



ARDEX TPO MEMBRANES

Environmentally Friendly and
Energy Efficient Roofing Membranes

TPO ROOFING SYSTEMS





ARDEX TPO Roofing Systems



A WORLD OF EXPERIENCE... PROVIDING ENGINEERED SOLUTIONS FOR WATERPROOFING PROJECTS

ARDEX Australia is part of the ARDEX group, a company founded in Germany in the 1940s, that has grown to become a global business, providing engineered solutions for flooring, waterproofing and tiling applications throughout 59 countries.

Our waterproofing solutions are highly application specific. From sub-floor to roofing, we have developed products that stand the test of time – and moisture. ARDEX are now proud to introduce TPO (thermoplastic polyolefin) membranes to the roofing market.

ARDEX TPO MEMBRANES THE LIGHT COLOURED ROOFING CHOICE

ArDEX TPO Membrane is manufactured by Firestone Building Products, who with almost 30 years in the commercial roofing industry, building upon a 100-year-plus heritage of success and innovation in plastics and rubber polymer technology.

The light coloured roofing choice ARDEX TPO is the smart choice when seeking an energy efficient light coloured, environmentally friendly roofing system that combines aesthetics with strong resistance to ultraviolet radiation, weathering, and outstanding seam strength. ARDEX TPO is a proprietary thermoplastic polyolefin combining polypropylene and ethylene propylene rubber.

The scrim-reinforced membrane combines the durability of rubber with the heat weldability of a thermoplastic in a flexible sheet with excellent installed characteristics.





Images courtesy of Firestone Building Products

The unique benefits of ARDEX TPO membranes

ARDEX TPO is a high performance waterproofing membrane, that is environmentally friendly, fast to install and safe to use.

EASE OF INSTALLATION

ARDEX TPO is available in 2.0m widths providing fast, economical coverage. At 1.53 kg/m² it is a lightweight membrane offering a variety of installation options for low slope roofing applications in both refurbishment and new construction projects.

FAST INSTALLATION

Single ply protection requirement and fast hot air welded seams combine to produce a rapid installation process.

SECURE HOT AIR WELDED SEAMS

ARDEX TPO hot-air welded seams result in a fully secure consistent seam quality and high strength. Heat welded seams form a homogeneous bond by fusing the top and bottom sheets together. ARDEX TPO's seaming process enables it to be installed year-round in a variety of weather conditions.

SAFE INSTALLATION

Utilising a non-flammable, non hazardous system, the ARDEX TPO membrane is extremely safe with no risk of fire or risk to health. Hot air welding eliminates the need for naked flames on site for the installation.



COST EFFECTIVE

The ARDEX TPO roofing system is extremely cost effective compared to equivalent roofing membrane systems.

SUPERIOR WEATHERABILITY AND DURABILITY

ARDEX TPO membrane contains no plasticizers resulting in outstanding resistance to shrinkage and cracking resulting from UV radiation and ozone exposure. The stable inert formula components of ARDEX TPO membranes can provide up to 20 years durability as an exposed membrane in the Australian and New Zealand environments.

SYSTEM SECURITY

The ARDEX TPO roofing system is backed by ARDEX, an International company that has been successfully involved with the building and construction industry for over 50 years.

The products have been developed in the total System ARDEX philosophy and the technology is based on over 100 years development by Firestone Building Products.

TECHNICAL BACKUP

ARDEX offers a comprehensive technical backup through their dedicated Technical Services Facility, R&D facility and experienced Sales and Service field staff. ARDEX will also provide assistance in writing specifications for TPO roofing membranes on your next roofing job.

INTERNATIONAL SUCCESS

Single ply TPO roofing membranes have been used extensively in International roofing installations over the past 15 years and their use has grown exponentially. In the US market, TPO roofing membrane systems have grown to constitute 28% of the roofing market.

In Europe TPO roofing membranes are growing exponentially because of the ability to install under a wide range of weather conditions. Over 150 million square metres of TPO roofing membranes are produced throughout the world each year at present and this is growing.



Images courtesy of Firestone Building Products

Because the environment matters

ARDEX is committed in providing waterproofing solutions of outstanding quality and optimal environmental friendliness. The benefits from ARDEX TPO membranes range from heat reflectivity and energy efficiency to green roofing systems.

