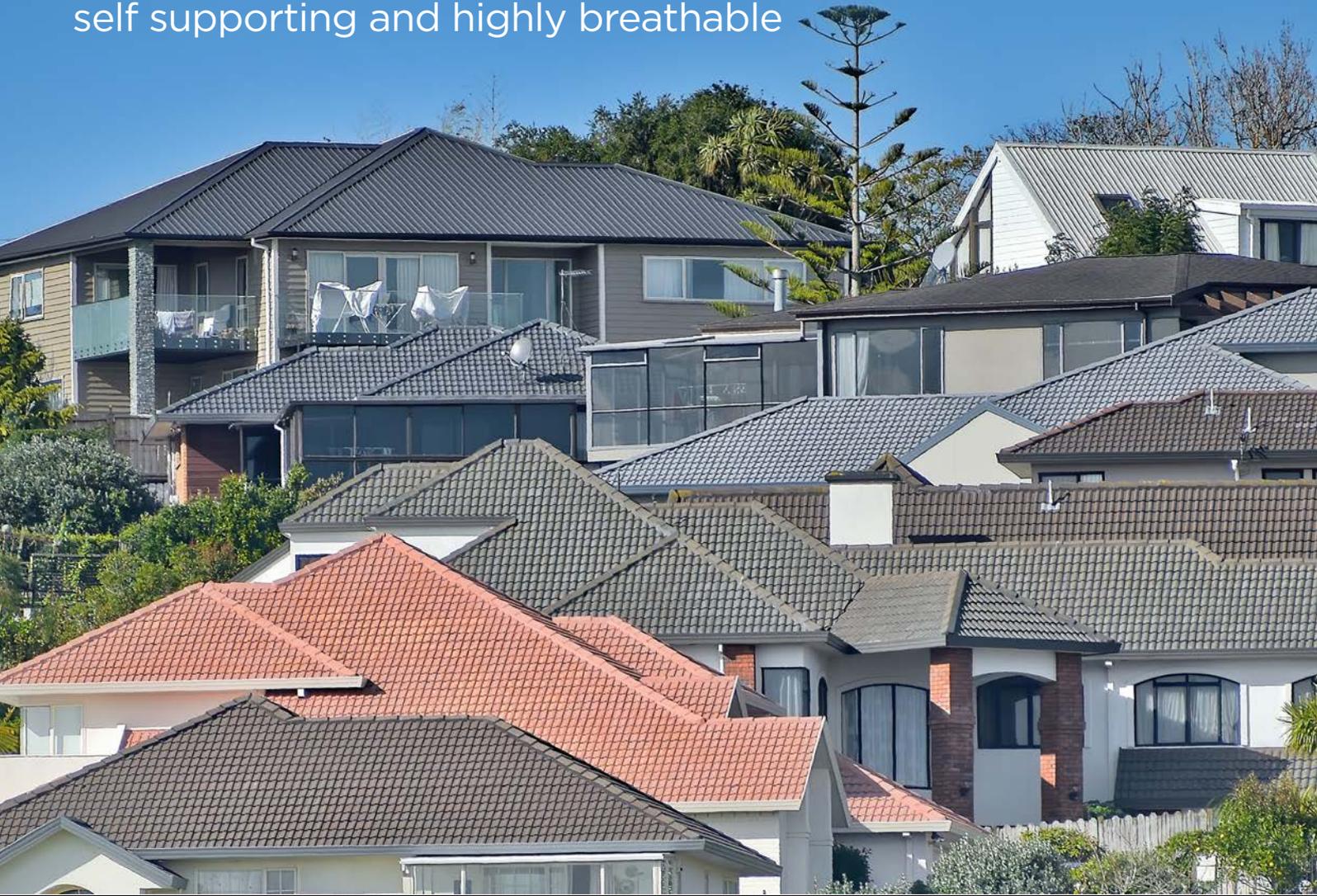




# Roof Underlay Installation Instructions

High performance, fire retardant\*,  
self supporting and highly breathable



**MASONS**  
Designed Smart, Built Tough.

[mpb.co.nz](http://mpb.co.nz) 0800 522 533



**STRONG WOVEN  
3 LAYER SUBSTRATE**



**VERY HIGH VAPOUR  
PERMEABILITY**



**SELF SUPPORTING**

Our roof underlays are premium synthetic, strong, self supporting, fire retardant\*, absorbant and highly breathable. They assist in the control of moisture and water vapour.

