Windowhalt Fusible Link -/120/- Fire Shutter Specification

Integrity Only | Single Coil | Small Span

Performance Requirement

The Windowhalt Fusible Link -/120/- Fire Shutter shall be supplied and installed in accordance with AS1905.2:2005, with activation via a UL-approved 68-degree Centigrade fusible link located at the center of the unit.

When fire tested in accordance with AS1905.2:2005 *Clause 3 Determination of Fire Resistance* it shall provide a minimum Fire Resistance Level (FRL) of -/120/- and a radiant heat flux of no more than 15kW/m^2 at 365mm from the unexposed face of the shutter, 30 minutes into the Standard Fire Test.

Note: if the system is being installed into a surrounding construction where the FRL of the construction is less than 90 minutes, the maximum FRL the system can achieve is equal to the FRL of the wall (i.e., a Windowhalt installed into a –/60/60 construction will achieve an FRL of no more than -/60/-).

Product Specified

Proprietary System: Windowhalt Fusible Link -/120/- Fire Shutter by Smoke Control T: 1300 665 471; info@smokecontrol.com.au or approved equivalent.

System Parameters

1) Fire performance (AS1530.4:2014) – -/120/- (or E120)
2) Air leakage performance (AS1530.7:2007) – 0.115 m^3/min/m^2 @ 200^{o}C, 25Pa (fabric only)
3) Maximum size – 4000mm(W) x 4000mm(H)
4) Component dimensions:
    a) Headbox – 165mm(H) x 165mm(D)
    b) Side Guide – 100mm(W) x 50mm(D)
5) Deployment speed – nominally 150mm/s
6) Power requirements – N/A (gravity only system)
7) Maximum pressure resistance:
    a) Deploying – 0Pa
    b) Deployed – 20Pa
8) System weight:
    a) System sizes up to 3000mm(H) – 20kg per metre width
    b) System sizes up to 4000mm(H) – 25kg per metre width
9) Approved supporting construction:
    a) Masonry
    b) Concrete
    c) Fire rated plasterboard with steel or timber stud
10) Approved installation configurations:
    a) Headbox:
        i) Face fixed to the wall
        ii) Fixed under the slab/into the wall

b) Side Guides:
   i) Face fixed to the wall
   ii) Fixed in the opening

Required Ancillary Items

1) Third-Party Product Listing: The product shall be manufactured under the Third-Party Product Listing scheme known as the Warnock Hersey Mark and shall bear the Warnock Hersey Certification Mark.

2) Maintenance: All fire shutters shall be listed on the Essential Services Register and shall be maintained by competent technicians in accordance with AS1851 and the manufacturer's recommendations.

Applications

- Protection of openings from SOU on to common corridor NCC2022 C4D12 (NCC2019 C3.11)
- Protection of openings in external walls NCC2022 C4D5 (NCC2019 C3.4)

Note: Windowhalt Fire Shutters have been used on projects requiring compliance with NCC Volume 2 for Class 1 & 10 buildings protection of openings on external walls in accordance with NCC2019 Vol2 Clause 3.7.2.4 (c)(ii), as an acceptable construction. Please check with your Certifier for acceptance of this system prior to specifying system.

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

Installation

Fire Shutters

The fire shutters shall be installed, certified, commissioned and tagged in accordance with AS1905.2:2005 by an ISO9001 Quality, ISO18001 WHS and ISO14001 Environment Accredited manufacturer.

When installed the system shall consist of a single overhead barrel for the full width of the opening. While some Registered Testing Authorities provide Formal Opinions regarding the expected fire resistance level of fire shutters, they do not discuss nor provide a warranty regarding their reliability.

Threshold

Unless addressed as part of an appropriate performance solution the shutter must deploy onto a fire rated or non-combustible threshold as per requirements of AS1905.2:2005 and AS1530.4:2014. The maximum gap permitted at the threshold is 25mm.

Fire Rated Bulkheads

Installation of the fire shutters suspended below the concrete slab shall only be permitted if the system has been fire-tested in this configuration and approved by a Registered Testing Authority for the sizes required in this project. That is; the suspension system fully exposed to fire from both directions without protection of a fire rated wall/bulkhead. If the system has not been fire tested in this configuration, a fire rated bulkhead shall be installed to support the fire shutter system. For clarity, the fixing of the fire shutter head box shall be directly to the fire rated bulkhead as per the fire tested prototype.

The fire rated bulkhead shall be installed as a 3-sided bulkhead (the fourth side is provided by the concrete slab) to provide a minimum of –/60/60 fire resistance level when tested in accordance with AS1530.4 and provide complete encasement of the fire shutter suspension system. This configuration will allow for certification of any service penetrations which will also be required to be certified in accordance with AS4072.1:2005.

Commissioning

Once installed it shall be demonstrated that the system shall fail-safe on simulation of activation of linked. The unit should be then tagged with an appropriate AS1905.2:2005 compliant tag.

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.