

Instructions for Use

Viega Eco Plus washbasin element, individually height-adjustable



for washbasins with single-hole fitting, also barrier-free

Model
8164.21

Year built (from)
10/2015

viega

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1 About these instructions for use

Trade mark rights exist for this document, further information can be found at viega.com/legal.

1.1 Target groups

The information in this instruction manual is directed at the following groups of people:

- Heating and sanitary professionals and trained personnel
- Operators
- Consumers
- Drywall builder

It is not permitted for individuals without the abovementioned training or qualification to mount, install and, if required, maintain this product. This restriction does not extend to possible operating instructions.

The installation of Viega products must take place in accordance with the general rules of engineering and the Viega instructions for use.

Handover to the user

This document contains information about the operation and maintenance of the washbasin system. Please make sure to hand the document over to the customer / operator / user of the washbasin system after mounting.

1.2 Labelling of notes

Warning and advisory texts are set aside from the remainder of the text and are labelled with the relevant pictographs.



DANGER!

This symbol warns against possible life-threatening injury.



WARNING!

This symbol warns against possible serious injury.



CAUTION!

This symbol warns against possible injury.

**NOTICE!**

This symbol warns against possible damage to property.



Notes give you additional helpful tips.

1.3 About this translated version

This instruction for use contains important information about the choice of product or system, assembly and commissioning as well as intended use and, if required, maintenance measures. The information about the products, their properties and application technology are based on the current standards in Europe (e. g. EN) and/or in Germany (e. g. DIN/DVGW).

Some passages in the text may refer to technical codes in Europe/ Germany. These should serve as recommendations in the absence of corresponding national regulations. The relevant national laws, standards, regulations, directives and other technical provisions take priority over the German/European directives specified in this manual: The information herein is not binding for other countries and regions; as said above, they should be understood as a recommendation.

2 Product information

2.1 Standards and regulations

The following standards and regulations apply to Germany / Europe. National regulations can be found on the relevant web site of your country at viega.com/standards.

Regulations from section: Fields of application / Mounting conditions

Scope / Notice	Regulations applicable in Germany
suitable masonry walls	EN 1996-1-1
suitable concreted walls	DIN 1045
suitable support profiles	DIN 18183

Regulations from section: Sound protection

Scope / Notice	Regulations applicable in Germany
Fulfilled noise protection requirements	DIN 4109
Fulfilled noise protection requirements	DIN 4109 (additional sheet 2)
Fulfilled noise protection requirements	VDI 4100 SSt I-SSt II

2.2 Intended use

2.2.1 Areas of use

The Viega Eco Plus washbasin element is suitable for mounting on masonry wall constructions and stud frames pursuant to the regulations in section [☞ 'Regulations from section: Fields of application / Mounting conditions'](#) on page 5.

The Viega Eco Plus washbasin element is suitable for washbasin ceramics with single-hole fitting (also barrier-free).

The individual user height can be adjusted within a range of 20 cm.

2.3 Product description

2.3.1 Overview

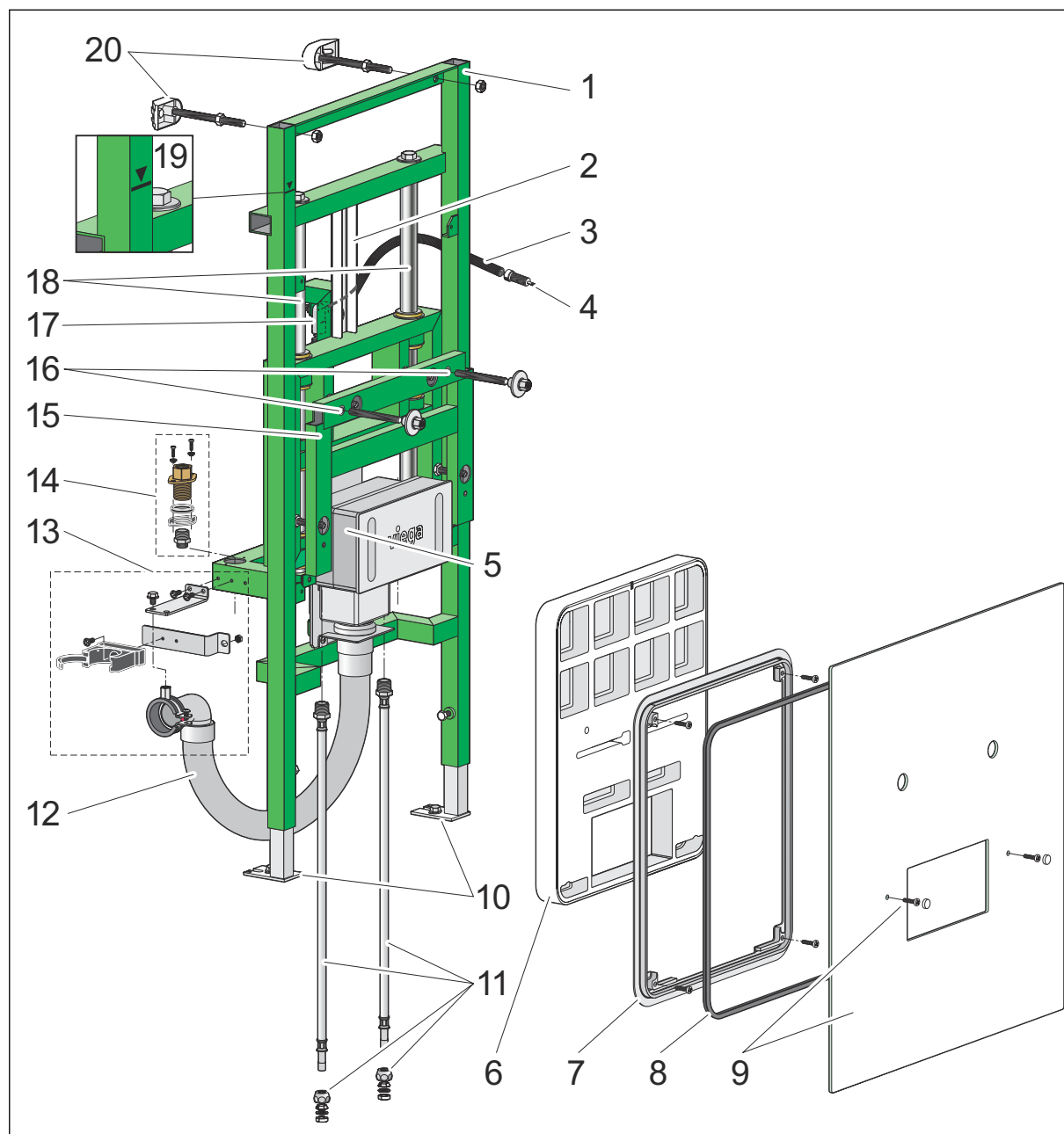


Fig. 1: 8164.21, washbasin element, overview

- | | |
|---|---|
| 1 - washbasin element | 9 - cover plate (incl. fixing screws) |
| 2 - transport lock | 10 - adjustable feet |
| 3 - hydraulic cylinder with hydraulic hose (connection to 4 – actuation unit) | 11 - flexible hoses G ½ x 10 mm |
| 4 - actuation unit | 12 - drain elbow |
| 5 - concealed connection box | 13 - drain elbow fixing material |
| 6 - mounting template | 14 - wall lead-in water connection |
| 7 - cover frame | 15 - cover plate contact surface |
| 8 - seal | 16 - threaded bolts for fixing sanitary objects (gauges for bore hole 280 mm) |

- 17 - gas pressure spring
- 18 - guide shafts
- 19 - marking 1.0 m above upper edge of the finished floor
- 20 - fixing set

Actuation unit – connection to hydraulic cylinder, position 4 in the overall view

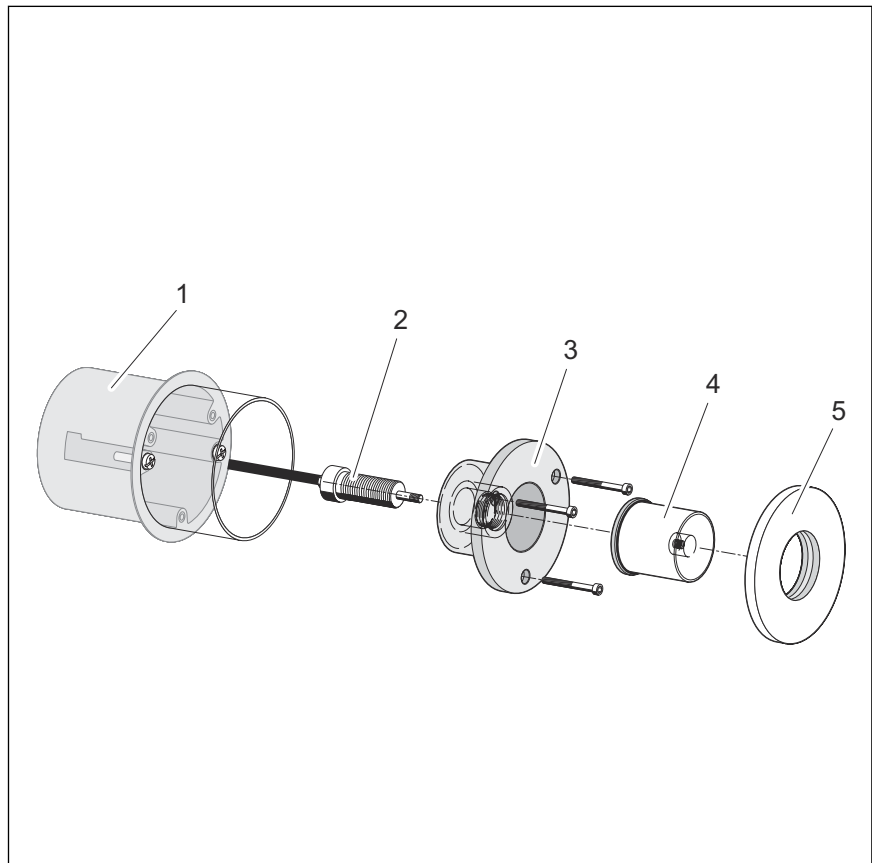


Fig. 2: for 4 – actuation unit for 8164.21, overview

- 1 - concealed socket
- 2 - actuation unit
- 3 - sleeve
- 4 - actuating button
- 5 - rosette