Available as:  
VHP **Maxi**, VHP **Ultra**, VHP **Strong**  
and VHP **Value**

\* VHP **Value** is not fire retardant

Four  
**Weights**

**125-220**  
gsm



## Condensation Considerations

In some region's condensation risks are higher, such as in areas of cold or high humidity.

Extra care needs to be taken in specifying the correct design and installation practices, as well as building in ventilation systems to prevent excessive condensation and moisture in the roof spaces.

Always refer to the MRM Code of Practice for the latest best practise in design and installation details. See MRM Code of Practice v3.0 9.4 – Ventilation.

### FACTORS WHICH INFLUENCE EXCESSIVE CONDENSATION FORMING IN ROOFING SYSTEMS

- Humid, and/or cold climatic regions
- Warm/skillion roof construction (require particular attention in design and construction)
- Low roof cavity air volume and restricted air movement
- Lack of a vapour control layer if applicable
- Low pitched roof or bulk insulation
- Penetrations in ceiling or warm air entering the roof space
- Activities within the building which create high moisture loading
- High levels of construction moisture such as concrete slab curing



These factors are beyond the control of Masons Plastabrick



## General Installation Instructions



To be read in conjunction with The MRM COP version 3.0 and NZBC E2/AS1. All installation to be supervised by suitably qualified LPB installer.

- Masons underlays are compatible with metal tile and profiled metal roof cladding as well as masonry tile roof cladding.
- For roof pitches greater than 10° all Masons **Roof Underlay** may be run vertically or horizontally without support.\*\*
- All Masons Roof Underlay should be supported if run vertically below 10°. Minimum roof pitch 3°.
- Ensure rolls are not damaged and are stored in clean, dry conditions out of sunlight.
- Will provide temporary weather protection during construction (21 days) although same day coverage is strongly recommended.
- May be installed in rain but take care in windy conditions due to large sail effect.
- May be run to any length. Has a 150mm lap line.
- Can be used on roofs up to and including NZS 3604 **Extra High** wind zones.
- Unaffected by LOSP treated timber.

\*\*For Roof pitches 10° or greater, Masons **VHP Roof Underlays** may be run vertically or horizontally without support. On roof pitches below 10° Masons **VHP Roof Underlays**, may be run horizontally without support. If run vertically it must be supported. Minimum roof pitch 3°.



# Residential Long-Run Metal Roofing / Vertical Or Horizontal Installation Method

## Wooden Construction

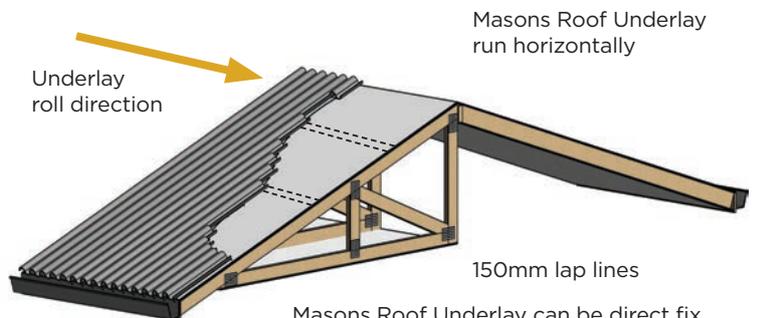
Masons recommends that underlay be laid horizontally. However, it may be laid vertically where roof pitches are 8° or greater. Horizontal underlay must be laid from the bottom up, so the upper layers overlap the lower layers. E2/AS1 requires 150mm minimum laps in all situations.

All cladding to be fixed per profiled metal cladding manufactures recommendations.

