

RL PIR BOARD

FOR ULTRATHERM ROOFING AND CLADDING SYSTEMS

DESCRIPTION

RL PIR Board is a Polyisocyanurate (PIR) rigid foam panel with a range of facer options.

Facer options include;

- Pure aluminium foil
- Multi-layer aluminium facer
- Coated fiberglass

RL PIR Board provides excellent thermal and fire performance and has high compressive strength for a rigid thermoset insulation board.

APPLICATION

Rigid insulation layer providing high thermal performance in all RoofLogic UltraTherm metal roofing, membrane roofing and wall cladding systems.

BENEFITS

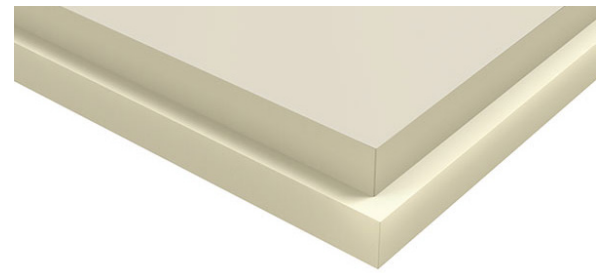
- Light weight panels with excellent rigidity and dimensional stability
- Excellent fire performance. RL PIR Board satisfies the requirements of AS 1366.2-1992: Combustibility of foamed plastics. When incorporated within a properly designed Rooflogic system a Group 1S rating is achieved with the RL PIR insulation core (AS ISO 9705-2003; ISO 9705:1993)
- Practically no water absorption or uptake of water by capillary action due to its structure of closed cell foam and to the aluminium paper.
- High thermal value relative to thickness. Boards can be supplied with L-Shape or tongue and groove edge to further reduce thermal bridging.
- High compressive strength
- Easy to manipulate and cut during installation
- CFC/HCFC free with zero ozone depletion potential (ODP)
- Range of facer options dependent on specific system and application
- Rot proof

STORAGE

RL PIR Boards are easy to handle, install and cut to size. Slabs are supplied in polythene packs which are designed for short term protection only. For longer term protection on site, product should be stored indoors, or under cover off the ground. Slabs should not be left permanently exposed to the elements.



RL PIR Board with Aluminium Facer.



RL PIR Board with Coated Glass Facer

TECHNONICOL PIR BOARD

THERMAL PROPERTIES-(R-VALUE)

| THICKNESS (mm) | 40 | 50 | 60 | 80 | 100 | 120 | 140 |
|----------------------------|------|------|------|------|------|------|------|
| THERMAL (ALUMINIUM FACER) | 1.8 | 2.25 | 2.7 | 3.6 | 4.5 | 5.4 | 6.3 |
| THERMAL (FIBERGLASS FACER) | 1.54 | 1.92 | 2.31 | 3.08 | 3.85 | 4.61 | 5.38 |

Note: System R-values will often be different to the stated R-Value of the board only. Contact Rooflogic for project specific thermal calculations in relation to specific assemblies.

TECHNICAL PROPERTIES

| PROPERTIES | CLASS ACC. EN 13165 | STANDARD | UNIT | SPECIFIED VALUES |
|--|-------------------------------|--|-------------------|---|
| DECLARED THERMAL CONDUCTIVITY COEFFICIENT | $\lambda_D, 10^\circ\text{C}$ | EN 12667 | W/m·K | 0.022 (aluminium facer) 0.026 (coated glass facer) |
| COMPRESSIVE STRENGTH | CS(10/Y)200 | EN 826 | kPa | $\geq 150\text{kPa}$ |
| DIMENSIONAL STABILITY 48h, 70°C, 90 %hr | DS(70,90)3 | EN 1604 | % | long, anch. <2 esp. <6 |
| WATER ABSORPTION | WS(P) | EN ISO 29767 | % | 0.1 |
| THICKNESS | - | EN 823 | mm | 30-150 |
| REACTION TO FIRE OF THE PRODUCT ¹ | - | EN 13501-1 | - | Euroclass E |
| | | AS 1366.2-1992 | | PASS |
| REACTION TO FIRE OF THE PRODUCT IN END USE (RL PIR BOARD OVER RL BASE DECK-STEEL DECKING.) | - | AS ISO 9705-2003 ¹ ISO 9705 -1993 ² | - | Group 1-S Classificaton |
| DENSITY | | EN 1602 | kg/m ³ | 30 ± 2 |

¹ AS ISO 9705-2003. Group Number Classification and SMORGA

² ISO 9705 -1993. Group Number Classification and Smoke Production Rate

MANUFACTURER

Rooflogic PIR Board is produced by the following manufacturers:

Techno-Nicol
Ryazan, 390047
Russian Federation

Manufacturing process in compliance with UNI ISO 9001 and UNI ISO 14001 Certification

POLIURETANOS PIR BOARD

THERMAL PROPERTIES-(R-VALUE)

| THICKNESS (mm) | 40 | 50 | 60 | 80 | 100 | 120 | 140 |
|----------------------------|------|------|------|------|------|------|------|
| THERMAL (ALUMINIUM FACER) | 1.75 | 2.20 | 2.65 | 3.50 | 4.40 | 5.30 | 6.15 |
| THERMAL (FIBERGLASS FACER) | 1.40 | 1.75 | 2.10 | 2.95 | 3.70 | 4.60 | 5.35 |

Note: System R-values will often be different to the stated R-Value of the board only. Contact Rooflogic for project specific thermal calculations in relation to specific assemblies.

TECHNICAL PROPERTIES

| PROPERTIES | CLASS ACC. EN 13165 | STANDARD | UNIT | SPECIFIED VALUES |
|--|--------------------------|--|-------|---|
| THERMAL CONDUCTIVITY COEFFICIENT | λ_i , (7d, 10°C) | EN 12667 | W/m·K | 0.0215 |
| DECLARED THERMAL CONDUCTIVITY COEFFICIENT | λ_D , 10°C | EN 12667 | W/m·K | 0.023 (aluminium facer) 0.028 (coated glass facer) |
| COMPRESSIVE STRENGTH | CS(10/Y)200 | EN 826 | kPa | $\geq 250\text{kPa} \pm 50$ |
| DIMENSIONAL STABILITY 48h, 70°C, 90 %hr | DS(70,90)3 | EN 1604 | % | $\Delta \epsilon_l, \Delta \epsilon_b \leq 2$ $\Delta \epsilon_d \leq 6$ |
| WATER ABSORPTION | WL(T)1 | EN 12087 | % | ≤ 1 |
| THICKNESS | - | EN 823 | mm | 30-150 |
| REACTION TO FIRE OF THE PRODUCT ¹ | - | EN 13501-1 | - | Euroclass E (AL) Euroclass F (VV) |
| | | AS 1366.2-1992 | | PASS |
| REACTION TO FIRE OF THE PRODUCT IN END USE (RL PIR BOARD OVER RL BASE DECK-STEEL DECKING.) | - | AS ISO 9705-2003 ¹ ISO 9705 -1993 ² | - | Group 1-S Classification |

¹ AS ISO 9705-2003. Group Number Classification and SMORGA

² ISO 9705 -1993. Group Number Classification and Smoke Production Rate

MANUFACTURER

Rooflogic PIR Board is produced by the following manufacturers:

Poliuretanos (owner:Kingspan Insulation SA Ltd.)
17244 Cassà de la Selva
Girona - Spain

Manufacturing process in compliance with UNI ISO 9001 and UNI ISO 14001 Certification