

PROPRIETARY ITEM: WARRIOR FZ FIRE SHUTTER
MANUALLY OPERATED WINDER COILING FIRE SHUTTER

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Manually operated winder system, overhead coiling fire shutter.
 - 2. For small protected openings.
- B. Related Requirements:
 - 1. Load Bearing Header Framing
 - 2. Sill details
 - 3. Finish: Powder coating of specified components.

1.02 REFERENCES

- A. National Construction Code:
 - 1. NCC 2014/2015
- B. Standards:
 - 1. AS1530.4 – Methods for fire tests on building materials, components and structures, Part 4 Fire-resistance test of elements of construction
 - 2. AS3959 – Construction of buildings in bushfire-prone areas
 - 3. AS1905.2 – Fire Shutters.
 - 4. AS3837– Method of test for heat and smoke release rates for materials and products using an oxygen consumption calorimeter

1.03 SUSTAINABLE DESIGN REQUIREMENTS

- A. ESD: Comply with sustainable design requirements including, without limitation, submittal and documentation requirements.
- B. Credit/Point Goals Applicable To This Section: In addition to global project credit/point goals:
 - 1. Materials & Resources - construction waste management
 - 2. Materials & Resources - recycled content
 - 3. Materials & Resources - regional materials
 - 4. Indoor Environmental Quality - construction IAQ management plan

1.04 SUBMITTALS

- A. Comply with Submittal Procedures:
 - 1. NCC Clause C3.4 and AS1905.2.
 - 2. Manufacturers Product data
 - 3. Shop drawings:
 - a. Shutter location and unique identification number
 - b. Include opening dimensions
 - c. Show and identify related work performed under other sections of the specifications
 - 4. Quality Assurance/Control Submittals:
 - a. Site Inspection and Test Plan.
 - b. Manufacturers ISO 9001 Certificate of Accreditation

1.05 CLOSEOUT SUBMITTALS

- A. Comply with Project Closeout:
 - 1. Certificate of Compliance with reference to NCC clause and AS3959 - Evidence of Suitability.
 - 2. Operation and maintenance manual.
 - 3. Manufacturer's warranty.

1.06 QUALITY ASSURANCE

- A. Certifications:
 - 1. AS1530.4 full scale fire test on a complete assembly
 - 2. AS3959 Clause 9.5.2 (b) (i)
 - 3. AS1530.8.2-2007 tested
 - 4. Laboratory cycle tested on a 3m x 3m complete assembly
- B. Pre-Installation Meeting:
 - 1. Schedule and convene a pre-installation meeting prior to commencement of field operations with representatives of the following in attendance: Owner, Architect, General Contractor, certifier
 - 2. Review substrate conditions, requirements of related work, installation instructions, storage and handling procedures, and protection measures.
 - 3. Document the responsibilities of various parties and deviations from specifications and installation instructions.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Comply with project delivery, storage, and handling requirements.
- B. Comply with manufacturer's instructions.

1.08 WARRANTY

- A. Provide manufacturer's standard one-year warranty for Defect Liability Period.
- B. Maintenance and Testing:
 - 1. Perform minimum quarterly maintenance and testing on each fire shutter as required by the manufacturer's warranty, AS1851 - Maintenance.
 - 2. Provide Commissioning documentation including Project name, project address, location and shutter number, number of cycles tested, observations, comments (eg: curtain out of alignment), notes (eg: curtain alignment repaired), Pass/fail.
 - 3. Re-certification after the defect liability period

PART 2 - PRODUCTS

2.01 MANUFACTURED UNITS

- A. Proprietary item; Model Warrior FZ Fire shutter.
- B. Manufacturer:
 - 1. Smoke Control Systems Pty Ltd
 - 2. Distributed by Bushfire Control Pty Ltd
- C. Label each fire curtain with following information:
 - 1. Manufacturer's name and contact details.
 - 2. Curtain location and unique identification number
 - 3. Fire Resistance Level
 - 4. Date of installation