Concealed connection box, position 5 in the overall view

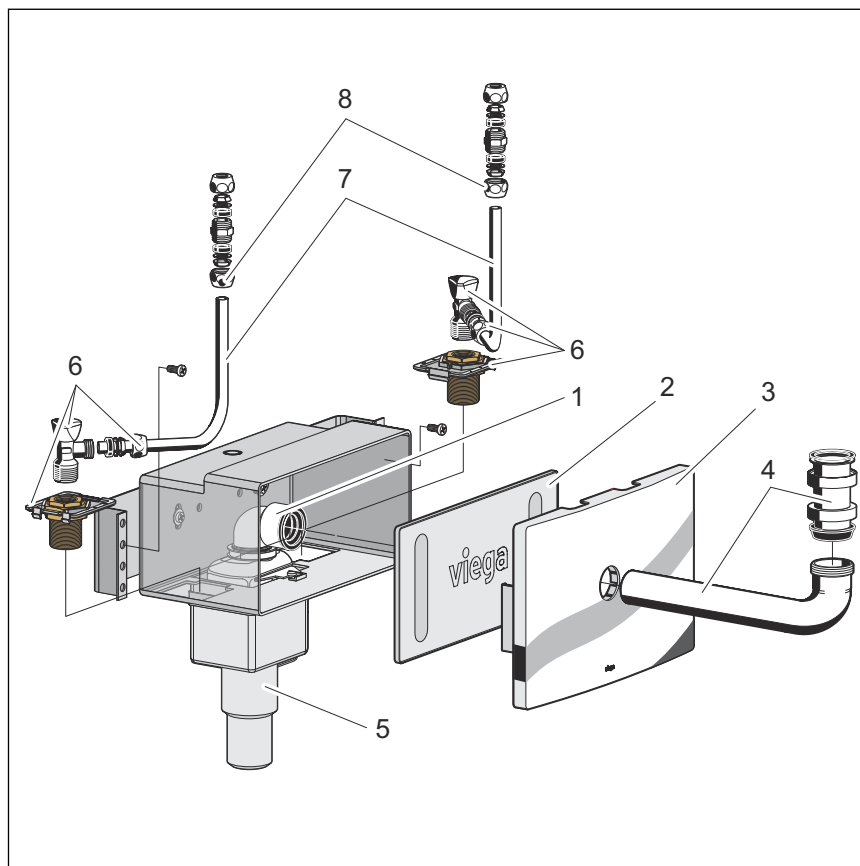


Fig. 3: for 5 – concealed connection box for 8164.21, overview

- 1 - concealed odour trap
- 2 - site protection
- 3 - chrome-plated plastic cover plate
- 4 - drain elbow
- 5 - drainage connection DN 40/50
- 6 - corner valves incl. wall lead-in
- 7 - pipe elbow, diameter 10 mm
- 8 - compression fitting diameter 10 mm

2.3.2 Operating mode

Gas pressure spring

The height-adjustable washbasin element is operated without electronics and functions with the help of a gas pressure spring.

The gas pressure spring enables continuous adjustment of the seat height within a 20 cm range.



Further information can be found in the instruction for use of the gas pressure spring.



CAUTION!
Risk of crushing

The cover plate shifts in parallel with the wall surface during the height adjustment. Due to this, there is the risk of crushing in the areas above and below the cover plate.

- Keep your hands away from the dangerous areas.

Lowering the washbasin

When the actuating button is pressed and there is the light load of a washbasin, the ceramic is lowered by maximum of 20 cm.

Lifting the washbasin

When the actuating button is pressed and there is no load, the washbasin is raised by a maximum of 20 cm by the gas pressure spring. If necessary, apply some manual help in the case of heavy washbasin ceramics.

2.3.3 Compatible components

The element is suitable for washbasin ceramics with a fixing interval of 280 mm. The maximum washbasin width is 700 mm.

The cover plate 8064.22 is required for the detailed installation.

2.3.4 Sound protection

The washbasin element complies with the noise insulation requirements specified in section ↗ *'Regulations from section: Sound protection'* on page 5.

2.3.5 Technical data

The product has the following technical data:

individual adjusting range of the washbasin height	200 mm
Fixing interval of the washbasin ceramic	280 mm
max. washbasin width	700 mm
Wall construction (incl. wall tile)	max. 45 mm

total liftable and sinkable weight	approx. 18 kg ± 3 kg
Release force for the actuating button	approx. 30 N



Depending on the total weight (including fitting, amongst other things), it may be necessary to apply some gentle manual support when raising or lowering the washbasin completely.

2.4 Accessories

Required accessories

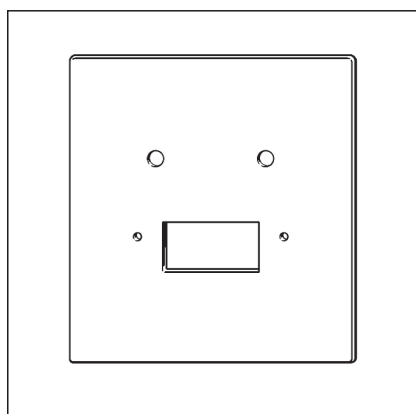
The washbasin element is delivered without cover plate. You require the cover plate 8064.22 for mounting.

Spare parts

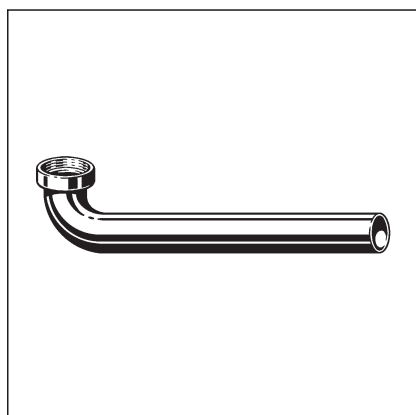
If necessary, you can order the following spare parts:

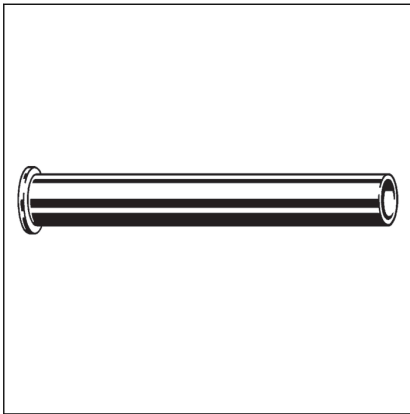
The cover plate model 8064.22, suitable for the Viega Eco Plus washbasin element model 8164.21, glass

- Push button with rosette for individual height adjustments of WB ceramic
- 2 double straight screw fittings with compression fittings for copper pipe d10
- 2 connection pipes, chrome-plated, d10
- Drain elbow 300 mm, chrome-plated brass
- Chrome-plated plastic cover plate for concealed connection box



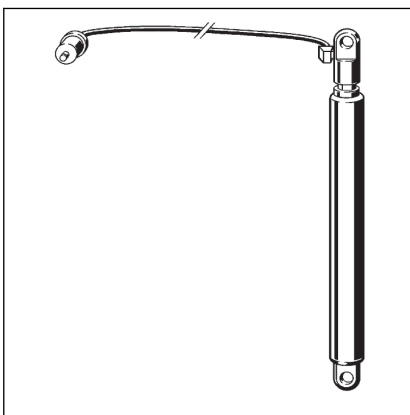
Drain elbow model 8064.90, chrome-plated with flanged rim





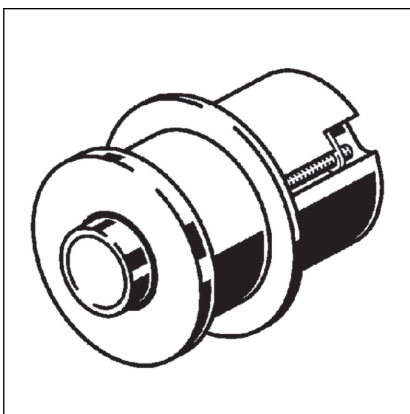
Drainpipe model 9945.143

- chrome-plated with flanged rim 75 mm, article 121 587
- chrome-plated with flanged rim 120 mm, article 670 856



