# Opening louvre roof

System MH210. Motorised aluminium louvre roof with blades that tilt from closed to open for shade, light and ventilation. Designed, consented where required, supplied and installed by MOTE Home.

## Specification

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| **Operation** | Blades rotate from closed to open. Closed, the roof is watertight. |
| **Drive** | Linear actuator motor concealed in the side beam. Remote and phone app control. |
| **Blade** | 200 × 50 × 1.8 mm extruded aluminium |
| **Side beam** | 200 × 68 × 2.3 mm extruded aluminium |
| **Between modules** | 170 × 68 × 2.3 mm intermediate beam |
| **Blade pivots** | Blades rotate on pivots in the side beams |
| **Post** | 150 × 150 × 3.0 mm extruded aluminium, with downpipe inside |
| **Gutter** | Integrated 89 × 58 × 1.5 mm gutter in the perimeter frame, draining through the posts |
| **Alloy and finish** | Extruded aluminium alloy (grade per supplier certificate), polyester powder coat. Standard colours: charcoal (RAL 7024), mid grey, white. Black available at extra cost. |
| **Fixings** | Stainless steel. Grade 316 within 500 m of the sea, 304 minimum elsewhere. |
| **Sensors** | Rain sensor included, closes the roof automatically. Wind sensor optional. |
| **Lighting** | Dimmable LED strip around the frame, included. |
| **Options** | Motorised drop-down blinds between posts, radiant heaters, privacy screens. |

## Design limits

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| **Blade span** | 4.2 m maximum between beams (module width). Wider roofs are split into equal modules. |
| **Blade rotation** | 0 to 150° (to be confirmed with supplier). |
| **Overall size** | Up to 12 × 12 m. |
| **Posts** | Any open edge with more than 6 m between supports gets an intermediate post. The house wall counts as a support. |
| **Intermediate beams** | Freestanding roofs: over 6 m. Attached to the house: over 8 m, or wherever the blade span needs one. |
| **Height** | 2.4 m, 2.7 m or 3.0 m to the underside of the frame as standard. |
| **Wind** | Posts, fixings and footings are designed for each site's wind zone (NZS 3604 / AS/NZS 1170.2) by a Chartered Professional Engineer. |

## Building Code and consent

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| **Building consent** | Required over 30 m². An attached roof of 20–30 m² at ground level may be exempt under Schedule 1, exemption 17A, where a Licensed Building Practitioner designs or supervises the work. Confirm with your council. |

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| **B1 Structure** | Specific engineering design for each project, covering wind, snow and earthquake loads. |
| **B2 Durability** | Aluminium and stainless steel components selected for the exposure zone. Durability period to be confirmed in the project specification. |
| **E1 Surface water** | Roof water collected in the integrated gutter and discharged through the posts to an approved outfall. |
| **E2 External moisture** | Head flashing over the wall beam, lapped behind the cladding and building wrap (MH-TD-03, MH-TD-04). |

## Care and maintenance

- Wash the frame and blades with fresh water and a soft brush every 3 months, or monthly within 500 m of the sea.
- Clear the gutters and post outlets every 6 months, more often under trees.
- Run the roof through a full cycle every month to keep the drive free.
- Do not operate the roof in high wind, or with snow or ice on the blades.

## Warranty

[To be confirmed]

## Typical details

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| **MH-TD-02** | General arrangement |
| **MH-TD-03** | Wall fixing: timber-framed wall |
| **MH-TD-04** | Wall fixing: concrete or block wall |
| **MH-TD-05** | Post fixing: existing concrete slab |
| **MH-TD-06** | Post on new concrete footing |
| **MH-TD-07** | Beam to post connection and drainage |
| **MH-TD-08** | Drop-down blind: cassette and guide rail |
| **MH-TD-09** | Post plan details and fixing schedule |

This data sheet supports a building consent application. Project-specific drawings, engineering and specification are provided by MOTE Home for each job. Information is correct at the date shown and may change without notice.