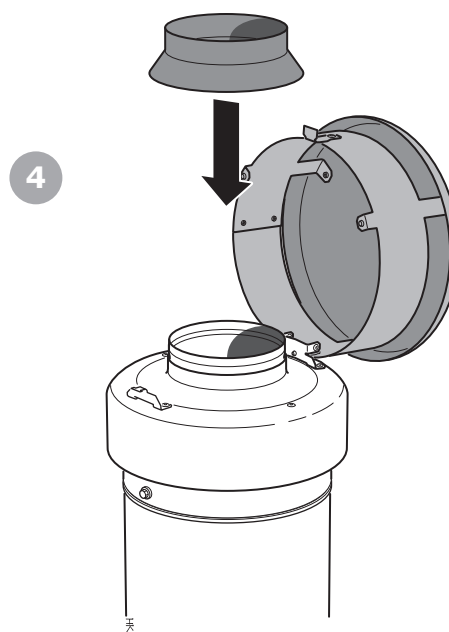
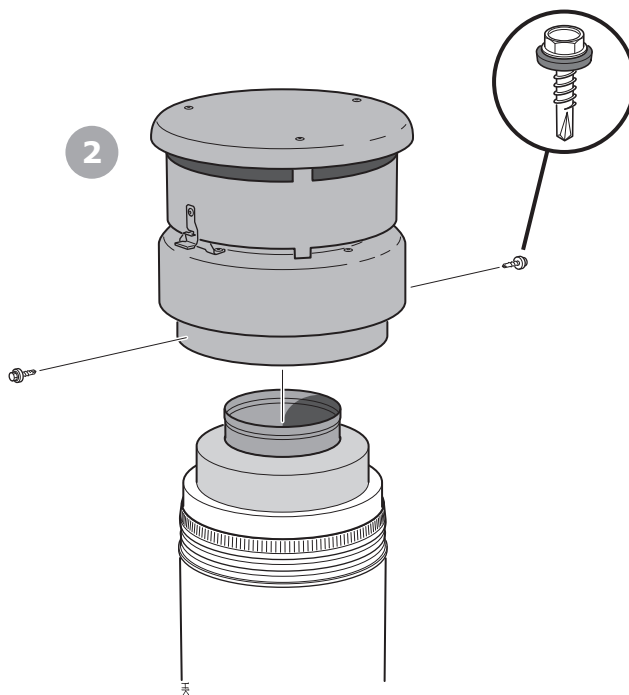
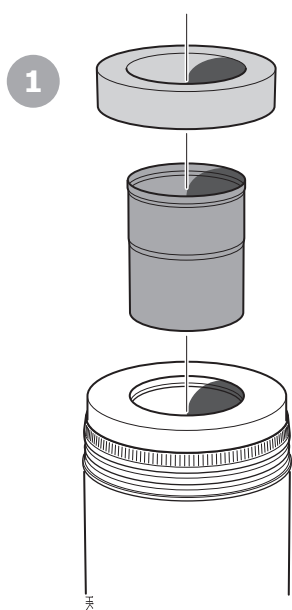
Measure from the outer jacket to the wall to get the measurement (M). Assemble the wall mounting as illustrated. Mark the position of the wall mounting and pre-drill for screws or plastic plugs. Screw the wall mounting into place and anchor the chimney to the wall mounting using the bracket and 5 screws with a seal washer as illustrated.

At delivery, the mounting bracket is straight and must be bent into shape around the chimney jacket before installation, do not forget to use protective plastic in-between.

