

# VMZ Double Lock Standing Seam

## Specification of details



# Technique information

Roofing technique	VMZ Double Lock Standing Seam
Roofing material	<ul style="list-style-type: none"> <li>• Natural Mill Finish, and and Azengar® engraved zinc</li> <li>• pre-weathered QUARTZ-ZINC® PLUS®</li> <li>• pre-weathered ANTHRA-ZINC® PLUS®</li> <li>• PIGMENTO® PLUS® range available in 4 finishes : Autumn Red /Ash blue/Lichen Green/Brown</li> </ul>
Support	19mm plywood
Underlay	Breathable waterproofing membrane
Ventilation	40mm unobstructed cavity created by timber battens/galvanised steel top hats at 600mm centres
Panel width	600mm centre to centre maximum
Panel length	13 metres maximum
Minimum pitch	3 degrees
Seam height	25mm
Sheet thickness	0.70mm, 0.80mm
Panel Weight	5.8/6kg per square metre

## Please note:

Main structure and insulation by others.



Commercial Building, The Rocks, Sydney, Installed by Roofing Group VMZINC Quartz-zinc, Double Lock Standing Seam roofing



Townsville Cruise Terminal, Designed by Arkhefield Architects, Installed by ZC Technical, VMZINC Athra-zinc Standing Seam, Photography by Angus Martin Photography

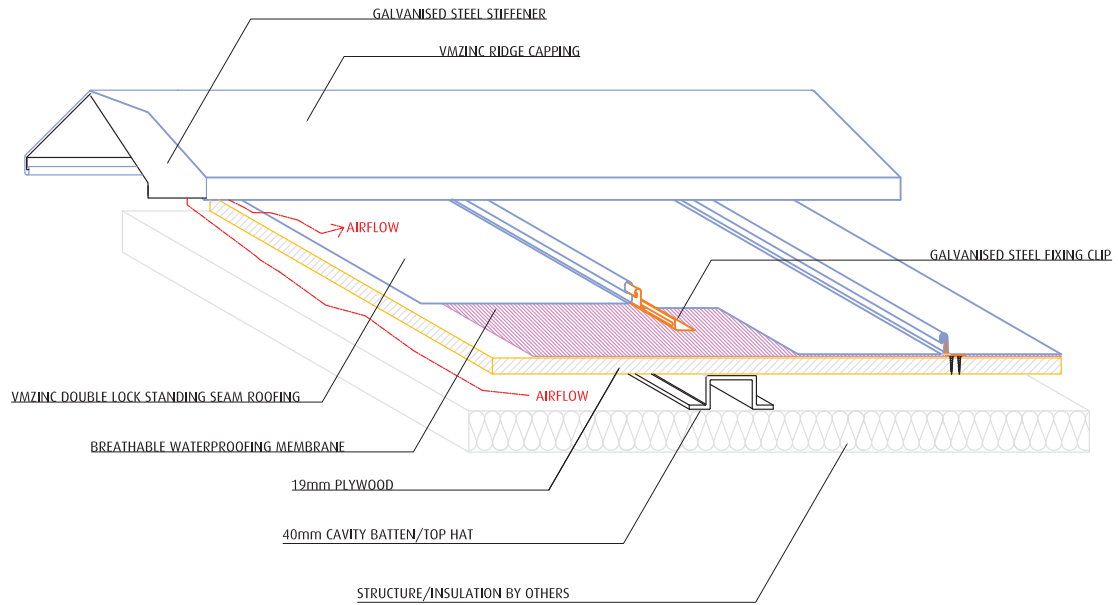
The sole objective of this document is to describe the main technical features of VMZINC® products manufactured by UMICORE. Specification and installation of these products remains the exclusive competency of building professionals who must ensure that the use of these products is adjusted to the construction in question and compatible with the other products and techniques used. Specification and installation of the products implies compliance with the current norms and recommendations of the manufacturer. In this respect, Umicore publishes specifications and installation guides that are regularly updated for specific geographical zones, and also organises training courses. All details may be obtained on request from the local VMZINC® team. Umicore may not be held responsible for any specification or use that does not comply with these norms, recommendations and practices.