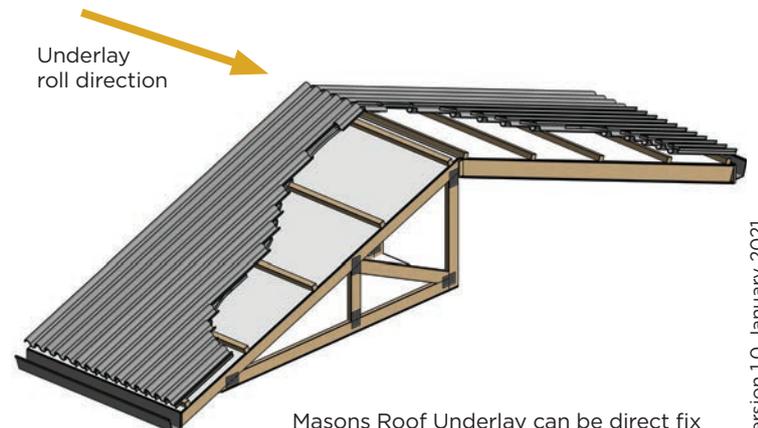
- 1.** Fix underlay using stainless steel 8-12mm staples or 20mm flat head clouts or appropriate proprietary fastenings at 300mm maximum centres.
- 2.** Between 3° and 5° pitched roofs suitable safety mesh 300mm x 150m or similar or hexagonal netting 50mm or 75mm, and/or Masons Insulation Strapping or Wrap Strap. Fix horizontally at 300mm centres.
- 3.** If required to achieve a lap seal (refer to NZ Metal Roofing Code of Practice 4.3.8 and 4.3.9), use Masons UNI Seam Tape or 40Below Platinum Flashing Tape.
- 4.** Masons Roof Underlay maybe unwound to the full length from the gutter to the ridge. However, when ventilation at the ridge is required the underlay should be finished at the ridge purlin to allow a free air movement.
- 5.** Flue penetrations must have a minimum distance of 50mm from the underlay See NZ Metal Roof and Wall Cladding Code of Practice 4.3.8.
- 6.** Masons Roof Underlay must be free of rips and holes fit tightly and be lap taped around all penetrations, (except flue penetrations) to assist with drainage and moisture.
- 7.** Maximum drape 25mm.

- Must be laid firmly and taut/tight without creases. Laps vertical or horizontal to be a minimum of 150mm lap.
- Masons VHP roof underlays will provide temporary weather protection during construction of a maximum of 21 days VHP. Same day coverage strongly recommended. DO NOT exceed this exposure limit.
- Masons recommends a premium proprietary safety mesh, hexagonal netting or Masons Stud or Insulation Strap is used.
- Commercial buildings will often require the use of high quality safety mesh under the Masons VHP roof underlay. Safety mesh must be designed and installed to comply with the requirements of AS/ NZ 4389:2015
  - Under dark roof cladding colours (low LRV) use of supporting mesh is recommended.

### CORRUGATED ROOFING



Masons Roof Underlay can be direct fix or cavity fix and must be installed in a manner that prevents ponding of water and span no more than 1200mm



Masons Roof Underlay can be direct fix or cavity fix and must be installed in a manner that prevents ponding of water and span no more than 1200mm

Masons VHP Roof Underlay Support Required

Roof Pitch	Span	Horizontally Installed	Vertically Installed
$\geq 10^\circ$	$> 1200\text{mm}$	Yes	Yes
$\geq 10^\circ$	$\leq 1200\text{mm}$	No	No
$< 10^\circ$ (Min $3^\circ$ )	$> 1200\text{mm}$	Yes	Yes
$< 10^\circ$ (Min $3^\circ$ )	$\leq 1200\text{mm}$	No	Yes