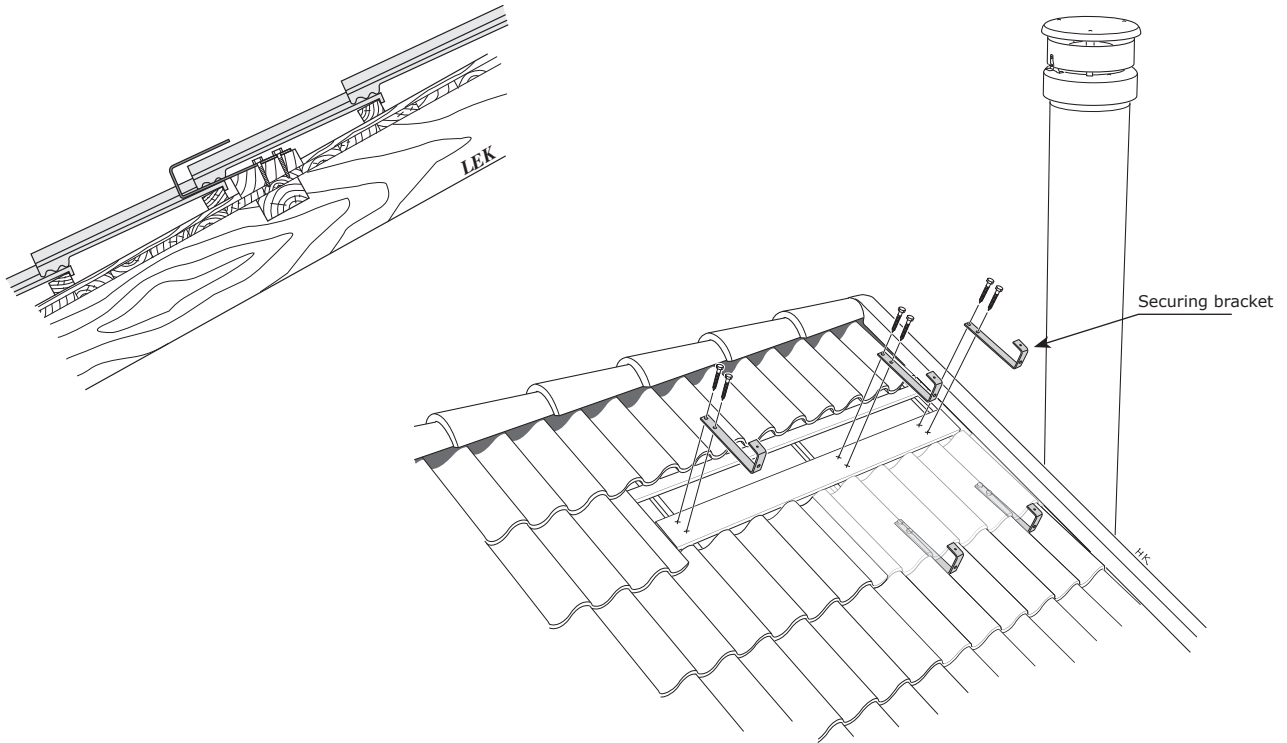


At delivery, the mounting bracket is straight and must be bent into shape around the chimney jacket before installation, do not forget to use protective plastic in-between.