Standing seam is a single folded or double folded seam.

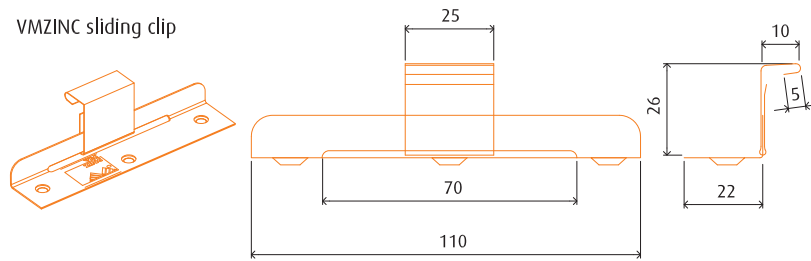
- \* The use of profiling and seaming machines for the closure of longitudinal seam joints significantly reduces installation time.
- \* The low height of the seams (25mm) contributes to the modernity, lightness and regularity of the roof and facade, while highlighting its architectural purpose. When dealing with more complex designs this system presents a more technologically advanced appearance.
- \* The standing seam technique is particularly suitable for very large roof surfaces and for structures located in regions of harsh climate, which are often subject to strong winds, heavy rain and snowfall (mountain or continental climate).

# VMZINC

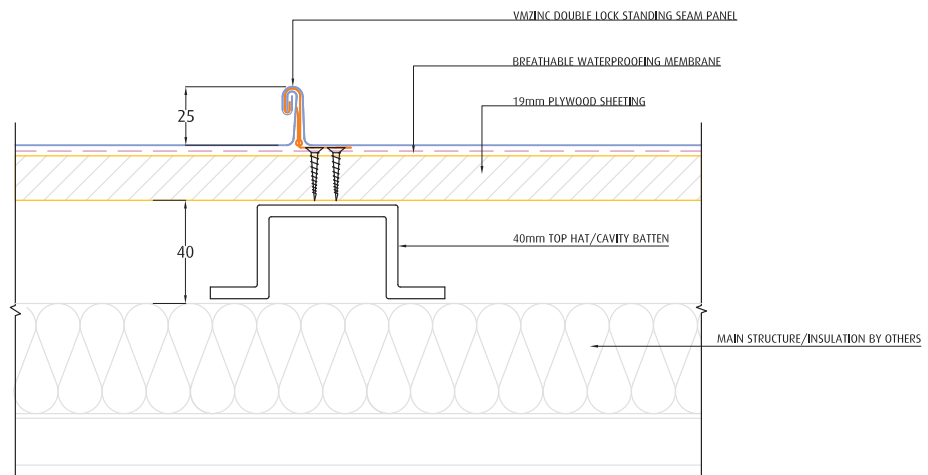
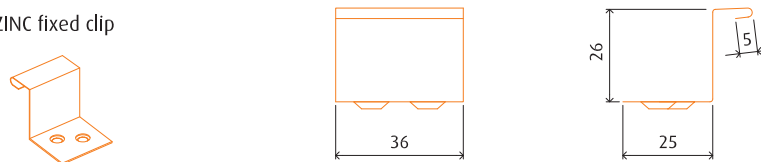
# Panel connection and clips



