MOTE HOME

Louvre roofs, designed and installed

Installation guide

MH228 retractable louvre roof



MH-IG-01 Rev A 13/11/2026

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Before you start

This guide sets out how a MOTE Home crew installs the MH228 retractable louvre roof. Follow the steps in order. It is based on the manufacturer's installation instructions (2024) and adds our own fixing, sealing and commissioning requirements.

Read it with

Project documents	Consented drawings, the engineer's design and any producer statements for this job. These take priority over this guide.
MOTE typical details	MH-TD-01 general arrangement, MH-TD-03 to MH-TD-08 fixing and drainage details, MH-TD-09 fixing schedule, MH-TD-10 profile schedule.
Motor instructions	The motor supplier's wiring and limit-setting instructions supplied in the box.

Safety

- Wear a hard hat, gloves and safety glasses. Use ladders and platforms that suit work at height, and follow WorkSafe guidance.
- Lift beams and frames with at least two people. Do not work in strong wind or rain.
- Electrical connection to the mains is done by a registered electrician only.
- An incorrectly installed roof can fall and cause serious injury. Do not skip steps or leave out fixings.

Check the delivery

- Unpack and check the type and quantity of every component against the packing list.
- Inspect each part for damage before you start. Photograph any damage and report it to the office the same day.
- Do not install a damaged part. A damaged part can fail and fall.

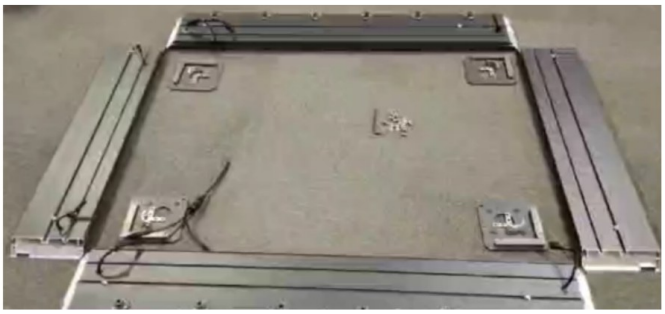
Tools

From the manufacturer	Also needed on MOTE jobs
Gloves, hard hat	Laser level and string line
Hammer, tape measure	Impact driver and SDS drill with masonry bits
Level and spirit level	Chemical anchor gun, brush and blow-out pump
Drill, ladder	Neutral-cure silicone and sealant gun, packers, touch-up paint

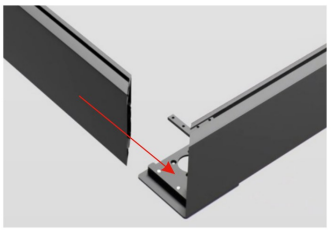
Crew of two to three. Typical install time for a 6 × 6 m two-module roof is one to two days once footings are in.

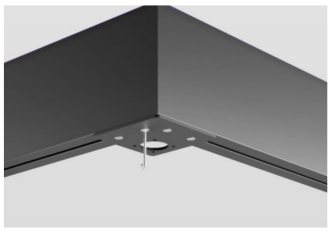
Stage 1 Assemble the side beams

1 Lay out the side beams, louvre blades and brackets. Check every part against the packing list.



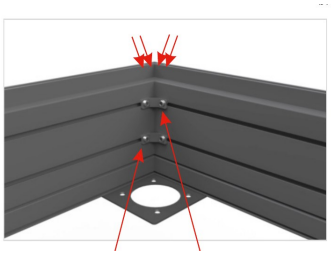
2 Fit the L-shaped bracket. Push the left and right side beams together so there is no gap between them, then lock the screws. Slide the beams into the bottom plate.

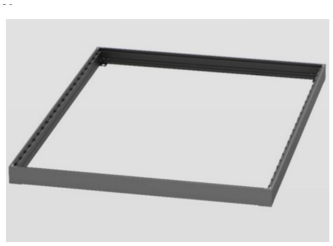




3 Fit the bow-shaped corner bracket at each corner. When all four corners are done the side beam frame is complete.

Check the frame is square: the two diagonals must match within 5 mm.

