

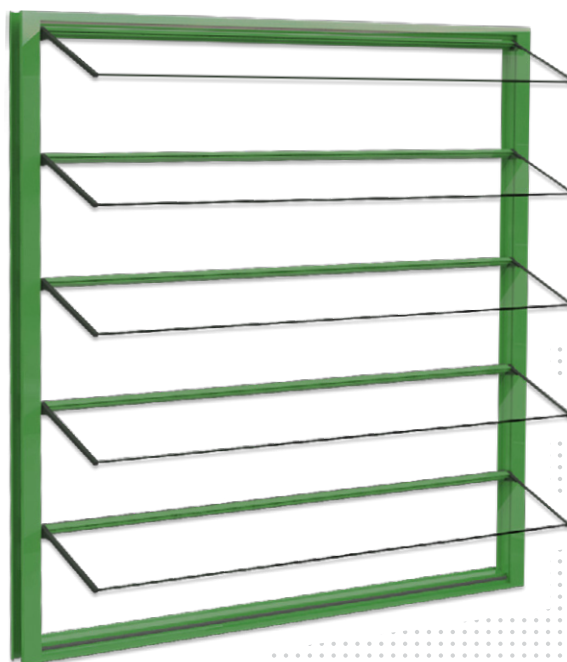
Product Information

The Safetyline Thermique louvre window is a cutting edge solution designed to help clients meet their energy efficiency needs. It combines the advantages of Safetyline's high free air and low air-infiltration louvre windows with European thermal break technology.



Featuring a reinforced polyamide louvre profile (a non-metallic, structural material of low thermal conductivity), the transfer of heat and cold across the window is minimised to reduce system U values.

In an era of sustainable design, Safetyline Thermique allows architects and building designers to achieve performance compliance, improve energy efficiency, and deliver the provision for year round comfort.



Features

Spans

- Extra wide spans up to 1200mm as a single unit or frames can be joined with a connector piece.

Security

- The PA louvre bearers are built into the frame – Which means that even if the glass is broken the system remains secure;
- A 14x14mm square section inside the PA66 glass bearer, facilitates the use of an optional 8mm internal security bar to provide the system with greater resistance to impacts and forced entry. – The rod is fitted inside the louvre bearer which does not affect the appearance of the system.

Seals

- Sealed on all 4 sides with Marine Grade EPDM seals on each horizontal transom and gaskets on the upright sections;
- Water drainage via bottom transom.

Screens

- Insect screens are fitted internally within a rebate section of the window frame, and are easily removed for cleaning;
- Available in fibreglass, aluminium or stainless steel mesh.

Frames

- Extremely durable, high quality 63mm module square cut aluminium frame assembled by stainless steel screws;
- The aluminium components are available in three surface finishes - powder coated, high performance powder coated or anodized;
- A wide range of colours are available to meet individual project requirements, enhancing existing buildings and offering architects and designers greater design freedom;
- Anodising thickness is 20 microns or 25 microns for seaside and inland locations where durability and longevity are of importance;
- Super durable DecoWood finish can be applied to the aluminium where the look of timber is desired.

Louvre Profiles (Louvre Bearers)

- The louvre profile is made of PA66 with 25% glass fibre.
- The surfaces are treated with an innovative system that allows its electrostatic powder coat surface finish.
- Where the look of anodised is preferred, the louvre profile can be powder coated the closest colour match Zeus Lunar Grey Matt.

Louvres

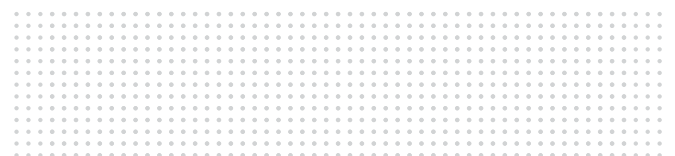
- Louvres are available in glass with nylon end caps;
- Any type of commercially available glass can be used in 6mm, 6.38mm or 6.5mm thickness – including laminate, low e, tinted, frosted, acoustic and performance glass;
- Louvre blade centres are 135mm;
- Requires 200kg pull out to remove glass louvre blades;
- Louvres open to the outside of the window – no interference to curtains or blinds.

Installation

- No assembly required - The system is supplied fully manufactured and glazed;
- Easy and fast installation using screws through the pre-punched fixing holes in the upright sections.

Operation

- Manual operator options include a cam driven lever mechanism or turn handles which open the louvres to 80° and can be fitted on the left or right hand side of the frame;
- High level louvres can be operated with a winding mechanism and detachable map rod;
- Louvres can be motor controlled using a 12V DC or 24V DC Actuator with wall switch and/or hand held remote;
- Motorised louvres can be integrated with climate control, fire and smoke systems;
- Internal and external motor options available.



