## **Australian Commercial Doors Pty. Ltd.**

# OPERATION & MAINTENANCE MANUAL

Non-Rated & Fire Rated Doors & Steel Door Frames

**FOR** 

### 50 Albert St, South Melbourne

Prepared by:

Australian Commercial Doors Pty. Ltd

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#### 1.0 Introduction

#### Scope of works

Supply of fire rated doors. Supply of fire rated and non-rated frames Supply of non-rated doors.

Client: Hickory Developments

Project Name: Albert St,

Project Location: 50 Albert St, South Melbourne

Contractor: Australian Commercial Doors Pty. Ltd.

8/97 Bayfield Road East, BAYSWATER, VIC. 3153 Telephone: 03 9720 5766 Facsimile: 03 9720 5388

**Key Personnel:** Ron Laing



#### 2.0 System and Plant Description

#### 2.1 Fire Rated Door Sets

Fire rated doors located as per Compliance Certificate.

Fire doors and other doors can be identified by the door number allocated to each door on the floor plan drawings and cross reference to same number in the door schedule and hardware schedule.

A fire door is installed across an opening in a firewall to maintain the fire resistance rating of that firewall. Fire rated door must be self closing or close automatically on the operation of an approved sensing device or on the loss of power supply. Once released the fire door must close cleanly and fully, and be unimpaired in its operation. Each fire door must have a metal tag attached as required by AS 1905.1

#### 2.2 Door Hardware

As part of a fire rated door assembly door hardware and closers have to comply with the statutory testing requirements. Fire resistance rating applies to the complete fire door assembly. As such, door hardware must provide safe and secure latching of fire doors when closed by the door closer.

Following are brief functional description of different types of locks:

**Passage set** – locks operated by lever handles from both sides of the door, not lockable. Usually used in passageways and high traffic areas.

**Storeroom set** – locks operated with lever and/or cylinder from external side and handle from internal side of the door. Usually used on rooms with restricted access, as well on the fire stairs to prevent unauthorised access from the fire stairwells to premises.

**Rim night latch** – locks for fire rated riser compartments operated by keyed cylinder from external side of the compartment and turn on the internal side.



#### 3.0 Detail System Operation & Description

#### **Purpose**

A fire door is installed across an opening in a fire wall to maintain the fire resistance rating of that wall.

#### Requirements

An approved fire resistant door set is one that is identical in assembly, construction and installation to a prototype of this door that has been submitted to the standard fire resistance test, and has fulfilled all the relevant test requirements.

A fire door must be self-closing or close automatically on the operation of an approved sensing device or on the loss of power supply.

In addition of above operation requirements, to comply with fire regulations fire door has to comply with following maximum clearances:

- Top and both sides maximum gap between the door leaf and the frame.
- Clearance to floor with a combustible covering max 25mm to noncombustible sill.
- Clearance to floor without a combustible covering max 10mm.

#### **Method of Operation**

Once released the fire door must close cleanly, and be un-impaired in its operation. It is essential that no unauthorised means is used to hold open a fire door.

#### **Identification – Tagging of Fire Doors**

Every fire door assembly should be clearly marked with frame and door certification tags. Tags are placed on the hinge side of the frame and door.

Frame tags contain the following information:

- Name of the certifier.
- Name of the manufacturer.
- Fire resistance level of the door frame in minutes.

Door leaf tag contain following information:

- Number of the standard.
- Fire resistance level in minutes (FRL).
- Name of the manufacture.
- Name of the sponsor.
- Name of the certifier.
- Year of manufacture.
- Serial Number.