# Long-Run Metal Roofing / Vertical Or Horizontal Installation Method

## Steel Construction

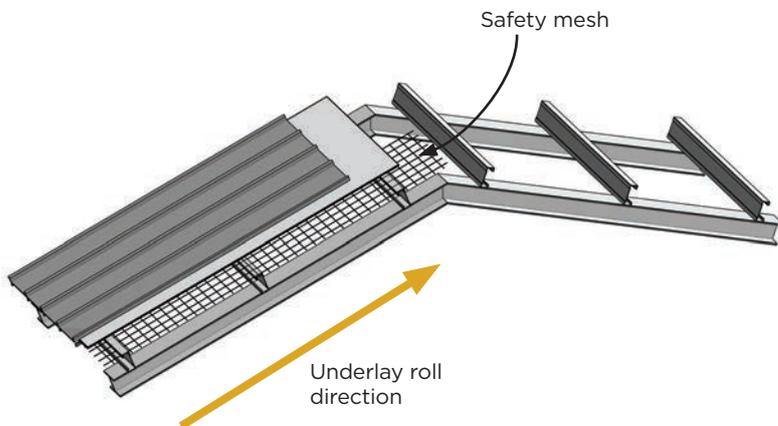
- Masons VHP Roof Underlay may be direct fixed or cavity fixed and must be installed in a manner that prevents ponding of water and spans no more than 1200mm.
- Masons VHP Underlay may be run vertically or horizontally. See table regarding support.
- Masons recommends that underlay be laid horizontally. However, it may be laid vertically where roof pitches are 8° or greater. Horizontal underlay must be laid from the bottom up, so the upper layers overlap the lower layers. E2/AS1 requires 150 mm minimum laps in all situations.
- Masons recommends a premium proprietary safety mesh, hexagonal netting or Masons Stud or Insulation Strap is used.
- Commercial buildings will often require the use of high quality safety mesh under the Masons VHP roof underlay.
- Must be laid firmly and taut/tight without creases. Laps vertical or horizontal to be a minimum of 150mm lap.
- Masons VHP roof underlays will provide temporary weather protection during construction of a maximum of 21 days VHP. Same day coverage strongly recommended. DO NOT exceed this exposure limit.

- Masons recommends a premium proprietary safety mesh, hexagonal netting or Masons Stud or Insulation Strap is used.
- Commercial buildings will often require the use of high quality safety mesh under the Masons VHP roof underlay. Safety mesh must be designed and installed to comply with the requirements of AS/NZ 4389:2015
- Under dark roof cladding colours (low LRV) use of supporting mesh is recommended.
- Fix Masons VHP roof underlay with self-drilling screws or propriety fasteners at maximum spacing of 300mm. Refer to the Metal Roofing association code of practice (COP) version

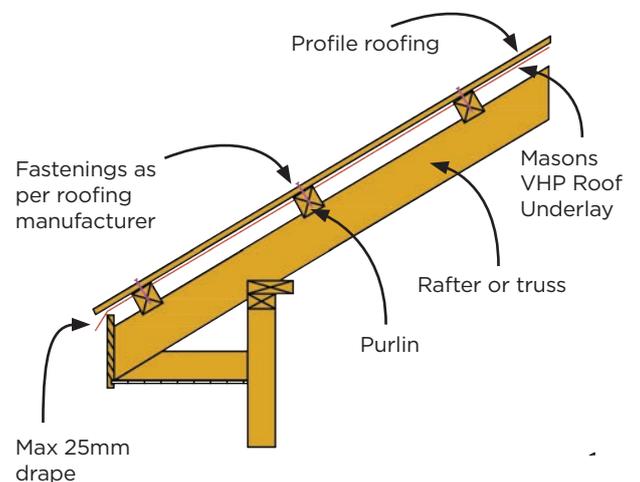
## Horizontal Fixing

- 1.** Masons **VHP Roof Underlay** upper sheet lapped over lower sheets (shiplap) to ensure water is shed to the outer face.
- 2.** Ensure there is adequate fastening at each purlin to prevent downward creep. When fixing horizontally ensure that a 150mm lap is achieved, If purlin spacings exceed 1100mm do not fix horizontally.

### LONG-RUN METAL ROOFING Steel Construction



### LONG-RUN METAL ROOFING Wooden Construction





## Tile Installation Method

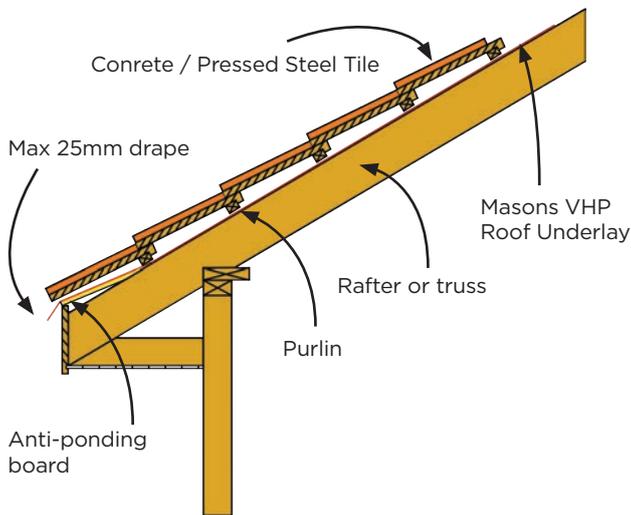
### Horizontal Fixing

1. Masons **VHP Roof Underlay** upper sheet lapped over lower sheets (shiplap) to ensure water is shed to the outer face.
2. Ensure there is adequate fastening at each purlin to prevent downward creep. When fixing horizontally ensure that a 150mm lap is achieved, If purlin spacings exceed 1100mm do not fix horizontally.

