
ARDEX WARM ROOFING SYSTEMS

THERMAL ROOFING INSULATION



SYSTEMARDEX
PREMIUM PERFORMANCE

THE FUTURE OF ROOFING

ARDEX has been producing roofing membrane systems worldwide for over 50 years. We offer a complete line of high performing roofing solutions as individual as your building.

Already a strong trend worldwide, we're bringing the benefits of warm roofing to New Zealand buildings. Enhance thermal control by adding superior insulation directly below the roof, creating healthier buildings that use significantly less total energy.



THERMAL INSULATION

ARDEX Polyiso insulation board offers high-energy efficiency. Compatible with all types of commercial roofing systems, this lightweight, easy-to-handle insulation is suited for direct application onto steel roof, concrete or wood deck. It provides outstanding thermal resistance, dimensional and compressive strength.

ARDEX Polyiso board is suitable for adhered, ballasted and mechanically fastened single-ply roofing systems. The installation of ARDEX Polyiso insulation boards as part of the ARDEX Total Roofing System provides you with a single source of quality design, quality materials and warranty responsibility.

The product itself consists of a closed-cell polyisocyanurate foam core laminated on both sides to a glass reinforced mat facer. The foam technology does not contribute to the depletion of the earth's ozone layer (zero ODP) and uses a HCFC-free blowing agent.



OUTSTANDING THERMAL PERFORMANCE

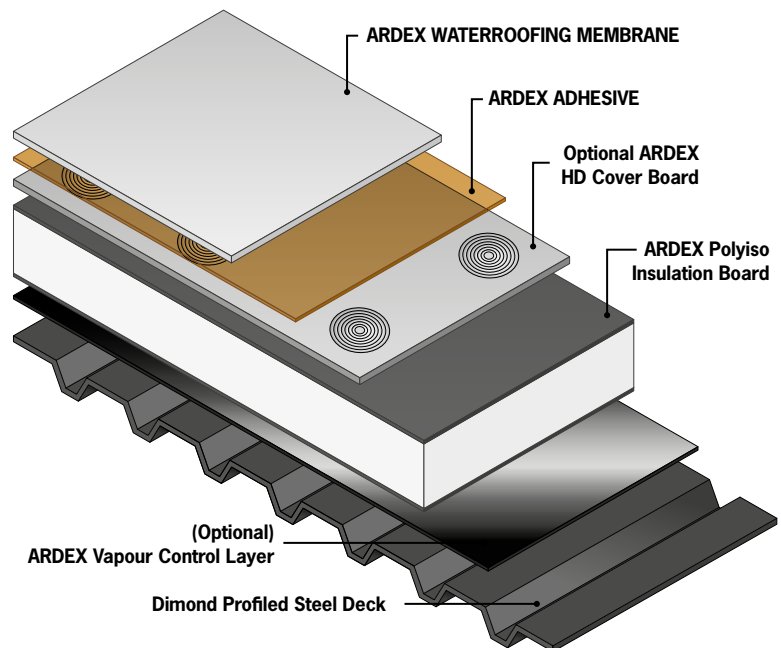
Polyisocyanurate (PIR) has a thermal conductivity rating of $\sim 0.021 \text{ W/mK}$ compared to fiberglass at 0.05 W/mK .

SUPERIOR ENERGY EFFICIENCY

By ensuring the entire roof structure is insulated, warm roofing systems such as ARDEX Polyiso boards mean it's more energy efficient than a cold roof. In fact, research shows it pays for itself within 20 years.

ARDEX HD COVER BOARD

ARDEX HD Cover Board is a high-density cover board that not only combines high impact resistance and ease of installation in a single durable product, but also enhances fire and wind resistance of the roof build-up, adds compressive strength to the entire roof system and provides a smooth surface in case of reroofing. With the highest thermal performance of any 12mm cover board product on the market and a superior resistance to extreme weather conditions, ARDEX HD Cover Board provides an added measure of protection for any roof.