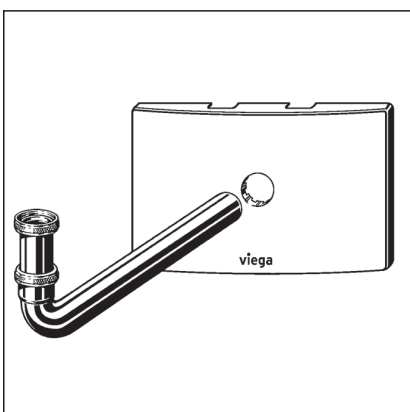
Gas pressure spring model 8172.1, only in connection with Viega Eco Plus washbasin element model 8164.21

- Steel
- hydraulic actuation



Push button 8064.10 with rosette, only in connection with Viega Eco Plus washbasin element model 8164.21

- chrome-plated brass
- hydraulic actuation



Cover plate for concealed connection box model 8314.5

- suitable for Viega Eco Plus washbasin element model 8164.21, washbasin module with concealed connection box model 8055.5, Viega Mono concealed connection box model 8314
- chrome-plated, plastic
- 2 double straight screw fittings with compression fittings for copper pipe d10
- 2 connection pipes, chrome-plated, d10
- Drain elbow 300 mm, chrome-plated brass
- adjusting pipe, chrome-plated brass

3 Handling

3.1 Assembly information

3.1.1 Mounting conditions

Suitable walls

The element is suitable for mounting on masonry wall constructions and support profiles pursuant to the regulations in section ⚡ 'Regulations from section: Fields of application / Mounting conditions' on page 5.

The element may only be mounted on even wall surfaces.

Minimum distance to the wall when mounting support profiles

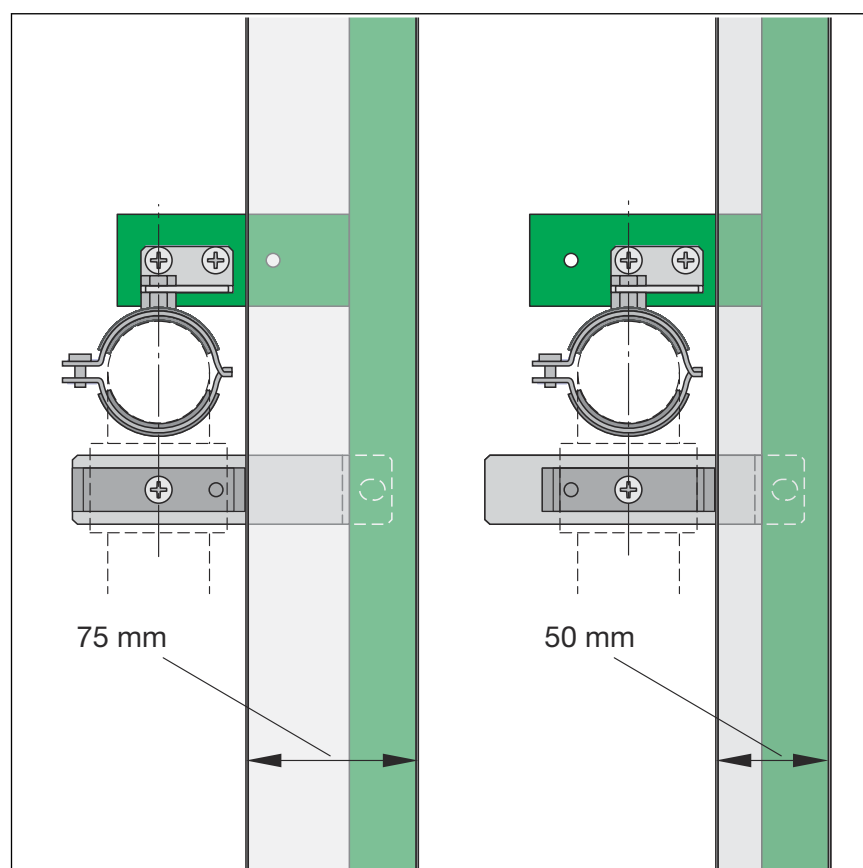


Fig. 4: Minimum distance to the wall

The minimum distance to the wall is:

- left 160 mm; outermost fixing points for support profiles with a depth of 75 mm
- right 135 mm; (when holding plate 2 is shortened) outermost fixing points for support profiles with a depth of 50 mm.

Construction height

With the construction height, the marked height of the upper edge of the finished floor must be observed.

Water connection

The washbasin element requires an on-site ½ inch water connection.

Wastewater connection

The washbasin element requires a DN 40 wastewater connection on site.

3.1.2 Installation dimensions

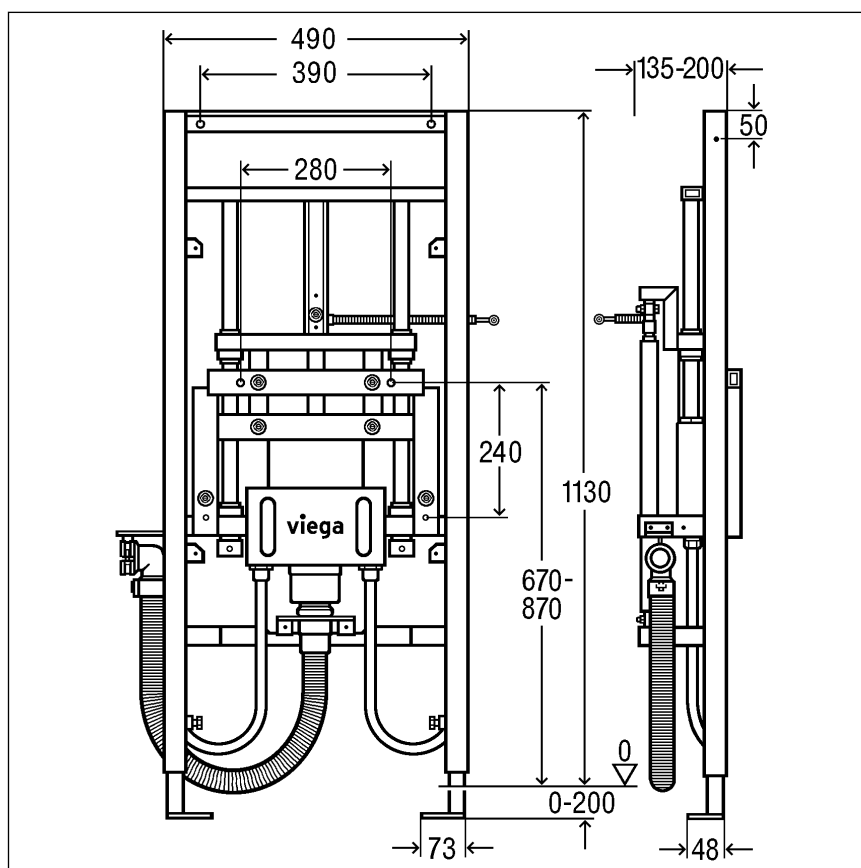


Fig. 5: Washbasin element 8164.21 dimensions

3.1.3 Required tools

The following tools are required for mounting the washbasin element:

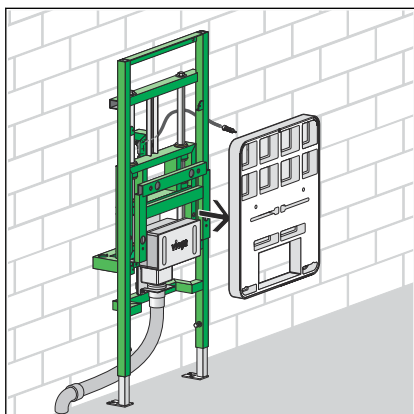
- drill with 10 mm drill bit
- ratchet with sockets: 13 mm / 17 mm
- fork or ring spanner: 10 mm / 13 mm / 17 mm / 19 mm / 22 mm / 27 mm

- Allen key: 5 mm
- Phillips-tip screwdriver
- flat-blade screwdriver
- silicone press
- cutting knife
- hacksaw
- file for deburring

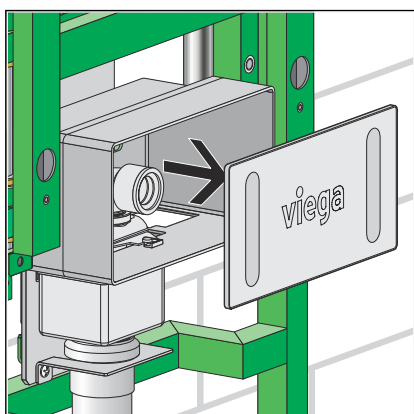
3.2 Assembly

3.2.1 Mounting the element

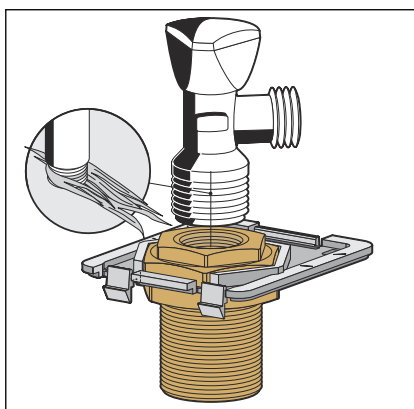
Preparing the concealed connection box



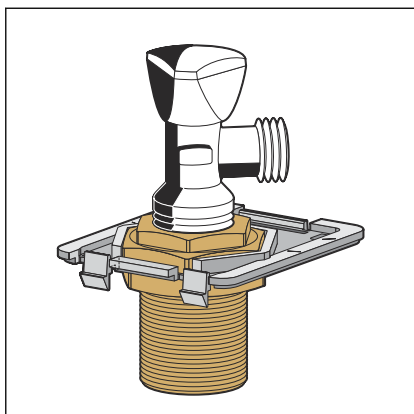
- Remove mounting template from the element.



