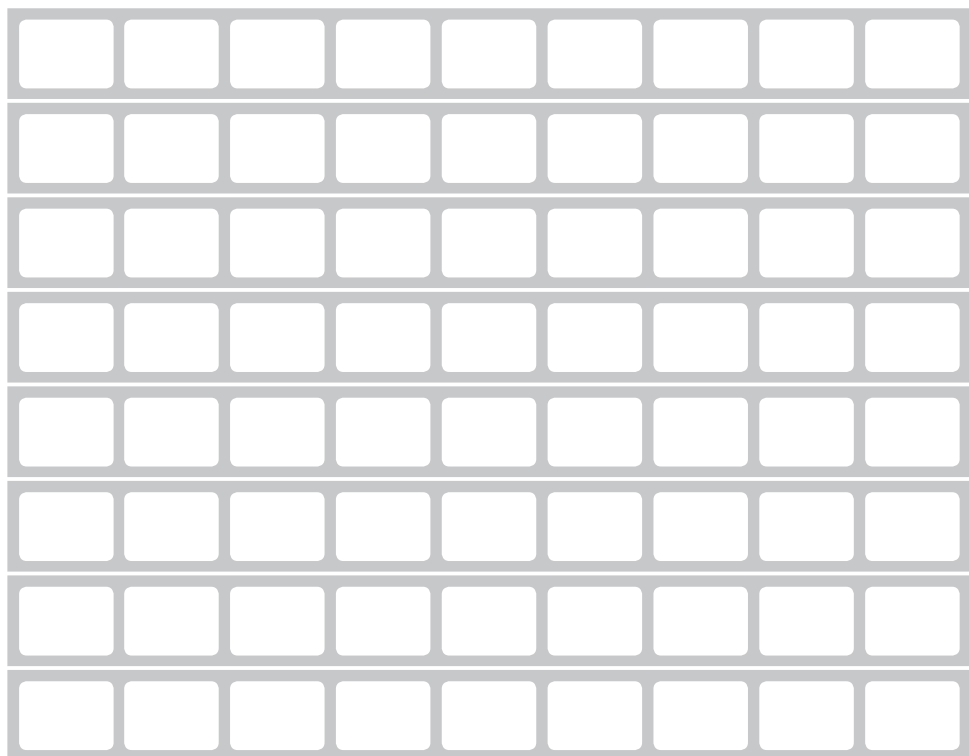


DK

INSTALLATION INSTRUCTIONS

ROLLER GRILLES/ROLLER SHUTTERS



INDEXLIST

4	Installation control
4	Determination of the installation type
6	Installing cylinder tube
6	Installing grille mats
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10	Installing emergency operation
10	Installing standard pelmets
10	Electrical connection
12	Attaching Alux security grilles

INSTALLATION CONTROL: Check the grille for transportation damage upon receiving it. Check that the delivery is complete in relation to the parts list.

Check the grille height and width with the order/order confirmation/packing slip before starting installation. Check that the grille parts are present in relation to the packing slip/parts list. Also, always check the assembly site in terms of the grille measurements in the order/order confirmation/packing slip.

DETERMINATION OF THE INSTALLATION TYPE:

Remember that all guide rails must be installed vertically so that the measurement on the outer side of the guide rails is the same along the entire height of the grille. Also check that there are no height differences on the floor. Both guide rails must be installed so that the lower edge and upper edge are levelled. One option is to chock the guide rail.

Niche installation:

Pre-drilled rails in the chamber as in figure 1. (A 15 mm hole on the outside of the chamber and on the inside of the chamber against the wall 8 mm). c/c between the holes must at a maximum be 300 mm from the bottom most hole and 125 mm from the bottom edge.

Install the accompanying U-bottom block in the floor where the guide rail should be.

Set the guide rail in place and secure it to the wall. Figure 2.

Surface-mounted installation:

Pre-drilled rails as in figure 4 (A 15 mm hole on the outside of the chamber and on the inside of the chamber against the wall 8 mm). c/c between the holes must at a maximum be 300 mm from the bottom most hole and 125 mm from the bottom edge. The guide rail is also attached at the top. Figure 3.

