Visioneering® Lunax Specification

Integrity & Insulation | Safety Glass | Single & Double Leaf | Sidelights & Toplights

Performance Requirement

The Visioneering® Lunax Fire Resistant Safety Glass system shall be supplied and installed in accordance with the deem-to-satisfy building code requirements under NCC2022 C4D6 (NCC2019 C3.5) and AS1905.1:2015 and achieve an FRL of up to -/60/30 in accordance with EN1364-1:2018. The system shall also be installed in accordance with Smoke Control's recommendations.

Note: The Visioneering® Lunax Fire Resistant Safety Glass systems are non-load bearing. Surrounding structure should be designed to carry any required supporting loads. Structural adequacy with respect to FRL is not required for the glazed system in accordance with NCC2022 S1C6 (NCC 2019 Schedule 5 – Clause 6).

Product Specified

Proprietary System: Visioneering® Lunax Fire Resistant Safety Glass System by Smoke Control T: 1300 665 471; info@smokecontrol.com.au

The system consists of a propriety cold formed and seam welded steel profile, incorporating beading with concealed fixing and tested clear Class A Safety Glass.

System Parameters

1) Glass specification:

Characteristic	Internal (SGU)
Product Name	Contraflam 60-3
Thickness (nominal)	27 mm
Weight	58.5 kg/m^2
Sound Reduction Rw (EN140-3)	43 (-2, -3) dB
Light Transmission (EN410)	83%
U-value (EN673)	4.3 W/m^2K
SHGC (g Value) (EN410)	0.68

2) Fire performance (EN1364-1:2018):
   a) $EI_1$30 (equivalent to -/30/30 in accordance with AS1530.4:2014)
   b) $EI_2$60 (equivalent to -/60/30 in accordance with AS1530.4:2014)

Note: As the system is approved only in accordance with European Norms (EN), a performance solution by a fire engineer is required to be compliant. Please check with your Certifier prior to specifying this product.

3) Air leakage performance – N/A

4) Maximum clear opening sizes:
   a) Single-leaf – 1150mm(W) x 2650mm(H)
   b) Double-leaf – 2300mm(W) x 2300mm(H)

Note: The system can be combined with sidelights and toplights from the Visioneering® Fire Resistant Safety Glass system to achieve 3000mm(H) (unlimited width with appropriate expansion joints, mullions and transoms).

5) Door Hardware:
   a) Lock:

i) Electric
ii) Magnetic
iii) One-way lockset

b) Handle – please contact info@smokecontrol.com.au (custom handles available on request)

c) Floor spring:
i) Dorma BTS 75 R
ii) Dorms BTS 80 F
iii) Dorma BTS 80 EMB (integrated hold open)
iv) Geze TS 500 NV
v) Geze TS 550 NV FP

6) Supporting construction:
a) Masonry
b) Concrete
c) Fire rated plasterboard with steel or timber stud
d) Visioneering® Fire Resistant Safety Glass

7) Powder-coating: Standard range Dulux Duralloy colours (other colour ranges available on request)

Required Ancillary Items

1) Maintenance: All Visioneering® systems shall be maintained by competent technicians in accordance with AS1851 and the manufacturer's recommendations.

2) Safety decals: These can be installed external on the glazing in accordance with EN testing or can be factory etched internally into the glass assembly.

3) Radiation shielding: Additional protective layers to be integrated into the glass assembly to provide EMF / Xray / Ionizing radiation shielding. As per agreed performance specification.

4) Tinting and visibility control: Glass should include translucent privacy film or tinted DGU.

5) Electronic hold-open: Integrated 24V DC magnetic hold-open is available in the door closer mechanism, alarm signal by others. Must be installed with a physical door stop (by others) to prevent door over swinging and damaging integrated hold open device.

Applications

- Fire walls in accordance with NCC2022 C3D8 (NCC2019 C2.7) and Specification S5 (NCC2019 Spec C1.1)
- Non-required stairways, ramps, and escalators in accordance with NCC2022 D2D17 & Specification 14 (NCC2019 D1.12 & Spec D1.12)
- Openings in fire walls in accordance with NCC2022 C3D8 and Specification S5 (NCC2019 C2.7 & Spec C1.1)

Note: Some applications listed above may require a Performance Solution to be compliant. Please check with your Certifier prior to specifying this product.

Installation

The Visioneering® Lunax Fire Resistant Safety Glass systems shall be installed, certified, commissioned and tagged in accordance with AS1905.1:2015 and Smoke Control's (manufacturer) instructions by an ISO9001 Quality, ISO18001 WHS and ISO14001 Environment Accredited manufacturer.

Clearances between the bottom of the glazed door leaf and the floor shall be in accordance with AS1905.1:2015 Clause 5.5.1. and as follows:

(a) Between the leaf and the top surface of the floor including any floor covering – not less than 3mm and not more than 10mm.

(b) Between the leaf and the top of the non-combustible threshold – not more than 25mm.

Any floor coverings across the threshold should be in accordance with AS1905.1:2015 Clause 5.5.1. Certification these floor coverings is by others.

Commissioning

AS1905.1:2015 commissioning testing shall be conducted to verify opening forces and the results recorded on the commissioning certificate provided in an applicable Operations and Maintenance Manual or equivalent report. The glazed fire door systems shall be then tagged with appropriate compliant tag in accordance with AS1905.1:2015.

Certificates of Compliance shall be issued by the sub-contractor in accordance with NCC2022 A5G3 & A5G4 (NCC2019 A5.2 & A5.3) and AS1905.2:2005 *Clause 7 Certification*.

All details and approvals are current as of the date displayed. This document supersedes all previous versions.