

## Product Name

Pro-Tect – Intruder Resistant Glass

## Product Line

Glass Project **Specialty Range**

## Description of Product

Pro-Tect from Glass Projects is a specialised laminated safety glass engineered to provide a significant barrier against forced entry and manual attack. It is constructed by bonding multiple lites of glass with one or more robust, penetration-resistant interlayers. This robust composition is designed to withstand repeated impacts from common burglary tools, delaying or preventing intruder access and offering valuable time for response.

## Intended Use

Any glazing situation where added security from forced entry or manual attack is required.

**Building types:** retail, commercial, assembly buildings, security.

**Uses:** windows, facades, shopfronts, interior glazing, partition glazing etc.

**Designs:** fully framed, partially.

## Product Identifier

Pro-Tect Intruder Resistant Glass is part of the Glass Project Specialty Range.

## Relevant Building Code Clauses and Compliance

Pro-Tect Intruder Resistant Glass supplied by Glass Projects is certified as a Grade A safety glass manufactured according to AS/NZS 2208 Safety Glazing Materials in Buildings.

When designed, installed, and maintained in accordance with Glass Projects standard details and requirements, Pro-Tect will comply with, or contribute to compliance of, the following performance clauses of the NZ Building Code:

### **B1 Structure**

**Clause:** B1.3.1, B1.3.2, B1.3.3, B1.3.4.

**Compliance:** Pro-Tect can be designed to meet project requirements in accordance with B1/AS1 clause 7.1 NZS4223.1, clause 7.2 NZS4223.2, clause 7.3 NZS4223.3 & Clause 7.4 NZS4223.4 or by specific engineering design to B1/VM1.

### **B2 Durability**

**Clause:** B2.3.1 (b).

**Compliance:** When designed, installed, and maintained in accordance with Glass Projects standard details and requirements, Pro Tect will satisfy the durability performance requirements for a minimum serviceability life of 15 years.

Processed glass has an in-service history of more than 50 years when used in ordinary conditions of exposure.

### **E2 External Moisture**

**Clause:** E2.3.1, E2.3.2.

**Compliance:** Glass is impervious to water.

### **F2 Hazardous Building Materials**

**Clause:** F2.3.2 for unimpeded path of travel, F2.3.3 for use of safety glass.

**Compliance:** F2/AS1 clause 1.0 NZS4223.3. Pro Tect is manufactured in accordance with NZS4223.3 for human impact location to the project requirements. Safety glass is marked in accordance with NZS4223.3 clause 2.8.

**F4 Safety From Falling**

**Clause:** F4.3.4.

**Compliance:** Pro-Tect can be designed in accordance with NZS4223.3 clause 21 Window glazing safeguarding a fall, and clause 22 Barriers, to the project requirements, as well as other designs by specific engineering design to B1/VM1.

### Limitations of use

1. Intruder-resistant glass must meet stringent testing requirements to conform to specified levels of resistance against forced entry. The required performance level depends on the project’s risk assessment and security needs. Glass specifications are determined on application to ensure the selected product is suitable for the intended use.
2. Pro-Tect Laminate Safety Glass is typically available in the following sizes (design restrictions apply).

Glass Thickness	Large x Small
7 mm – 40 mm + (specific To Requirements)	6000 mm x 3200 mm

Larger sized panes may be available upon request and can depend on requirements.

3. Pro-Tect glass makeup and maximum size is dependent up the level of security required and the glass support system. Contact Glass Projects to discuss requirements.
4. Pro-Tect is not classified as fire rated glazing.
5. Minor edge delamination can occur in laminate glass and delamination’s that occur up to 6mm in from the edge of the glass is not considered a defect.

### Design Requirements

Pro-Tect Intruder Resistant Glass can be designed for use in projects with the following scope.

Any design and installation that follows NZBC B1/AS1 section 7 and the following glazing standards:

NZS 4223.1	Glazing in buildings – Glass selection and glazing
NZS 4223.3	Glazing in buildings – Human impact safety requirements
NZS 4223.4	Glazing in buildings – Wind, dead, snow, and live actions

**Wind Zones:** All NZS 4223.4 wind zones as well as Specific Engineered Design wind pressures when designed, used, installed, and maintained in accordance with Glass Projects standard details and requirements.

**Exposure Zones:** All NZS 3604 exposure zones when designed, used, installed, and maintained in accordance with Glass Projects standard details and requirements.

Pro-Tect Intruder Resistant Glass is custom designed and fabricated to the requirements of each project. The following details must be confirmed by the specifier:

- Glass size
- Required support type or framing method.
- Project wind zone or design wind pressure.
- Any glazing performance requirements that the glass should meet including centre of glass U-value, Shading Coefficient (SC), and Visible Light Transmission as a minimum.
- Level of resistance the glass is required to meet.

### Installation requirements

Glazing systems utilising Pro-Tect must be designed and glazed by Glass Projects or an approved installer.



## Cleaning & Maintenance

Care must always be taken when cleaning any glass and clean, grit free water, cleaning solutions, cloths, brushes, sponges, and squeegee products must be always used.

### ***During construction***

Check weekly and clean every 1 - 2 months, or as required, during construction. Protect the glass from weld and grinding splatter, concrete and mortar splashes, and impact or scratch damage from other trades.

### ***Regular maintenance***

Proprietary cleaners should be used with a soft cloth, brush, or sponge, but a mild soap or liquid detergent and warm water can work well. After washing rinse with clean water and use a clean squeegee to remove excess water.

Ensure the glass is dry and spot free. Excess water droplets will evaporate and can leave dissolved minerals on the glass that can cause surface staining particularly when a hard water supply is used.

Never use harsh solvent, abrasive, or alkaline cleaners.

Never use scrapers or razor blades to remove paint spots or sticky residue from the glass surface.

The condition of glass should be checked as part of a regular building maintenance regime and should be cleaned as soon as any build of dirt or foreign particles is noticed, but as a minimum the following is recommended.

Industrial sites – glass should be cleaned every 1 - 2 months.

Urban areas – glass should be cleaned every 3 months.

Rural areas – glass should be cleaned every 6 months.

## Samples

Please contact Glass Projects to discuss your needs.

## Product Selection & Technical Assistance

We work closely with our clients to understand their specific needs and develop innovative design concepts that seamlessly integrate with the overall architecture of their building. Our team of sales and engineering experts specialise in custom glass design and have a deep understanding of New Zealand regulations. We are available to provide advice on glass products to suit any application.