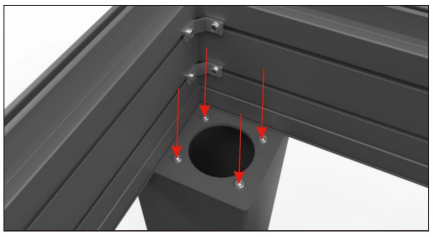


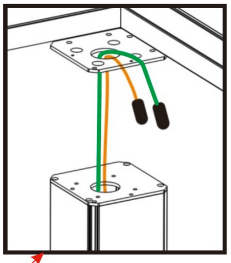


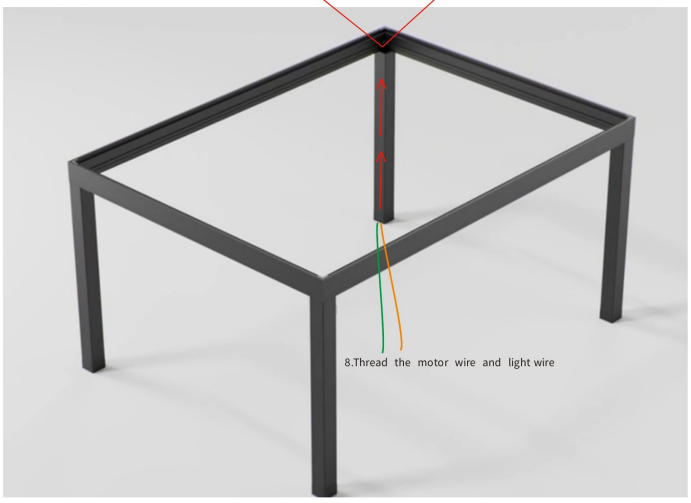
Stage 2 Fit the posts and run the cables

4 Fit the posts to the frame at the corner brackets. Thread the motor cable and the LED cable down through the post that will carry the power, and out at the base.

Cables run inside the post to a junction box at the base (MH-TD-07). Agree the cable route with the electrician before standing the frame.





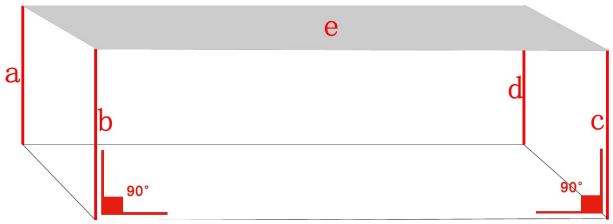


Stage 3 Check the site

Do this before fixing anything. Most problems with blades not closing, motor faults and noise come from a frame that is out of level.

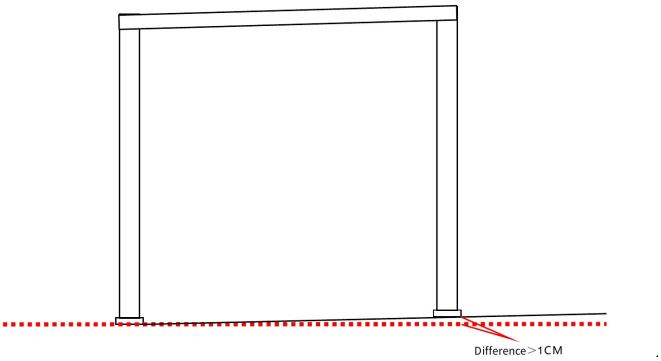
5 Check the ground with a level. Where the ground falls, set the post heights so the top of the roof is level, not the posts.

Measure the height at the four corners a, b, c and d. They must be the same, so the top plane e is level.



6 Stand the posts plumb. If the four corners differ by more than 10 mm the roof will tilt. Blades may not close tightly, the motor may fault and the roof will be noisy.

MOTE tolerance: corners within 5 mm, posts plumb within 3 mm over their height.