Serial number is used for allocation and identification of the door, and is also transferred into the fire door logbook, which is part of the Fire Certificate for the fire doors on every building. After the



inspe numl	ection performa per.	ed by authorised o	company this fire o	certificate is to be re	issued yearly conta	ining this



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#### 4.0 General Maintenance Procedures

#### 4.1 Door and Hardware Maintenance

#### **Doors**

Doors in general do not require special maintenance if the following guidelines are followed:

- It is essential that no unauthorised means is used to hold open a fire door.
- External doors and doors in wet areas are sealed/painted on top and bottom every three years.
- There is no excessive movement in the building structure or dry walls where doors are installed.
- Doors and door hardware sets are not dismantled or disassembled, and non-original parts are used for replacement. Door closer arms are not disconnected, locks and handles are not forced or tampered.
- Doors are not abused or misused and are not kept open by unauthorised means.
- Door hardware (hinges, handles lock tongues) sets are properly maintained and lubricated occasionally to provide smooth action.
- All hardware is installed and maintained as per the hardware maintenance manual.

Regular monthly and yearly maintenance/inspection checks are required for fire doors as per AS 1851.7.

To ensure a proper history of each fire door is retained, the following records must be available and maintained.

- Log book identifying each fire rated doors set, and showing its identification number, size and fire resistance level.
- A numbered Certificate of Compliance giving written evidence that door set complies with AS 1905.1.

#### Hinges

All hinges should be checked for tightness and lubricated on a regular basis (once a year). Where hinges are fixed on the exterior of a building it may be necessary to lubricate more often.

#### **Stainless Steel**

Stainless steel is renowned for its resistance to corrosion and low maintenance requirements.

Stainless steel corrosion resistance is attributable to the presence of a thin, durable film of passive, but stable, chromium oxide. Being inert, invisible, extremely adherent and self repairing, this film provide an unrivalled protection for the steel, should the film be damaged or removed it will regenerate independently, provided that oxygen is present to allow the reaction to occur with the chromium content of the steel.

For stainless steel cleaning, initially wash down the surface using soapy water or a mild detergent. Always thoroughly rinse the cleaning agent away with clean water. To complete the cleaning procedure dry/polish the item with a soft dry cloth.

#### 4.2 Maintenance Schedule



#### **Maintenance Checks**

It is recommended that a fire door and hardware be inspected monthly by the owner. The owner may delegate this function to another person or body where necessary or appropriate.

#### Under AS 1851.7 Two Levels of Inspections are required:

#### Monthly – Type 1 Inspection

A visual and physical inspection of the door and its function. This inspection must be carried out by the owner or occupier or by a suitably qualified representative (i.e maintenance manager).

#### Yearly - Type 2 Inspection

The routine required for the monthly inspections.

Comparison of each fire door set with the appropriate specification in the installation log book supplied with the door.

The inspection items specified in Appendix A of AS 1851.7 pages 6-8. This inspection shall be carried out or supervised by a person acceptable to the regulatory authority (building surveyor) as being competent and experienced in the field of fire doors.

It is recommenced that where any corrective action involves repairs to the door leaf, such repairs should be carried out by the original manufacturer.

It is essential all fire doors are maintained in operational condition at all times.



#### 5.0 Fire Door Log Book

Fire door log book is provided by the fire door supplier showing:

- a) Identification of your building and its owner.
- b) The supplier of the door sets.
- c) The date of commissioning of the fire door sets in your building.
- d) Identification number of each door set.
- e) Type of door, dimensions and fire resistance level.



#### 6.0 Equipment Suppliers & Subcontractors

Fire Rated Doors, Non Rated Doors; Non Rated & Fire Rated Frames

Australian Commercial Doors Pty Ltd 8/97 Bayfield Road East, BAYSWATER, VIC. 3153

Contact: Ron Laing Phone: 03 9720 5766



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#### 7.0 Manufacturers Literature

#### 7.1 Fire Doors

• Pyropanel catalogue - fire doors www.pyropanel.com.au

#### 7.2 Non Rated Doors

• Pyropanel catalogue - fire doors www.acdoors.com.au

#### 7.3 Door Hardware

- Lockwood Catalogue <u>www.lockwood.com.au</u>
- Raven Products Catalogue www.raven.com.au



#### 8.0 Commissioning/Test Data

#### 8.1 Fire Doors Commissioning/Certificate

• Fire Door Compliance Certificate

#### 8.2 Warranties and Guarantees

General Subcontractors Warranty – Australian Commercial Doors Pty. Ltd.