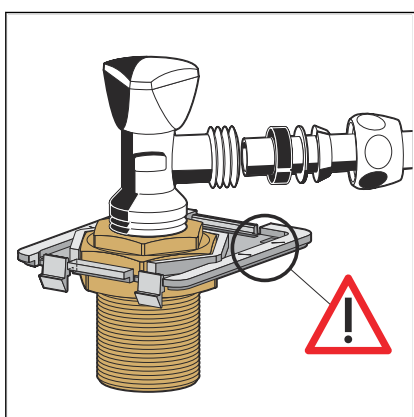
- Remove the site protection from the concealed connection box.



- Seal the corner valve (e.g. using hemp).

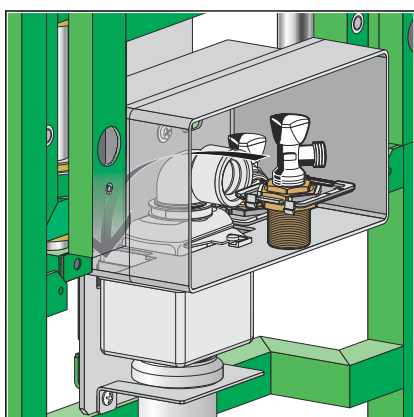


► Screw the corner valve into the 1/2 inch screw fitting.

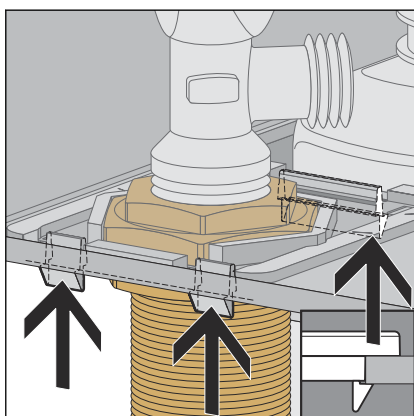


INFO! Note the marking for aligning the corner valves!

► Screw in until the connection for the washbasin fitting is positioned between the markings (see marking on the top holder).

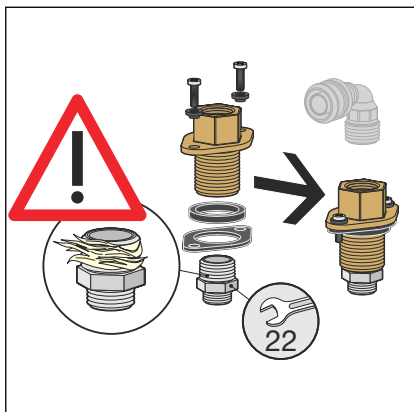


► Install the complete holders in the concealed connection box.

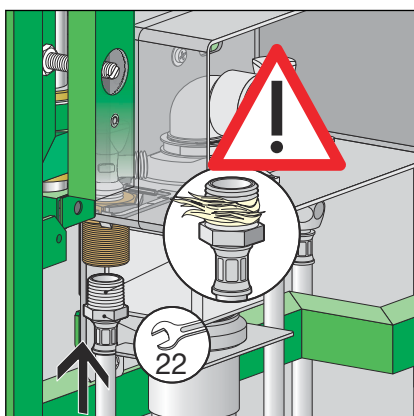


► In addition, audibly clip each of the three catches into the concealed connection box.

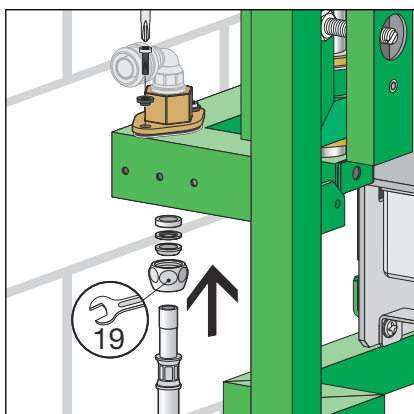
Preparing the washbasin element



- Seal the reducing nipple in on one side and pre-assemble with the wall lead-in (size 22). Please ensure that the supplied rubber seals are fitted correctly.
- Provide a connection to the piping system on site.

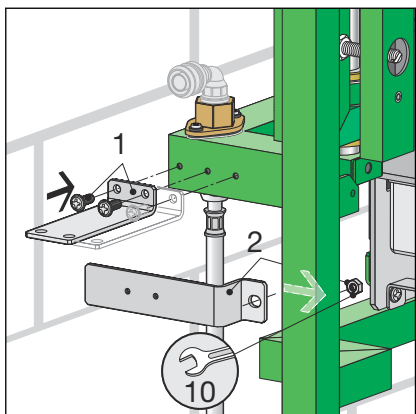


- Seal the flexible hose in on the thread side and assemble on the wall lead-in of the concealed connection box (size 22).

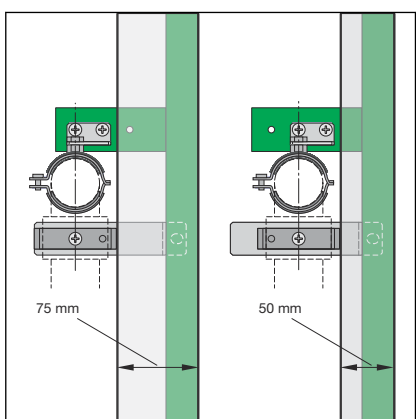


- Mount the flexible hose on the left-hand side of the wall lead-in of the element using a compression fitting (size 19).
- Repeat mounting on the right-hand side.

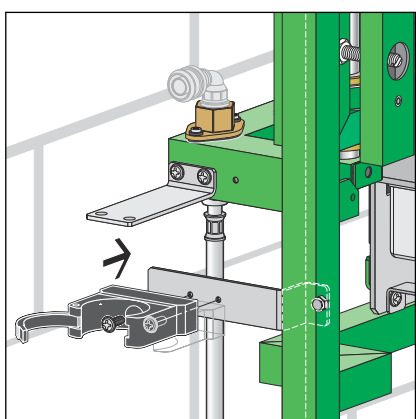
Only for mounting support profiles



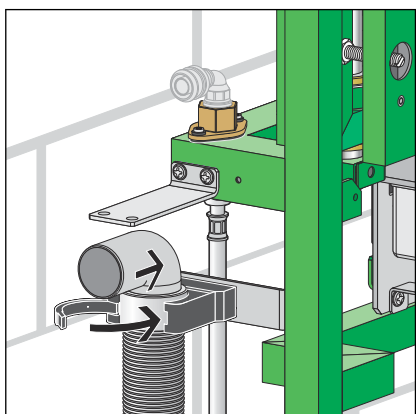
- Mount retaining plates 1 and 2. They can be attached on the left and right hand side of the element.



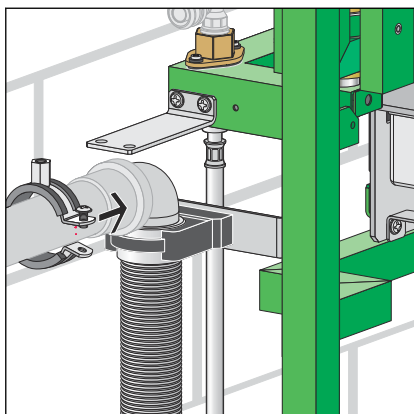
- Left:** min. interval to wall 160 mm; external fixing points for support profile with a depth of 75 mm.
- Right:** min. interval to wall 135 mm (when holding plate 2 is cut to length); internal fixing points for support profiles with a depth of 50 mm.



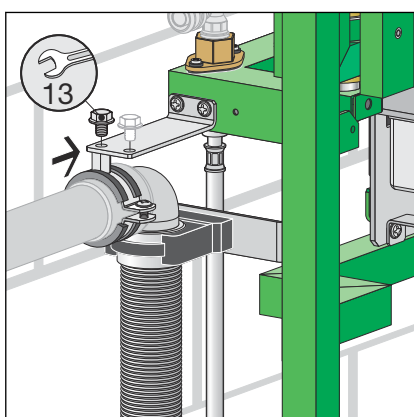
- Mount the pipe clamp for the drain elbow to retaining plate 2.



- Mount the drain elbow in the pipe clamp.



► Make a wastewater connection (DN 40) on site.



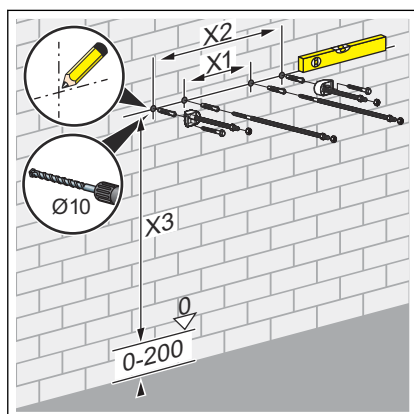
► Mount pipe clamp to retaining plate 1 (size 13) and on the sleeve of the wastewater hose connection.

