

HOME VENTILATION WITH HEAT RECOVERY

Outer wall terminals M-WRG-II ES... M-WRG-ES... M-WRG-II KSR...

for fitting on external walls



Part no. 744005EN Week 20/2022 EN



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1 Introduction

1.1 Notes on this installation manual



This installation manual contains important information that should be followed when installing the outer wall terminals.

- ▶ Read all the instructions carefully before installing the outer wall terminals to avoid possible risks and mistakes.
- ▶ When assembly is complete, give these instructions to the home owner, caretaker or property manager.
- ▶ These instructions are part of the product. Keep the instructions in a safe place for future reference.

! WARNING

- ▶ Follow ALL danger and warning instructions and notes on precautionary measures.
- ▶ Read section “2 Safety instructions” on page 6 carefully.

1.2 Description

These instructions describe how to install the following outer wall terminals on an external wall:

- M-WRG-II ES..., intended for ventilation units from the **M-WRG-II** series
- M-WRG-ES..., intended for ventilation units from the **M-WRG** series
- M-WRG-II KSR..., intended for ventilation units from the **M-WRG-II / M-WRG** series

1.2.1 Outer wall terminal stainless steel pod M-WRG-II ES...

- **M-WRG-II ES**,
outer wall terminal stainless steel pod, material: stainless steel 1.4301, part no. 730000
- **M-WRG-II ES-P (*)**,
outer wall terminal stainless steel pod, material: stainless steel 1.4301, colour: white powder-coated (similar to RAL 9016), part no. 730001
- **M-WRG-II ES-PK (*)**,
outer wall terminal stainless steel pod, material: stainless steel 1.4301, colour: colourless matt powder-coated (R533-0092), part no. 730002



Fig. 1: Outer wall terminal stainless steel pod M-WRG-II ES

(*) We recommend this version for use where the outdoor air is polluted or saline (e.g. industrial regions or near the coast).

1.2.2 Outer wall terminal stainless steel pod M-WRG-ES...

- **M-WRG-ES**,
outer wall terminal stainless steel pod, material: stainless steel 1.4301, part no. 5150
- **M-WRG-ES/SD**,
as for M-WRG-ES, but with increased noise protection part no. 5150-1
- **M-WRG-ES-P (*)**,
outer wall terminal stainless steel pod, material: stainless steel 1.4301, colour: white powder-coated (similar to RAL 9016), part no. 5153
- **M-WRG-ES-P/SD (*)**,
as for M-WRG-ES-P, but with increased noise protection part no. 5153-1
- **M-WRG-ES-PK (*)**,
outer wall terminal stainless steel pod, material: stainless steel 1.4301, colour: colourless matt powder-coated (R533-0092), part no. 5153-10
- **M-WRG-ES-PK/SD (*)**,
as for M-WRG-ES-PK, but with increased noise protection part no. 5153-11

(*) We recommend this version for use where the outdoor air is polluted or saline (e.g. industrial regions or near the coast).



Fig. 2: Outer wall terminal stainless steel pod M-WRG-ES

1.2.3 Outer wall terminal plastic pipe set M-WRG-II KSR...

- **M-WRG-II KSR-1**,
outer wall terminal plastic pipe set, material: ASA, colour: white, similar to RAL 9016, part no. 730100
- **M-WRG-II KSR-2**,
outer wall terminal plastic pipe set, material: ASA, colour: grey, similar to RAL 7012, part no. 730101



Fig. 3: Outer wall terminal plastic pipe set M-WRG-II KSR-1, horizontal arrangement for M-WRG-II ventilation units

1.3 Target group

The activities described in this manual must only be carried out by specialised personnel with the following qualifications:

- Training in local safety requirements
- Knowledge of the relevant standards and directives
- Knowledge and observance of this document and all the safety instructions

1.4 Storage

- ▶ Store the outer wall terminal in its original packaging in a dry place where the temperature ranges between 0 °C and +40 °C.

1.5 Environmentally-friendly disposal

The outer wall terminals must not be disposed of in the residual waste bin.

- ▶ Dispose of the outer wall terminal in accordance with the waste disposal regulations that apply on site.

1.6 Revision index

Edition	Manual	Date
5 th edition	Installation manual for outer wall terminals M-WRG-II ES..., M-WRG-ES..., M-WRG-II KSR...	Week 20/2022 EN

1.7 Explanation of the symbols used

- ▶ This symbol indicates an action to be taken.
- This symbol indicates a list.

2 Safety instructions

This manual contains notes that you must follow for your own personal safety and to avoid injury and damage to property. They are highlighted by warning triangles and are shown as follows according to the level of danger.

2.1 Hazard classification

DANGER

The signal word designates a hazard with a **high** degree of risk which, if it is not avoided, will result in death or severe injury.

WARNING

The signal word designates a hazard with a **medium** degree of risk which, if it is not avoided, will result in death or severe injury.

CAUTION

The signal word designates a hazard with a **low** degree of risk which, if it is not avoided, could result in minor or moderate injury.

NOTICE

A note as used in this manual contains important information about the product or about a part of the manual to which particular attention should be paid.

2.2 Notes on using the ventilation units safely

2.2.1 Condensate drain / build-up of icicles and ice patches at low external temperatures

The heat recovery process in our ventilation units causes condensation. This condensation is dissipated via the exhaust air pipe.

- Note the information on the condensate drain and the build-up of icicles and ice patches in the relevant installation manuals for the M-WRG-II and M-WRG series.

2.2.2 Starting and using the ventilation unit

- Do not start up the ventilation unit until it is fully installed.
- Always make sure that the cover is closed and locked in place before using the ventilation unit.
- Please note that the ventilation unit must not be used without the outer wall terminal for safety reasons.

2.3 Intended use

- Always use the correct outer wall terminal for the unit series (see section 1.2 on page 3).
- The outer wall terminal is attached to the outdoor air pipe and exhaust air pipe on the external wall.
- The intended use also includes compliance with all the notes in the operating instructions.
- The ventilation unit must not be operated without air filters or outer wall terminal.
- For any use contrary to the intended use, Meltem Wärmerückgewinnung GmbH & Co. KG shall accept no liability for any damage that may occur and offers no warranty that the ventilation unit will work perfectly and correctly.