Ceiling/floor installation:

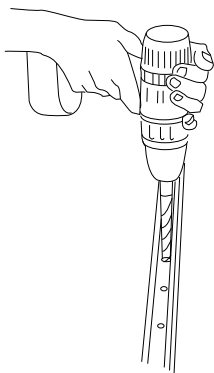
Install the accompanying U-bottom block in the floor where the guide rail should be. Place the U-bottom block in the guide rail, run the guide rail up and attach the upper U-bottom block to the ceiling.

Lastly, "lock" the guide rail to the U-bottom block with a self-drilling screw. Figure 5.

Fastening:

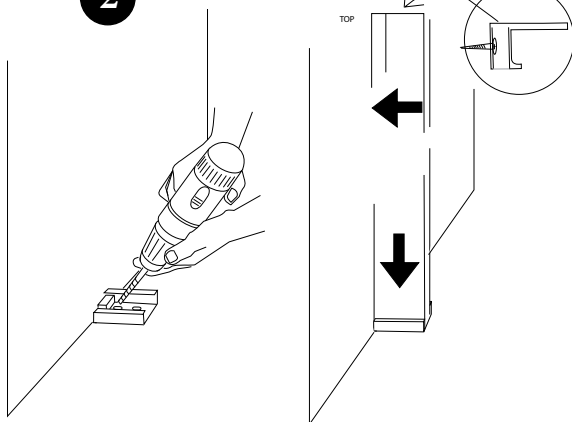
The guide rails are fastened with screws suitable for the wall material. The dimensions are in accordance with current regulations. (See the table on pages 12 and 13).

1



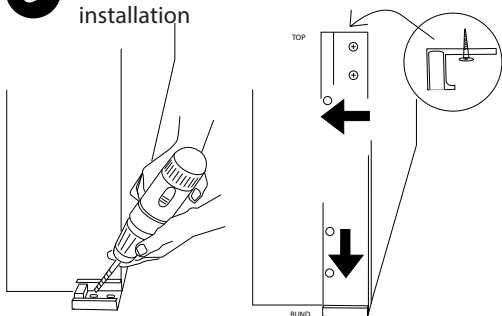
2

Niche installation

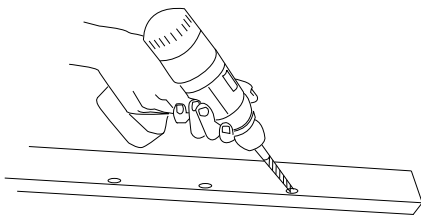


3

Surface-mounted installation

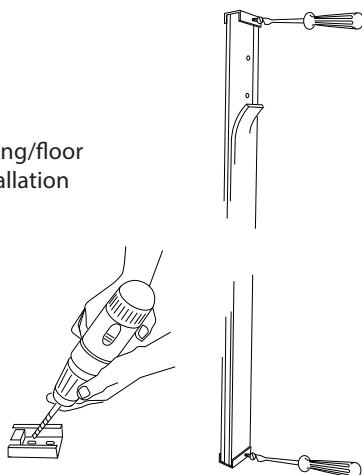


4



5

Ceiling/floor installation



INSTALLING THE CYLINDER TUBE:

Determine the motor side. Lift the cylinder tube up and screw it into the consoles. Where the consoles have several vertical hole pairs, the hole nearest to the guide rail for grille up should be used for a total height of approximately 2,500 mm. For grilles with a height of between approximately 2,501 mm and approximately 4,000 mm, hole pair no. 2 is used. For grilles with a total height of over 4,001 mm, hole pair no. 3 is used.

Note: This does not apply to Safe 4000 type 75 (PD75) and Safe 5000 (Poly-lux) grilles/shutters.

Check that the cylinder tube is levelled. Tighten the two small 4 mm Umbraco locking screws in the end bearing.

Connect the motor to the test cable and test whether the motor can run in both directions. Run the motor to end stop in the up or down position, depending on which method is used to mount the grille mat.

INFORMATION:

At the factory, the motor is set to eight revolutions – four revolutions in each direction. For each revolution of the cylinder tube via the motor, the grille is lifted or lowered approximately 400 mm.

