

HOME VENTILATION WITH HEAT RECOVERY

Outer wall terminals
M-WRG-ES
M-WRG-ESR
M-WRG-ESG

for fitting on external walls



INSTALLATION MANUAL

Part no. 5300-20-01 Week 01/2017 EN



Contents

1	Introduction	3
1.1	Notes on this installation manual	3
1.2	Description	3
1.2.1	Outer wall terminal stainless steel pod M-WRG-ES	3
1.2.2	Outer wall terminal stainless steel pipe set M-WRG-ESR	4
1.2.3	Outer wall terminal stainless steel, louvred design M-WRG-ESG	4
1.3	Target group	5
1.4	Storage	5
1.5	Environmentally-friendly disposal	5
1.6	Revision index	5
1.7	Explanation of the symbols used	5
2	Safety instructions	6
2.1	Hazard classification	6
2.2	Notes on using the ventilation units safely	6
2.3	Intended use	6
3	Items supplied	8
3.1	Items supplied with the outer wall terminal stainless steel pod M-WRG-ES	8
3.2	Items supplied with the outer wall terminal stainless steel pipe set M-WRG-ESR	9
3.3	Items supplied with the outer wall terminal stainless steel, louvred design M-WRG-ESG	10
4	Tools and equipment required	11
4.1	Outer wall terminal stainless steel pod M-WRG-ES	11
4.2	Outer wall terminal stainless steel pipe set M-WRG-ESR	11
4.3	Outer wall terminal stainless steel, louvred design M-WRG-ESG	11
5	Installing the outer wall terminals	12
5.1	Installing the outer wall terminal stainless steel pod M-WRG-ES	13
5.1.1	Checking the ventilation pipes	13
5.1.2	Drilling the holes for the outer wall terminal	13
5.1.3	Attaching the outer wall terminal	14
5.2	Installing the outer wall terminal stainless steel pipe set M-WRG-ESR	15
5.2.1	Checking the ventilation pipes	15
5.2.2	Applying permanently elastic sealant and Vaseline	15
5.2.3	Attaching the outer wall terminals	16
5.3	Installing the outer wall terminal stainless steel, louvred design, surface-mount M-WRG-ESG	17
5.3.1	Checking the ventilation pipes	17
5.3.2	Drilling the holes for the outer wall terminal	17
5.3.3	Attaching the outer wall terminal	18
6	Cleaning and care instructions	19
6.1	Stainless steel outer wall terminals	19
6.2	Powder-coated outer wall terminals	19

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 terminal to avoid possible risks and mistakes.
- ▶ When installation 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 outer wall terminals M-WRG-ES, M-WRG-ESR and M-WRG-ESG on an external wall.

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

- **M-WRG-ES**,
outer wall terminal stainless steel pod,
part no. 5150
- **M-WRG-ES/SD**,
outer wall terminal stainless steel pod with
increased noise protection,
part no. 5150-1
- **M-WRG-ES-P**,
outer wall terminal stainless steel pod,
white powder-coated,
part no. 5153
- **M-WRG-ES-P/SD**,
outer wall terminal stainless steel pod,
white powder-coated, with increased noise
protection,
part no. 5153-1

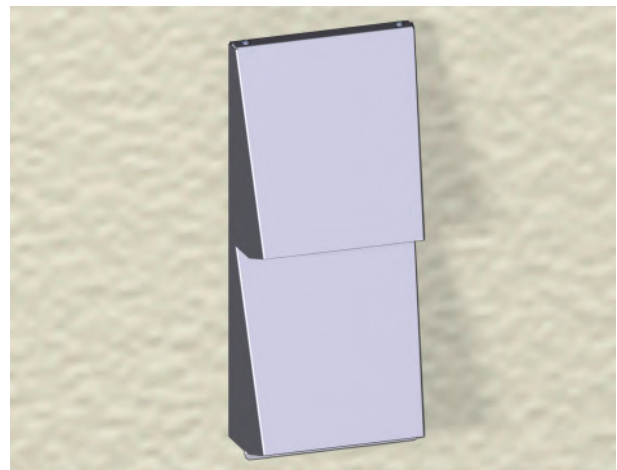


Fig. 1: Outer wall terminal stainless steel pod M-WRG-ES

1.2.2 Outer wall terminal stainless steel pipe set M-WRG-ESR

- **M-WRG-ESR**,
outer wall terminal stainless steel pipe set,
part no. 5152
- **M-WRG-ESR-P**,
outer wall terminal stainless steel pipe set,
white powder-coated,
part no. 5154
- **M-WRG-ESR-RO**,
outer wall terminal stainless steel pipe set
with rosettes,
part no. 5155
- **M-WRG-ESR-RO-P**,
outer wall terminal stainless steel pipe set
with rosettes, white powder-coated,
part no. 5156