VMZINC sliding clip

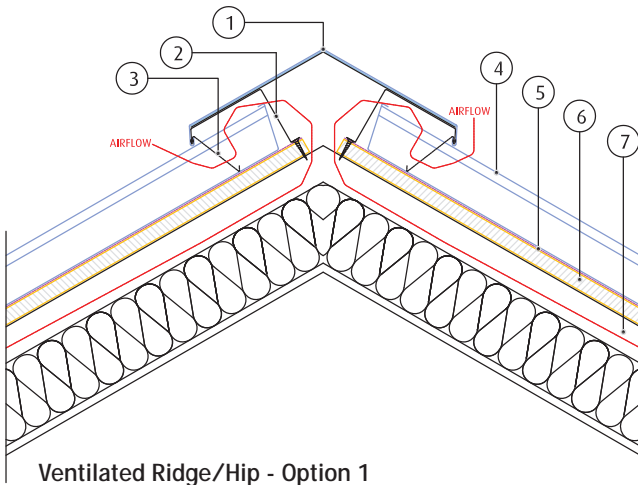


VMZINC fixed clip



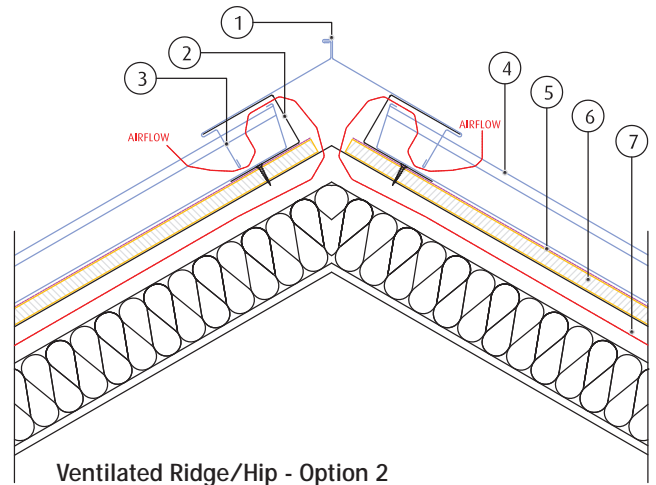
ROOF BUILD UP

# VMZ Double Lock Standing Seam



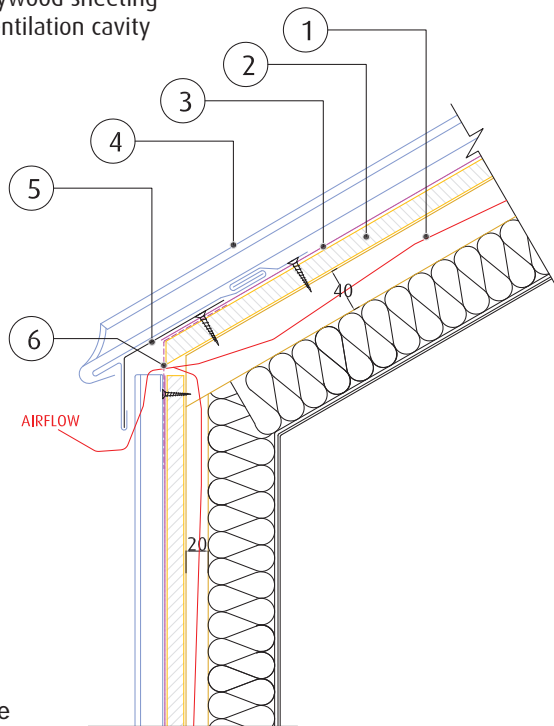
Ventilated Ridge/Hip - Option 1

1. VMZINC Ridge capping over galvanised steel stiffener
2. Galvanised steel support bracket
3. Perforated flashing/mesh
4. VMZINC Double Lock Standing Seam roofing
5. Breathable waterproofing membrane
6. 19mm plywood sheeting
7. 40mm ventilation cavity



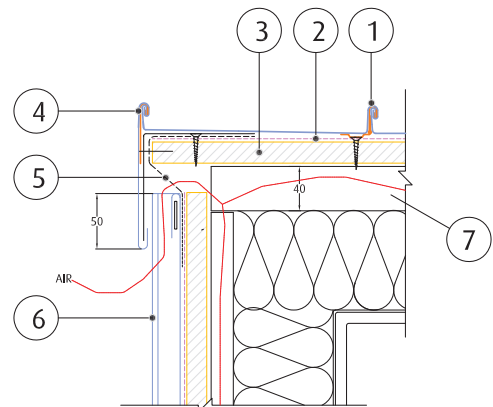
Ventilated Ridge/Hip - Option 2

1. VMZINC Ridge capping over galvanised steel stiffener
2. Galvanised steel support bracket
3. Perforated flashing/mesh
4. VMZINC Double Lock Standing Seam roofing
5. Breathable waterproofing membrane
6. 19mm plywood sheeting
7. 40mm ventilation cavity