Installation on a brick wall



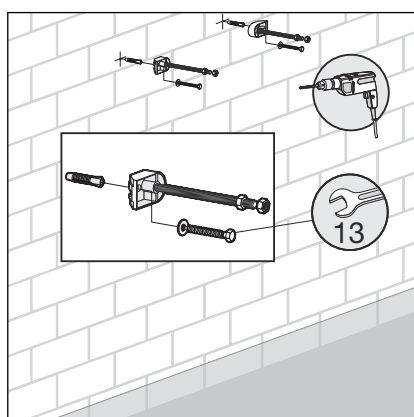
Masonry and concreted walls

You should use a support bracket (model 8165) when mounting multiple washbasin elements with an interval of > 490 mm. Observe the instructions for use of the support bracket when mounting.



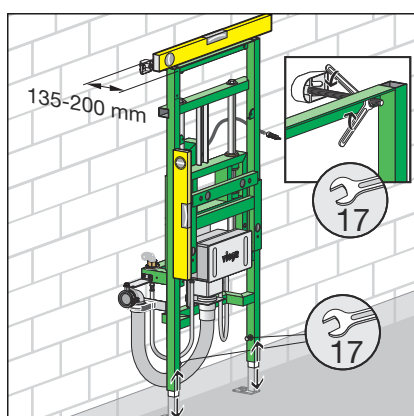
► Determine and mark fixing points.

- X1: 390 mm (model 8180.73)
- X2: 440 mm (model 8173)
- X3: 1100 mm

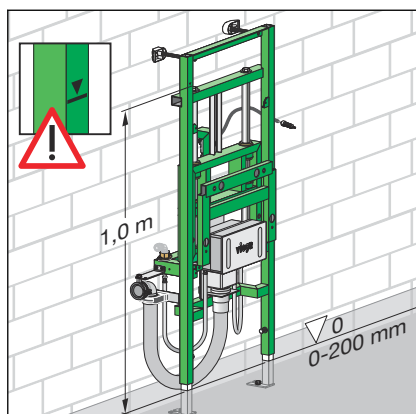


► Drill holes.

► Mount the fixing set supplied with the fork spanner (size 13).

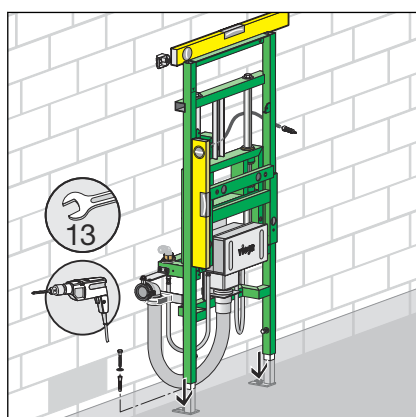


► Align the washbasin element and set the distance to the wall 135–200 mm (size 17).

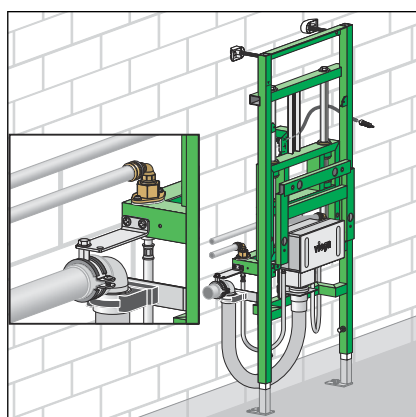


- Determine construction height in accordance with the on-site marking of the upper edge of the finished floor.

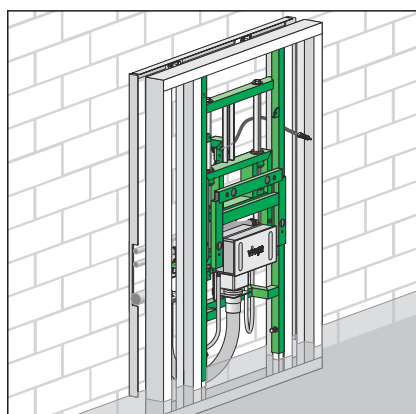
INFO! The construction height must be determined exactly. There are only limited possibilities available to remedy errors made during this assembly step, see [☞ 'Construction height' on page 13.](#)



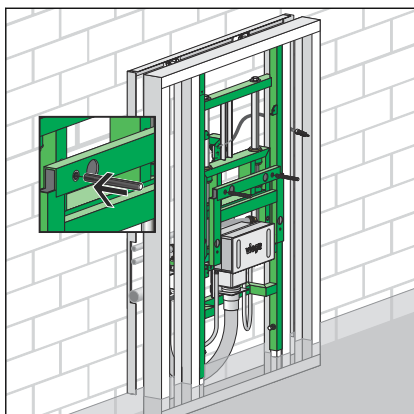
- Drill floor holes.
- Attach washbasin element to the floor (size 13).



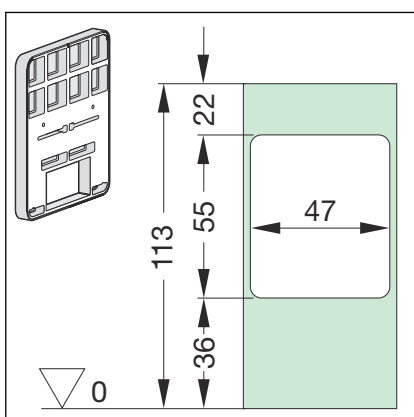
- Provide connections to the water and wastewater pipe system on site.



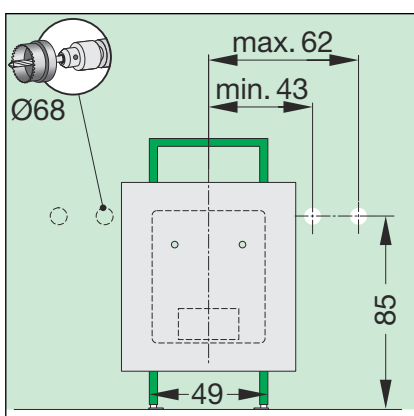
- Encase the element with support profiles in order to clad it.



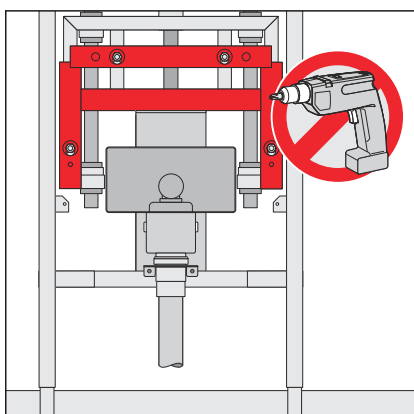
- Install the threaded bolt for fixing the sanitary object.



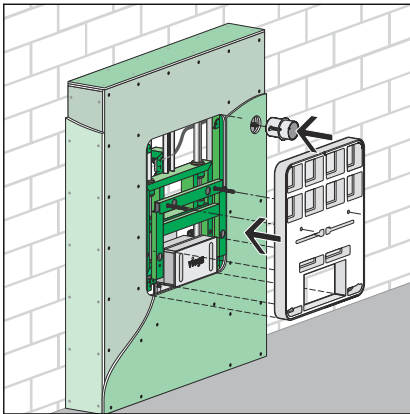
- Double-clad (2 x 12.5 mm) the element and support profile.
Clad up to the template.



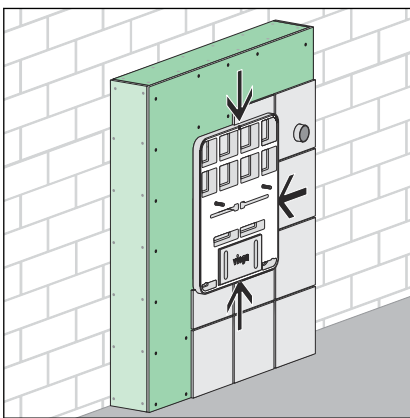
- The concealed socket can be mounted on the left or right hand side, as required. If changing the sides of the hydraulic hose is necessary, see [Chapter 3.2.4 'Changing the sides of the hydraulic hose'](#) on page 32.



- Plaster board must **not** be screwed together with the height-adjustable internal frame!



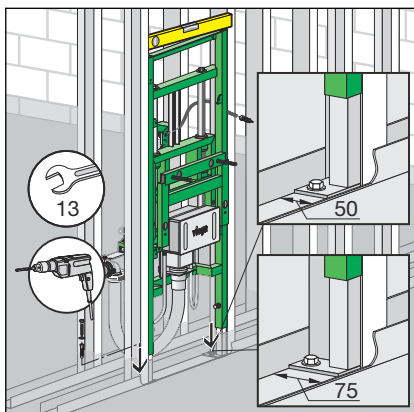
► Install the concealed socket and mounting template.



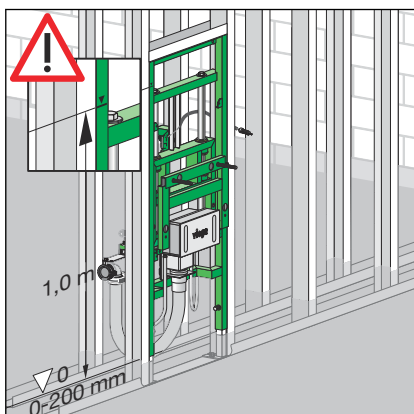
► Tile up to the mounting template and concealed socket.