Stage 4 Fix the posts

7 Mark out the post positions with a chalk line. Check the diagonals.



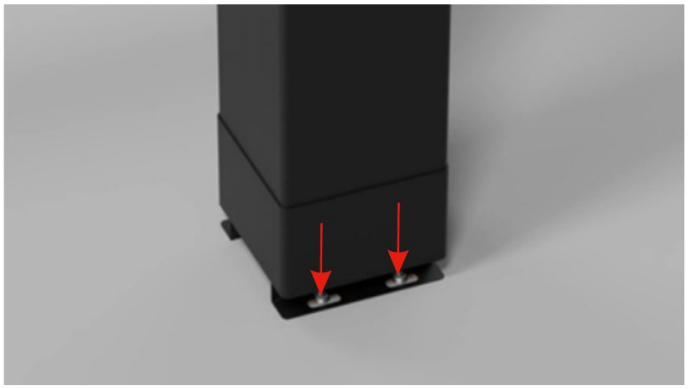
8 Drill the anchor holes at the marked positions.

Existing slab: 4 × M12 × 120 SS316 chemical anchors, 90 mm embedment, 100 mm minimum edge distance (MH-TD-05). New footing: cast-in M16 bolts (MH-TD-06). Clean the holes before injecting.



9 Fix the base to the ground.

Pack under the base bracket with 3 mm HDPE packers to level. Seal around the base.



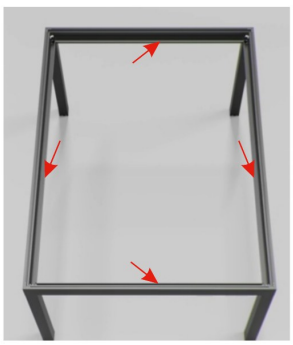
10 Post installation is complete. Recheck level and plumb before moving on.



Stage 5 Fit the gutters and track mounting brackets

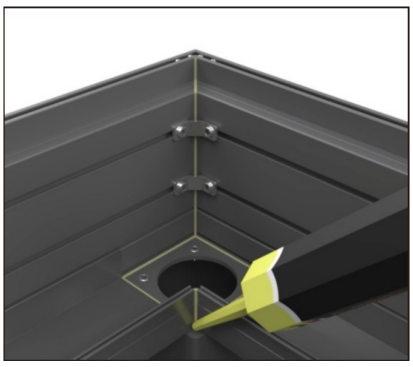
11 Fit the gutters into the side beams.





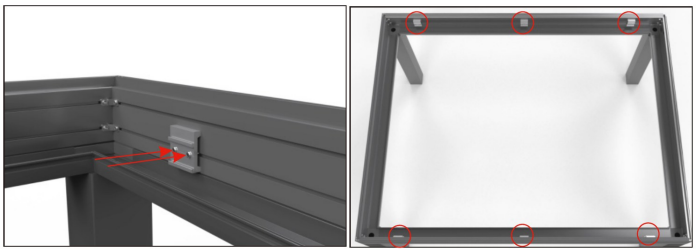
12 Fix the gutters, then run sealant along the marked line at every joint and around each outlet.

Use neutral-cure silicone. Check each outlet lines up with the downpipe in the post.



