SMART SUSTAINABLE DESIGN



LIVING SMART

Thermotek customises world-class innovations and sustainable systems for the Australian climate. Our extensive knowledge and industry experience include manufacturing, project management and field support. We make superior, energy-efficient uPVC windows and doors with advanced German technology. Ideal for your sustainable build projects.

WORLD-CLASS INNOVATIONS. LOCAL EXPERTISE

Established in 2012, Thermotek manufacture everything in Melbourne. We are one of the leading, commercial uPVC window and door suppliers in Australia.

Our commitment to world class standards has evolved us into utilising highest quality profiles and hardware from Germany, and top-grade Australian double glazing. This is complemented with local customised designing, manufacturing capacity, on-the-field project support and an in-depth understanding of the local market and environment. This provides a significant value proposition to any designer, architect, or home builder.

Consistency of Quality Excellence

Thermotek have a long-term, strategic partnership with aluplast in Germany. This has allowed us to access to the most updated, innovative uPVC profile systems in the world. We customise the global innovations and systems for our climate and market. Exceeding Australian Standards, experience high energy efficiency with our windows and doors. Perfect for modern, sustainable, passive design and energy rated projects.

Customised Solutions at No Extra Cost

We have extensive, local knowledge and industry experience over many years. This has paved the way to an unwavered focus. Our mission is making superior window and door systems accessible to Australian homes. Enabling accessible uPVC pricing and responsive services lead-times.

Seamless Project Delivery

Our committed, experienced team include project management and field services experts, and more.

MEMBERS OF







INNOVATIVE

Our focus is on achieving a net-zero future. Our aim is to reduce dependence on fossil fuels. This is one of the main reasons we chose uPVC as our material of choice, rather than timber or aluminium.



Versatility

UPVC stands for unplasticised polyvinyl chloride. This is the rigid, hard, durable version of PVC. UPVC remains the most important polymer for the construction sector. It is popular across Europe and the USA. Versatility and costeffectiveness are some benefits. But there are many more reasons Thermotek chooses uPVC.

UPVC: the Ideal Material of Choice

Vinyl applications can perform for much longer than alternative materials. Flexible vinyl can have a lifespan of up to 100 years. UPVC (window profiles) have a lifespan of up to 300 years. Also, PVC products need minimal maintenance. Less consumption of energy, raw materials and chemicals are necessary to ensure functionality. As a result, PVC has the advantage of remaining in use for a long period before it enters the waste chain.

Strong and Lightweight

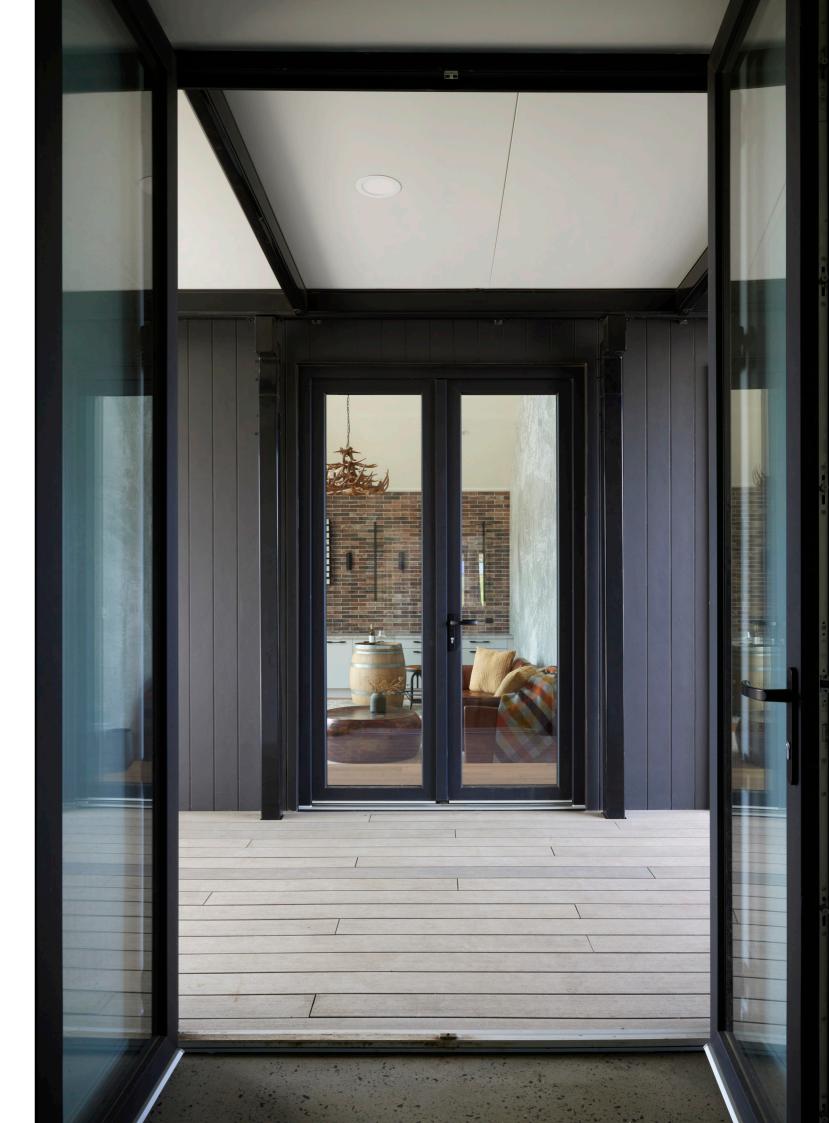
UPVC has abrasion resistance, is lightweight, and has good mechanical strength and toughness. These are key technical advantages for its use in building and construction applications.