3 Items supplied

3.1 Outer wall terminal stainless steel pod M-WRG-II ES...

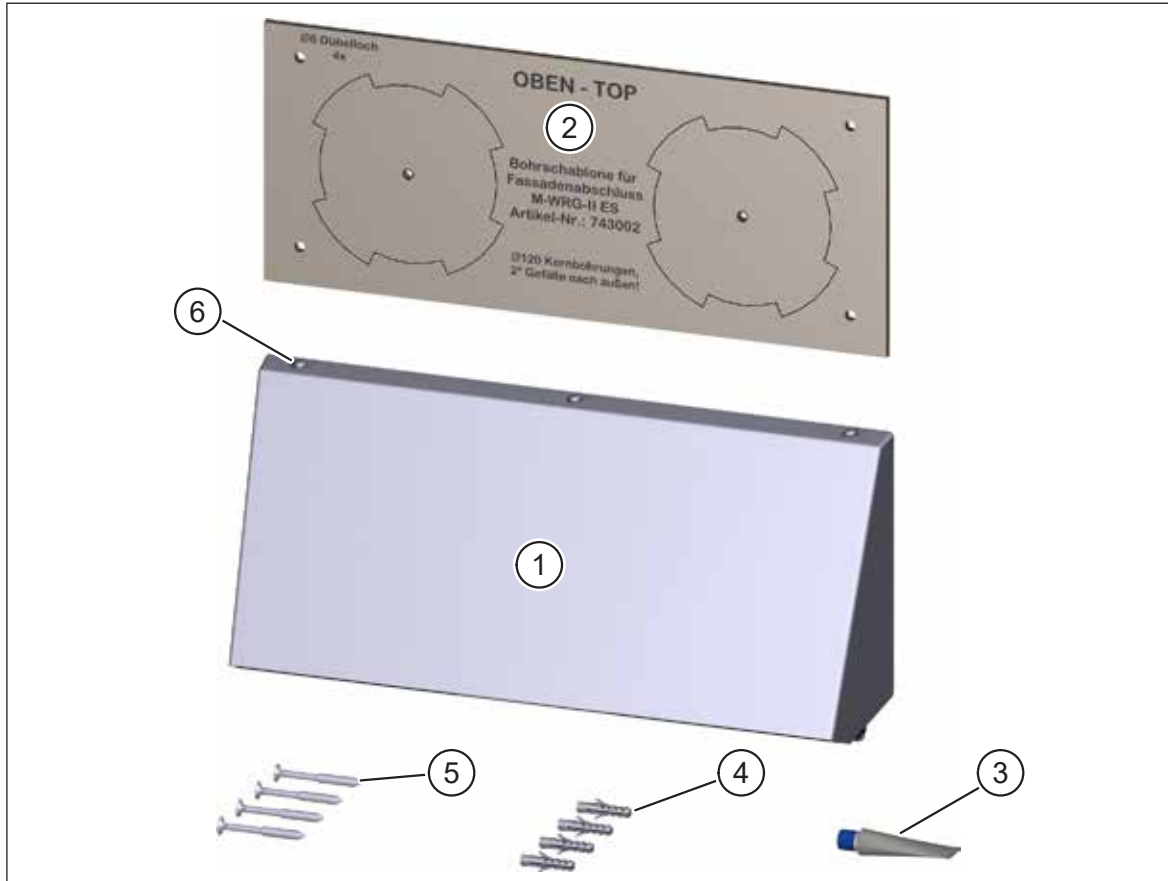


Fig. 4: Items supplied with the outer wall terminal stainless steel pod M-WRG-II ES...

Item	Description	Quantity
1	Outer wall terminal stainless steel pod M-WRG-II ES...	1 x
2	Drilling template	1 x
3	Vaseline, tube	1 x
4	Dowel 6 x 30 mm for fitting to brick wall	4 x
5	Screws 4.0 x 40 mm, stainless steel	4 x
6	Screws 3.5 x 16 mm	3 x
-	Installation manual	1 x

NOTICE

- The fixing materials supplied are intended for fixing the outer wall terminal to brick walls.
 - ▶ For other wall structures, contact your facade constructor to ensure that the outer wall terminal is fitted correctly.
- Würth insulation anchors with setting tool, part no. 090350050, for example, are suitable for fixing the outer wall terminal to rigid foam boards.

3.2 Outer wall terminal stainless steel pod M-WRG-ES...



Fig. 5: Items supplied with the outer wall terminal stainless steel pod M-WRG-ES...

Item	Description	Quantity
1	Outer wall terminal stainless steel pod M-WRG-ES...	1 x
2	Drilling template	1 x
3	Vaseline, tube	1 x
4	Dowel 6 x 30 mm for fitting to brick wall	6 x
5	Screws 4.0 x 40 mm, stainless steel	6 x
6	Screws 3.5 x 16 mm	2 x
-	Installation manual	1 x

NOTICE

- The fixing materials supplied are intended for fixing the outer wall terminal to brick walls.
 - ▶ For other wall structures, contact your facade constructor to ensure that the outer wall terminal is fitted correctly.
- Würth insulation anchors with setting tool, part no. 090350050, for example, are suitable for fixing the outer wall terminal to rigid foam boards.

3.3 Outer wall terminal plastic pipe set M-WRG-II KSR...



Fig. 6: Items supplied with the outer wall terminal plastic pipe set M-WRG-II KSR...