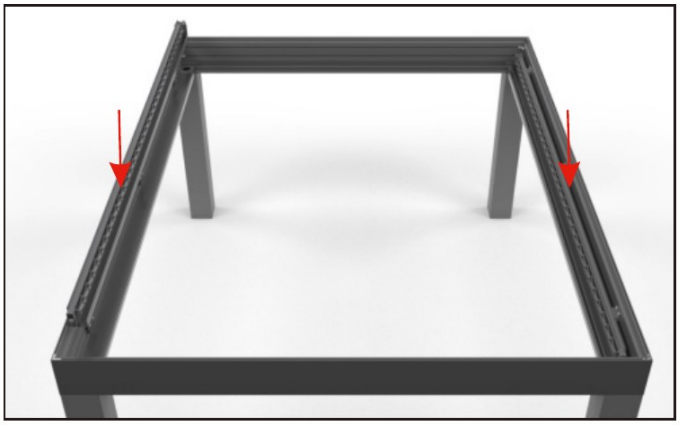


13 Fix all the track mounting brackets to the beams, matching the labels on each bracket.



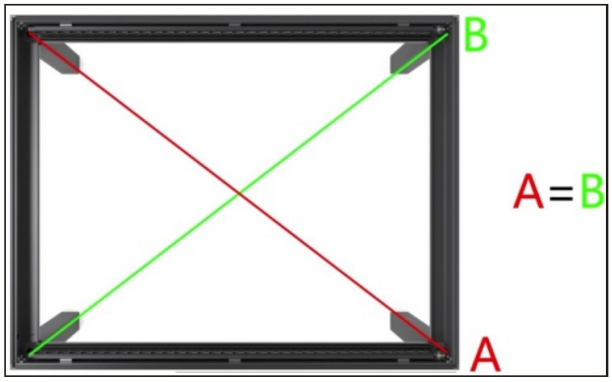
Stage 6 Fit the tracks

14 Fit the two tracks, one on each side.

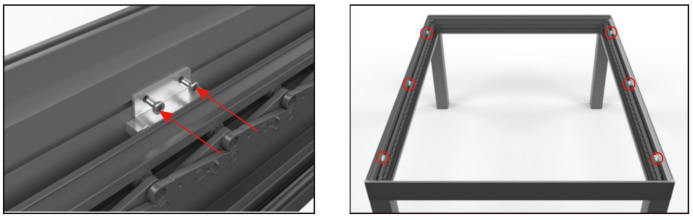


15 Measure the diagonals between the tracks and adjust until they match (A = B). The tracks must be parallel.

Within 2 mm. Out-of-parallel tracks make the blades bind.

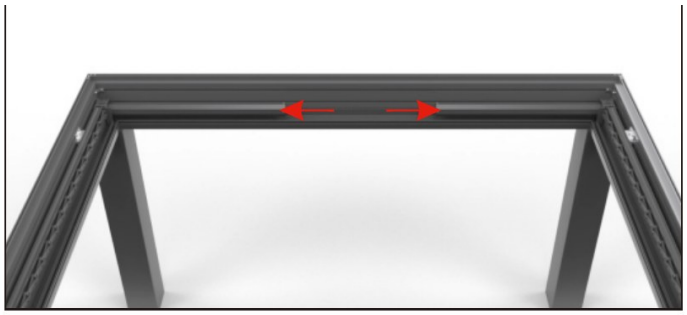


16 Fit the track fasteners at every track mounting bracket.

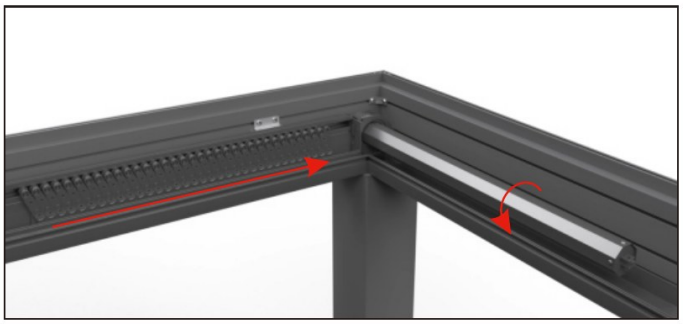


Stage 7 Fit the motor and wiring

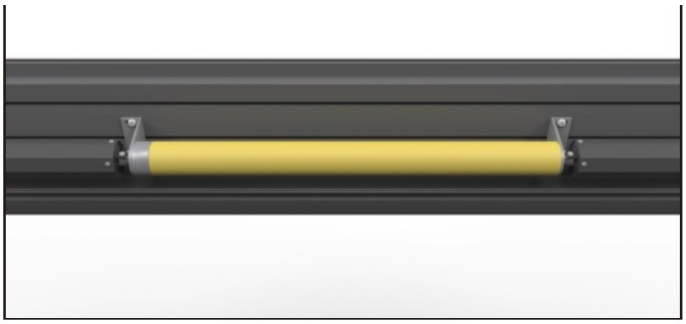
17 Fit both octagonal drive tubes.