Fig. 2: Outer wall terminal stainless steel pipe set M-WRG-ESR

1.2.3 Outer wall terminal stainless steel, louvred design M-WRG-ESG

- **M-WRG-ESG/AP**,
outer wall terminal stainless steel, louvred
design, surface-mount version,
part no. 5163
- **M-WRG-ESG/AP-P**,
outer wall terminal stainless steel, louvred
design, surface-mount version, white powder-coated,
part no. 5164

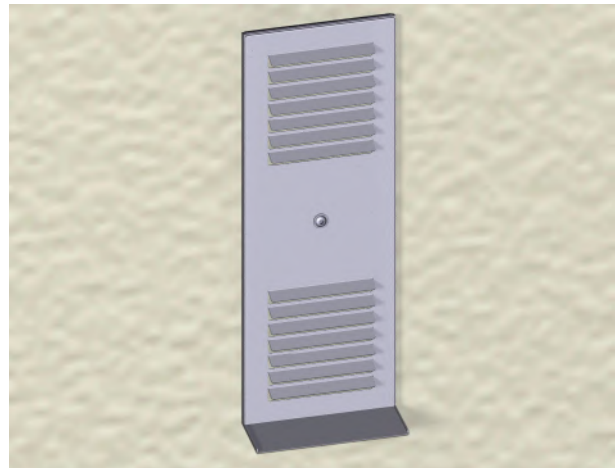


Fig. 3: Outer wall terminal, louvred design M-WRG-ESG

1.3 Target group

The activities described in this manual must only be carried out by technicians 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 terminals in their 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 terminals in accordance with the electronic waste disposal regulations that apply on site.

1.6 Revision index

Edition	Manual	Date
3 rd edition	Installation manual for outer wall terminals M-WRG-ES, M-WRG-ESR, M-WRG-ESG	Week 01/2017 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.

NOTE

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

WARNING

— **Build-up of icicles and ice patches at low temperatures**

The heat recovery process in our ventilation units causes condensation. This condensation is dissipated to the outside via the exhaust air pipe. When external temperatures drop below 0 °C this can cause a build-up of icicles at the outer wall terminals and ice patches on the ground.

- ▶ You should therefore position the outer wall terminals so as to exclude any possibility of accidents.

— **Do not run without the outer wall terminal.**

- ▶ Please note that the ventilation unit must not be used without the outer wall terminal for safety reasons.

2.3 Intended use

- The outer wall terminals should only be used together with ventilation units from the Meltem M-WRG series.
- The outer wall terminals are attached to the exhaust air pipe and outdoor air pipe on the external wall.
- The intended use includes compliance with all the notes in the installation manual.
- Modifications to the outer wall terminal are regarded as contrary to the intended use.

- 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 components will work perfectly and correctly.