Installing rain protection

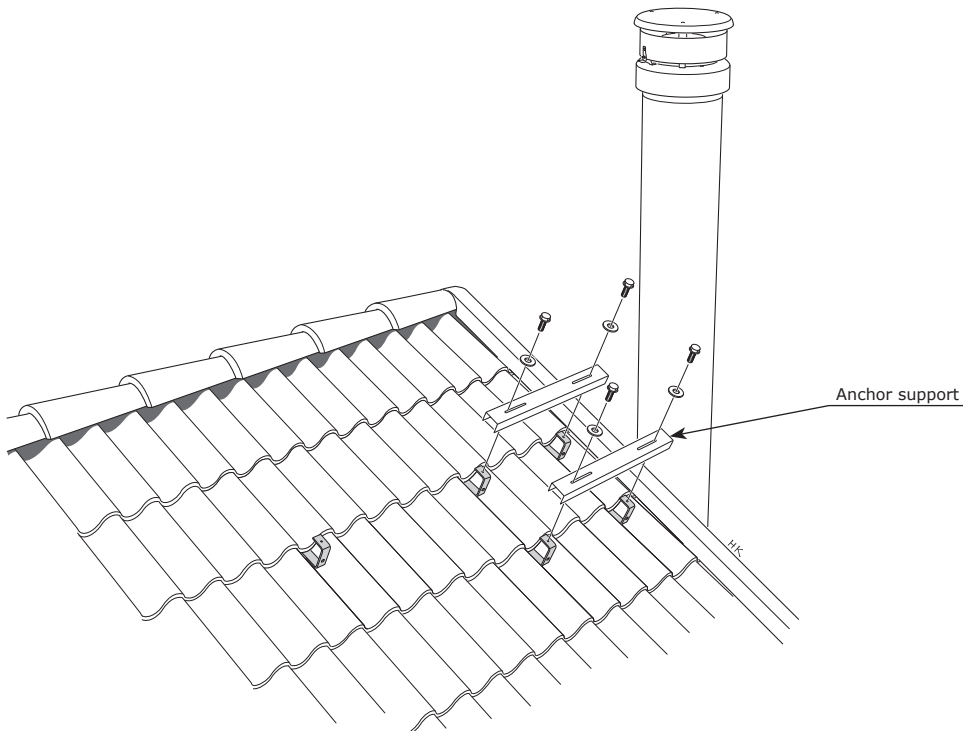


Installing the work bridge for chimneys without chimney cowls

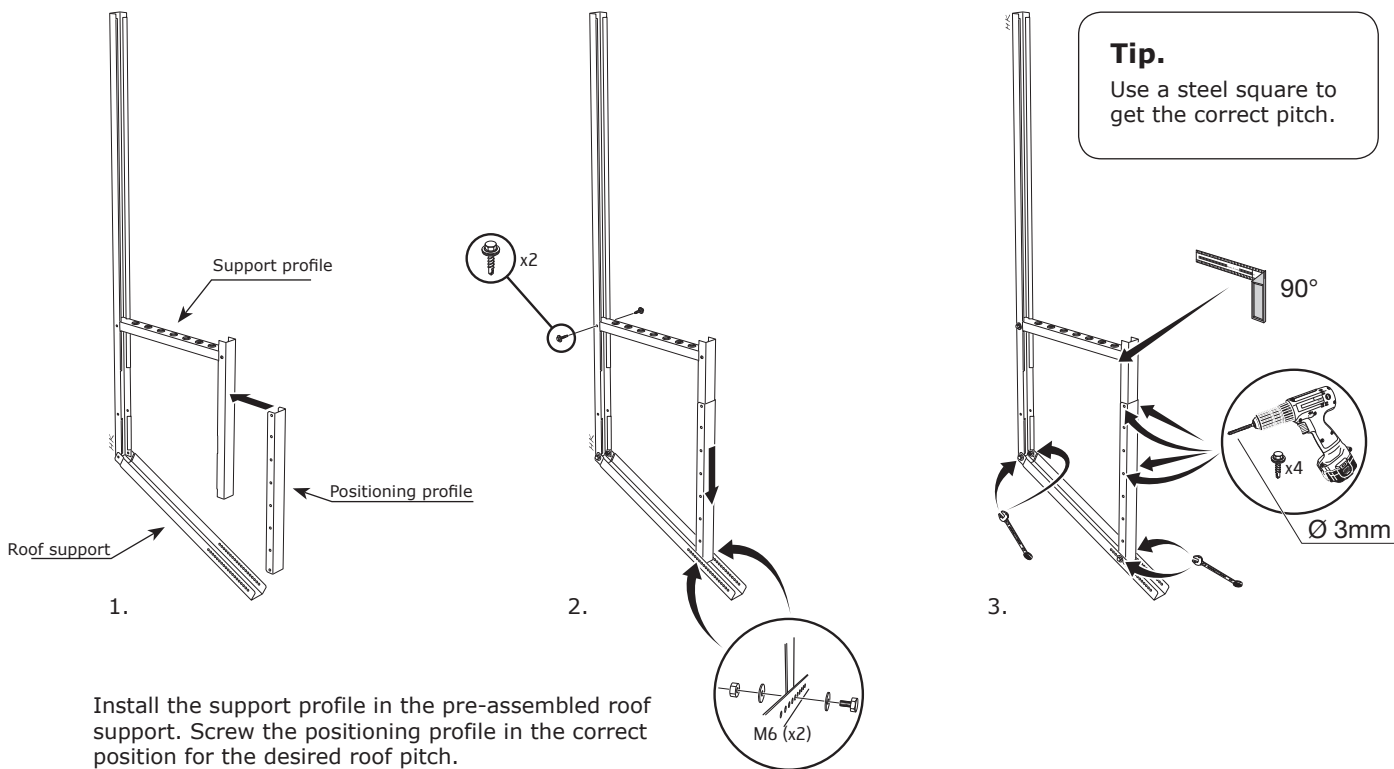


Screw the securing bracket to the lower roof using two hexagonal screws. Check that the