High Durability

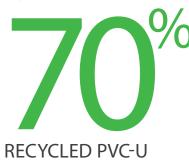
UPVC is resistant to weathering, rotting, chemical corrosion, shock and abrasion. It is thus the preferred choice. Medium to long-term applications accounts for 85% of UPVC's production. Studies show that over 60 per cent will have a working lifespan of over 40 years.

Cost-Effectiveness

PVC has been a popular material for construction applications for decades. This is due to its physical and technical properties and excellent cost-performance advantages. Research shows that PVC is generally the most cost-effective option, with competitive pricing.



WINDOW PROFILES MADE WITH



SUSTAINABLE

UP TO **ENERGY SAVINGS** DURING THE PRODUCTION



REDUCE YOUR EMBODIED CARBON FOOTPRINT

We manufacture window profiles with 70% recycled uPVC. This gives us savings of up to 50% in energy, over 60% in air emissions and more than 60% in water emissions.

UPVC products contribute to energy efficiency through low thermal conductivity.

UPVC window profiles have three times the heat insulation efficiency of aluminium profiles.

The formulation used in our uPVC profiles is free of barium and cadmium. We utilise our additives in a much more targeted manner to ensure sustainable use.



ECO-MANAGEMENT

Emphasis on Recycling

The raw materials for our window profiles include a lead-free, calcium-organic chemical compound. We can manufacture and recycle window systems in an ecological and managed way.

UPVC's Life Cycle

Building a net zero carbon future requires driving down embodied carbon to an absolute minimum and this begins with reducing the carbon footprint of what and how we build. Thermotek's profiles and other products are sourced from partners who share our eco-philosophy, a fully recyclable window and door means our uPVC products are part of a Circular Economy.

Decarbonising Australia's Buildings

As a manufacturer of a very important part of the building envelope, we recognise our responsibility towards the environment. This not only means sourcing materials from low carbon footprint partners, but also playing a direct role in decarbonising Australia's buildings by delivering low carbon footprint products and services.



THERMOTREE PROGRAM

Natural landscapes and forests play a huge role in building a sustainable future. Our focus is on tree planting as part of our continual commitment to sustainability.

With every project collaboration, Thermotek will plant a tree on your behalf. With our Thermotree Program, we have partnered with a brilliant organisation, Carbon Neutral. The organisation focuses on large-scale revegetation of degraded farmlands and reforestation. They restore landscapes and natural ecosystems in the Yarra Yarra biodiversity corridor.





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DESIGN



STAY COOL WITH GERMANY TECHNOLOGY

During hot weather, materials can heat up a great deal. Dark colours absorb heat rays more than light colours. This causes material damage and discolouration. Vast amounts of temperature changes inside and out can affect your windows and doors.

At Thermotek, we mitigate this using our patented cool colour technology. Materials with high surface heat resistance. Thermotek utilises revolutionary Cool Colour technology, in collaboration with Continental. This technology achieves amazing weatherproofing and outstanding UV protection.

Thermotek windows have the option of an innovative PVDF layer structure. This can reduce profiles from heat absorption, even in direct sunlight.

Suitable for any climate, the patented cool colour pigments repel radiating heat. They reflect up to 80% of the Near-Infrared or NIR part of the sunlight. This allows profiles to stay 5°C cooler and colours to stay as brilliant as on the first day, for many years to come.

Thermotek's advanced design and engineering tick all the boxes. Utilise our state of the art window systems.