3 Items supplied

3.1 Items supplied with the outer wall terminal stainless steel pod M-WRG-ES

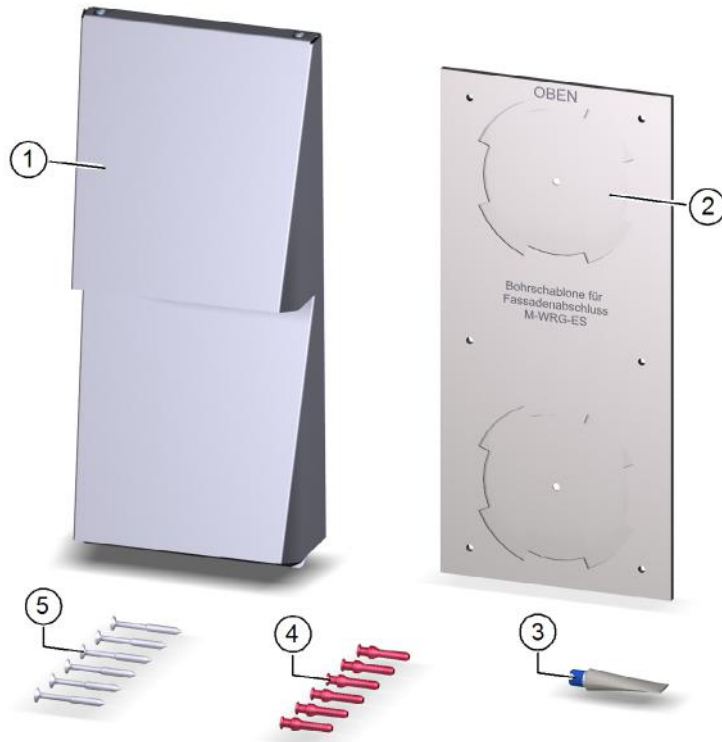


Fig. 4: Items supplied with the outer wall terminal stainless steel pod

Item	Description	Quantity
1	Selected outer wall terminal stainless steel pod (section 1.2.1, page 3)	1x
2	Drilling template	1x
3	Vaseline, tube	1x
4	Dowel 6 x 30 mm for fitting to brick wall	6x
5	Screws 4.0 x 40 mm, stainless steel	6x
-	Installation manual	1x

NOTE

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 terminals are fitted correctly.

NOTE

Würth insulation anchors with setting tool, part no. 090350050, for example, are suitable for fixing the outer wall terminals to rigid foam boards.

3.2 Items supplied with the outer wall terminal stainless steel pipe set M-WRG-ESR

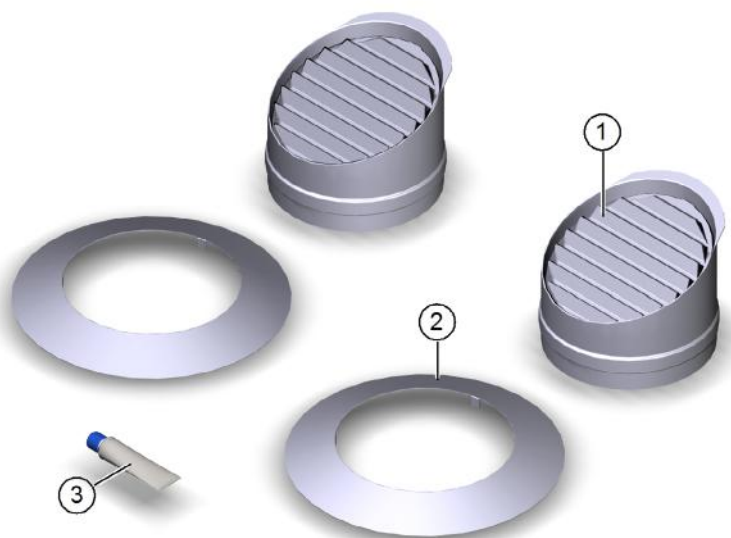


Fig. 5: Items supplied with the outer wall terminal stainless steel pipe set

Item	Description	Quantity
1	Selected outer wall terminal stainless steel pipe set (section 1.2.2, page 4)	2x
2	Rosette (M-WRG-ESR-RO or M-WRG-ESR-RO-P only)	2x
3	Vaseline, tube	1x
-	Installation manual	1x

3.3 Items supplied with the outer wall terminal stainless steel, louvred design M-WRG-ESG

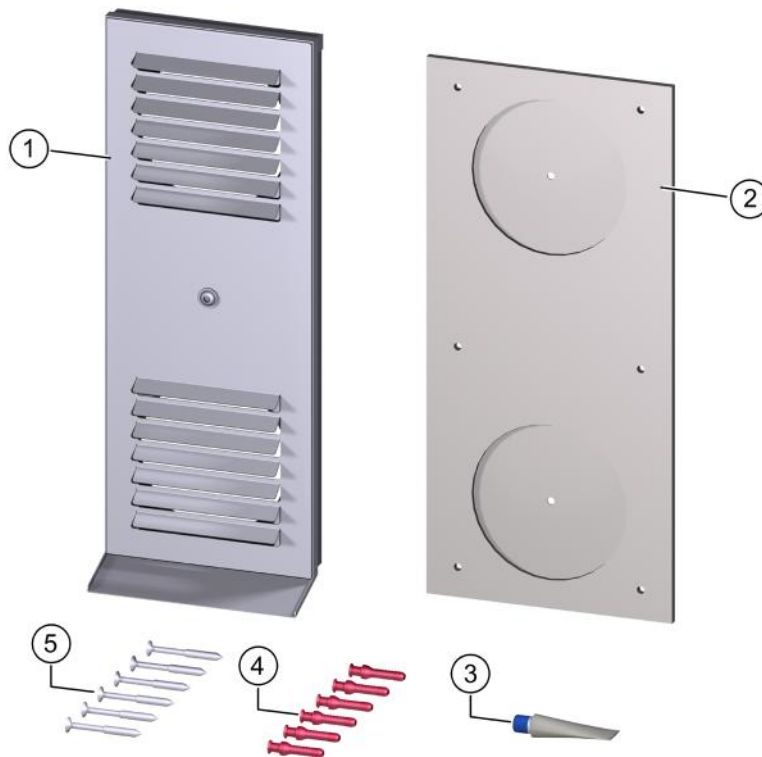


Fig. 6: Items supplied with the outer wall terminal stainless steel, louvred design