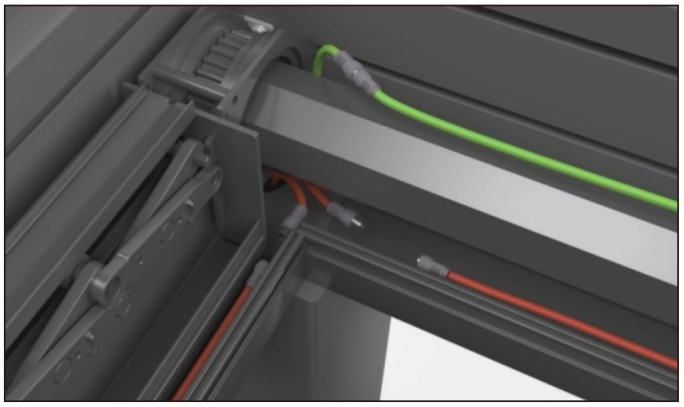
18 Turn the drive tube by hand and tighten the hinge chain to one side.



19 Connect the motor to the drive tubes on both sides, then fix the motor.

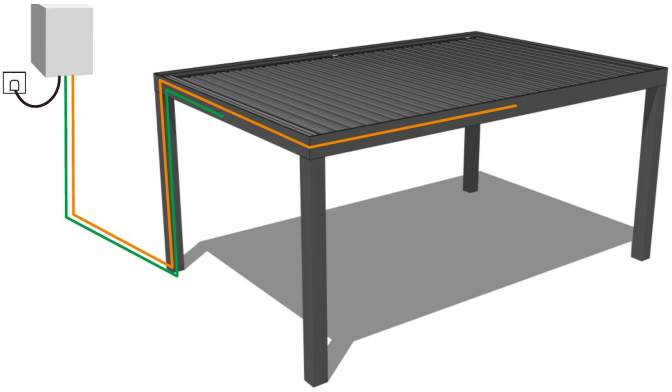


20 Connect the motor cable and the LED cable as shown in the wiring diagram.



21 Wiring diagram. Green is the motor cable. Orange is the LED lighting cable. Both run down the post to the junction box.

Mains connection, isolation switch and certificate of compliance by a registered electrician.

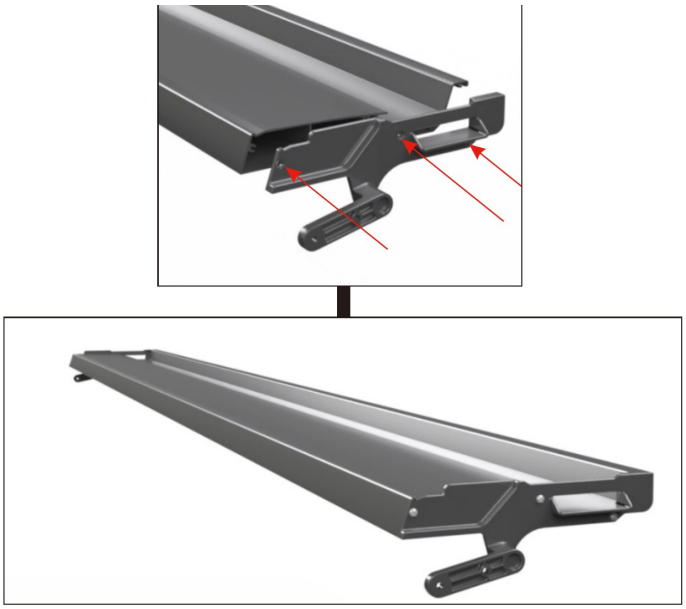


Stage 8 Set the motor travel and prepare the blades

22 With the hinge chain disconnected from the motor, set the motor travel limits. Follow the motor supplier's limit-setting instructions and video.