INSTALLING GRILLE MATS:

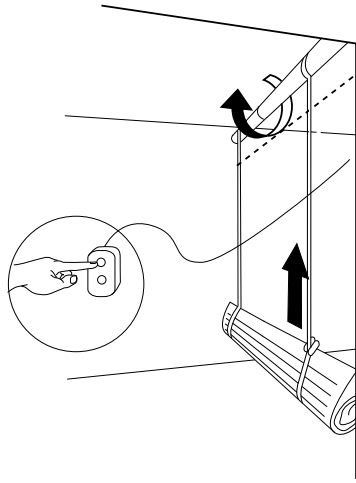
Screw the fastening screws for the grille mat off the cylinder tube. Note that if two screws are shorter than the others, only use these in the motor holes. If other screws are used, the motor may suffer damage.

Alternative 1:

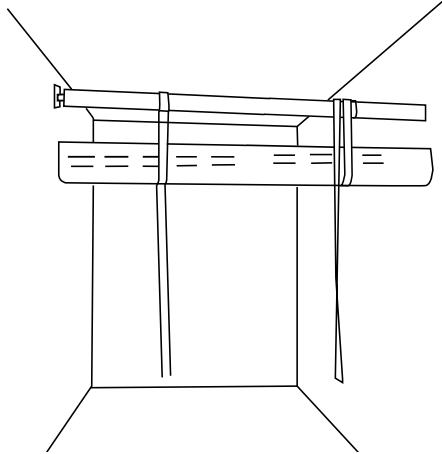
Roll the grille mat together so that the mounting bracket is on the outside. Attach two flat (standard) load straps in the mat and around the cylinder tube. (This is so the mat is balanced when lifted). The motor can now be used to hoist the grille mat up approximately 30 cm below the cylinder tube. See figure 6.

Insert the grille mat into the two flat load straps. (On each end). These also enclose the cylinder tube. See figure 7. Run the motor with cylinder tube up using the test cable. The grille mat will slowly roll itself out and up onto the cylinder tube. See figure 8. While rolling up, it may be necessary to keep the mat a little bit out so that it is free of the flap on the guide rails. After attaching the grille mat, roll it completely out on the cylinder tube upwards while continuing to run the motor. When the grille mat is rolled, put the bottom rail/end profile in place in the guide rails and run the motor down so that the mat glides into place in the guide rails, the grille mat is centered sideways, and the mat is screwed into the cylinder tube with screws through the mounting brackets on the grille mat. See figure 9. Insert locking screws and locking lever to the mounting brackets and screw them in so that the mat does not move sideways. Optionally, the mat can be locked using small self-drilling screws screwed into the mounting brackets.

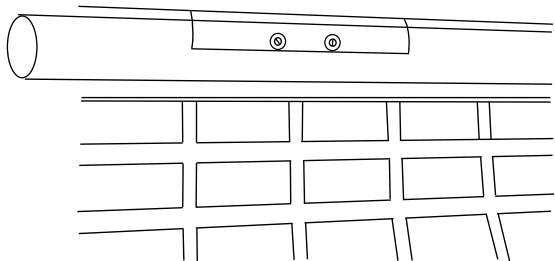
6



7



8



Alternative 2:

Lift the grille mat that lies outermost in a roll with the bottom rail/end profile (may be rolled up) and lift the bottom rail over the cylinder tube and down into the guide rails. Pull the grille mat slowly down into the guide rails.

Centre the grille mat sideways, and screw the mat into the cylinder tube with screws between the mounting brackets on the grille mat. See figure 9.

Insert locking screws and locking lever to the mounting brackets and screw them in so that the mat does not move sideways. Optionally, the mat can be locked using small self-drilling screws screwed into the mounting brackets.

ADJUSTING THE MOTOR'S END STOP:

Adjust the upper end stop so that the grille in upper position stops with the bottom rail hanging out over the flap. (See section *Adjusting the motor's end stop* a little further down)

Adjust the lower end of the motor so that the motor clamps the grille against the pad and the mounting brackets between the grille mat and the cylinder tube stops in a position between 9.00 and 12.00 o'clock. See figure 9.