Eave

1. 40mm ventilation cavity
2. 19mm plywood
3. Breathable waterproofing membrane
4. VMZINC Double Lock Standing Seam roofing
5. VMZINC Eaves flashing over galvanised steel stiffener
6. Insect screen/Mesh

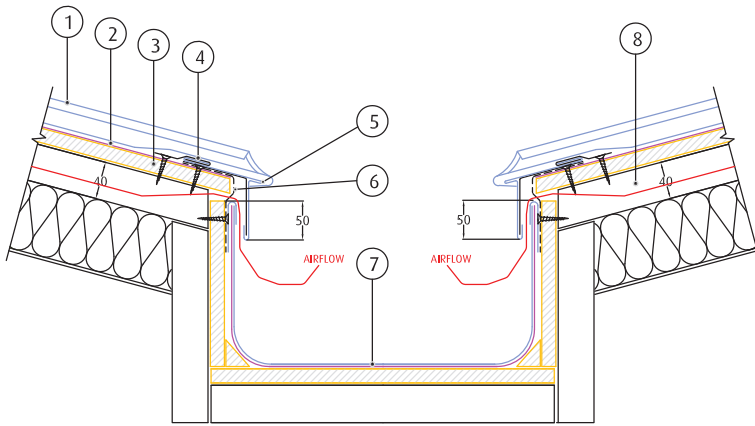


Edge

1. VMZINC Double Lock Standing Seam roofing
2. Breathable waterproofing membrane
3. 19mm plywood
4. VMZINC Edge flashing
5. Insect Screen/mesh
6. VMZINC Single Lock Standing Seam cladding