mounting is weight bearing and sufficiently thick for hexagonal screws. When

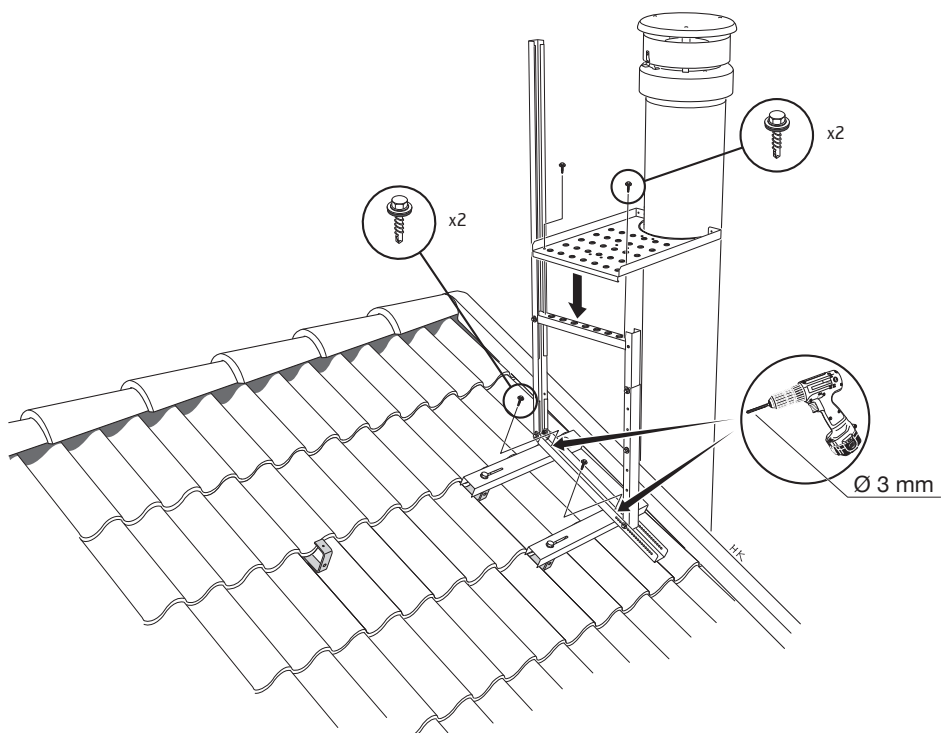
the mounting is considered insufficient for hexagonal screws it is recommended that M8 Screws screwed through with washers and nuts are used instead.