Item	Description	Quantity
1	Outer wall terminal stainless steel, louvred design, surface-mount (M-WRG-ESG/AP or M-WRG-ESG/AP-P, see section 1.2.3, page 4)	1x
2	Drilling template	1x
3	Vaseline, tube	1x
4	Dowel 6 x 30 mm for fitting to brick wall	6x
5	Screws 4.0 x 40 mm, stainless steel	6x
-	Installation manual	1x

NOTE

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 terminals are fitted correctly.

NOTE

Würth insulation anchors with setting tool, part no. 090350050, for example, are suitable for fixing the outer wall terminals to rigid foam boards.

4 Tools and equipment required

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

- Cross-head screwdriver
- Hammer drill with 6 mm masonry bit for fitting the outer wall terminal in brick walls. Make sure you use suitable tools for other wall structures.
- Spirit level
- Torx screwdriver TX20

4.2 Outer wall terminal stainless steel pipe set M-WRG-ESR

- Permanently elastic sealant, solvent-free if applied to polystyrene

4.3 Outer wall terminal stainless steel, louvred design M-WRG-ESG

- Allen key, size 4
- Cross-head screwdriver
- Hammer drill with 6 mm masonry bit for fitting the outer wall terminal in brick walls. Make sure you use suitable tools for other wall structures.
- Spirit level
- Torx screwdriver TX20

5 Installing the outer wall terminals

NOTE

- The unit must be installed 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.

NOTE

- We recommend that you wear gloves when installing the stainless steel outer wall terminals. In this way you will avoid transferring grease from your skin to the outer wall terminals. Dust and other soiling can then collect on the grease deposits, which will encourage flash rusting (see also section „6 Cleaning and care instructions“ on page 19).
- Do not remove the protective film from the outer wall terminals until the installation is complete.

NOTE

The following requirements must be fulfilled before the outer wall terminals are 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 wall box so that they end flush on the inside.
- 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.

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

5.1.1 Checking the ventilation pipes

- ▶ Check that the ventilation pipes protrude 5 - 10 mm beyond the external plaster (see item 1 in Fig. 7).
- ▶ Check that the cut surfaces of the ventilation pipes have been deburred (see item 2 in Fig. 7).

NOTE

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.

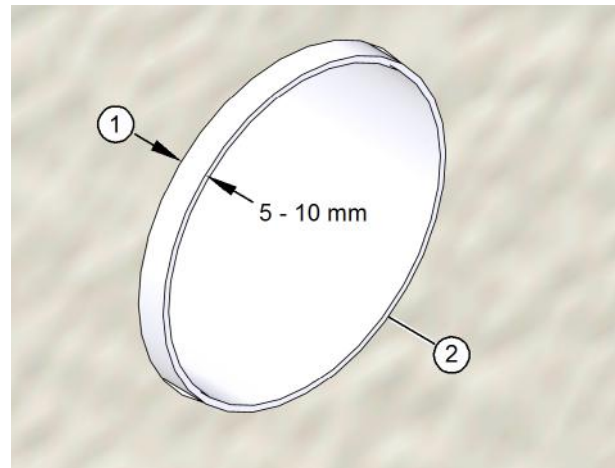


Fig. 7: Checking the ventilation pipes

5.1.2 Drilling the holes for the outer wall terminal

- ▶ Press the pre-punched cut-outs (item 1 in Fig. 8) for the ventilation pipes out of the drilling template (item 2 in Fig. 8).
- ▶ Position the drilling template (item 2 in Fig. 8) correctly on the ventilation pipes and flush with the facade.

NOTE

Note the "OBEN (TOP)" (item 3 in Fig. 8) printed on the drilling template.

NOTE

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.
- ▶ 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. 8).
- ▶ Remove the drilling template.
- ▶ Insert the six dowels provided into the holes.