Item	Description	Quantity
1	Outer wall terminal plastic pipe set M-WRG-II KSR...	1 x (2 per pack)
2	Self-tapping Torx screws TX10, 2.9 x 6.5 mm	4 x
3	Vaseline, tube	1 x
-	Installation manual	1 x

4 Dimensions

4.1 Outer wall terminal stainless steel pod M-WRG-II ES...

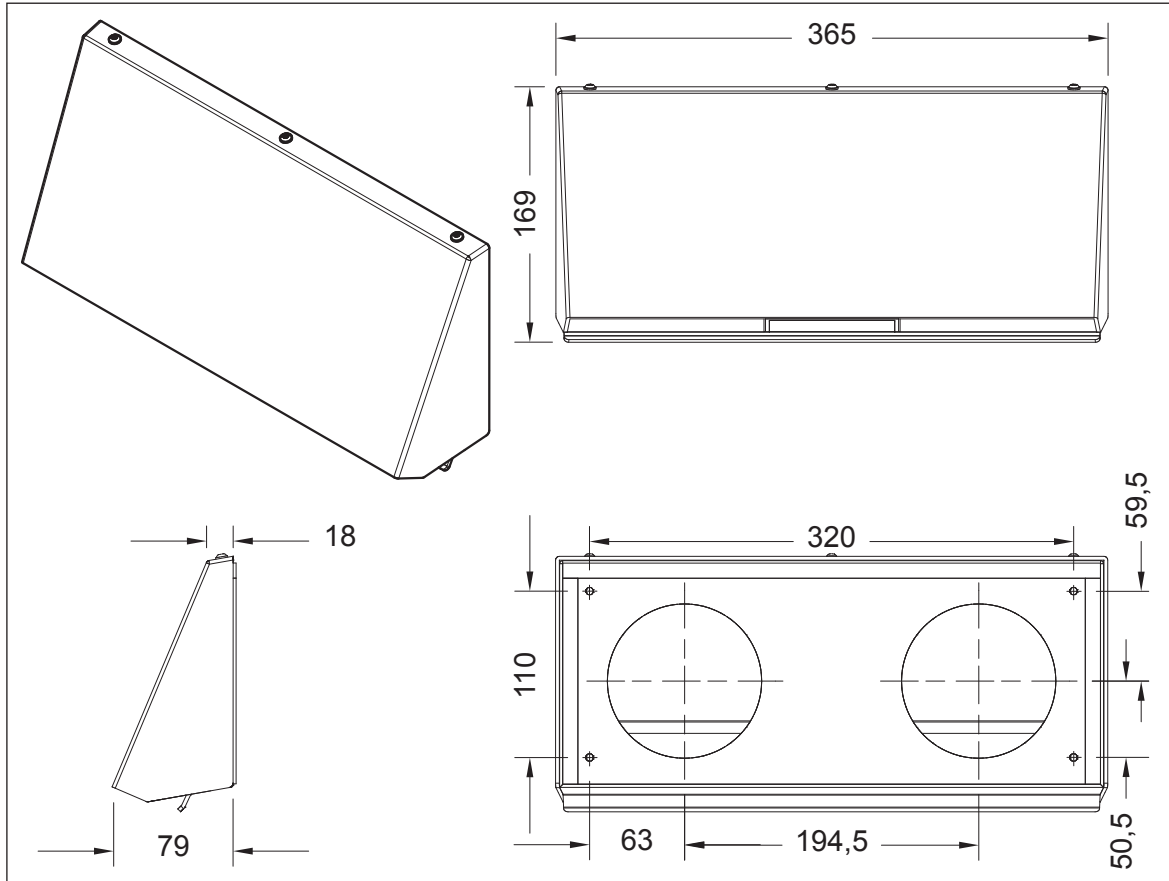


Fig. 7: Dimensions of the outer wall terminal stainless steel pod M-WRG-II ES..., dimensions in millimetres