Mounting in on-site support profile

The washbasin element can be installed in support profiles of 50 mm and 75 mm.

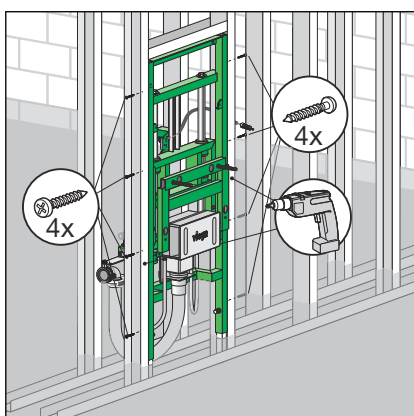


- Determine the fixing points.
- Align the element using a spirit level.

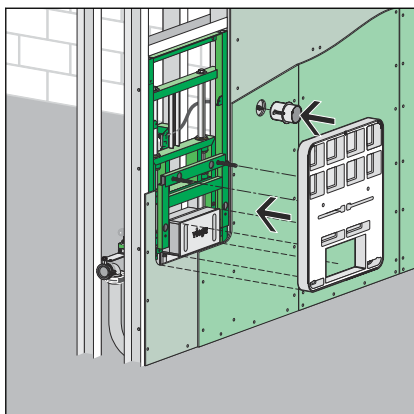


- Determine construction height in accordance with the on-site marking of the upper edge of the finished floor.

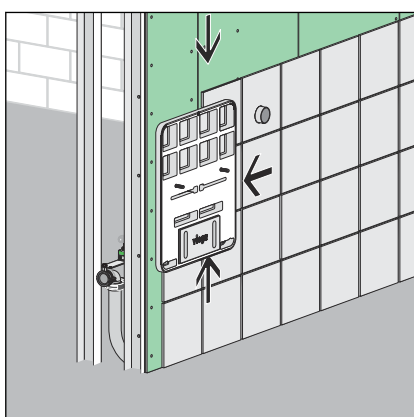
INFO! The construction height must be determined exactly. There are only limited possibilities available to remedy errors made during this assembly step, see ↗ 'Construction height' on page 13.



- Secure element onto the floor and in the support profiles.

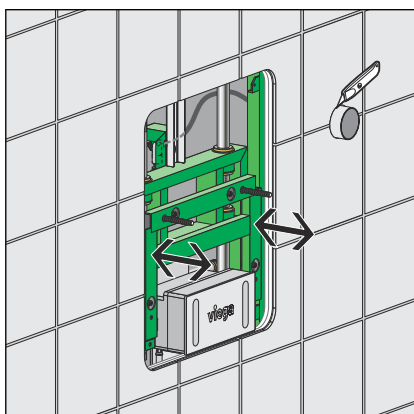


- Mounting of threaded bolts, concealed socket and cladding as described in ↗ **'Installation on a brick wall'** on page 20.

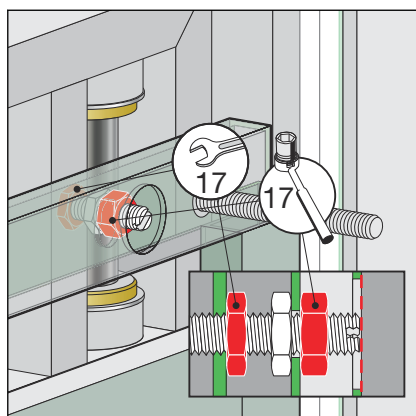


- Tile up to the mounting template and concealed socket.

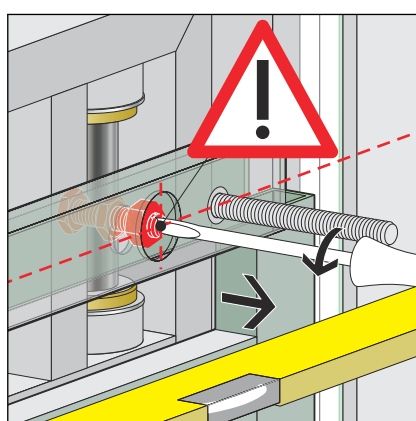
3.2.2 Mounting the cover plate



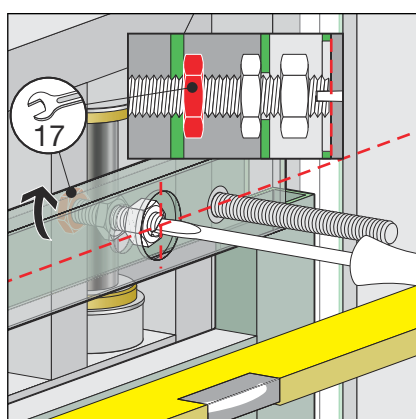
- Mount the bearing surface (H support) for the cover plate flush with the finished wall surface (size 17 / 19).



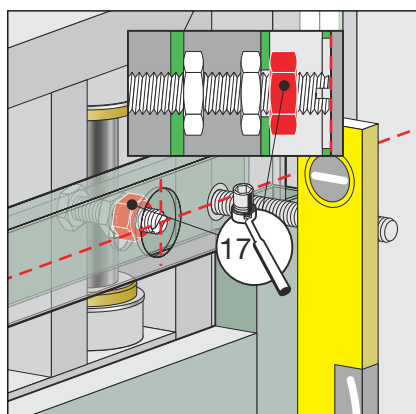
- Loosen the four threaded nuts on the element (size 17).
- Loosen the four front threaded nuts on the sides of the bearing surface (size 17 nut).



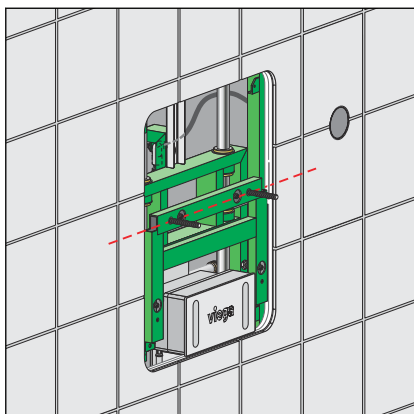
- Screw the threaded nuts in or out to adjust all four points flush with the wall surface.
- Check it is flush with the wall surface using a spirit level.



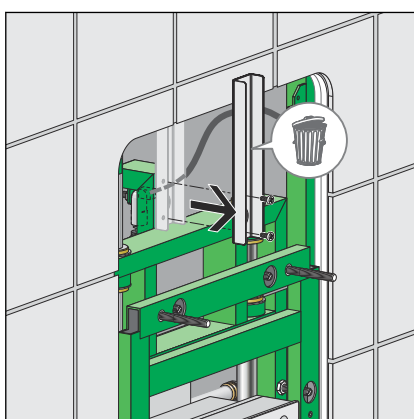
- Tighten the rear threaded nuts at all four points (size 17).
When doing so, hold the threaded bolts with a flat-blade screwdriver.



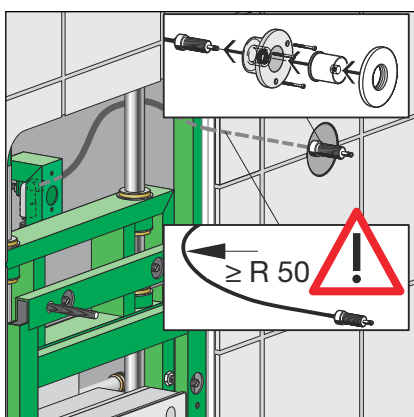
- Tighten the front threaded nuts at all four points (size 17).
- Check to ensure they are flush.



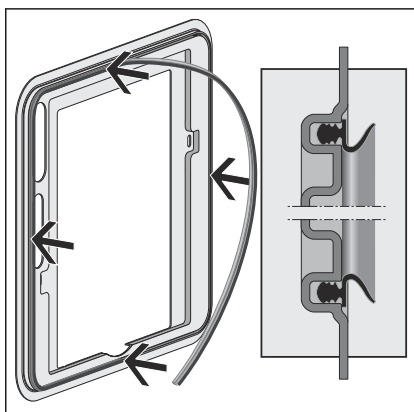
- Shorten the threaded bolts for fixing the sanitary object in accordance with the ceramics.



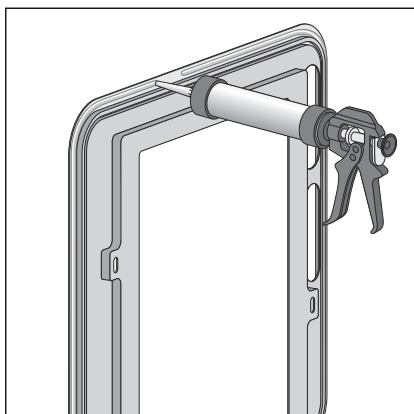
- Loosen the screws of the transport lock and dispose of the transport lock.