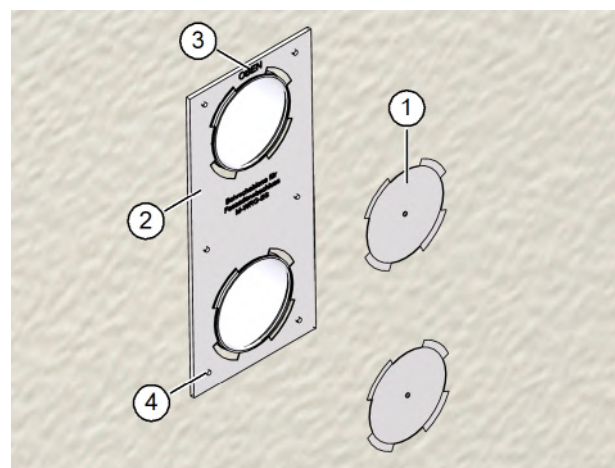


Fig. 8: Drilling the holes

5.1.3 Attaching the outer wall terminal

- ▶ Remove the two cross-head screws (item 1 in Fig. 9) at the top of the outer wall terminal.
- ▶ Slide the cover (item 2 in Fig. 9) up roughly 10 mm. Lift the cover away from the base plate (item 3 in Fig. 9).
- ▶ Fully coat the 4 mm wide sealing surfaces (item 4 in Fig. 9) on the inside with Vaseline.

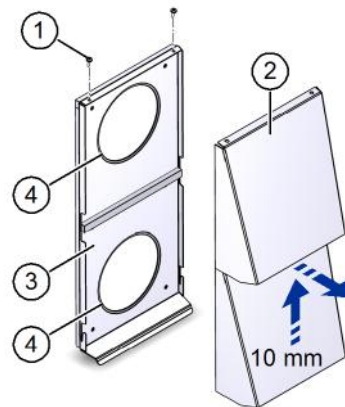


Fig. 9: Removing the cover

- ▶ Carefully position the base plate (item 1 in Fig. 10) correctly on the ventilation pipes. Be careful not to damage the seals.

NOTE

Make sure that the drip edge (item 2 in Fig. 10) is pointing downwards.

- ▶ Use a spirit level to align the base plate vertically (see item 3 in Fig. 10).
- ▶ Use the six screws provided to fix the base plate (item 4 in Fig. 10).
- ▶ Attach the cover to the base plate.
- ▶ Use the two cross-head screws to fix the cover (item 1 in Fig. 11).
- ▶ Remove the protective films from the cover.
- ▶ Clean the outer wall terminal (see section 6 on page 19).

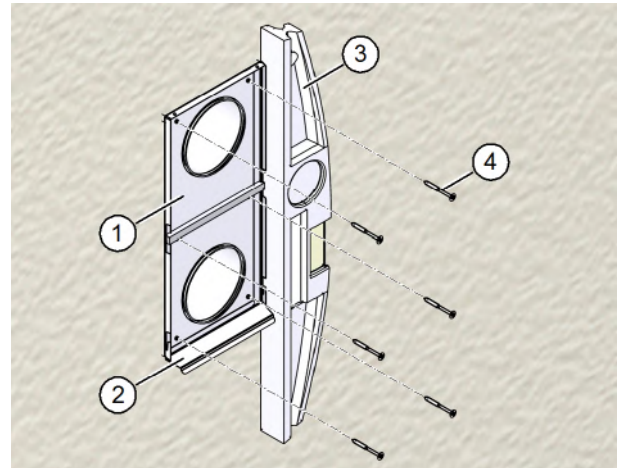


Fig. 10: Fixing the base plate

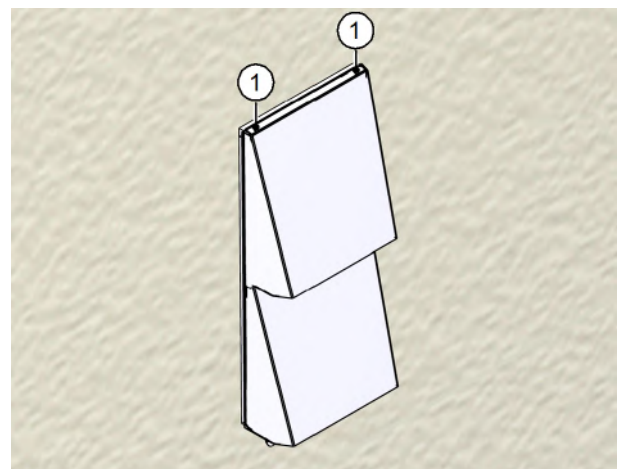


Fig. 11: Outer wall terminal installed

5.2 Installing the outer wall terminal stainless steel pipe set M-WRG-ESR

NOTE

Wall terminal sets must not be installed on top of one another.