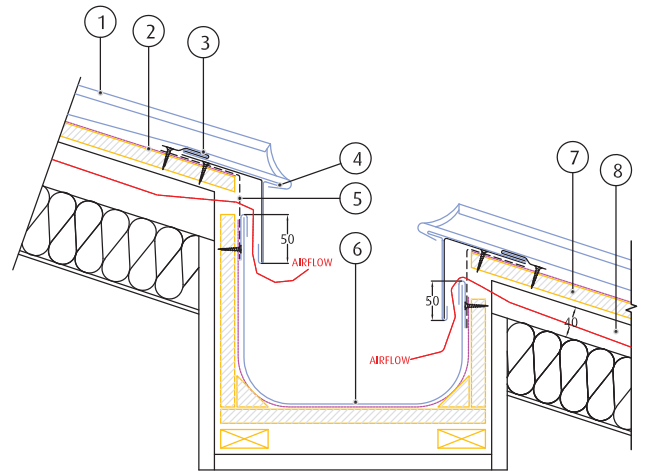
*NOTE: MAIN STRUCTURE, INSULATION AND WATERPROOF MEMBRANE BY OTHERS*

# VMZ Double Lock Standing Seam



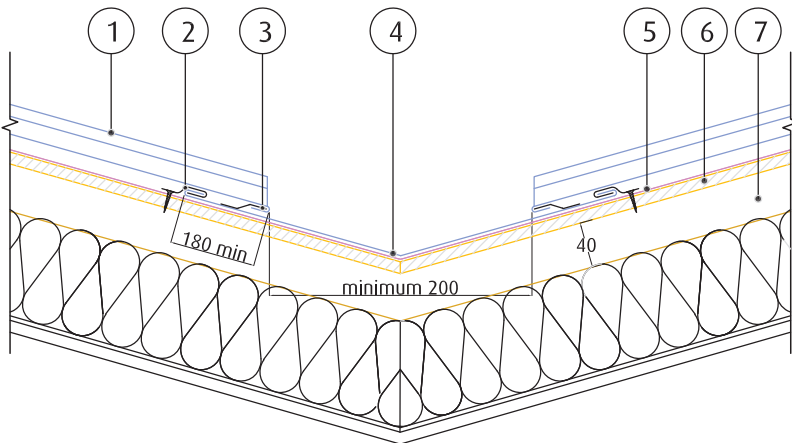
**2 Slope box gutter**

1. VMZINC Double Lock Standing Seam roofing
2. Breathable waterproofing membrane
3. 19mm plywood sheeting
4. Fixing clip
5. VMZINC Eave flashing
6. Insect screen
7. VMZINC Box gutter
8. 40mm ventilation cavity



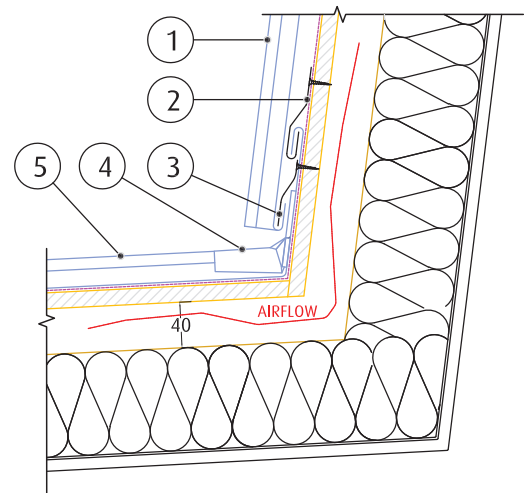
**1 Slope box gutter**

1. VMZINC Double Lock Standing Seam roofing
2. Breathable waterproofing membrane
3. Fixing clip
4. VMZINC Eave flashing
5. Insect screen
6. VMZINC Box gutter
7. 19mm plywood sheeting
8. 40mm ventilation cavity



**Valley**

1. VMZINC Double Lock Standing Seam roofing
2. Fixing clip
3. Soldered clip
4. VMZINC Valley flashing
5. Breathable waterproofing membrane
6. 19mm plywood sheeting
7. 40mm ventilation cavity

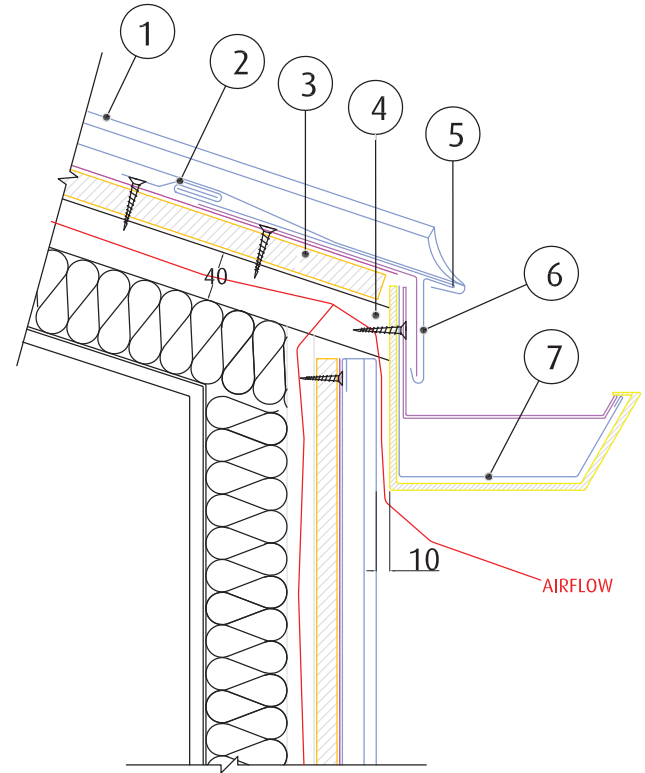
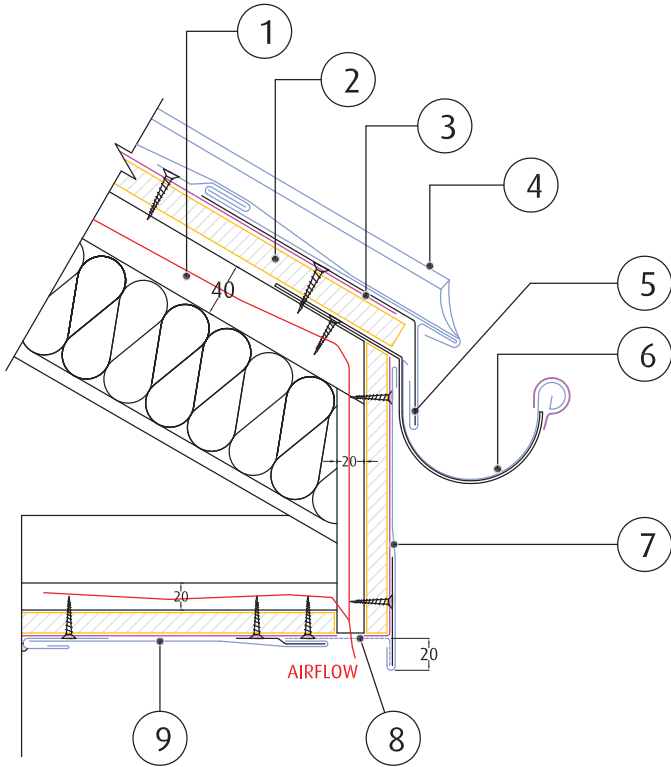


