

ACE DOORS FIRECOIL™ FIRE RATED ROLLER DOOR

Specification No: FFRD1
Date: 25/07/13

1. SCOPE

Supply, install, and commission AceDoors FirecoilTM Fire Rated Roller Doors to the locations identified on the drawings, complete with all accessories. All aspects of this work shall be in strict accordance with the manufacturer's technical literature and installation requirements (check www.acedoors.co.nz, call 09 273 4972 or email sales@acedoors.co.nz for the latest editions), other relevant product manufacturers' recommendations, and as noted and detailed on the drawings.

No substitutions are permitted for AceDoors Firecoil™ Fire Rated Roller Doors.

2. PRODUCTS

2.1. General

'Firecoil™ Fire Rated Roller Door. Suitable for door openings up to 7925mm high x 8535mm wide.

Formed opening size:

Opening construction:

Location:

2.2. Materials

FireCoilTM Fire Rated Roller Door - Fire rated roller door with fusible link initiated automatic release closure system that melts at 74°Celcius under fire conditions.

Fire Rating – BS476 Part22 3-hour Factory Mutual (FM), 4-hour Underwriter Laboratory (UL). Fire listing - UL, C-UL, CSFM.

Roller Curtain - Curtain shall consist of 18 gauge (.047 minimum steel thickness) steel interlocking slats. Steel slats roll-formed from commercial quality hot-dipped galvanized (G-90) steel per ASTM A-653. Slat Type: Curtain slat configuration shall consist of (select from list below):

- Flat profiled interlocking curtain slats Suitable for all door sizes (Standard specification)
- Large contour interlocking curtain slats Suitable for doors over 3658mm wide (Optional specification)

Bottom Bar and Seal - Bottom bar shall be two structural steel angles 51 mm x 51 mm x 4.8 m. Bottom astragal shall be single-contact type (motor operation only). Finish with one coat of rust-inhibitive primer. Finish and colour as selected.

Door Guides – Guide assemblies shall consist of three structural steel angles, minimum 76 mm x 51 mm x 4.8 mm, and fitted with removable curtain stops. Finish with one coat of rust inhibitive primer.

Weather Seal - Rolling fire door may be provided with guide brush seal (delete if not applicable).

Endlocks: Lateral movement of slats contained by means of zinc-plated malleable cast-iron endlocks fastened with two zinc plated steel rivets.

Curtain Hood - Formed from 24g hot-dipped galvanised (G-60) steel with rolled edges.

Drive Operation - as selected.

2.3. Counterbalance System

- a) Headplates Mounting brackets made from 6mm steel plate attached to wall angle of guide assembly with 12.7 mm diameter bolts. Inside of drive bracket fitted with sealed ball bearing. Finish with one coat of rust-inhibitive primer.
- b) Barrel Made from minimum 114.3 mm O.D. x 3.1 mm wall structural steel pipe. Deflection of pipe under full load shall not exceed .8 mm per 300mm of span.
- c) Counterbalance Curtain counterbalanced by torsion spring consisting of oil-tempered, helical torsion springs, grease packed and mounted on continuous steel torsion shaft.



2.4. Enclosures

- a) Hood Rolling fire doors furnished with round hood enclosure.
- b) Headplate Cover Rolling fire door furnished with headplate covers comprised of 24 gauge steel and finish-painted to match curtain.
- c) Flame Baffle Rolling fire doors may be furnished with flame baffle to prevent spread of fire (required on FM, ISO, BS listings) (delete if not applicable).

2.5. Release System

- a) Descent Control Operation mechanism disengaged during automatic closing of door. Descent of door under fire conditions controlled by (select from list below):
 - Mechanical Oscillating Governor:
 - QuickTest[™] Centrifugal Governor:
- b) Release Type- Automatic closing of rolling fire door under fire conditions initiated by (select from list below):
 - Fusible Links
 - Thermol-Manual Links
 - Electro-Thermal Manual Links with Junction Box
 - Electro-Thermal Manual Links without Junction Box
 - Model XP
 - Model XPBB
 - Model AFCB
 - c) Detection Type Device used in conjunction with release type to initiate automatic closing of rolling fire door (select from list below or delete if not applicable).
 - Ionization Smoke Detector:
 - Photoectronic with Heat Sensor Detector:

2.6. Hardware

Lock - Rolling fire doors provided with optional lock (select from list below or delete if not applicable).