The grille is self-locking. Therefore, check at the end that the grille can not be lifted up. See figure 10.

If the grille has not locked itself, the motor's bottom most end stop must be adjusted slightly up or down.

If it is not possible to lock the grille mat, the top most whole slats in the grille mat can be screwed to the cylinder tube with Supertex self-drilling screws.

Note:

Make sure that the screws are sufficiently short that they do not go into the motor in the cylinder pipe. Drilling screws into the motor will destroy it.

Adjusting the motor's end stop:

To adjust the motor + one turn, the end stop's adjuster wheel/screw must be rotated eight times.

If the motor is used during emergency operation, manual emergency operation may not be used before both end stops are set.

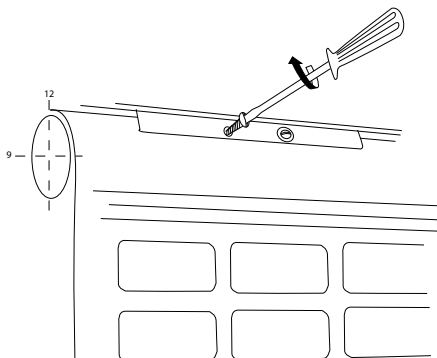
Motor type 11 without emergency operation + motor type 15:

The end stop is adjusted by turning the two small wheels on the motor. See figure 11. Two arrows towards plus and minus indicate which direction the wheels can adjust the end stop to.

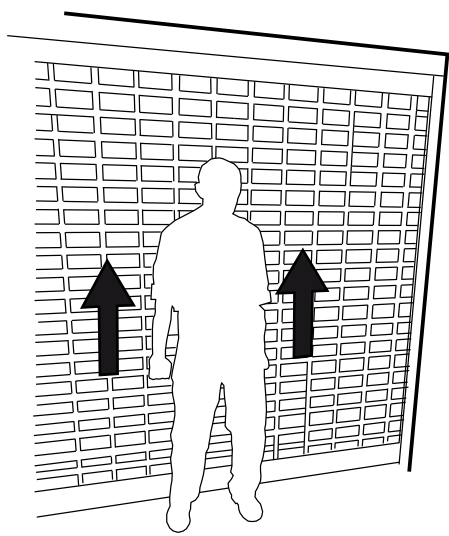
By rotating the wheels more than in plus, the grilles go further down in this direction.

By rotating the wheels more than in minus, the grilles go shorter in this direction.

9



10



Motor type 11 with emergency operation:

The end stop is adjusted by turning the two small 4 mm Umbraco screws on the motor. See figure 12. Two arrows towards plus and minus indicate which direction the wheels can adjust the end stop to.

By rotating the wheels more than in plus, the grilles go further down in this direction.

By rotating the wheels more than in minus, the grilles go shorter in this direction.

INSTALLING EMERGENCY OPERATION:

Type 11 motor: Insert the hexagonal shaft with eye through the "hole" in the motor head and lock it with the locking ring on both sides.

Type 15 motor: No special installation required. Pay close attention to the rotary handle.

Note: The rotary handle can only be installed on locked shutters and screens. Remember to store the rotary handle.

INSTALLING STANDARD PELMETS:

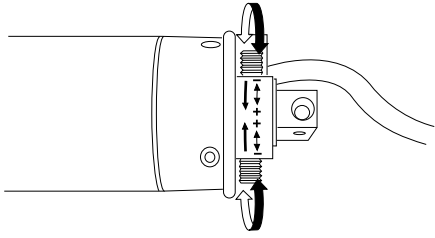
Surface-mounted installation: Lift the pelmet up and screw the end caps into the rear edge of the guide rails. Screw the cover into the wall in the top edge.

Niche installation: Set the pelmet onto the end caps of the guide rails.

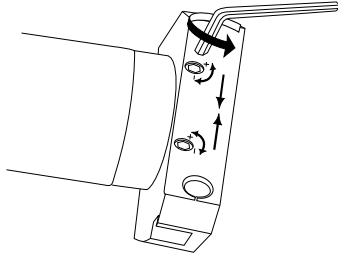
ELECTRICAL CONNECTION:

An authorized electrician must perform electrical connection in accordance with the enclosed connection diagrams and applicable laws and regulations. Failure to observe this will void our warranty.