4.2 Outer wall terminal stainless steel pod M-WRG-ES...

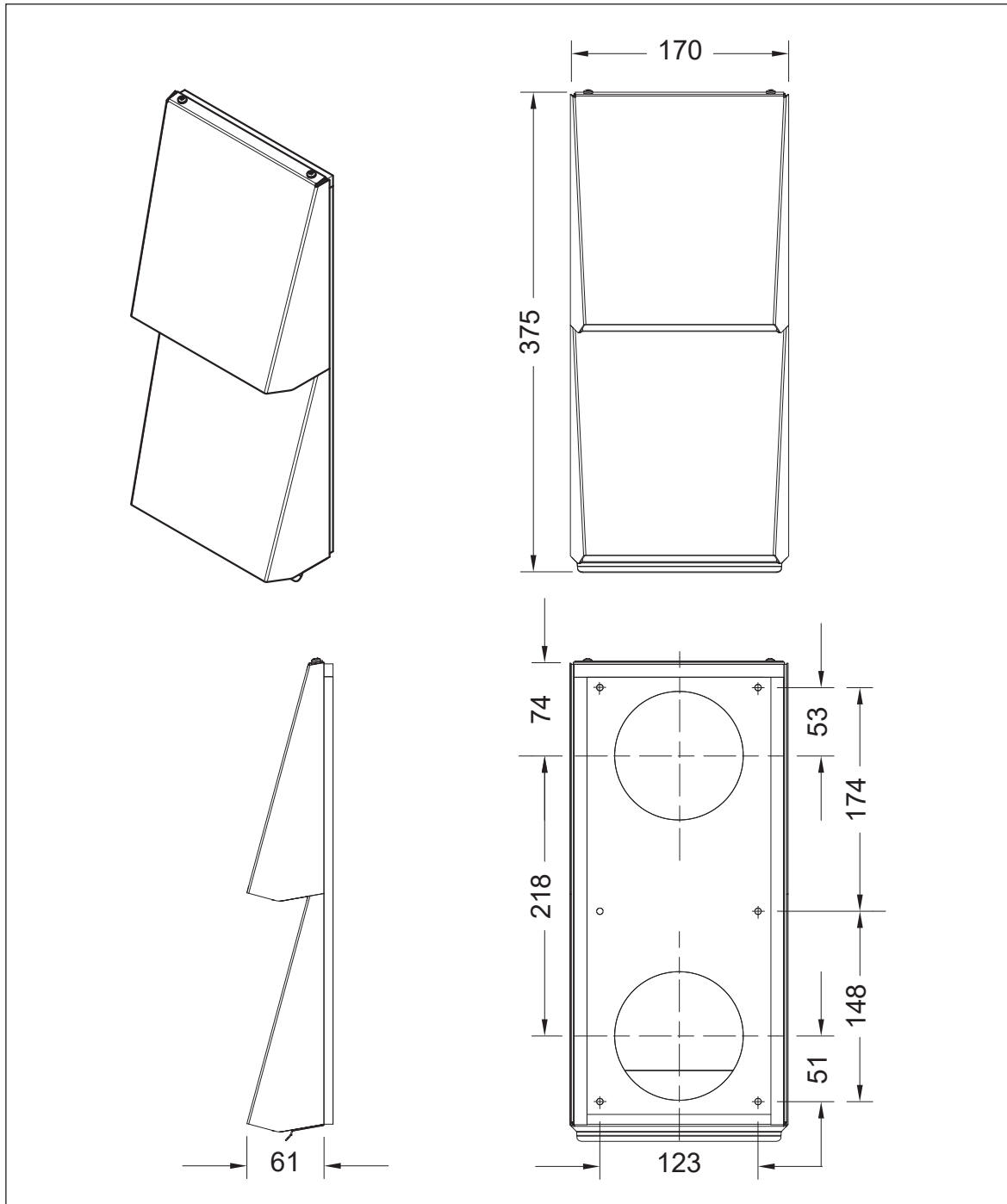


Fig. 8: Dimensions of the outer wall terminal stainless steel pod M-WRG-ES..., dimensions in millimetres

4.3 Outer wall terminal plastic pipe set M-WRG-II KSR...

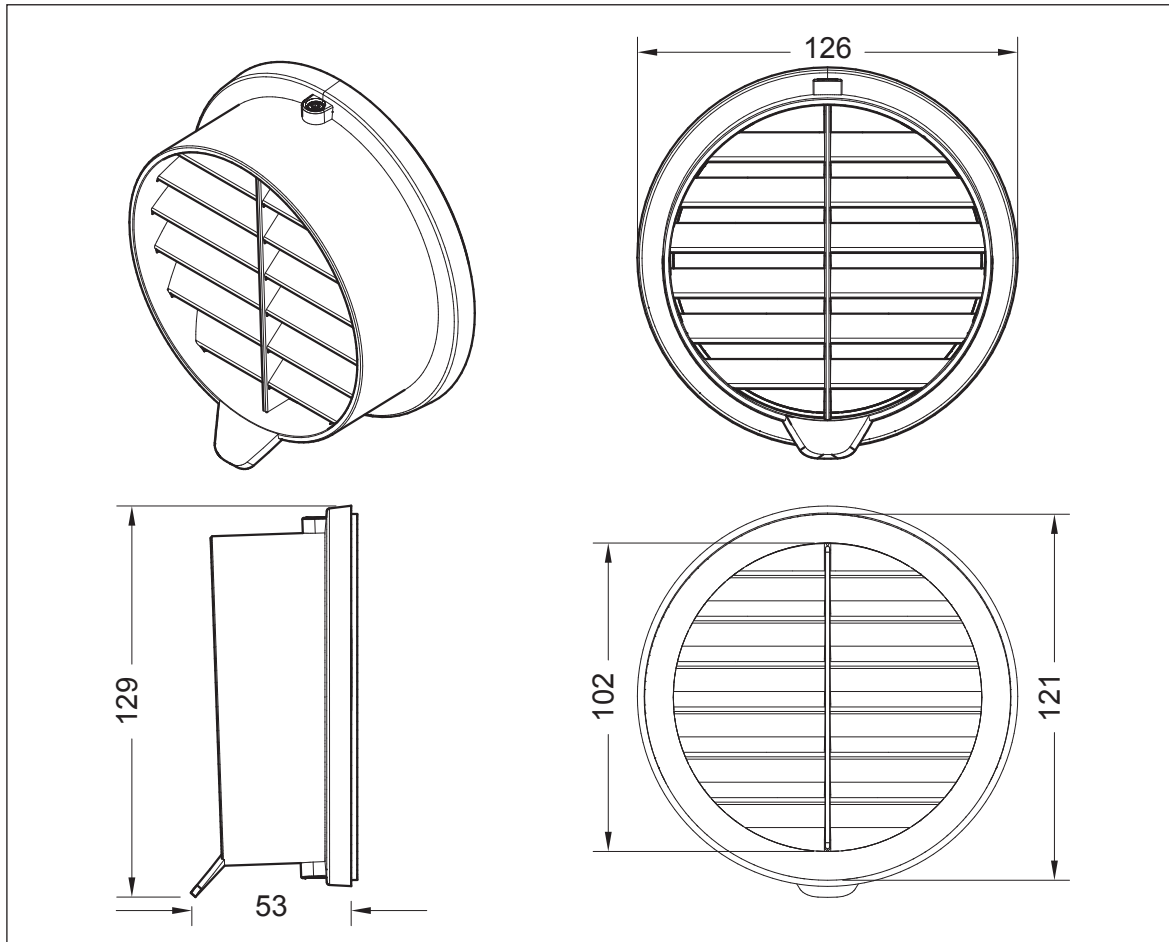


Fig. 9: Dimensions of the outer wall terminal plastic pipe set M-WRG-II KSR..., dimensions in millimetres

5 Tools and equipment required

5.1 Outer wall terminal stainless steel pod M-WRG-II ES... and M-WRG-ES...

- Cross-head screwdriver
- Hammer drill with 6 mm masonry bit for fitting the outer wall terminal on brick walls. Make sure you use suitable tools for other wall structures.
- Spirit level

5.2 Outer wall terminal plastic pipe set M-WRG-II KSR...

- Torx screwdriver TX10

6 Installing the outer wall terminal

NOTICE

- The installation must be carried out in accordance with the generally acknowledged rules of technology.
- Connections with adjacent components must be formed to absorb movements between the contact surfaces.
- Seal any connections that are exposed to driving rain with tapes, profiles or sealants such that they offer sufficient protection against the expected conditions.