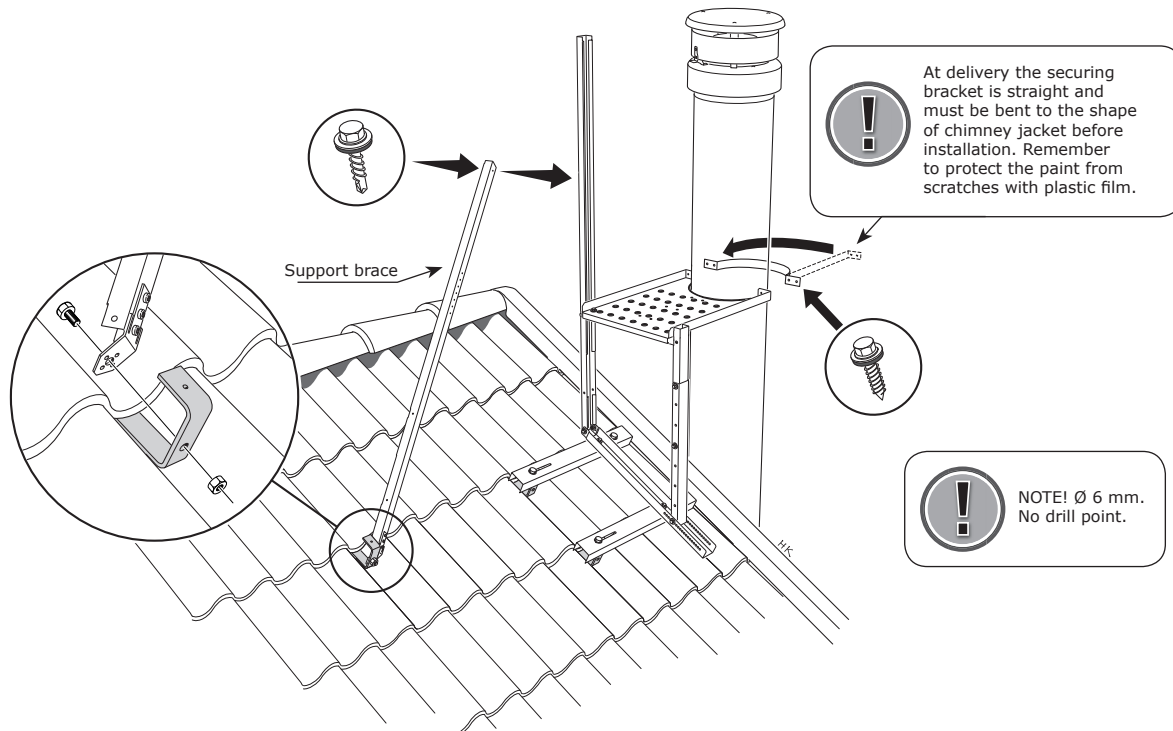
Position the front anchor support for the work bridge using 4 x M6 screws in the threaded holes in the securing bracket.



Install the support profile in the pre-assembled roof support. Screw the positioning profile in the correct position for the desired roof pitch.



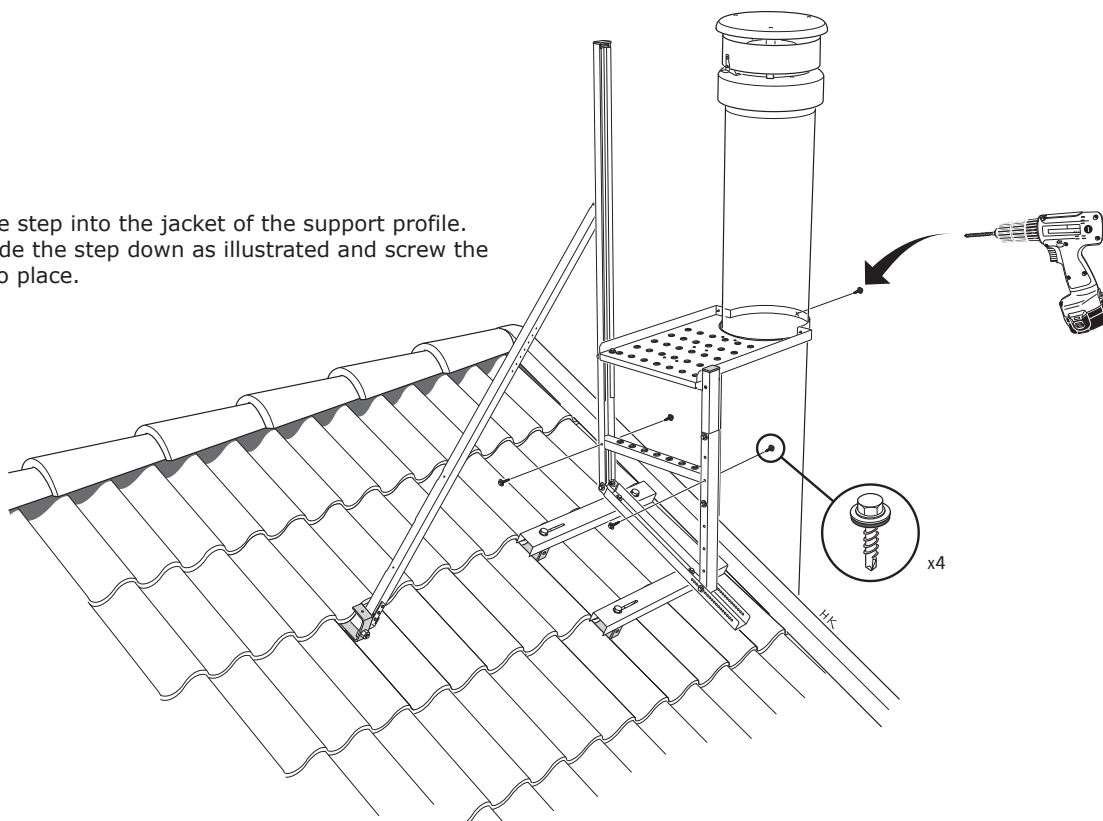
Pre-drill and secure the assembled roof support in the anchor support. Secure the work platform in the support profile with 2 x screws.



