

Fire rated glass

Aluflam glass structures use specially developed A grade safety glass that comply with AS1288 and AS2208. A number of different glass types are used depending on the fire rating and product type. The glass consists of multiple layers of safety glass that is laminated with intumescent gel that provides thermal protection.

The intumescent gels used by the glass manufacturers contain a proprietary combination of compounds that are usually reactive to heat. These are integral to achieving the required fire integrity and insulation performance. Depending on the specific glass, the stable temperature range is usually between -10 °C to +50 °C. More information is on the datasheet of the glass from the manufacturer.

Fire rated glass is clear and transparent however it is not the same as clear glass as clear glass does not have an intumescent fire resistant gel. Whilst these compounds are usually transparent, it can be possible for the glass to appear milky depending on environmental factors, differing angles, lighting conditions or some cleaning products.

Standard glass

Any non-fire rated glass can be supplied in Aluflam glass structures. The slim AF70 profile can accommodate glazing from 6mm thick up to 38mm thick. AW60 profile can accommodate glass up to 80mm thick. For larger glass please contact an Aluflam sales representative for a customised solution.

Interior Use

Usually interior glass is single glazed and installed in a controlled environment. Be mindful of interior installations that may still be exposed to UV or exterior factors. Unusually high exposure to UV or heat should be avoided for fire resistant glass that is rated for interior use only.

Exterior Use

For exterior installations Aluflam recommends a double glazed unit with 6mm toughed low-E glass is used to provide higher comfort levels and also protection of the intumescent gels from elevated temperatures.

It is also possible to use single glazed fire rated glass for external applications provided there is a UV protection layer in the glass.

Transportation and storage

- Transport and store in vertical position only using special racks with an inclination of 5°.
- Transport and store at temperatures above -10 °C but not higher than +50 °C.
- Avoid extreme atmospheric conditions, exposure to atmospheric precipitations and direct sunlight.
- Avoid formation of condensation water between glass panes.
- Each individual glass pane must rest against the support base during transportation and storage. The surface of base of rack must be wooden, plastic or rubber.
- No contact between glass panes must be allowed during transportation and storage by using appropriate cork spacers between the panes.

Installation

- Glass panes must be carried in a vertical position, taking particular care to protect their corners and edges against any impact. Glass panes must never rest on their corners or be supported on a hard surface.
- Make sure to thoroughly clean the surface and edges of a glass pane prior to fitting.
- Always inspect each glass pane prior to fitting to make sure it has no visual defects or damages. Never fit the glass that has been damaged.
- For full installation details follow the installation manual for the product.

Cleaning

- Clean glass and frames frequently during and after construction.
- Always protect product from contaminating substances e.g. construction dust, leachate from concrete and rusting from steel can contribute to the formation of mild chemicals which may stain or otherwise permanently damage the glass.
- Only use a soft cleaning material free of grit and grime to avoid scratching and marking glass surfaces.
- Use clean warm water with a mild liquid detergent. Proprietary glass cleaners may also be used.
- Do not use detergents that contain either alkaline, acids or fluoride. Tap water in Australia contains fluoride.
- Abrasive cleaning methods i.e. scouring pads, steel wool, and razor blades may only be used for spot cleaning, as damage to the surface might result
- Do not allow any metal or hard parts of the cleaning equipment to contact the glass surface.
- Rinse immediately with clean water and remove any excess water from the glass surface with a squeegee.
- Temporary screens may need to be installed if welding, sandblasting, floor sanding, cutting or other potentially damaging construction practices are used near glass. Glass installations which are adjacent to concrete eg concrete slab floors require extra care and cleaning due to the abrasive nature of concrete dust.

What to avoid

- Do not store or place other material in contact with the glass. This can damage the glass or create a heat trap leading to thermal breakage.
- Never use abrasive cleaners on glass. Scouring pads or other harsh materials must not be used to clean windows or other glass products.
- Avoid causing extreme temperature changes as this may lead to thermal fracture of the glass, ie do not splash hot water on cold glass or freezing water on hot glass.
- Some tapes or adhesives can stain or damage glass surfaces. Avoid using such materials unless they are known to be easily removed

Additional datasheets

Fur technical details on each fire glass please refer to the manufacturers datasheet.

Vetrotech

Interior

- [Contraflam® Lite 60](#)
- [Contraflam® Lite 120](#)
- [Contraflam® 30](#)
- [Contraflam® 60](#)
- [Contraflam® 90](#)
- [Contraflam® 120](#)

Exterior

- [Contraflam® Lite 60 ClimaPlus](#)
- [Contraflam® Lite 120 ClimaPlus](#)
- [Contraflam® 30 ClimaPlus](#)
- [Contraflam® 60 ClimaPlus](#)
- [Contraflam® 60 ClimaPlus Horizontal](#)
- [Contraflam® 90 ClimaPlus](#)
- [Contraflam® 120 ClimaPlus](#)

Guidelines

- [Care and Cleaning Guideline](#)

Pilkington

Interior

- [Pyrostop® 60-101](#)
- [Pyrostop® 90-200](#)
- [Pyrostop® 120-104](#)

Exterior

- [Pyrostop® 60-201](#)
- [Pyrostop® 90-200](#)
- [Pyrostop® 120-201](#)

Glass LT

Interior

- [Fireblock 60](#)
- [FireBlock 60 Structure](#)

Guidelines

- [Quality Guideline](#)
- [Transportation Guideline](#)



Distributed by

Glazing contractors enquire to become a reseller.

Aluflam has a policy of continuous improvement and reserves the right to change methods and specifications without notice. Issue Date: 18/06/2021
Refer to our website to check if this technical datasheet is valid. Aluflam Australia is a trading name of Greene Fire Manufacturing Pty Limited.