Key Performance Ratings

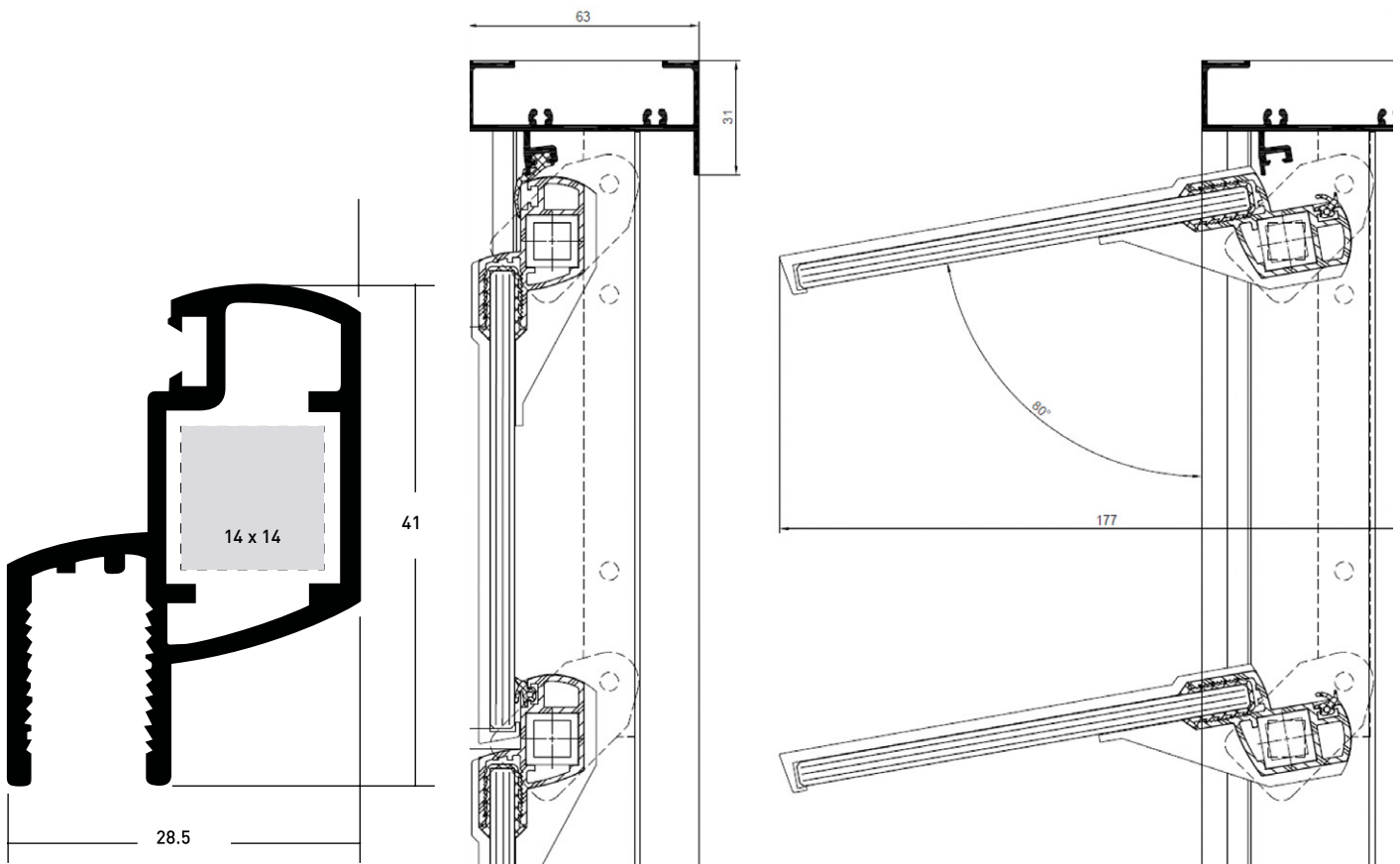
- Acoustic Performance – 35Rw
- Protection of Openable windows (Fall prevention) - Pass with insect screen
- Ultimate Load Test – tested to 550kg
- Impact Test – AS/NZS2208 – Pass
- Meets balustrade requirements
- Meets fall prevention requirements

Total Performance U-Value and SHGC Calculation to AFRC Lab conditions (WERS)

The most energy efficient windows result from a combination of both an insulated frame and the right glass to achieve superior energy performance.

An analysis has been undertaken to assess the overall thermal performance of the Safetyline THermique louvre system. The analysis was undertaken with THERM 6.3, the Australian fenestration rating council (AFRC) total U-value and solar heat gain coefficient (SHGC) of the vision panels has been calculated based on actual sizes.

PANEL SIZE	GLAZING	U -VALUE	SHGC
1400x2700	6.38mm Clear Laminate	6.0	0.51
1400x2700	6.38mm Comfortplus	4.4	0.45
1400x2700	6.2mm Vacuum Glass	3.4	0.44



PA66 louvre bearer profile

Top node of Safetyline Thermique in closed position (left) and in open position (right)