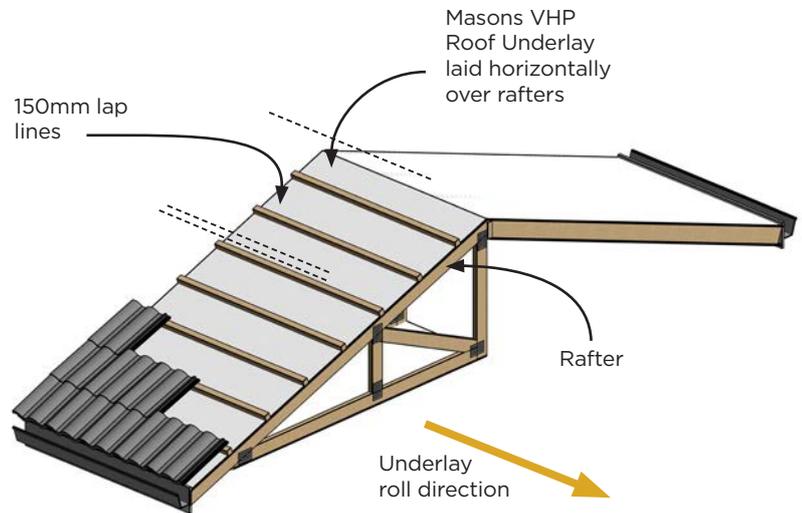
### Concrete or Metal Tile Roofing

1. Lay Masons **VHP Roof Underlay** over rafters prior to fixing the tile battens. The maximum span between rafters is 1200mm. Masonry tile roofs with pitches less than 17° must have anti-ponding boards in accordance with E2/AS1 Paragraph 8.2.5.
2. Masons **VHP Roof Underlay** may be laid over the top of the anti-ponding boards and should be draped into the gutter by no more than 25mm. Where Masons **VHP Roof Underlays** overlap occurs under Tile Battens, minimum overlap may be reduced to 75mm.
3. Drape should be 25mm or less.

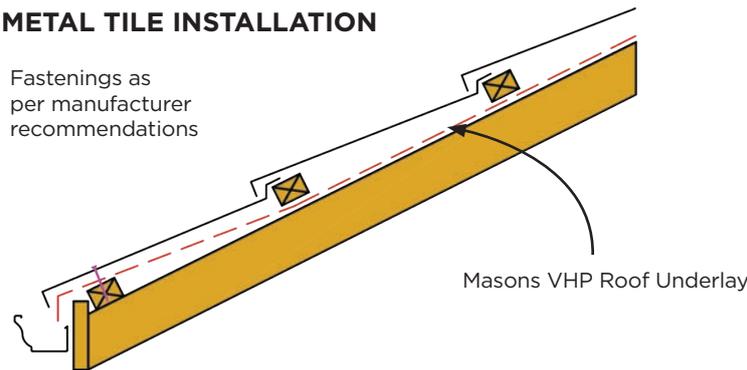
### CONCRETE / METAL TILE ROOFING



### TILE ROOFING



### METAL TILE INSTALLATION



Masons have a range of adhesive flashing tapes and roof accessories such as plastic support strapping and Masons Roof Boots external pipe flashings to compliment your roof project. To learn more visit [mpb.co.nz](http://mpb.co.nz)

Call your Masons Rep for further information

Waikato, Central Region, Taranaki and Wanganui: **Arthur 021 772 925**

Coromandel, BOP, Hawkes Bay, Manuwatu, Wairapa and Wellington: **Graham 021 929 070**

West and North Auckland: **Jacqueline 021 414 100** East and South Auckland and the Far North: **John 021 558 160**

South Island: **Riki 021 786 898**

[masons.nz](http://masons.nz) **0800 522 533**