5.2.1 Checking the ventilation pipes

- ▶ Check that the ventilation pipes protrude 25 - 30 mm beyond the external plaster (see item 1 in Fig. 12).
- ▶ Check that the cut surfaces of the ventilation pipes have been deburred (see item 2 in Fig. 12).

NOTE

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

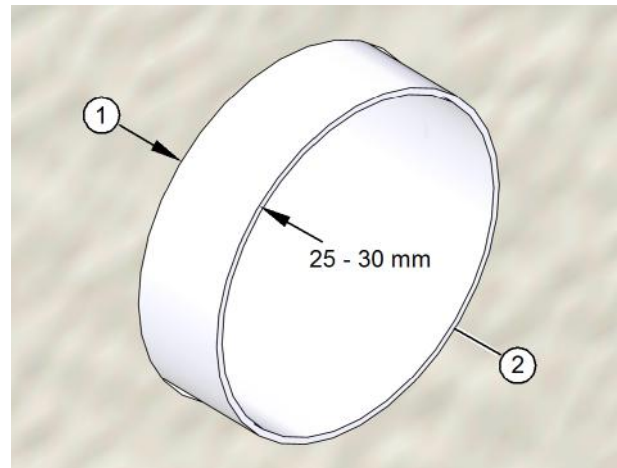


Fig. 12: Checking the ventilation pipes

5.2.2 Applying permanently elastic sealant and Vaseline

- ▶ Apply a thin coating of permanently elastic sealant all around the outside of the ends of the ventilation pipes (item 1 in Fig. 13). This will fix the outer wall terminal in place in the correct position when it is placed on the ventilation pipe.

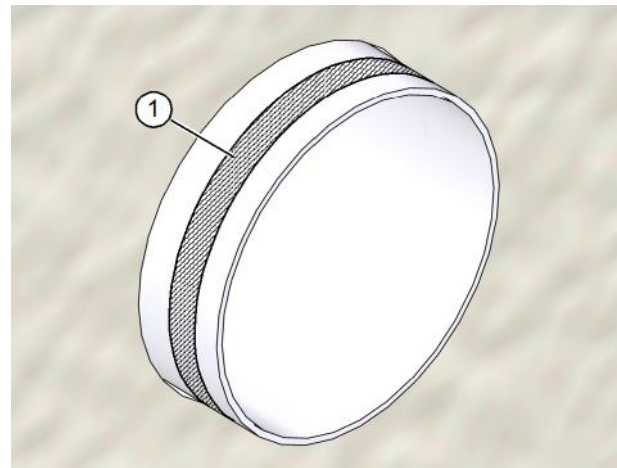


Fig. 13: Applying permanently elastic sealant

- ▶ Apply the Vaseline provided to the black sealing tape on the insides of the two outer wall terminals (see item 1 in Fig. 14).

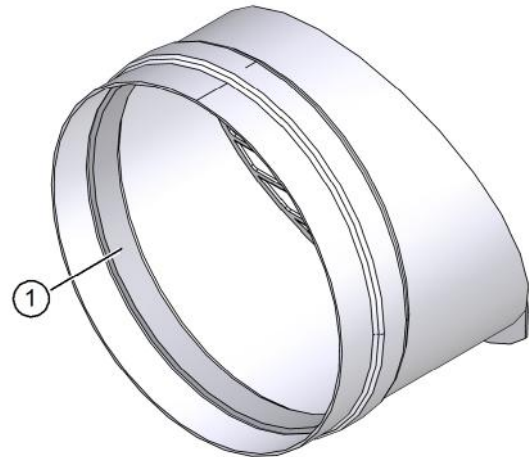


Fig. 14: Applying Vaseline to black sealing tape

5.2.3 Attaching the outer wall terminals

NOTE

M-WRG-ESR-RO(-P) only:

- ▶ Push the rosettes (item 1 in Fig. 15) onto the back of the two outer wall terminals (item 2 in Fig. 15).
- ▶ Place the outer wall terminals on the ventilation pipes.
- ▶ Direct the drip edges (item 3 in Fig. 15) downwards.

NOTE

- ▶ If the stainless steel pipe does not lie flush against the external wall, seal the gap between the stainless steel pipe and the external wall with a bead of permanently elastic sealant. There is a risk that the plaster will be damaged if this is not done.
- ▶ Press the rosettes onto the plastered wall, if necessary.
- ▶ Clean the outer wall terminal (see section 6 on page 19).

