



Facilities Management
Planning & Design
M458A
35 Stirling Highway
CRAWLEY WA 6009

Specification:

Automatic Power Operated Doors

Revision 1.1 31 July 2006

1 **AUTOMATIC POWER OPERATED DOORS**

1.1 **GENERAL REQUIREMENTS**

GENERALLY

Statement of intent

Location: Install where shown.

Reason: Assist with disabled access and egress, and minimize traffic flow interruption by swinging doors.

Bi-parting doors: Fit wherever possible within the physical constraints of the installation site.

Single leaf doors: Fit where bi-parting doors are not suitable to the design of the building entry.

Definition

Provide: Delivery, installation and commissioning.

Keying

Requirement: Where keying is required by this specification:

- Coordination: Liaise with UWA Security to arrange keying prior to installation.
- Key switches: Hand to UWA Security not less than 2 weeks before installation for barrels to be keyed to UWA master key system.
 - Consequence of failing to comply: Installation and commissioning will be delayed by 2 weeks with no time extension.

Activation devices

Installation: Locate at 1000mm above finish floor level.

1.2 **INSTALLATION, OPERATION AND DETAILED INSTRUCTIONS**

AUTOMATIC DOORS

Door installation

Type: Provide automatic Bi-parting / Single leaf (*delete as appropriate*) doors as shown.

Standards: *AS 4089 – 1992 Automatic Sliding Door Assemblies* and the *Building Code of Australia*.

Additional requirements

Door head unit cover :

- External installations: Provide lock, keyed to University of Western Australia (EM) keying system.
- Power connection and cabling: Conceal within the *Door head unit* cover or another enclosure.

Motor: Squirrel cage, constant rated, stall-proof torque capacitor start.

Gearbox: Self-lubricating planetary.

Tracking system: Replaceable hard coated anodized aluminum.

Wheels: Sealed bearing fiberglass-reinforced nylon.

Hanger bars: Adjustable.

Operation: Fail-safe with automatic reloading.

Actuation: via OPO1 sensors.

Obstructed opening or closing:

- Action when obstructed: Automatic reversing.
 - Sensitivity setting: Fully adjustable.
- Opening sequence obstruction:
 - Action: Automatic stop and retry.
 - Delay: Adjustable.
 - Safety creep speed facility: Allow doors to reduce speed before reaching location of previously detected obstruction.

Motor locking: Provide electric motor lock and battery reserve.

Interfaces:

- To Fire Indicator Board (FIB): Connect door fire inputs directly to the FIB.
- To Access Control Systems: Connect to normally closed voltage free contacts provided by Access Control System. Engage University's preferred Security contractor to effect connection.

Switching:

- After hours entry: SK-2 key switch
- Mode change: SK-4 key switch to facilitate **Open, Lock, Exit only** and **Automatic**.
- Key switch barrels: Key to University of Western Australia master keying system. Liaise with UWA Security to arrange keying prior to installation.

After hours exit: Provide green mushroom head push button.

Power supply: 240 VAC 50 Hz.

NORMAL DOOR FUNCTION

Manual operation

Function: In the operating mode controlled by the *Mode change* key switch.

Manual operation door modes

Open: Doors remain open until the switch is reset.

Automatic: When the PIR sensors detect movement at the door on the access or egress side, doors open for a predetermined time.

Lock: Egress only by use of an after hours push button. No entry is allowed in Lock mode, except by use of After hours entry key switch.

Exit only: Egress only by the PIR sensors on the egress side. No entry is allowed in Exit mode, except by use of After hours entry key switch.

ACCESS CONTROL FUNCTION

Access Control operation

Function: In the operating mode controlled by the Access Control System.

Access Control door modes

Business Hours mode: Free access and egress on command from Access Control System.

- Control: Door PIR Sensors.
- Alarms: Not reported.

Lock mode: Door controller closes and locks the door on command from Access Control System.

- Control: As for *After Hours mode*.

After Hours mode: Closed and locked door is opened and closed on command from Access Control System.

- Control: Card reader or "Press to exit" button/Break glass release unit.
- Alarms reported:
 - Valid access/egress during Night mode.
 - Door open too long alarm.
 - Forced door alarm.
 - Invalid card read attempt.
- Access: By a valid card read.
- Access process: On unlock command from Access control system, the door controller unlocks and opens the door for a pre-determined time, after which the door closes and locks.
 - Open time: (Typically) 12 seconds.
- Egress (required exit): When the "Press To Exit", button is activated.
- Egress (non-required exit): By a valid card read.

- Egress process: On unlock command to the sliding door controller, the door controller unlocks and opens the door for the predetermined time, after which the door closes and locks.
 - Open time: (Typically) 12 seconds.

Changes required from the manual operation setup

After hours entry: Replace SK-2 key switch with Entry Card Reader

Mode change: Replace SK-4 key switch and mushroom button by:

- Non required exit: Exit Card Reader, or
- Required exit: Access control "Push to Exit" button and break-glass release unit.

Connection to Access Control System

Effect: Engage UWA preferred security contractor to effect connection.

Coordination: Liaise with UWA preferred security contractor on required inputs/outputs and types.

Commissioning: Effect with a representative from UWA Security in attendance.

DETAILED INSTRUCTIONS

Connection To The FIB

Requirement: Directly connect and commission connection.

Purpose: Ensure installed door responds to a Fire Alarm.

Performance compliance: Building Code of Australia, Health Act: Public Buildings Regulations and University of Western Australia fire requirements.

Commissioning: Effect with a representative from Central Plant in attendance,

Break glass door release units

Location: Install adjacent to "Press to Exit" buttons.

Action on activation: Door control unit unlocks and opens the door. The door will remain open until the *Break glass door release* unit is reset.