⚠ WARNING

Follow the relevant accident prevention regulations

- ▶ Follow the accident prevention regulations when setting up the installation location.
- ▶ Protect the outside area against falling parts.

NOTICE

- We recommend that you wear gloves when installing the stainless steel outer wall terminal. In this way you will avoid transferring grease from your skin to the outer wall terminal. Dust and other soiling can then collect on the grease deposits, which will encourage flash rusting (see also section “7 Cleaning and care instructions” on page 21).
- Do not remove the protective film from the outer wall terminal until the installation is complete.

NOTICE

The following requirements must be fulfilled before the outer wall terminal is fitted:

- The external wall has been plastered. The plaster forms the windtight layer on the external wall.
- The ventilation pipes have been shortened to the correct length.
- The ventilation pipes have been pushed into the openings in the installation kit so that they end flush with the inside of the installation kit.
- The ventilation pipes project to the required length over the external plaster.
- The ventilation pipes have been glued into the facade using permanently elastic sealant.
- The chamfered edges of the pipe openings have been filled all-round with permanently elastic sealant. This will prevent moisture penetrating into the masonry.
- The cut surfaces of the ventilation pipes must be deburred. If this is not the case, there is a risk that the seals on the outer wall terminal will be damaged.

6.1 Installing the outer wall terminal stainless steel pod M-WRG-II ES...

NOTICE

This outer wall terminal is intended for M-WRG-II ventilation units.

6.1.1 Checking the ventilation pipes

- ▶ Check that the ventilation pipes protrude 5 - 10 mm beyond the external plaster (see item 1 in Fig. 10).
- ▶ Check that the cut surfaces of the ventilation pipes have been deburred (see item 2 in Fig. 10).

NOTICE

The cut surfaces of the ventilation pipes must be deburred. If this is not the case, there is a risk that the seals on the outer wall terminal base plate will be damaged.

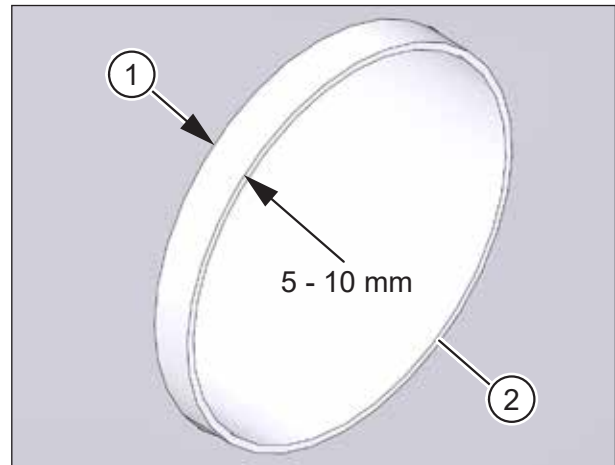


Fig. 10: Checking the ventilation pipes

6.1.2 Drilling the holes for the outer wall terminal

- ▶ Press the pre-punched cut-outs (item 1 in Fig. 11) for the ventilation pipes out of the drilling template (item 2 in Fig. 11).
- ▶ Position the drilling template correctly on the ventilation pipes and flush with the facade.

NOTICE

- Note the “OBEN (TOP)” (item 3 in Fig. 11) printed on the drilling template.
- The fixing materials supplied are intended for fixing the outer wall terminal to brick walls.
 - ▶ Note the information on page 8 concerning other facade structures.

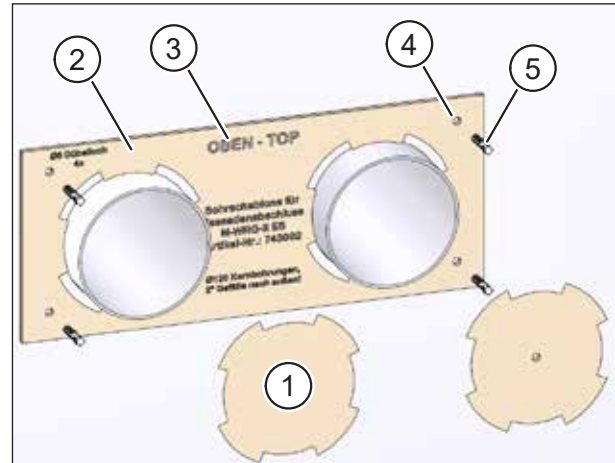


Fig. 11: Drilling the holes

- ▶ Use the 6 mm masonry bit to drill four holes, roughly 40 mm deep, in the external wall at the points indicated on the drilling template (item 4 in Fig. 11).
- ▶ Remove the drilling template.
- ▶ Insert the four dowels provided (item 5 in Fig. 11) into the holes.

6.1.3 Attaching the outer wall terminal

- ▶ Remove the three cross-head screws 3.5 x 16 (item 1 in Fig. 12) at the top of the outer wall terminal.
- ▶ Slide the cover (item 2 in Fig. 12) up roughly 10 mm. Lift the cover forward and away from the base plate (item 3 in Fig. 12).
- ▶ Fully coat both 4 mm wide sealing surfaces (item 4 in Fig. 12) on the inside with Vaseline.
- ▶ Carefully position the base plate (item 1 in Fig. 13) correctly on the ventilation pipes. Be careful not to damage the seals.
- ▶ Use a spirit level to align the base plate vertically (see item 2 in Fig. 13).
- ▶ Use the four screws provided to fix the base plate (item 3 in Fig. 13).
- ▶ Position the cover (item 1 in Fig. 14) on the base plate so that the tabs of the cover (item 2 in Fig. 14) slide into the guides on the base plate (item 3 in Fig. 14).
- ▶ Use the three cross-head screws 3.5 x 16 (item 4 in Fig. 14) to fix the cover.
- ▶ Remove the protective films from the cover (this does not apply to powder-coated outer wall terminals).
- ▶ Clean the outer wall terminal (see chapter 7 on page 21).