ECO-FRIENDLY MEMBRANE

ARDEX TPO is a heat reflective and energy efficient roofing membrane.

- **Heat Reflective**

White colour results in a heat reflective index of 70% and retains a high proportion of this through its service life due to the colour fastness and retention of the membrane.

- **No Toxic Emissions**

The membrane systems chlorine-free, non-halogenated and plasticizer-free formulation in combination with the hot-air welded seaming method produce no emissions harmful to the environment.

- **Bacteria Propagation Resistant**

Ardex TPO membrane exhibits excellent resistance to the propagation of discolouring bacteria that reduces the heat reflectivity and energy efficiency.

- **Low Carbon Footprint**

The TPO membrane can also be easily recycled and has a lower production footprint than comparable systems.

GREEN ROOF SYSTEM

Due to ever increasing concern for the environment, green roofs are becoming regular part of our landscape. ARDEX TPO membranes has successfully passed the FLL test for root penetration resistance in green roofs. It is an ideal membrane for combination with extensive green roof systems using lightweight and low maintenance sedum vegetation.

The ecological benefits of a green roof system are numerous:

- **Reduction of the urban heat island effect**

Prevent reflection of the heat into the surrounding atmosphere. Plant transpiration resulting in cooling the atmosphere.

- **Reduction of energy costs**

Excellent natural insulation properties to help to keep the cold out in winter and the heat out in summer.

- **Storm water management**

Through water retention and increased evaporation.

- **New habitats for plants & animals**

Green roofs create a natural habitat for local wildlife.

- **Improved air quality**

Purification of the air by filtering dusts and pollutants and converting CO₂ into oxygen.

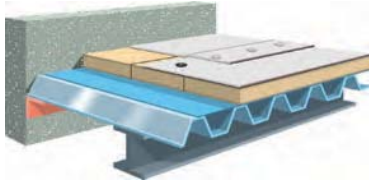
- **Reduction of noise pollution**

Excellent sound insulators reducing the noise pollution external sources.



Reliable solutions for every need

ARDEX TPO's lightweight, flexible, scrim-reinforced membrane is engineered to provide dependable performance in most commercial roofing applications. ARDEX is offering a variety of installation options to meet the most demanding rooftop challenges for both renovation and new built applications.



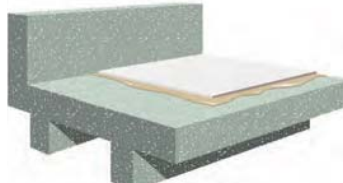
ARDEX TPO MECHANICALLY ATTACHED

The ARDEX TPO Mechanically Attached System is a lightweight system, suitable for roofs that cannot carry the additional load of ballast, where the roof deck is suitable for mechanical attachment.

SYSTEM FEATURES

- Adaptable to unusual roof configurations
- High wind uplift performance
- Low material costs
- Lightweight

Ideal for installation to metal roofs over insulation.



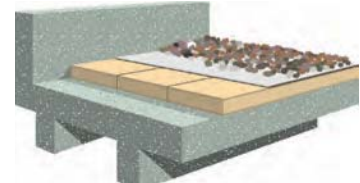
ARDEX TPO FULLY ADHERED

The ARDEX TPO Fully Adhered System is a lightweight system with outstanding design flexibility. It is suitable for contoured roofs, roofs with irregular shape and any roof with limited load bearing capacity, provided the substrate is compatible with adhesives.

SYSTEM FEATURES

- Applicable on any slope
- Applicable to unusual roof configurations
- Lightweight
- High wind uplift performance

Ideal for installation to concrete and masonry roofs.



ARDEX TPO BALLASTED & LANDSCAPED

The ARDEX TPO Ballasted System is the most economical TPO roofing system available and is suitable for a wide variety of buildings.

SYSTEM FEATURES

- Excellent choice for Green roofs
- Fewer seams
- Large choice of compatible substrates
- Faster installation
- Low installation costs
- Excellent fire rating

Suitable for light/medium traffic decks and roofs.

Complete System ARDEX Installation

ARDEX offers a complete range of accessories for its TPO Roofing Systems to meet the requirements of various roofing applications and installation details. This allows building owners, specifiers and installers the convenience to obtain all components necessary for a complete TPO Roofing System from ARDEX.





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