



PRODUCT SPECIFICATION

Vii® Fire Cabin

1 GENERAL

1.1 Scope

Vii® Fire Cabin active fire curtain barrier assemblies (“Fire Curtain”) are to be designed, fabricated, delivered, installed and commissioned with all required components as outlined in this specification.

1.2 Design Requirements and Considerations

Fire resistance requirements

Vii® Fire Cabin is an uninsulated Fire Curtain with an FRL of -/120/-. It can be used to protect windows in close proximity to the property boundary. There is no control panel required as its activation is by fusible link only.

Activation requirements for the fire barriers

This product activates by fusible link at the end of the headbox. It cannot be activated from an alarm signal. It is suitable where thermal activation is the only requirement

Maintaining the area underneath the curtain as clear from obstructions

The Fire Curtain is a concealed, operable fire barrier. It is required as part of the design to ensure that suitable provisions are in place to maintain the area under the Fire Curtain as clear from obstructions at all times as the Fire Curtain could be activated at any time.

No fixing to the Fire Curtain

The components of the Fire Curtain cannot be fixed to by any other building element.

Structure

Suitable fire rated substrate is required to affix the headbox and side guides with a FRL of -/120/120.

1.3 Standards and Compliance

Fire Resistance

Compliant to NCC Clause C3.4

AS 1530.4: 2005 : Fire-resistance test of elements of construction

- FRL of - / 120 / - for sizes up to 3 metres and drop height of 3 metres.

AS1905.2: 2005 : Fire-resistant roller shutters

1.4 Submittals

Certification

Test or assessment reports from NATA accredited agencies

Shop drawings

Detailing the location, size, requirements ‘by others’ and design of the Fire Curtains shall be submitted to the General Contractor and the drawings approved prior to the commencement of the manufacture process.

Completion certificate

Issue a completion certificate at the completion of the works confirming that the installation has been completed in accordance with this specification the tested prototypes for the Fire Curtain.

Operation and maintenance manual

Electronic copy of operation and maintenance manual including commissioning data for each Fire Curtain and As Built drawings.



1.5 Quality Assurance

Management Systems

The manufacturer shall operate and be certified to ISO 9001 for quality management systems, and ISO 14001 for environmental management systems.

[Greene Fire ISO 9001 Certificate of Approval](#)

[Greene Fire ISO 14001 Certificate of Approval](#)

1.6 Warranty

Greene Fire Limited warrants that its Vii® Fire Cabin Fire Curtain is free from manufacturing defects for a period of not less than 12 months from installation and commissioning when installed, maintained and used in accordance with Greene Fire specifications and operational manuals.

1.7 Inspections

Pre-installation meeting

Hold a meeting at the project site with the Owner, Architect, General Contractor and Certifier to review the Fire Curtain requirements.

Review this specification, fire engineering report, substrate conditions, requirements of related work, installation methodology, storage and handling procedures, protection measures and commissioning requirements. Document the responsibilities of each party.

2 Product

2.1 Manufacturer

Greene Fire Pty Limited – Level 2, 381 Port Hacking Road, Caringbah NSW 2229, Australia
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2.2 Location

Vii® Fire Cabin fire curtains are to be installed in the locations shown on the Architectural drawings.

2.3 Product Description

Vii® Fire Cabin Fire Curtain

An electrically operated Vii® Fire Cabin Fire Curtain is a light weight fire separating element that automatically closes on heat activation to fire protect windows.

The Fire Curtain comprises of zinc anneal mild steel headbox, fire resistant fabric, zinc anneal mild steel bottom bar, zinc anneal mild steel side guides, descent speed governor and fusible link.

2.4 Operation

The fire curtain will remain retracted within its headbox until it is activated by heat exceeding 74°C in the vicinity of the fusible link. Upon activation, the fire curtain will deploy by gravity to its fire operation position, completely closing the opening and creating a fire compartment. The speed of descent will be within the range of 0.15m/s to 0.3m/s.

To restore the Vii® Fire Cabin Fire Curtain the barrel assembly is required to be manually wound to its top position and a new fusible link installed.

2.5 System Components

Headbox

The fire curtain is concealed in a zinc anneal mild steel headbox of not less than 1.2mm thickness which provides



protection for the barrier (curtain) and acts as a fixing element to the building structure. This can be powder coated to a standard DULUX colour.

Bottom Bar

The bottom bar assembly is attached to the lower edge of the fabric, and acts to keep the fabric hanging vertical when the curtain is in the lowered position, minimising deflection due to air currents. The bottom bar must form one continuous section when installed. The bottom tray is zinc anneal mild steel of not less than 2mm thickness and can be powder coated to a standard DULUX colour.

Side Guides

Side guide is zinc anneal mild steel of not less than 1.6mm thickness and is a side fixing element to the building structure. This can be powder coated to a standard DULUX colour.

The Fire Curtain fabric is restrained at the sides in the side guides, which prevents fire spread at the sides.

Fabric

Fabric type is EFP™ 4/1000, a glass fibre, stainless steel wire reinforced, fabric coated with a micronized aluminium filled fire retardant polyurethane to both sides, nominal 690 g/m². The fabric is manufactured in strips and is tested in the vertical orientation including the sewing yarns.

Fusible Link

The fusible link is a mechanical heat activated device which will release at 74°C. The fusible link is attached to the barrel assembly and stops the barrel assembly from uncoiling until the fusible link is activated.

2.6 Product Performance:

The complete Vii® Fire Cabin Fire Curtain inclusive of headbox, motor, fabric and bottom tray is to be tested or assessed to the requirements outlined in Section 1.4 of this specification. A summary of this performance is:

- FRL of - / 120 / - for sizes up to 3 metres and drop height of 3 metres
- Test to ensure that operating speed is within 0.15 - 0.3 m/sec in accordance with AS1905.2

2.7 Labelling

The Vii® Fire Cabin Fire Curtain must be labelled with a metal tag affixed to the bottom bar clearing showing the Fire Curtain details, manufacturer, installation date and FRL.

3 EXECUTION

3.1 Installation

Vii® Fire Cabin Fire Curtain shall be installed by manufacturer trained and Approved Installers in strict adherence with the manufacturer's guidelines.

Ensure that the structure being fixed to is suitably fire rated and to the manufacturer's specifications.

All Vii® Fire Cabin Fire Curtains shall be carefully located in the positions indicated on the approved Shop Drawings in perfect alignment, plumb, level, straight and true.

Adjust the active fire curtain barrier assemblies to provide uniform clearances and smooth non-binding operation.

3.2 Commissioning

The installer shall perform suitable tests to ensure that the Vii® Fire Cabin active fire curtain barrier assemblies operate in accordance with the Contract Documents and this specification.

3.3 Maintenance

The Vii® Fire Cabin Fire Curtain shall be included in the required Fire Safety Measures for the building and must be maintained in accordance with the manufacturer's recommendations. At a minimum the active fire barriers shall be



inspected and maintained in accordance with AS1851 (2012) Section 13 which requires 6 monthly intervals. Maintenance and inspections shall be performed by fully trained and competent technicians.