**Wall junction**

1. VMZINC Single Lock Standing Seam roofing
2. Fixing clip
3. Securing clip
4. VMZINC Saddle piece
5. VMZINC Double Lock Standing Seam roofing

NOTE: MAIN STRUCTURE, INSULATION AND WATERPROOF MEMBRANE BY OTHERS

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NOTE: MAIN STRUCTURE, INSULATION AND WATERPROOF MEMBRANE BY OTHERS

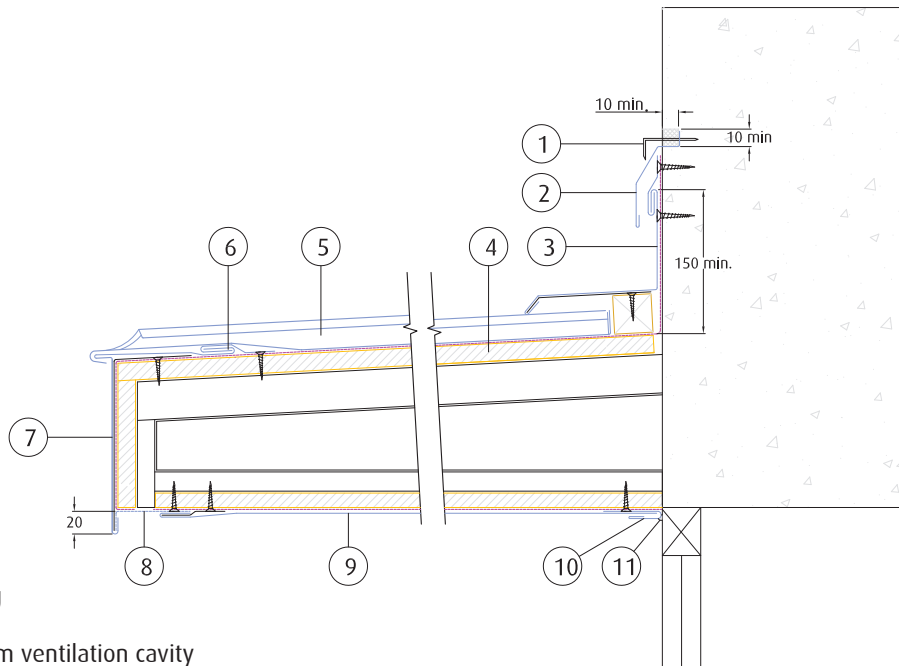
## Eave Gutter

1. 40mm ventilation cavity
2. 19mm plywood
3. Breathable waterproofing membrane
4. VMZINC Double Lock Standing Seam roofing
5. VMZINC Eaves flashing over galvanised steel stiffener
6. VMZINC Eaves gutter and bracket
7. VMZINC Fascia
8. Perforated flashing strip/mesh
9. VMZINC soffit