THE TECHNOLOGY OF COMFORT

Superior Profile Design

Our systems have a profile depth of 70mm, with 3-6 chambers. Suitable for all standard frame, sash, mullion, and transom profiles.

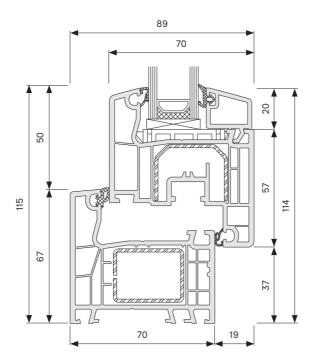
The multi-inner and outermost hollow chambers guarantee optimal thermal insulation properties. The outermost chambers allow for concealed drainage and air equalisation of the rebates. The large, middle chambers accommodate the structure of reinforcement profiles.



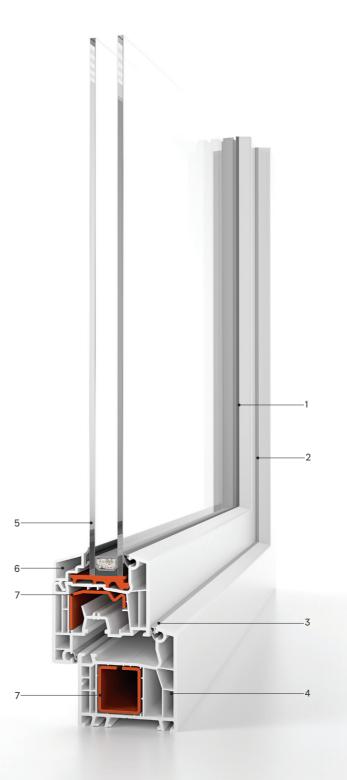
AVAILABLE IN NUMEROUS DECOR VARIATIONS

70mm Profile Depth

- Thermal insulation of the standard combination $U_f\mbox{=}1.3~W/m^2K$
- Backstop gasket system with two sealing levels
- Glazing thickness up to 41mm
- Design variety in the sash (classic-line recessed)
- Tested burglar resistance class RC2
- Concealed drainage is possible
- · Excellent sound insulation up to noise insulation class IV
- · 5-chamber system as standard combination



- 1—Glazing gasket
- 2 Casement optics
- 3 —Sealing levels
- 4 Profile chambers
- 5 —Glazing
- 6 Glass strip
- 7 Steel reinforcement





Single-Leg Glazing Bead

Single-Leg Glazing Bead is a secure, single-leg 'knock-In' or J-bead design. The single-leg bead makes for faster, easier installation. This provides the cleanest glazing platform. Installers love the way the single-leg bead locates. The single-leg format affords both stability and security while accommodating normal glazing tolerance. The secure bead system passes Secure by Design and PAS24 with ease.

Superior Gaskets Insulation

The frame's outer backstop gasket and the sash's inner backstop gasket optimise heat and sound insulation values. This prevents the formation of condensation in the fittings and main profiles. Welded with pre-inserted TPE backstop and glazing gaskets. Choose from either black or papyrus grey gasket.

Squareline Contemporary Profiles

These sculptured shape designs create stunning windows and doors. Beautiful both inside and out with a design focused on symmetry. These windows and doors are perfect for replacements. Easy to fabricate and stunning to look at.

There are positive stops at either extreme of the sculptured shape. These provide defined data points for fabrication machinery. They make fabrication easier in more basic fabrication environments.

Matching Bead and Profile Design

The bead shape mirrors the shape of the upstand to the glazing rebate. This provides a beautiful, balanced appearance with identical sightliness. The finished window looks identical viewed from inside or outside.

Our 24mm high performance, double glazed sealed units have become the performance standard. The option of 28mm glazing depth is also available. Suitable for a wider range of window and door specifications. Glazing beads for 24mm and 28mm sealed units offer a square line appearance. This enhances the profile detail. We can also produce triple glazing with ease utilising our 36 and 40mm glazing beads.

Co-extruded Gaskets

Co-extruded gaskets end the need for weather seals and gaskets to frames and sashes. This is a time-consuming application following the welding process as part of fabrication. The time saved will provide an increase in fabrication efficiency.

Thermotek's gaskets provide outstanding weather performance and complement the profiles' elegant sightliness. Co-extruded gaskets remove "the shrinking back" effect typical of old gasket systems. They prevent any gaps in corners.

Our windows and doors are also easier to fit. They come in two options of either black or papyrus grey gasket.

THERMOTEK



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SMART SUSTAINABLE LIVING

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