2.02 DESIGN CRITERIA

- A. Head box; 145 H x 132 W mm
- B. Bearing type; Standard support rollers
- C. Side guide; 90 mm x 50mm
- D. Side guide restraint system; Standard bobbin type
- E. Fabric type; 660g/m² stainless steel woven fabric, incorporating a coated glass fibre material to reduce radiant heat transmission.
- F. Manually operated deploy/retract system
- G. Bottom bar; Weights incorporated into curtain
- H. Finishes; Dulux Duralloy colour range (Standard)
- I. Load requirements at head = 20kg/m of width
- J. Load requirements at sides = 15kg/m of height
- K. Mounting orientation
 - 1. Installation Configuration: Housing attached directly to substrate face fixed ONLY.
 - 2. Fabricate and install mounting brackets, hardware, and fasteners needed to attach fire shutter assembly to building structure.

2.03 PERFORMANCE CRITERIA

- 1. Fire Resistance Level (FRL): -/30/-
- 2. Group Number for fabric: 1 when tested in accordance with AS3837
- 3. Durability; light duty
- 4. Maximum allowable gap to non-combustible sill 25mm
- 5. Maintenance shall be conducted quarterly by the Manufacturer and/or their nominated representative to the Manufacturers recommendations.

2.04 COMPONENTS

- A. Curtain: Warrior FZ stainless steel, incorporating fiberglass and coated on a single side with polyurethane.

- B. Side Guide Assembly
 - 1. Standard; 1.6mm thick Zinalume mild steel incorporating rivets along its tab for rigidity incorporating a bobbin restraint system.
 - 2. Optional; Identical design produced from 304 stainless steel
 - 3. Optional; Identical design produced from 316 stainless steel
- C. Housing/Bearing Type
 - 1. Standard; 1.6mm thick galvanized mild steel head box incorporating roller bearings.
 - 2. Optional; Identical design produced from 304 stainless steel
 - 3. Optional; Identical design produced from 316 stainless steel
- D. Bottom Bar: Concealed weights incorporated into curtain.
- E. Pulley Rope: 8mm doubled braided polyester rope used to retract and deploy system.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrates upon which work will be installed.
 - 1. Verify related work performed under other sections is complete and in accordance with shop drawings.
 - 2. Verify wall surfaces are acceptable for installation of fire shutter system components
 - 3. Verify setout point locations.
- B. Coordinate with responsible entity to perform corrective work on unsatisfactory substrates.
- C. Commencement of work by installer is acceptance of substrate.

3.02 INSTALLATION

- A. Install fire shutter system components in accordance with fire test approvals and manufacturer's installation instructions.
- B. Once installed it shall be demonstrated that the system shall close and open on release/removal of manually operated winder system.

3.03 FIELD QUALITY CONTROL

- A. Field Test 1: Calibration & Commissioning

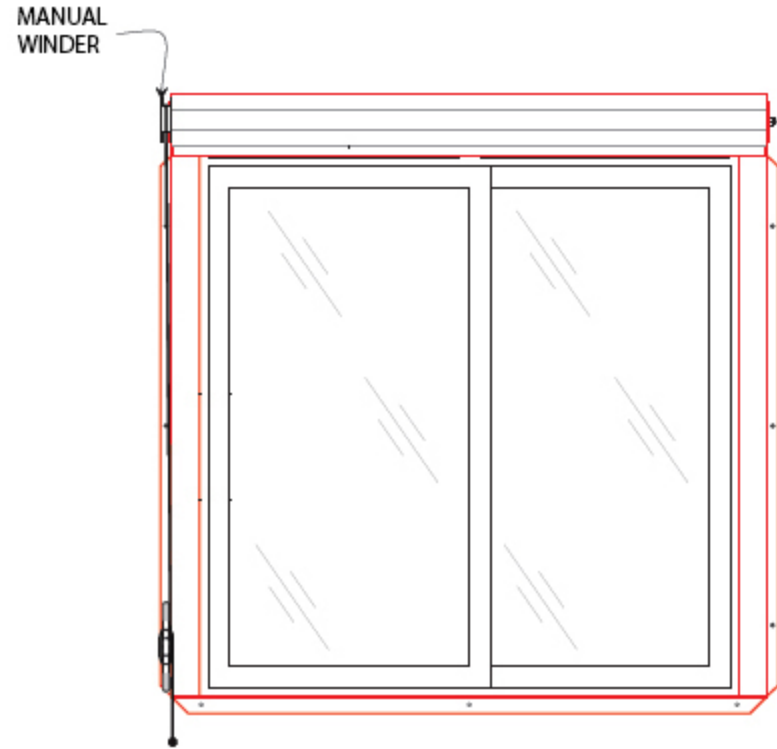
Follow manufacturer's cycle test procedures prior to application of thermal holding link.