AN ENVIRONMENTALLY RESPONSIBLE CHOICE

The product itself is a 12.7mm thick Polyiso board designed for use as a cover board. It is a mould resistant, high-density, closed-cell, Polyiso foam core that has been manufactured with a coated fiberglass facer. The foam technology does not contribute to the depletion of the earth's ozone layer (zero ODP) and uses a HCFC-free blowing agent. It also contains 8% post industrial recycled content.

AN ADDED MEASURE OF PROTECTION

With a compressive strength of more than 800 kPa (5 to 6 times that of a normal PIR insulation board), ARDEX HD Cover Board adds structural strength to the entire roofing system and helps to absorb the effects of hail, worker traffic and other potentially damaging impacts. ARDEX HD Cover Board can also enhance fire performance of the roofing system.

REDUCED INSTALLATION TIME AND LABOUR COSTS

Lightweight at just 5kg a sheet, ARDEX HD Cover Board is easy to cut, manipulate and handle for quick fabrication and placement around roofing elements such as drains or other penetrations, saving time on every project.

PROTECT. CONSERVE. ENDURE.

POLYISO INSULATION BOARD AND HD COVER BOARD - A WINNING COMBINATION

When foot traffic on the roof is heavy, mineral wool boards run the risk of being crushed or, in case of plastic foam insulations, the adhesion of the facer to the foam can be affected.

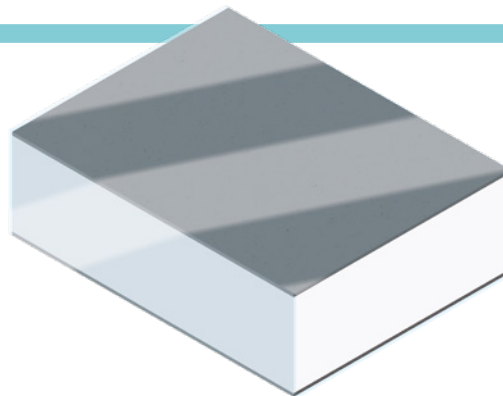
ARDEX HD Cover Board spreads the load and protects the boards underneath. It therefore often pays, from a life-cycle cost perspective, to combine ARDEX Polyiso insulation boards with the protection of ARDEX HD Cover Boards. Get impact resistance and ease of installation in a single durable product.



WHY CHOOSE ARDEX WARM ROOFING SYSTEMS

- Compatible with ballast, fully adhered and mechanical attached single-ply systems
- Provides outstanding thermal resistance
- Excellent dimensional and compressive strength
- Compatible with ARDEX recommended water based bonding adhesives
- Lightweight, easy (and fast) to handle and install – reducing labour costs
- Compatible with fully-adhered roofing systems
- Good fire resistance properties - enhanced fire performance
- Environmentally friendly
- Superior energy efficiency
- Good resistance to extreme weather conditions
- Add structural strength to the entire roofing system

ARDEX POLYISO BOARD INFORMATION



- 1.2m x 2.4m and varying thicknesses from 20mm to 140mm
- Density: 38~42 kg/m³
- Compressive strength ≥ 0.09 MPa
- Shear Strength ≥ 0.11 MPa
- Thermal Conductivity @ 15°C
- Thermal Conductivity @ 23°C
- Dimensional Stability:
 - $\geq 3\%$ (70° C @ 95%RH for 20hrs)
 - $\geq 1\%$ (-10° C @ 95%RH for 20hrs)
- Water Vapour Transmission Rate: 10-15g/m² per 24hours

Thickness	R-Value @ 15° C (mK/W)	Weight (kg/m ²)
20	0.97	0.97
25	1.22	1.19
30	1.46	1.41
40	1.95	1.85
50	2.43	2.29
60	2.92	2.73
70	3.41	3.17
75	3.65	3.39
80	3.90	3.61
90	4.38	4.05
100	4.87	4.49
140	6.82	6.25



ARDEX Polyiso Board is the perfect thermal insulation roofing option for a variety of projects including;

- Residential homes
- Apartment Buildings
- Hotels
- Warehousing and commercial spaces
- Offices

To learn more please call 0800 227 339,
email ardexspec@ardexnz.com
or visit **ardex.co.nz**

COMPATIBLE
WITH ALL
ROOFING
SYSTEMS



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