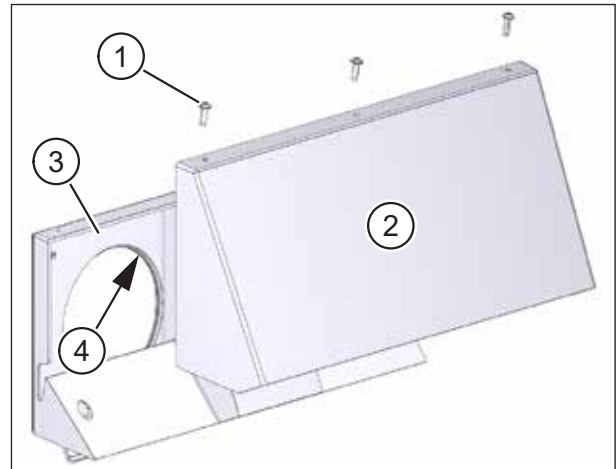


Fig. 12: Removing the cover

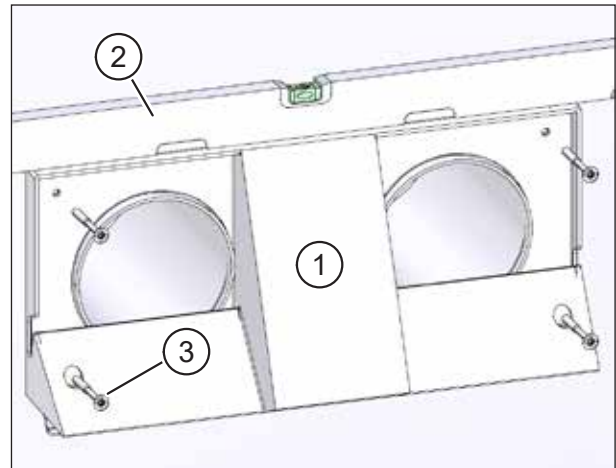


Fig. 13: Fixing the base plate

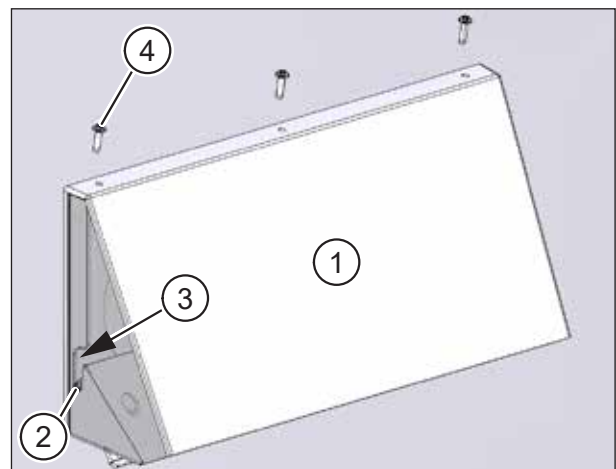


Fig. 14: Outer wall terminal installed

6.2 Installing the outer wall terminal stainless steel pod M-WRG-ES...

NOTICE

This outer wall terminal is intended for M-WRG ventilation units.

6.2.1 Checking the ventilation pipes

- ▶ Check that the ventilation pipes protrude 5 - 10 mm beyond the external plaster (see item 1 in Fig. 15).
- ▶ Check that the cut surfaces of the ventilation pipes have been deburred (see item 2 in Fig. 15).

NOTICE

The cut surfaces of the ventilation pipes must be deburred. If this is not the case, there is a risk that the seals on the outer wall terminal base plate will be damaged.

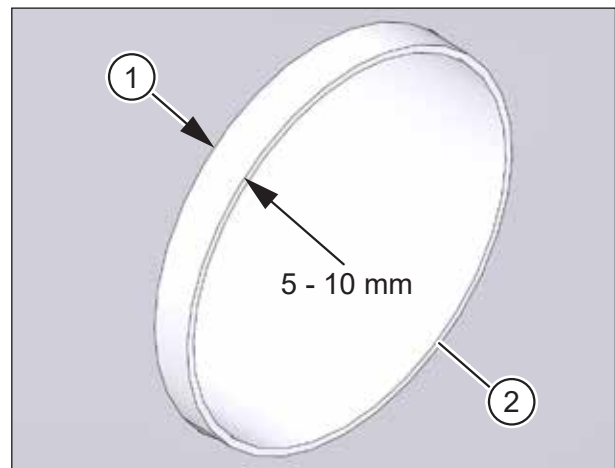


Fig. 15: Checking the ventilation pipes

6.2.2 Drilling the holes for the outer wall terminal

- ▶ Press the pre-punched cut-outs (item 1 in Fig. 16) for the ventilation pipes out of the drilling template (item 2 in Fig. 16).
- ▶ Position the drilling template (item 2 in Fig. 16) correctly on the ventilation pipes and flush with the facade.

NOTICE

- Note the “OBEN (TOP)” (item 3 in Fig. 16) printed on the drilling template.
- The fixing materials supplied are intended for fixing the outer wall terminal to brick walls.
 - ▶ Note the information on page 9 concerning other facade structures.

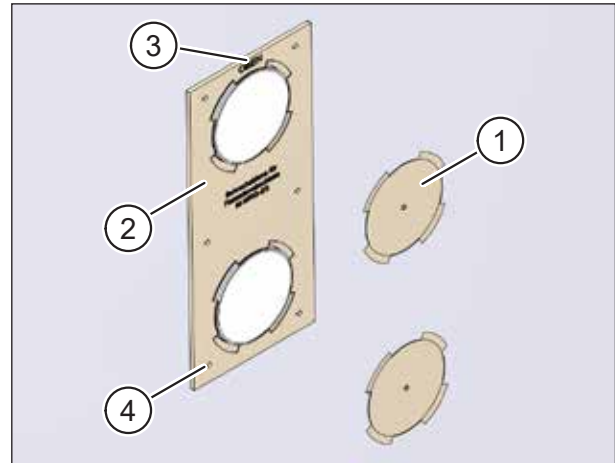


Fig. 16: Drilling the holes

- ▶ Use the 6 mm masonry bit to drill six holes, roughly 40 mm deep, in the external wall at the points indicated on the drilling template (item 4 in Fig. 16).
- ▶ Remove the drilling template.
- ▶ Insert the six dowels provided into the holes.

