# THE FERRUM RANGE

**Excellence in Metal Roofing & Cladding** 

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## 'PIERCED FIX' INSULATED ROOF SYSTEM WITH FACED INSULATION



#### **SYSTEM OVERVIEW:**

MRC Group's insulated 'Pierced Fix' roof system using compressed bulk density faced insulation is the standard form of construction for new build roofs.

The faced bulk density insulation can be supplied in a range of thicknesses, colours and finishes and is supported either by galvanised mesh or straining wire which is installed perpendicular to the steel purlins.

The faced bulk density insulation is compressed between the 'Pierced Fix' roof sheet and the purlin. Under compression the thermal performance of the insulation is reduced by up to 40% from stated uncompressed technical data.

MRC Group's installed system 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.

## **KEY FEATURES:**

- Full range of aluminum and steel 'Pierced Fix' roof and cladding systems
- Available R-Value performance up to 1.5 (m<sup>2</sup>.K/W) in its compressed state
- End laps and side laps to be sealed with 8mm round butyl seal
- Not advised for roof pitches less than 7.5 degrees
- Backed with the up to 20 year 'Guardian' System Warranty

Compressed insulation reduces its thermal performance by up to 40%

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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## **TECHNICAL DATA:**

#### STRAINING WIRE INSULATION SUPPORT SYSTEM

 1.6mm galvanised or coated steel wire perpendicularly secured to the purlins at between 300 – 400mm centres

#### **FACED BULK DENSITY INSULATION**

- Full range of insulation types & thicknesses available
- Facings include silver foil, white & black
- Fire Classification Class 1 (non-combustible)

R-Value Table for insulation compressed between the 'Pierced Fix' roof system and the steel purlin

| R-Value (m².K/W) | 0.9  | 1.5   | > 100mm NOT advised with  |
|------------------|------|-------|---------------------------|
| Glass Wool       | 50mm | 100mm | 'Pierced Fix' roof system |

i.e. Insulation compressed between purlins & roof sheets will lose up to 40% of the proclaimed uncompressed R-Value

R-Value Table with use of the AshGrid<sup>™</sup> Spacer System

| R-Value (m².K/W) | 2.5   | 3     | 4     | 5     | 6.25  |
|------------------|-------|-------|-------|-------|-------|
| Glass Wool       | 115mm | 135mm | 180mm | 220mm | 280mm |
| Bracket          | 115mm | 135mm | 180mm | 220mm | 280mm |

i.e. a constant cavity thickness does **NOT** compromise the R-Value

### WEIGHT OF A TYPICAL INSULATED ROOF SYSTEM

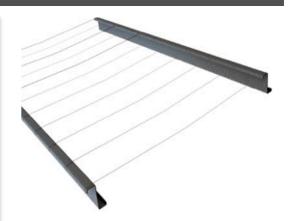
| • | 1.6mm wire at 300mm centres | $0.5 \text{ kg} / \text{m}^2$ |
|---|-----------------------------|-------------------------------|
| • | 100mm roll out insulation   | $1.3 \text{ kg} / \text{m}^2$ |
| • |                             | $6.0 \text{ kg}/\text{m}^2$   |
|   | Total Weight                | $7.8 \text{ kg} / \text{m}^2$ |

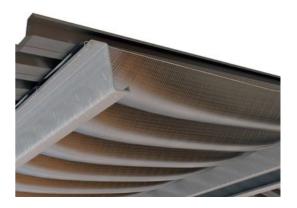
#### ALTERNATIVE OPTIONS TO CONSIDER

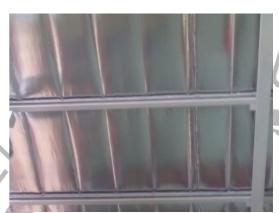
| • | 0.8mm Aluminum Roof System | $4.0  \text{kg}  /  \text{m}^2$ |
|---|----------------------------|---------------------------------|
| • | 0.8mm Steel Roof System    | $9.0  \text{kg}  /  \text{m}^2$ |

### SYSTEM WARRANTY

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







#### **ACCREDITATIONS**







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