Visioneering® -/90/60 Specification

Integrity & Insulation | Safety Glass | Fixed Window/Screen/Partition

Performance Requirement

The Visioneering® -/90/60 Fire Resistant Safety Glass system shall be supplied and installed in accordance with the deem-to-satisfy building code requirements under NCC2022 C3D8 (NCC2019 C2.7) and Specification S5 (NCC2019 Spec C1.1) for fire rated walls or openings in fire rated wall and achieve an FRL of -/90/60 in accordance with AS1530.4:2014.

Any Visioneering® glazed door systems shall be installed in accordance with NCC2022 C4D6 (NCC2019 C3.5) requirements and AS1905.1:2005 achieving an FRL of at least -/90/60. Both systems shall also be installed in accordance Smoke Control's (manufacturer) recommendations.

Note: The Visioneering® -/90/60 glazing 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® -/90/60 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)	External (DGU)
Product Name	Contraflam 90-4	Contraflam 90-4 Climaplus
Thickness (nominal)	40 mm	58 mm
Weight	82 kg/m^2	97 kg/m^2
Sound Reduction Rw (EN140-3)	46 (-2, -3) dB	45 (-2, -2) dB
Light Transmission (EN410)	81%	73%
U-value (EN673)	3.6 W/m^{2}K	1.1 W/m^{2}K
SHGC (g Value) (EN410)	0.64	0.58

2) Fire performance (AS1530.4:2014) – -/90/60 (or E90 I60)

3) Air leakage performance – N/A

4) Maximum opening sizes:

   a) Single-pane:

      i) Portrait – 1680mm(W) x 3340mm(H) (max. 4.74m^2(A))

      ii) Landscape – 1690mm(W) x 1575mm(H) (max. 2.27m^2(A))

   b) Multi-pane – 3335mm(H) (unlimited width) with appropriate expansion joints, mullions and transoms

5) Frame Profile:

   a) Internal – 70mm(W) x 90mm(D)

   b) External – 70mm(W) x 90mm(D)

6) Frame material:
    a) Galvanised steel
    b) Stainless steel
7) Supporting construction type:
    a) Masonry
    b) Concrete
    c) Fire rated plasterboard with steel or timber stud
8) Gasketing – Smoke Control proprietary integrated black rubber gasket
9) 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.

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® glazing systems shall be installed, certified, commissioned and tagged in accordance with AS1905.1:2015 and Smoke Control Pty Ltd manufactures instructions by an ISO9001 Quality, ISO18001 WHS and ISO14001 Environment Accredited manufacturer.

The glazed partition shall be installed into a fire rated wall structure of a type listed in System Parameters Clause 7) of this document. The FRL of the wall shall be at least 90/90/90 when tested in accordance with AS1530.4. Appropriate expansion gaps shall be included between the glazed partition and the wall structure and approved fire rated mastic and/or silicone shall be applied to this gap.

Commissioning

Once installed it shall be demonstrated that the glazing system includes the appropriate markings in the bottom of each glazed panel indicating glass model and toughening standard.

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*.