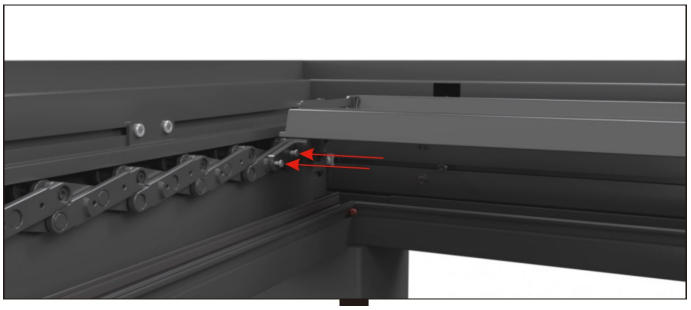


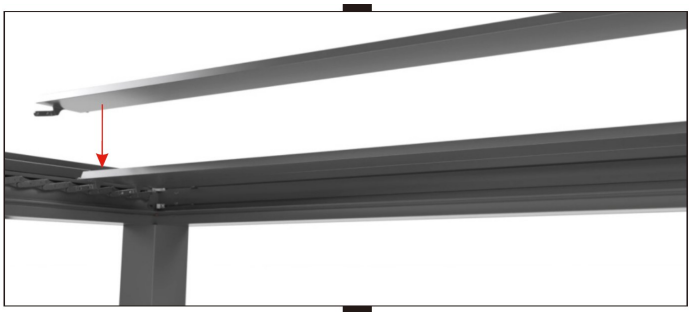
23 Fit the end fittings to each louvre blade.