6.2.3 Attaching the outer wall terminal

- ▶ Remove the two cross-head screws (item 1 in Fig. 17) at the top of the outer wall terminal.
- ▶ Slide the cover (item 2 in Fig. 17) up roughly 10 mm. Lift the cover away from the base plate (item 3 in Fig. 17).
- ▶ Fully coat the 4 mm wide sealing surfaces (item 4 in Fig. 17) on the inside with Vaseline.
- ▶ Carefully position the base plate (item 1 in Fig. 18) correctly on the ventilation pipes. Be careful not to damage the seals.

NOTICE

- ▶ Make sure that the drip edge (item 2 in Fig. 18) is pointing downwards.
- ▶ Use a spirit level to align the base plate vertically (see item 3 in Fig. 18).
- ▶ Use the six screws provided to fix the base plate (item 4 in Fig. 18).
- ▶ Attach the cover to the base plate.
- ▶ Use the two cross-head screws to fix the cover (item 1 in Fig. 19).
- ▶ Remove the protective films from the cover (this does not apply to powder-coated outer wall terminals).
- ▶ Clean the outer wall terminal (see chapter 7 on page 21).

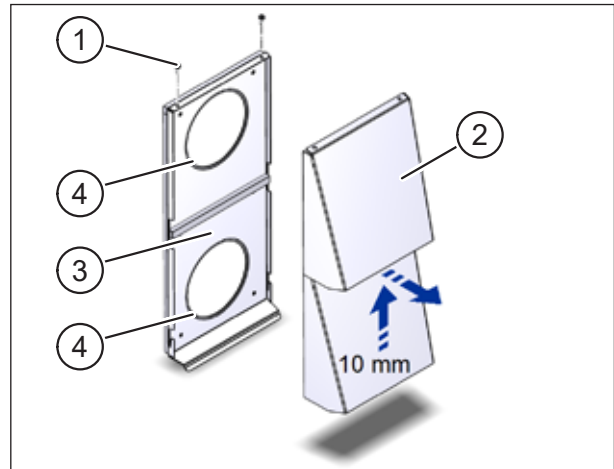


Fig. 17: Removing the cover

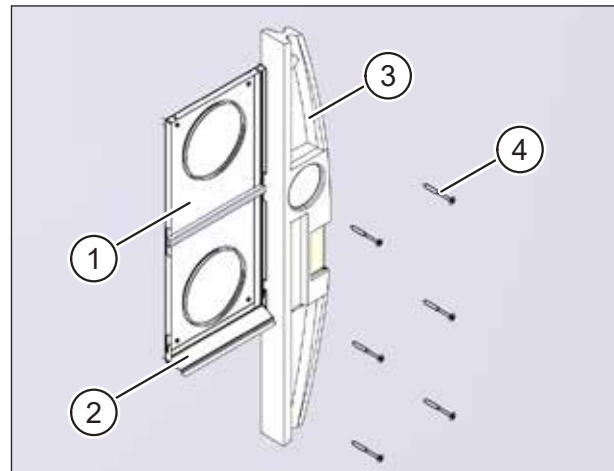


Fig. 18: Fixing the base plate

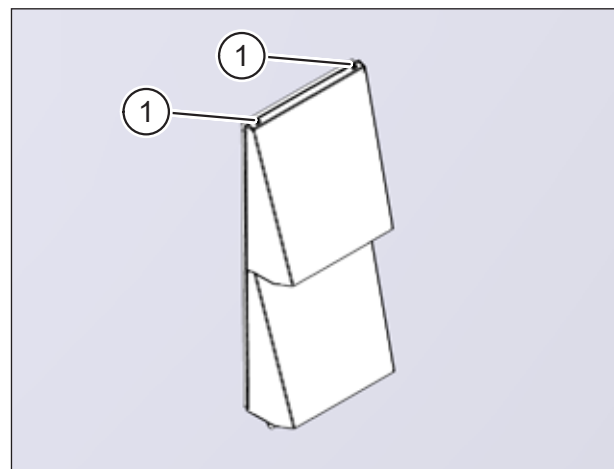


Fig. 19: Outer wall terminal installed

6.3 Installing the outer wall terminal plastic pipe set M-WRG-II KSR...

NOTICE

- This outer wall terminal is intended for both M-WRG-II and M-WRG ventilation units.
- With M-WRG-II ventilation units the outer wall terminals are arranged horizontally (see Fig. 3 on page 4); with M-WRG ventilation units they are vertical.
- Multiple plastic pipe sets may only be installed one above the other if the ventilation units have a condensate connection or if units with enthalpy heat exchangers are used (M-WRG-II series only).

6.3.1 Checking the ventilation pipes

- ▶ Check that the ventilation pipes protrude 20 - 27 mm beyond the external plaster (see item 1 in Fig. 20).
- ▶ Check that the cut surfaces of the ventilation pipes have been deburred (see item 2 in Fig. 20).

NOTICE

The cut surfaces of the ventilation pipes must be deburred. If this is not the case, there is a risk that the seals on the outer wall terminal will be damaged.