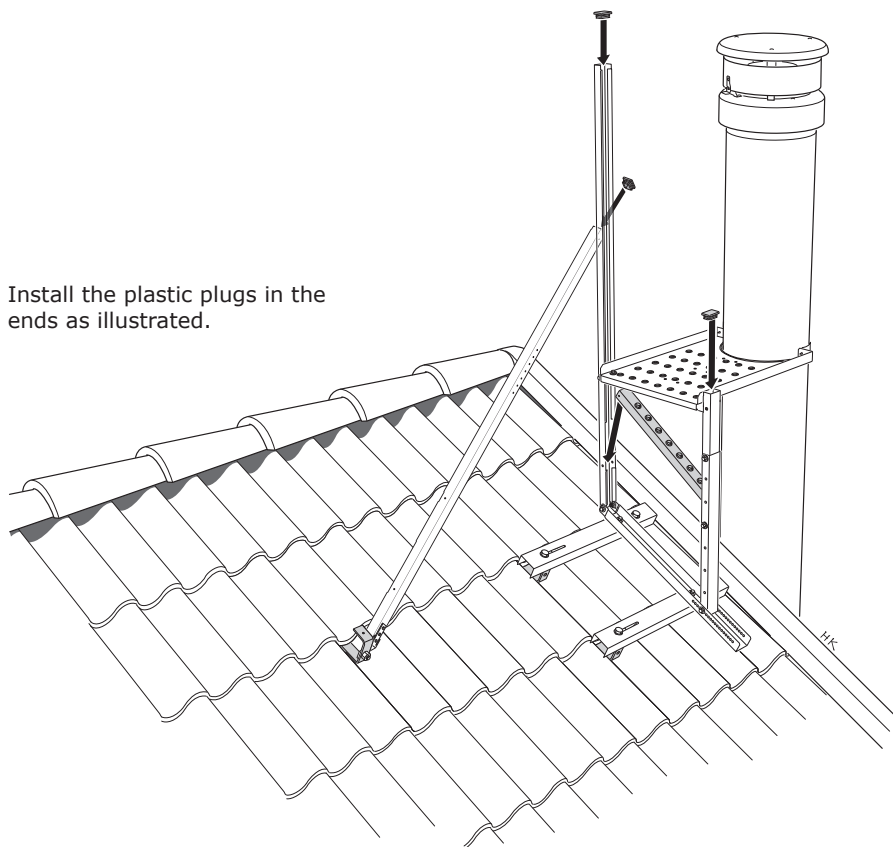
Screw the brace into the securing bracket using an M10 screw and nut. Then press the support brace against the roof support and screw it into place approx. 450 mm

above the work platform. Screw the mounting bracket on one side of the work platform and bend it around the chimney. Then secure it on the opposite side.

Slide the step into the jacket of the support profile. Then slide the step down as illustrated and screw the step into place.



Install the plastic plugs in the ends as illustrated.





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