# THE FERRUM RANGE

**Excellence in Metal Roofing & Cladding** 

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## **EXCELLENCE IN CONSTRUCTING PERIMETER DETAILING - RIDGE**



## **EXCELLENCE IN CONSTRUCTING A RIDGE DETAIL:**

The purpose of a ridge flashing is to complete the intersection between two opposing roof planes and to seal the building against water penetration. For a ridge flashing to be effective, it must be durable, low-maintenance, weather resistant, compatible with adjoining materials, and also able to accommodate thermal movement.

The complete construction of the ridge detail must prevent direct and wind driven water from entering the building, close off the insulation void and ensure that debris does not build-up forming moisture traps that will have a negative impact on the roof sheeting.

MRC Group's commitment to excellence in perimeter detailing, is backed with the unrivalled single source 'Guardian' System Warranty which covers design, materials, installation & maintenance for the term of the roofing and cladding system.

## **ESSENTIAL KEY COMPONENTS:**

METAL RIDGE FLASHING WITH FASTENERS

METAL SERRATED CLOSURE

EXPANDED POLYETHYLENE POLYCLOSURE

MASTIC SEALANT TO ONE SIDE OF POLYCLOSURE

ROOF SHEET 'TURN UP'

Please note it is essential that **ALL** components are installed correctly to withstand the impact from wind driven rain and to stop water ingress

JOHANNESBURG – DURBAN – CAPE TOWN

For project specific specifications, CAD Details, Samples or technical assistance please contact our technical department on **+27 (0) 861 672 476** or refer to our Technical Brochure available on <a href="https://www.mrc-goup.co.za">www.mrc-goup.co.za</a>

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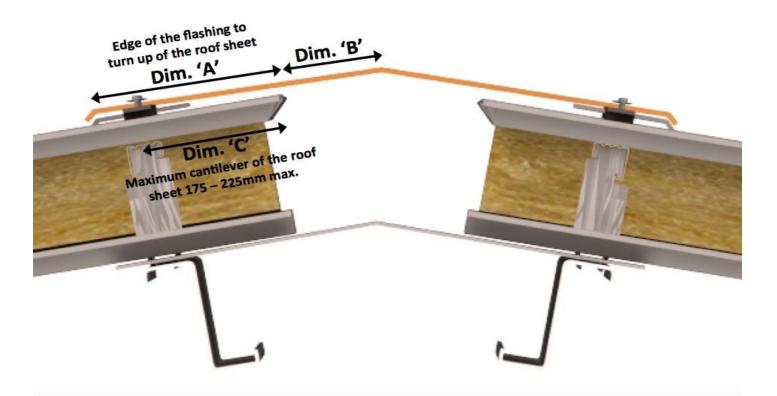
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## **TECHNICAL DATA FOR CORRECT CONSTRUCTION:**

DESIGN OF THE METAL RIDGE FLASHING

To determine the overall girth of the ridge flashing the following should be considered:-

- Roof Pitch
- Length of the roof sheet due to thermal expansion
- Wind loads, Site location and Environment

Dim. 'A' – The lower the roof pitch the longer this dimension should be to stop wind driven rain.

Dim. 'B' – This dimension is determined by the purlin distance. (\*In the below table we have assumed 100mm)

Table of Minimum Dimensions to determine the correct girth of Ridge Flashings.

| Flashing Girth<br>Calculator   | Ridge Edge<br>Turn Down | Dim 'A' | Dim 'B' (*) | Leg of the<br>Flashing | Total Girth<br>(both sides) | Minimum<br>Gauge of Steel |
|--------------------------------|-------------------------|---------|-------------|------------------------|-----------------------------|---------------------------|
| Roof Pitch up to 7.5 Degrees   | 20mm                    | 300mm   | 100mm       | 420mm                  | 840mm                       | 0.8mm                     |
| Roof Pitch over<br>7.5 Degrees | 20mm                    | 225mm   | 100mm       | 345mm                  | 690mm                       | 0.8mm                     |

Please note that any flat, unbent surfaces greater than 270mm should be formed from 0.8mm gauge steel

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### **TECHNICAL DATA FOR CORRECT CONSTRUCTION:**

#### METAL SERRATED CLOSURE

The primary purpose of the metal serrated ridge closure is to withstand the impact of wind and to slow the passage of wind driven rain. Although it will stop some water entering the detail it is not sealed to the roof sheet.

The impact from wind behind the metal serrated ridge closure is minimal and therefore the wind driven rain entering the detail slows quickly. The steeper the roof pitch, the less the water will travel into the detail before it stops or contacts the polyethylene polyclosure.

#### CLOSED CELL POLYETHYELENE POLYCLOSURE

The primary function of the polyclosure is to stop wind driven rain and debris entering further into the ridge. It should be sealed on the bottom edge to the roof sheet with a butyl mastic sealant, to provide a seal. As the roof sheet thermally moves the polyclosure will move with the roof sheet, still providing a water tight seal.

#### ROOF SHEET 'TURN - UP'

The 'turning up' of the edge of the roof sheet is to strengthen the edge and to provide the final detail to stop any water ingress into the building.

The turning up the roof sheet should be undertaken by the appropriate manufacturer's tool to ensure that the roof sheet does not split and that the turn up is uniform.

#### SYSTEM WARRANTY

Up to 20 year, single source 'Guardian' System Warranty covers Design, Materials, Workmanship & Maintenance.

#### **CAUTIONARY NOTE**

For the long term performance of the ridge detail, it is essential that all components are installed correctly. Should any of the components be omitted or later removed, debris build-up causing water traps will speed up the corrosion of the roof sheets within the ridge detail. Once rust holes have been formed, the ridge detail will no longer be water tight.



Steel roof sheet material breakdown within the ridge



Corrosion of roof sheet as a result of moist debris build-up



Accumulation of wind driven debris build-up

#### **CACCREDITATIONS**







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