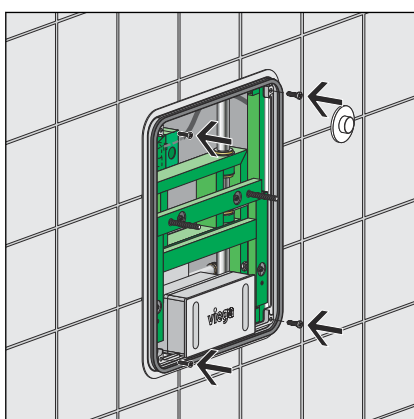
- Screw the sleeve onto the hydraulic cylinder.
- Screw the sleeve tightly into the concealed socket with the screws supplied.
- Screw on the actuating button and push the rosette onto the actuating button.
- Screw the rosette onto the sleeve.
- Observe the minimum radius of 50 mm for hydraulic actuation. This prevents the hydraulic actuation from buckling.



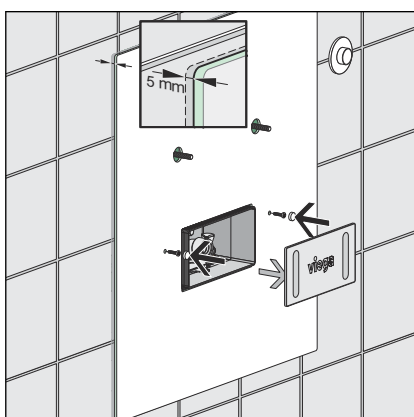
- Fit the supplied seal in the cover frame on the front.



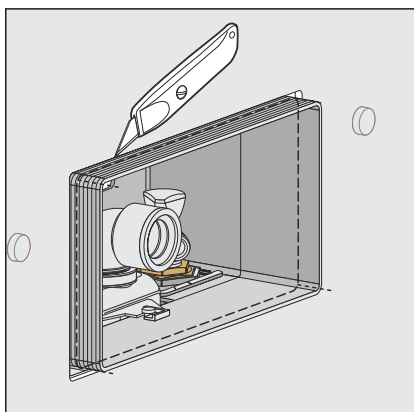
- Apply the silicone seal to the rear of the cover frame.



- Align cover frame.
- Attach cover frame to the element with the recessed head screws supplied.

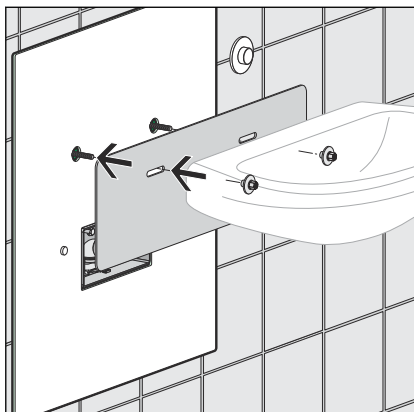


- Apply the cover plate and secure with supplied screws.
- Remove the site protection from the concealed connection box.
 - Check: The gap dimension between the wall and the cover plate must amount to 5 mm, in order to ensure the washbasin height adjustment functions smoothly.

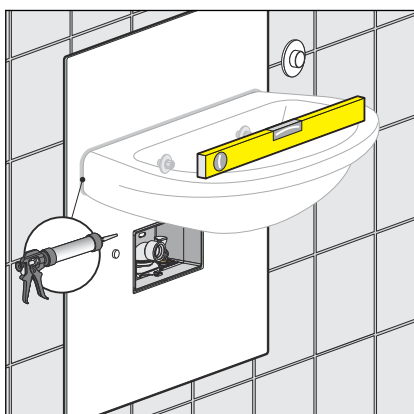


- Cut the concealed connection box flush with the cover plate
- INFO! Take care when cutting! Do not damage the cover plate.**

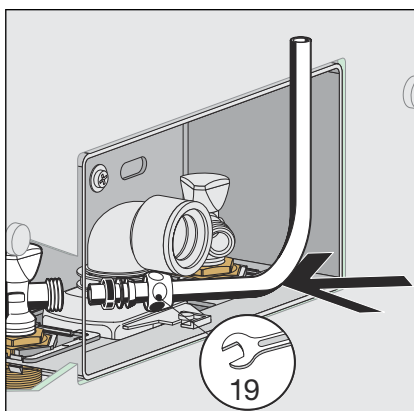
3.2.3 Final assembly of the concealed connection box



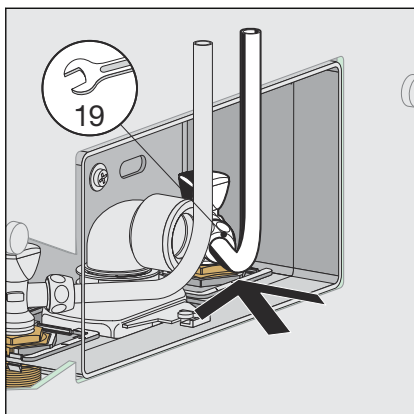
- Cut the sound insulation panel to size.
Never use the cover plate as a base.
- Install the washbasin.



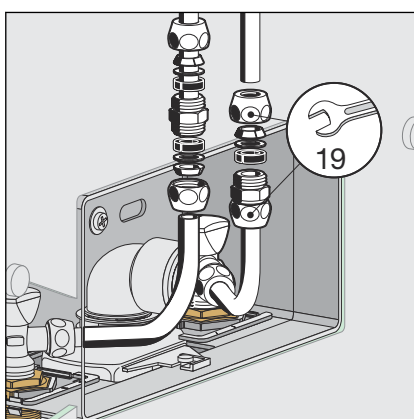
- Align the washbasin.
- Seal the gap between the cover plate and the ceramic washbasin with silicone.



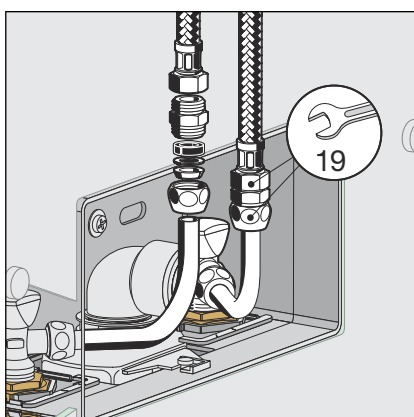
- Connect the first washbasin fitting connection via the supplied copper pipe (SW 19).
- If necessary, cut supplied chrome-plated pipe elbows to length.



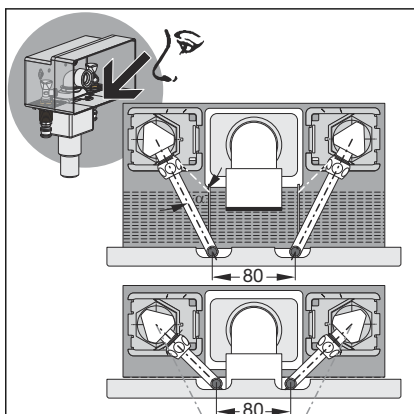
- Connect the second washbasin fitting connection via the supplied copper pipe (SW 19).
- If necessary, cut supplied chrome-plated pipe elbows to length.



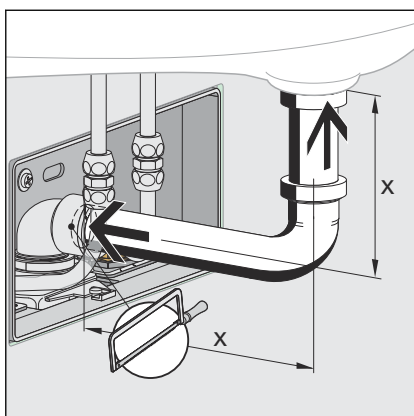
- Shorten the copper pipe enough that the connection with the compression fitting is inside the concealed connection box.
- Attach the compression fitting inside the concealed connection box (SW 19).



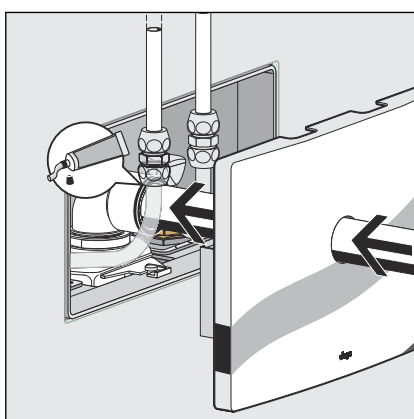
- Example illustration: Connection of a washbasin fitting to the concealed connection box with flexible hoses.



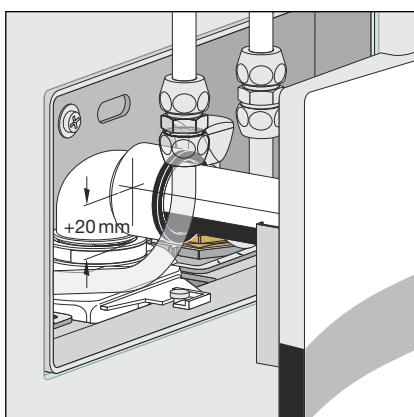
- Align corner valves: align the chrome-plated pipe elbow with the marking aid (line in the concealed connection box).