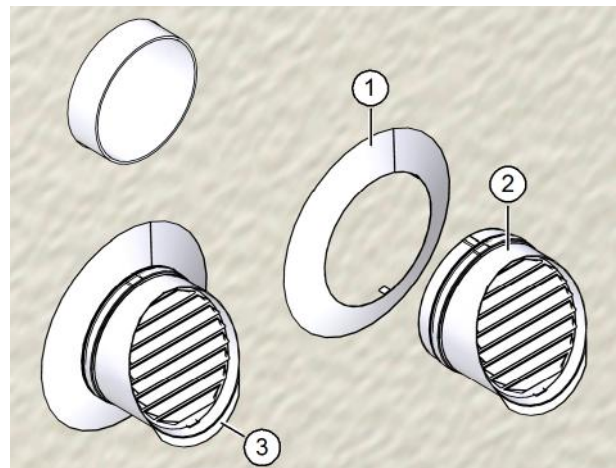


Fig. 15: Attaching the outer wall terminals

5.3 Installing the outer wall terminal stainless steel, louvred design, surface-mount M-WRG-ESG

5.3.1 Checking the ventilation pipes

- ▶ Check that the ventilation pipes protrude 5 - 10 mm beyond the external plaster (see item 1 in Fig. 16).
- ▶ Check that the cut surfaces of the ventilation pipes have been deburred (see item 2 in Fig. 16).

NOTE

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.

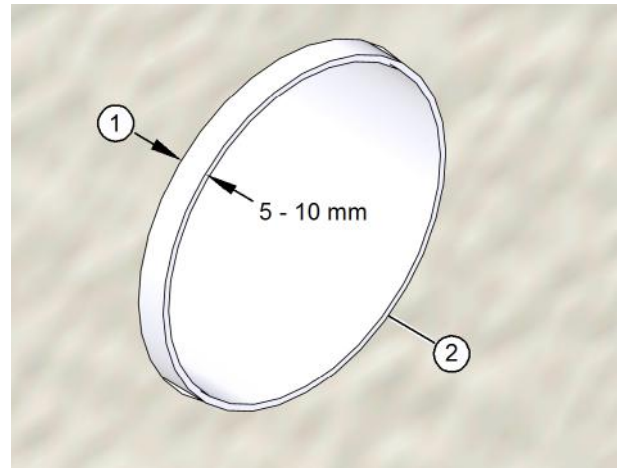


Fig. 16: Checking the ventilation pipes

5.3.2 Drilling the holes for the outer wall terminal

- ▶ Press the pre-punched cut-outs (item 1 in Fig. 17) for the ventilation pipes out of the drilling template (item 2 in Fig. 17).
- ▶ Position the drilling template (item 2 in Fig. 17) correctly on the ventilation pipes and flush with the facade.

NOTE

The fixing materials supplied are intended for fixing the outer wall terminal to brick walls.

- ▶ Note the information on page 10 concerning other facade structures.
- ▶ 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 3 in Fig. 17).
- ▶ Remove the drilling template.
- ▶ Insert the six dowels provided into the holes.

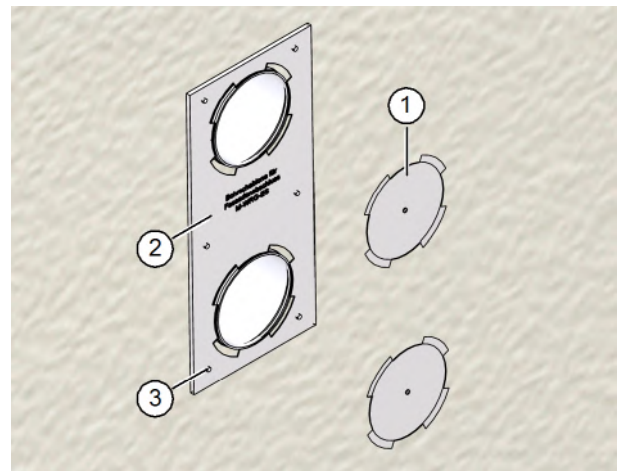


Fig. 17: Drilling the holes

5.3.3 Attaching the outer wall terminal

- ▶ Use a size 4 Allen key to remove the hexagon socket screw (item 1 in Fig. 18) on the cover (item 2 in Fig. 18) and lift the cover away from the base plate (item 3 in Fig. 18).
- ▶ Fully coat the 4 mm wide sealing surfaces (item 4 in Fig. 18) on the inside with Vaseline.