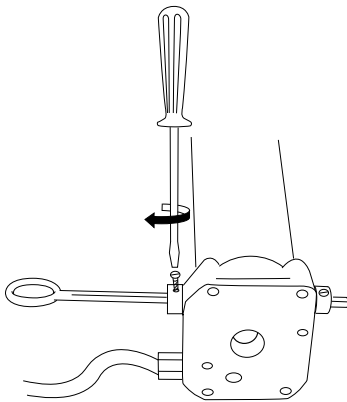
11



12



13



Attaching Alux security grilles

PAD	Concrete	Brick (solid)	Brick (hollow)
Fastener	Construction screw	Construction screw	Construction screw
	6 x 60 mm m/dowell ¹ 8 x 40 mm	6 x 60 mm m/dowell ¹ 8 x 40 mm	6 x 75 mm m/dowell ² 8 x 65 mm
Pull value Pull/transverse Security factor \geq 3	160/120 kg per piece	130/120 kg per piece	80/65 kg per piece
	c/c 300 mm	c/c 300 mm	c/c 300 mm

¹Dowel: Expandet – Super or better.

²Dowel: Expandet – Super with double expansion or better.

³Turbo anchor: UPAT Turbo Anchor K/M or better.

If installing in P2 (light) gas concrete, glue/bolts must be used.

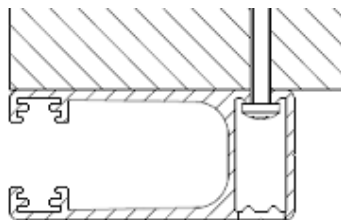
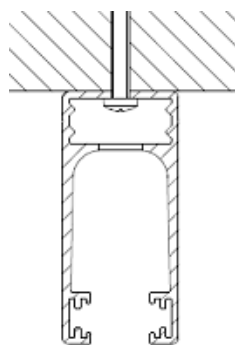
With rolling grilles/rolling shutters, U-bottom brackets/angles can be used at the top and/or at the bottom for supplemental attachment. This will substantially strengthen the installation. When installing in plaster, the rolling grilles/rolling shutters must also be attached to the building part at the top and bottom.

Note: The fastening pad must be of such structure and nature that it corresponds to the pull value as prescribed in the fastening materials and in their installation.

PAD	Concrete	Brick (solid)	Brick (hollow)
Fastener	Glue – Universal UPM-448 mm/ threaded rod (8.8)	Glue – Universal UPM-448 mm/ threaded rod (8.8)	Glue – Universal UPM-448 mm/ threaded rod (8.8)
Pull value Pull/transverse Security factor \geq 3	520/470 kg per piece	350/250 kg per piece	200/200 kg per piece

Attaching Alux security grilles

Gas concrete P4/Leca	Plaster	Wood/pine/spruce	Steel/aluminium
Construction screw	2 layers of plaster	Span screw	SuperTex
6 x 60-75 mm m/turbo 6 anchor ³ 10 x 50 mm	Expandet Plaster – rosette Røde	6 x 60 mm Pre-drilled	6,3 x 22-38 mm M6 thread
50/50 kg per piece	70/85 kg per piece	115/120 kg per piece	430/250 kg per piece
c/c 300 mm	c/c 300 mm	c/c 300 mm	c/c 300 mm



Gas concrete (625 kg/m ³)	Leca	Concrete
Glue – Universal UPM-448 mm/ threaded rod (8.8)	Glue – Universal UPM-448 mm/ threaded rod (8.8)	Concrete anchor Expandet 12 x 115
⁴ 200/100 kg pr. stk.	170/90 kg pr. stk.	1.070/2.640 kg pr. stk.

⁴) strength difference between glueing in common P4 and P2 gas concrete compared to using turbo anchors is generally negligible.

MANUFACTURER

THIS MACHINE BELONGS TO

Stamp:

YEAR OF MANUFACTURE

A CE mark is affixed to the product



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Sun & Safe Systems

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