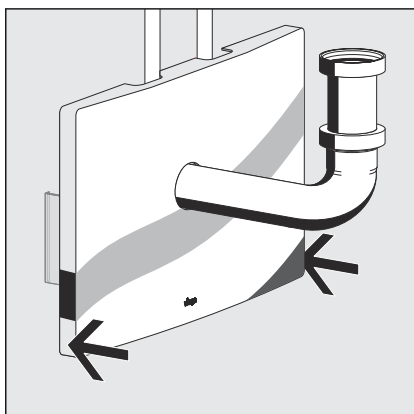
- Insert the drain elbow into the lip seal of the odour trap.
- Identify possible sizes on the drain elbow and adjusting pipe that may have to be shortened.
- Shorten drain elbow and adjusting pipe, if necessary.



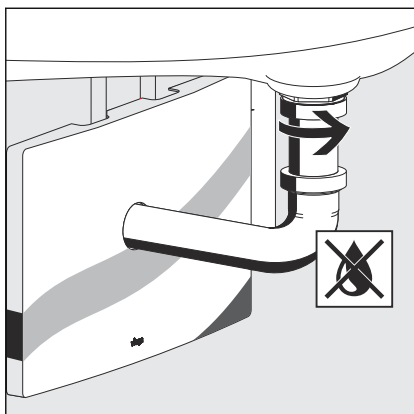
- Deburr the interface and grease the lip seal.
- Insert the drain elbow through the cover plate in the lip seal of the odour trap.



INFO! The adjustment range of the odour trap is 20 mm up and down.

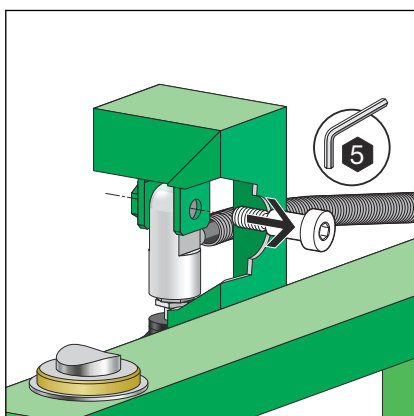


- Attach the cover plate to the concealed connection box. The lateral bars serve as anti-twist protection.

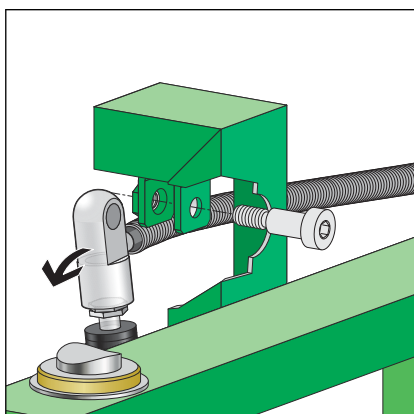


- Secure the drain elbow to the washbasin.
- Check for leaks.

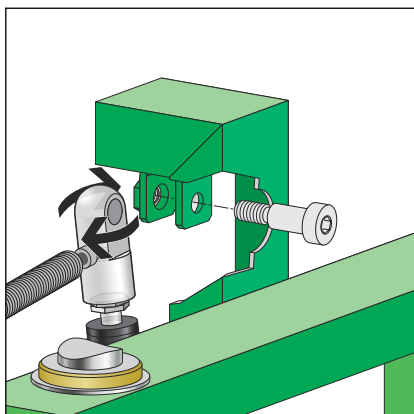
3.2.4 Changing the sides of the hydraulic hose



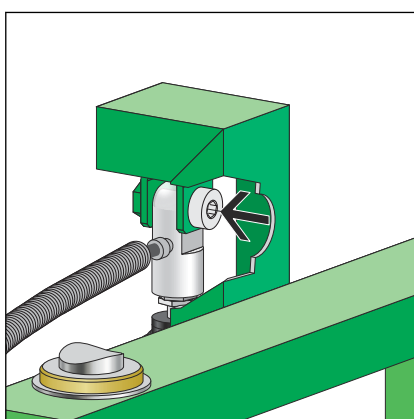
- Loosen Allen screw (SW 5) on the head of the gas pressure spring.



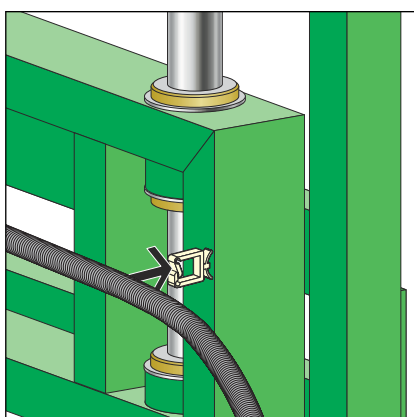
- Swing out the gas pressure spring to the left and right-hand side.



- Turn the head of the gas pressure spring with hydraulic hose by 180°.

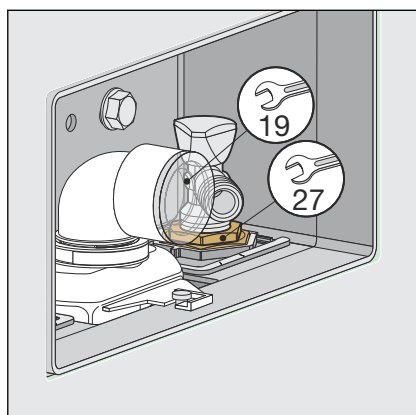


- Set gas pressure spring back in position and secure with Allen screw.
- Mount hydraulic hose and actuation unit as described in [Chapter 3.2.3 'Final assembly of the concealed connection box'](#) on page 29.



- Re-mount hydraulic hose in the prescribed guide on the rear side of the washbasin element.

3.2.5 Replacing the corner valves



If the corner valve has to be replaced, proceed as follows:

- Cut the water supply.
- When replacing (SW 19), counter the screw fitting with a spanner (SW 27).

3.3 Lifting and lowering the washbasin

The washbasin can be lifted and lowered hydraulically within a 20 cm range with the help of a built-in gas spring.

The maximum hydraulically adjustable weight of the washbasin including the fitting, among other things, is from 15 up to 21 kg.



If necessary, help a little by hand (push up or lean on it), until the full adjusting distance is achieved.

The washbasin is secured and released (adjustability on/off) with the actuation button.

Lowering the washbasin



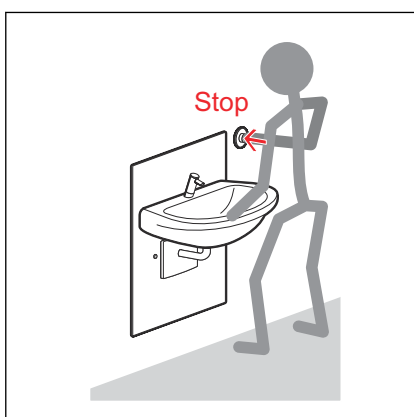
CAUTION! **Risk of crushing**

The cover plate shifts in parallel with the wall surface during the height adjustment. Due to this, there is the risk of crushing in the areas above and below the cover plate.

- Keep your hands away from the dangerous areas.



- Push the washbasin down by hand or by leaning on it.
- If the washbasin does not lower: Push the actuation button to unlock.



- Push the actuation button when the desired position has been reached.
- Washbasin is secured in the chosen position.

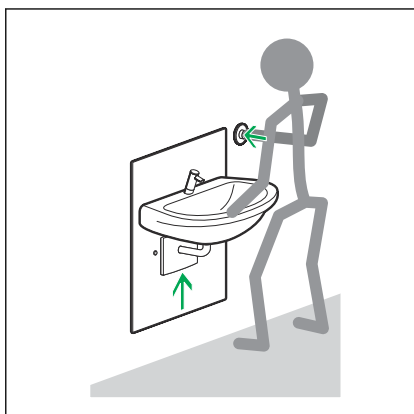
Lifting the washbasin



CAUTION! **Risk of crushing**

The cover plate shifts in parallel with the wall surface during the height adjustment. Due to this, there is the risk of crushing in the areas above and below the cover plate.

- Keep your hands away from the dangerous areas.



- Push the actuation button to unlock.
- Washbasin is unlocked and is lifted hydraulically (if necessary, help a little by hand).



- Press the actuation button again when the desired position has been reached.
- Washbasin is secured in the chosen position.

3.4 Cleaning and maintenance

The mechanism of the height adjustment is maintenance-free.

Maintenance and cleaning work may only be carried out by specialist trade professionals or qualified experts.

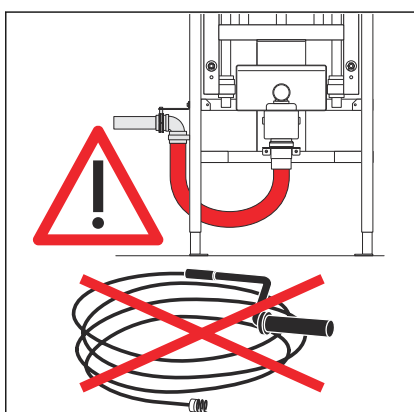
Cleaning

Only mild, soapy cleaning agents are suitable for cleaning the cover plate.

Scouring milk and cleaning agents or disinfectants containing the following ingredients may **not** be used:

- alcohol
- ammoniac
- hydrochloric acid
- phosphoric acid
- acetic acid

They would corrode the surface.



NOTICE! Pipe damage

Do not use a cleaning spiral around the area of the flexible drain elbow on the washbasin connection.

Consult a specialist company in the event of blockages.

3.5 Disposal

Separate the product and packaging materials (e. g. paper, metal, plastic or non-ferrous metals) and dispose of in accordance with valid national legal requirements.



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