- Lock Bar optionally-provided with locking bar (padlock by others) for use with push-up, hand chain, and hand crank operated doors (motor operated doors will require an interlock switch with locking bar).
- Hand Chain Lock optionally-provided for doors operated with hand chain (padlock by others).
- Cylinder Lock optionally-provided and available for use with push-up, hand chain, and hand crank operated doors (motor operated doors will require interlock switch with cylinder lock).

2.7. Operation

- a) Operation Type Rolling fire doors shall be operated (select from list below):
 - Hand Chain: as normally-provided for service doors over 3048 mm wide and/or 2235 mm high.
 - Hand Crank: as optionally-provided by means of a gear reduction hand crank.
 - Motor: as optionally-provided by means of a Raynor PowerHoist jack-shaft type electric operator (specified separately).
- b) Mounting Rolling fire door shall be (select from list below):
 - Face-Mount as normally-provided and fastened to face of wall opening (see Curtain B) for guide attachment hardware options).
 - Between-Jamb Mounting: as optionally-provided and fastened between jambs of wall opening (see Curtain B) for guide attachment hardware options.
- c) Drive Orientation for hand-chain, hand-crank or motor operated fire doors, drive shall be oriented (select from list below):
 - Left-hand: as normally-provided from left-hand side, when facing reference side of door (side with counterbalance or hood exposed).
 - Right-hand: as optionally-provided from right-hand side, when facing reference side of door (side with counterbalance or hood exposed).



3. FINISHES

Curtain Finish

Curtain shall be finished with (select from list below):

- Grey as normally-provided, one coat white epoxy primer and one top coat of grey polyester paint.
- Tan as optionally-provided, one coat white epoxy primer and one top coat of tan polyester paint
- ArmorBriteTM Powdercoat as optionally-provided from manufacturer's selection of 187 standard colors (please specify color).

4. CO-OPERATION

Co-operate with other trades to ensure that all preliminary and preparatory works are completed to specification and as shown on the drawings.

Co-ordinate with other trades as required to install AceDoors FireCoil[™] Fire Rated Roller Doors, mechanical operators and associated cabled services, to the required operating functionality and tolerances

Where required, complete and submit for door manufacture the AceDoors Site Measure document confirming all door opening site-measurements and other necessary information prior to manufacture.

5. WORKMANSHIP

Where required by the NZ Building Amendment Act 2012 it is the building contractor's responsibility to ensure that all restricted building work is carried out by a Licensed Building Practitioner.

All installation and commissioning work shall be carried out by experienced and competent installers, familiar with the specified products and installation techniques, in accordance with the manufacturer's installation requirements and as shown on the drawings. All work shall be such as to leave a neat, efficient and robust installation. Do not install damaged or defective products.

Electrical wiring shall be carried out by a qualified electrician in accordance with the electrical standards and regulations.

6. DELIVERY & HANDLING

Store AceDoors FireCoil[™] Fire Rated Roller Doors, components and accessories undercover on a flat, level surface off the floor as recommended by the manufacturer. Keep dry and protect from damage and contamination at all times.

Handle products in accordance with the manufacturer's requirements to avoid marking, distortion or other damage.

7. INSTALLATION

Installation shall be in accordance with best practice health and safety procedures.

Install and commission FireCoilTM Fire Rated Roller Door to the required operation and functionality in accordance with the manufacturer's installation requirements and set-out drawings, complete with drive system and controls and accessories as required. Installation mounting shall be:

- Interior Face Mounted to the location and details shown on the drawings (Standard specification)
- Between Jambs Mounted



Jamb Construction: Rolling fire door shall be mounted to (select from list below):

- Steel Jambs: as normally-provided, and supplied with self-tapping fastener.
- Masonry Jambs: as optionally-provided, and supplied with anchor bolt fasteners.

Installation tolerances shall not exceed the manufacturer's recommendations, door guides shall be plumb and parallel, head roller shall be true to level.

8. COMPLETION

Check that the FireCoil[™] Fire Rated Roller Door has been installed correctly and have been commissioned to the required operating functionality. Check for damage and defects, replace or repair as necessary.

Remove all rubbish and excess material from the site.

Issue the following warranties:

Manufacturer/Supplier Warranty

Provide a Material Manufacturer / Supplier Warranty as follows:

1 year: For all Ace Door products

• 3 years: By committing to a 3 year Preventative Maintenance Agreement (where applicable)

that warranty will be extended by a further 2 years ie: total 3 years warranty from

date of practical completion of the contract works.

Installer Warranty

Provide an Installer Warranty as follows:

• 1 year: For all Ace Door products installed by AceDoors recommended installers.

Provide this warranty on the AceDoors Standard Form. Commence this warranty from date of practical completion of the contract works.

Provide all necessary AceDoors Producer Statements.