BRIARWOOD
ESTD 1978
BUILDING AGRICULTURE

SPECIFICATION SHEET

NOVEMBER 1ST 2023

PRODUCT REFERENCE

Insulated Roof Panel PIR 30mm

UK CA CE RIDBA Rural & Industrial Design & Building Association Trustpilot

CONTENTS

GENERAL DATA

PRODUCT CODE

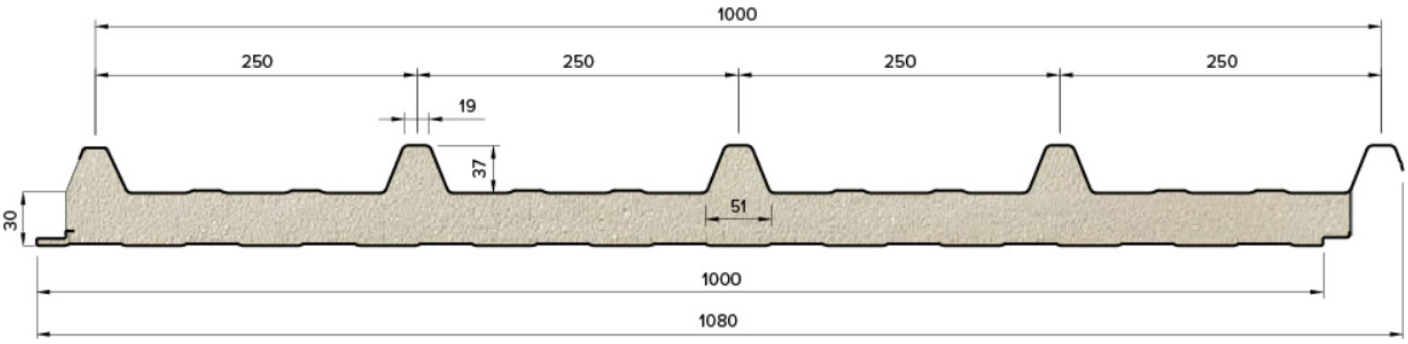
- **Roof Panel:** Insulated Roof Panel PIR 30mm
- **Code:** METPOLINS3003075, METPOLINS3004075, METPOLINS3005075, METPOLINS3006075, METPOLINS3007075

DETAILS OF CLASSIFIED PRODUCT

Nature and end use application

The product **INSULATED ROOF PANEL PIR 30MM** *is defined as a self-supporting double skin metal faced insulating panel. Its classification is valid for the following end use application(s):*

- Wall - Without non combustible substrate
- Ceiling- Without non combustible substrate



TECHNICAL DATA	VALUE
Overall width	1080mm
Cover width	1000mm
Corrugation pitch	250mm
Depth of profile	37mm
Side lap	1 rib
Minimum end lap	75mm
Minimum roof pitch	4 Dg
Approx weight when installed	7.42 Kg/m^2
Maximum purlin spaces	1880mm
Cutback	75mm

CHARACTERISTICS

ELEMENT	*THICKNESS*	*REFERENCE STANDARD*
Topside metal facing	0.40mm	EN 14509
Insulation core	30mm	EN 14509
Underside liner	0.40mm	EN 14509

INSULATION TABLE

INSULATION THICKNESS	CORE TYPE	WEIGHT	DENSITY	U-VALUE	RW	THERMAL RESISTANCE R
30mm	Polyisocyanurate PIR	7.42 Kg/m^2	40±5 kg/m3	0.71 W/m^2K	23.0 dB	1.41 m^2K/W

CHARACTERISTICS TABLE

ELEMENT	VALUE
Density (with skin)	40 Kg/m^3
Density (without skin)	36-38 Kg/m^3
Thermal transmittance	0.71W/m^2K
Thermal conductivity	λ = 0.023 W/mK
Reaction to fire	B-s2,d0
Fire resistance	Broof T2-T3
Water permeability	NPD
Permeability to water vapour	Impermeabile
Air permeability	NPD
Noise insulation	NPD
Tensile strength	0.064 N/mm^2
Tensile elasticity	1.311 N/mm^2
Compressive strength	0.099 N/mm^2
Compressive elasticity	1.176 N/mm^2
Shear strength	0.086 N/mm^2
Shear module	2.961 N/mm^2
Tension of compression for profiled façade	238.5 N/mm^2
Tension of wrinkle for continuous panel	56.11 N/mm^2
Adhesion value	1 Kg/cm^2
Water absorption	≥ 95%
Operating temperature	from -40°C to +80°C

CLASSIFICATION AND DIRECT FIELD OF APPLICATION

REFERENCE AND DIRECT FIELD OF APPLICATION

- This classification has been carried out in accordance with clause 8.2 of EN 13501-1:2009

CLASSIFICATION

- The Briarwood Insulated Panels with the 30mm and 80mm insulation core thickness in relation to its **fire reaction behaviour is classified as B**.
- The additional classification in relation to **smoke production is s2**.
- The additional classification in relation to flaming droplets/particles is **d0**.

The format of the reaction to fire classification for construction products except flooring is:

FIRE BEHAVIOUR		SMOKE PRODUCTION			FLAMING DROPLETS	
B	-	**s**	**2**	-	**d**	**0**

FIELD OF APPLICATION

This classification is valid for the following end use conditions:

- Equal or more than 30mm thick
- Metal skin thickness from 0.4mm or more
- Cut edges protected or not protected with steel flashings
- With or without joints
- Fixing each 400mm or less
- Core density *40 kg/m3 ±15%*

REFERENCE STANDARDS

FIRE CLASSIFICATIONS

- **BS EN 13501-1:** Fire classification of construction products and building elements
- **EN ISO I 1925-2:** Reaction to fire rests for building products
- **BS EN 13823**: Reaction to fire tests for building products excluding floorings exposed to the thermal attack by a single burning item

TOLERANCES AND CALCULATIONS

- **BS EN 14509:**Factory-made double skin metal faced insulating sandwich panels