- 1. Conduct a minimum of 3 consecutive, error free cycle tests
- 2. Complete Inspection and Test Plan

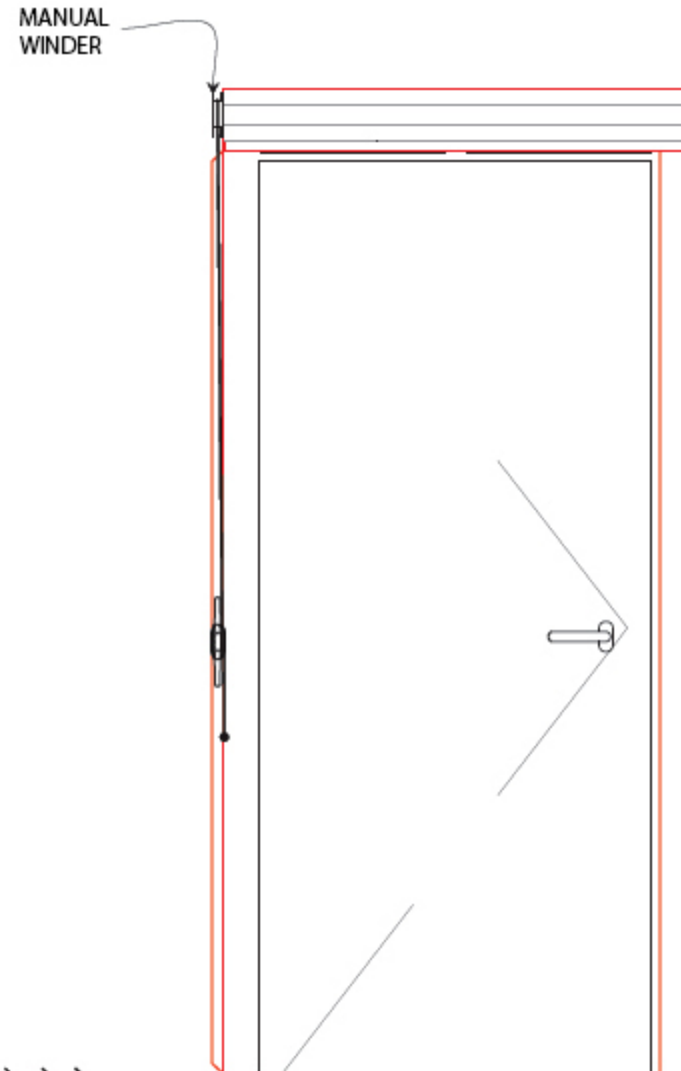
END OF SECTION

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CHK	REASON	DATE
IR	FOR INFORMATION ONLY	19/05/2016



1 FRONT ELEVATION - VIEW FROM OUTSIDE
 WARRIOR FZ FIRE SHUTTER OVER WINDOW
 SCALE 1:10 @ A2



2 FRONT ELEVATION - VIEW FROM OUTSIDE
 WARRIOR FZ FIRE SHUTTER OVER DOOR
 SCALE 1:10 @ A2

INFORMATION ONLY



PROJECT	
CLIENT	
TITLE FRONT ELEVATIONS FLAME ZONE	
SUB SET (CATEGORY) 02 - FLAME ZONE	
DRAWING NUMBER	
DRAWN BY IGOR REBENKO	ISSUE STATUS: FOR INFORMATION
START DATE 19/05/2016	SCALE AS SHOWN @A2

PLOTTED ON 20/05/2016 BY IGOR REBENKO