## Eave Gutter

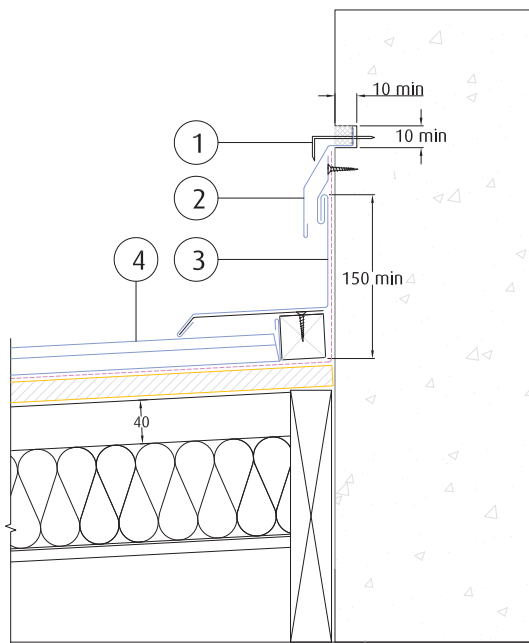
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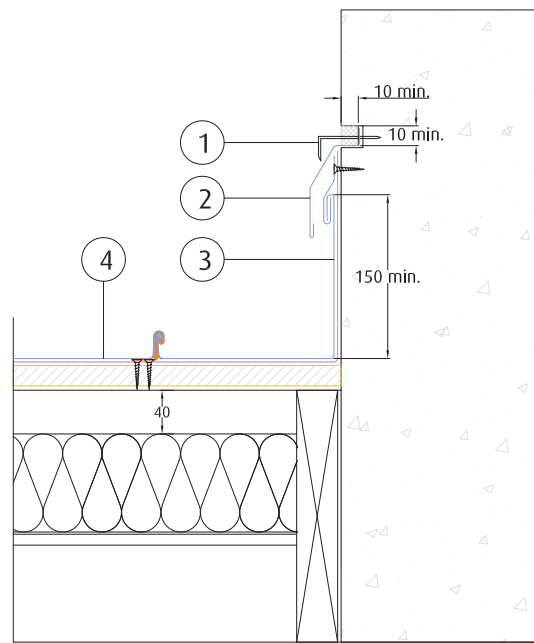
**Awning**

- 1. 40mm ventilation cavity
- 2. 19mm plywood
- 3. Breathable waterproofing membrane
- 4. VMZINC Double Lock Standing Seam roofing
- 5. VMZINC Eaves flashing over galvanised steel stiffner
- 6. VMZINC Eaves gutter and bracket
- 7. VMZINC Fascia
- 8. Perforated flashing/Mesh
- 9. VMZINC Soffit
- 10. VMZINC Securing clip
- 11. Neutral Sealant



**Wall abutment**

- 1. Metal Wedge
- 2. VMZINC Apron flashing
- 3. VMZINC Wall flashing
- 4. VMZINC Double Lock Standing Seam panel



**Wall abutment**

- 1. Metal Wedge
- 2. VMZINC Apron flashing
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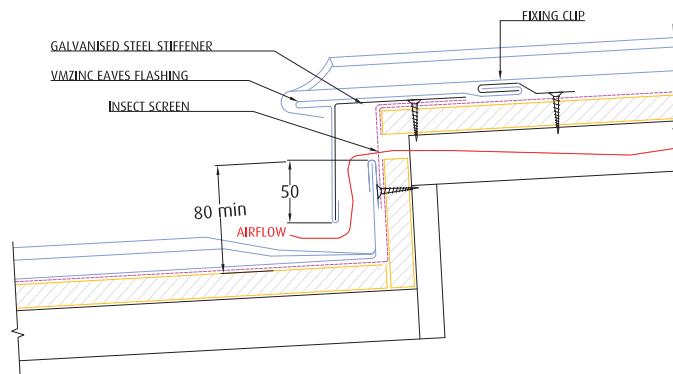
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# Transversal junctions/expansion

When the length of the roof slope exceeds the maximum recommended length of 13 metres, it is necessary to join the sheets using transverse junctions. Several techniques exist depending on the pitch of the roof.