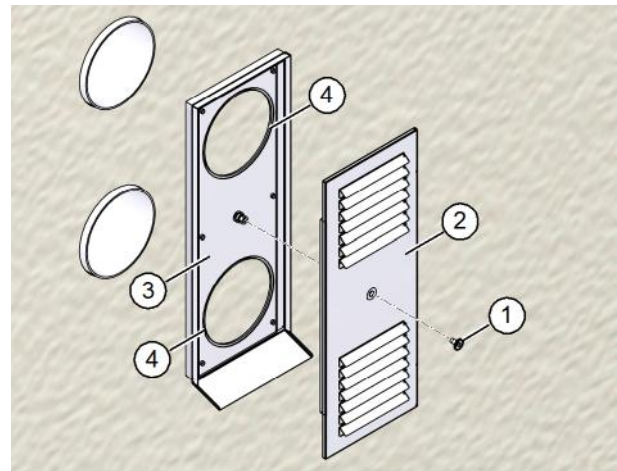


Fig. 18: Removing the cover

- ▶ Carefully position the base plate (item 1 in Fig. 19) correctly on the ventilation pipes. Be careful not to damage the seals.

NOTE

Make sure that the drip edge (item 2 in Fig. 19) is pointing downwards.

- ▶ Use a spirit level to align the base plate vertically (item 3 in Fig. 19).
- ▶ Use the six screws provided to fix the base plate (item 4 in Fig. 19).

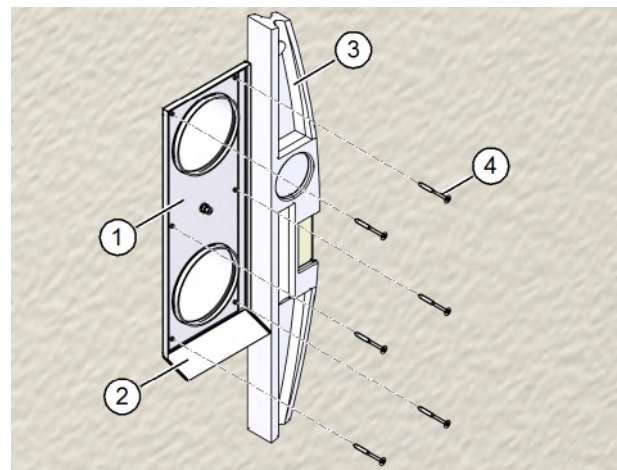


Fig. 19: Fixing the base plate

- ▶ Correctly position the cover (item 1 in Fig. 20) on the base plate.

NOTE

Make sure that the louvres of the cover are pointing downwards to prevent the ingress of water in driving rain.

- ▶ Use the hexagon socket screw to fix the cover (item 2 in Fig. 20).
- ▶ Clean the outer wall terminal (see section 6 on page 19).

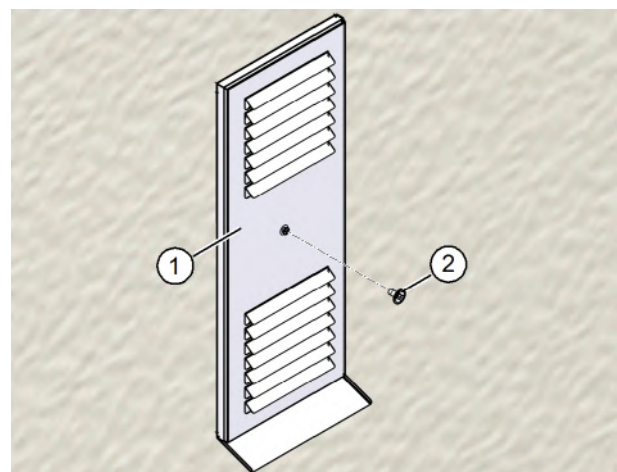


Fig. 20: Fixing the cover

6 Cleaning and care instructions

6.1 Stainless steel outer wall terminals

NOTE

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.
- ▶ 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.
- ▶ 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 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.

NOTE

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

6.2 Powder-coated outer wall terminals

- ▶ 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 before it hardens from the surface of the outer wall terminals.
- ▶ Do not use abrasive cleaning utensils (pan scourers, steel wool, etc.).



We have checked the content of this publication for conformity with the unit 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 the subsequent editions.

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We reserve the right to make changes.

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