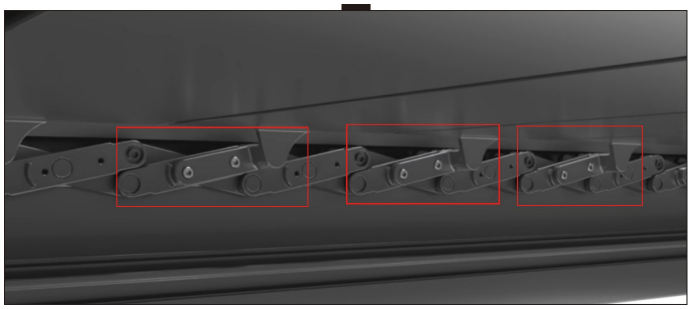
Stage 9 Fit the blades

24 Attach the blades to the hinge chain one at a time, working along the module.



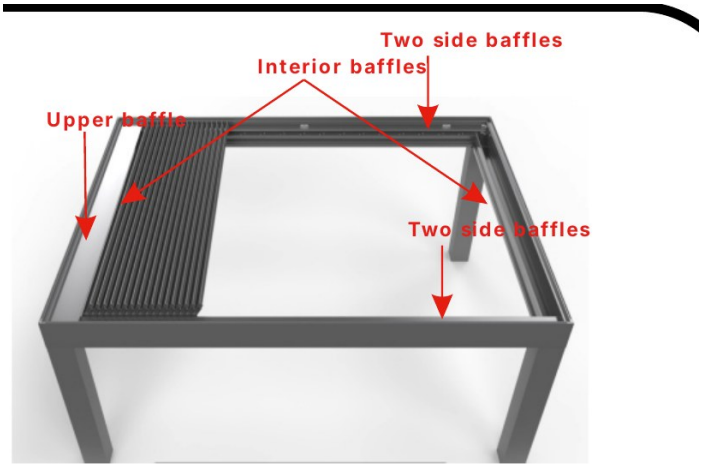


25 Check the blades are evenly spaced on the hinges before moving on.

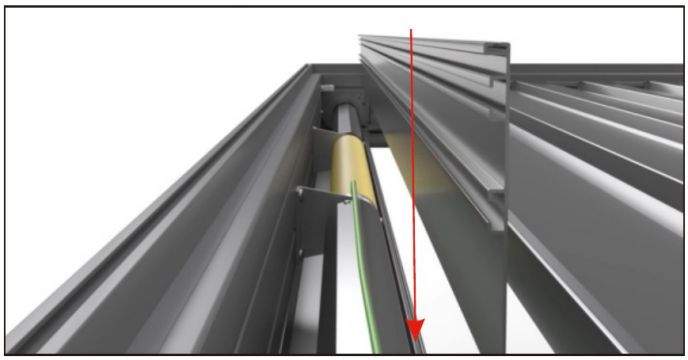


Stage 10 Fit the baffles

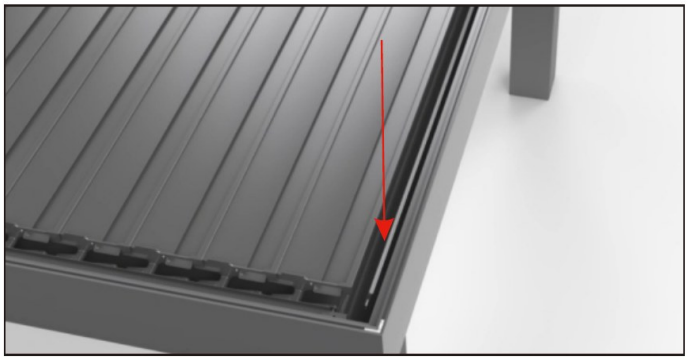
26 Fit the baffles at every position shown: the upper baffle, the interior baffles and the two side baffles.



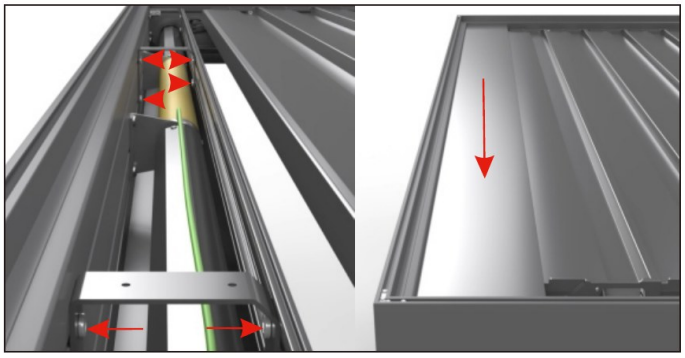
27 Fit the interior baffles.



28 Fit the interior baffles on the other sides.

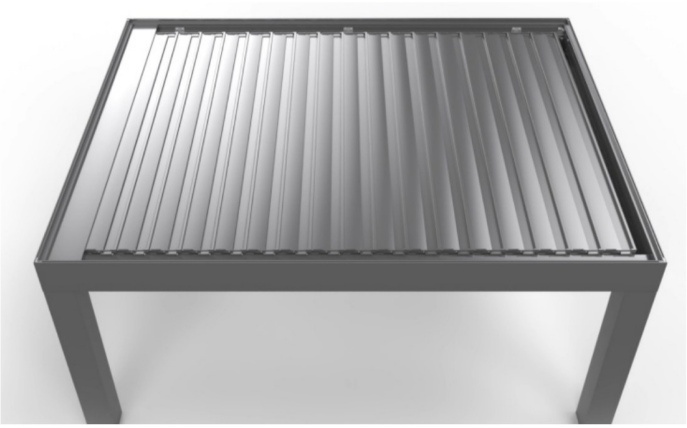


29 Fit the upper baffle bracket first, then the upper baffle.



Stage 11 Power on and commission

30 Installation is complete. Power on and run the roof through its full travel, closed to fully retracted.





Commissioning checklist

Complete on site, sign, and file with the job. Give the client a copy with the warranty and care guide (MH-WC-01).

- ☐ Frame level and square, posts plumb (within MOTE tolerance)
- ☐ All fixings fitted and tight, to the fixing schedule (MH-TD-09)
- ☐ Three full open and close cycles, smooth and quiet
- ☐ Blades close tightly with even gaps
- ☐ Hose test: no leaks, gutters drain to every outlet
- ☐ Rain sensor closes the roof
- ☐ Remotes paired and app set up for the client
- ☐ LED lights and dimmer working
- ☐ Blinds and heaters working (if fitted)
- ☐ Electrical certificate of compliance received
- ☐ Protective film removed, frame cleaned, scratches touched up
- ☐ Photos taken of the finished roof and each fixing type
- ☐ Client shown how to use and care for the roof
- ☐ Warranty and care guide handed over, install date recorded

Job number

Address

Installer (LBP no.)

Date

Signed

Images: manufacturer's installation instructions (2024). Steps reworded and supplemented by MOTE Home. Project documents take priority over this guide.