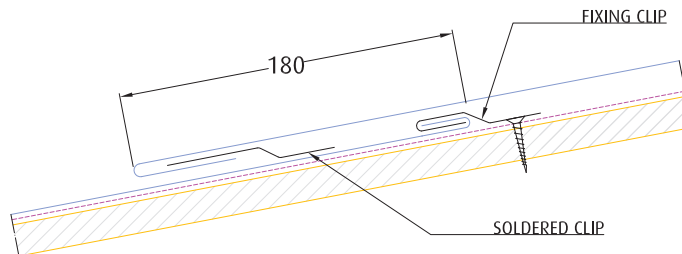
These include:

**Step (or drip):** for pitches of 3° (5%) or more the step height will be a minimum of 8 cm for standing seam.



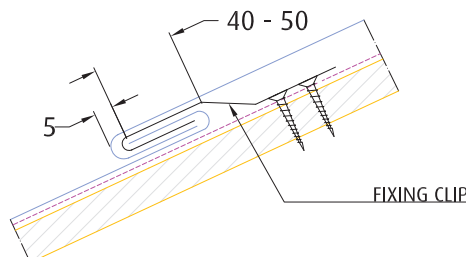
**Double welt:** for pitches of 11° (20%) or more.

The double welt can be used for pitches of 11° and above. The minimum length of the overlap is 200 mm. The dimensions can vary due to the projected expansion and/or contraction based on the conditions at the time of installation, with a securing clip at the top. Depending on climatic conditions such as wind and rain, the overlap should be increased. The VMZINC fixed clip should be soldered onto the zinc sheet, not fastened to it.



**Single welt:** for pitches > 25° (47%) or more

The single welt or single lock cross-welt with an overlap of 51 mm. The dimensions can vary due to the projected expansion and/or contraction based on the conditions at the time of installation. This can be adopted for pitches greater than 25° (42%) in the standing seam technique.







### **Objective of Document**

This document is intended for specifiers (building project and architect and design teams) and users (companies responsible for installation on the building site) of the designated product or system.

Its purpose is to provide the main information, text and diagrams, relating to specification and installation (including supporting structures) and flashing installation. Any use of specification outside the area and/or specifications contained in this manual requires specific consultation with the Umicore technical departments.

This does not commit the latter to any responsibility with regard to the feasibility of the design or implementation of these projects.

### **Countries of application**

This document applies exclusively to the specification and installation of the designated products or systems on building sites in Australia and New Zealand.

### **Qualifications and reference documents**

Please note that the specification of all the construction systems for a given building remains the exclusive responsibility of its design team, who must, in particular, ensure that the specified products are suitable for the purpose of the building and compatible with the other products and techniques used.

Please note that the correct use of this manual requires knowledge of VMZINC materials and of the zinc roofing profession.

While construction is underway all standards in force must be respected.

Furthermore, Umicore offers training courses specifically for professionals.

### **Responsibility**

The specification and installation of VMZINC products manufactured by Umicore are the sole responsibility of the architects and building professionals who must ensure these products are used in a way suited to the end purpose of the construction and that they are compatible with the other products and techniques used.

The specification and installation of the products implies respecting the standards in force and the manufacturer's recommendations. In this regard, Umicore publishes and regularly updates specifications and installation manuals for specific geographic areas and provides training courses. All the information on the latter can be obtained from the local VMZINC team.

Unless otherwise agreed in writing, Umicore cannot be held responsible for any damages resulting from a specification or installation that does not respect all of Umicore's specifications and the above standards and practices.