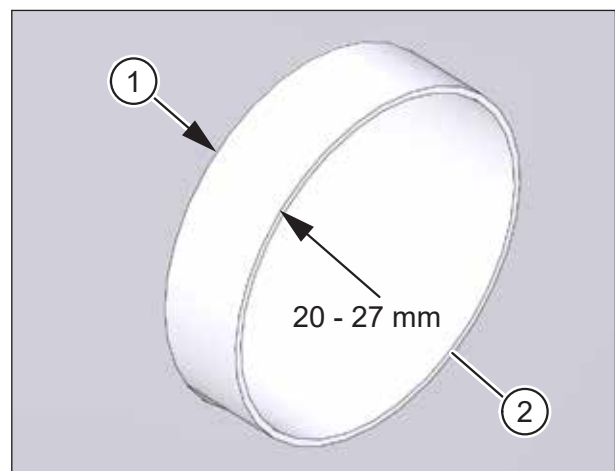


Fig. 20: Checking the ventilation pipes

6.3.2 Applying Vaseline

- ▶ Unscrew the two Torx screws (item 1 in Fig. 21) from the outer wall terminals until you can no longer see the tips of the screws in the holes (item 2 in Fig. 21).

NOTICE

Do not unscrew the screws completely from the holes otherwise there is a risk that you may lose them.

- ▶ Apply the Vaseline provided to the inside of the black sealing ring (item 3 in Fig. 21) on each of the outer wall terminals.

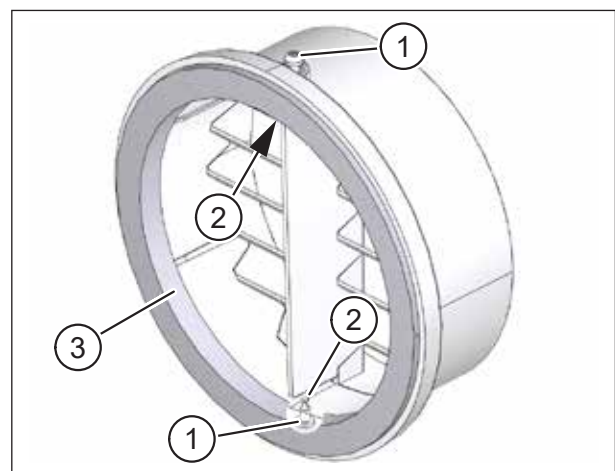


Fig. 21: Applying Vaseline

6.3.3 Attaching the outer wall terminals

- ▶ Carefully push the outer wall terminals (item 1 in Fig. 22) onto the ventilation pipes (item 2 in Fig. 22). Be careful not to damage the seals.
- ▶ Direct the drip edges (item 3 in Fig. 22) downwards.
- ▶ Press each outer wall terminal against the outer wall so that the plastic ring (item 4 in Fig. 22) lies flat against the outer wall. Hold the outer wall terminal in this position.
- ▶ Carefully screw the upper and lower Torx screws (item 5 in Fig. 22) in as far as they will go. They will self-tap into the ventilation pipes, thus fixing the outer wall terminal in position.

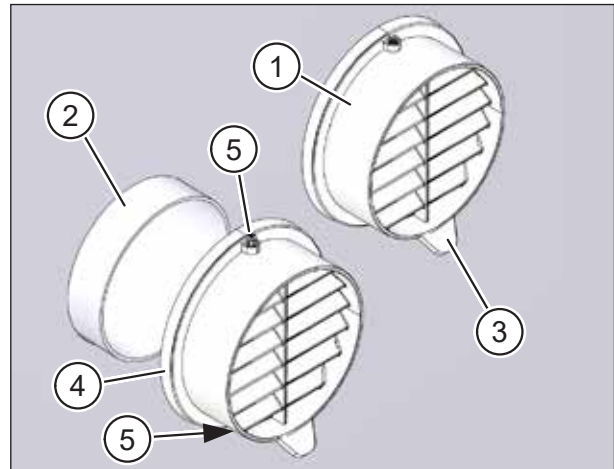


Fig. 22: Attaching the outer wall terminals

NOTICE

If the outer wall terminal does not lie flush against the external wall, seal the gap between the outer wall terminal and the external wall with permanently elastic sealant. There is a risk that the plaster will be damaged if this is not done.

- ▶ Clean the outer wall terminal if necessary (see section 7.3 on page 21).

7 Cleaning and care instructions

7.1 Stainless steel outer wall terminals (M-WRG-II ES, M-WRG-ES)

NOTICE

The thin and transparent passive coating on the surface protects the stainless steel against corrosion. However, dust and other soiling from the atmosphere can still be deposited on the surface, causing flash rusting.

- ▶ Do not remove the protective film from the outer wall terminals until the installation is complete.
- ▶ Remove all adhesive residues that remain on the outer wall terminals when you remove the protective film.
- ▶ Clean the outer wall terminals after installation using a soft, lint-free cloth and stainless steel cleaner.
- ▶ Remove any flash rust that is already present using a soft, lint-free cloth and stainless steel cleaner.

NOTICE

Corrosion caused by flash rust is not covered by the warranty.

- ▶ Immediately remove particles of iron, metal filings, plaster and swarf from the surface of the outer wall terminals.
- ▶ Remove lime and cement spatter as quickly as possible and before it hardens from the surface of the outer wall terminals.
- ▶ Do not use abrasive cleaning utensils (pan scourers, steel wool, etc.) and do not use cleaning agents containing chlorine or hydrochloric acid.

7.2 Powder-coated outer wall terminals (M-WRG-II ES-P..., M-WRG-ES-P...)

- ▶ Clean the outer wall terminals after installation using a soft, lint-free cloth and mild soapy water.
- ▶ Immediately remove particles of iron, metal filings, plaster and swarf from the surface of the outer wall terminals.
- ▶ Remove lime and cement spatter as quickly as possible and before it hardens from the surface of the outer wall terminals.
- ▶ Do not use abrasive cleaning utensils (pan scourers, steel wool, etc.).

7.3 Outer wall terminal plastic pipe set (M-WRG-II KSR...)

- ▶ Clean the outer wall terminals using a soft, lint-free cloth and mild soapy water.

We have checked the content of this publication for conformity with the product described in it. There may nevertheless still be differences, so we cannot guarantee complete accuracy.

The information in this publication is regularly checked and any necessary corrections are made in subsequent editions.

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