

**Carey Automatic Door, LLC**  
**1 - PNEUMATIC OPERATOR FOR SWINGING FIRE DOORS**

The Automatic Swinging Fire Door Package has been previously tested to meet the Provisions of the National Fire Protection Association Standards 80 and 101. The Package fills a need required by Life Safety Codes in hospitals, nursing homes, industrial plants, institutions, office buildings and schools.

**Double Egress  
Package 55**

**Perimeter "IN"  
Package 56**

**Perimeter "OUT"  
Package 57**



**FACTORS TO CONSIDER BEFORE ORDERING:**

- DOUBLE EGRESS:** Two doors swinging in opposite direction. "A" labeled with Astragal; "B" labeled without Astragal.
- PERIMETER:** Doors swinging in same direction (either IN or OUT). "B" labeled Doors Only.

FOR INFORMATION ON INSTALLATION DETAILS AND WIRING, REFER TO: DETAIL SHEET P-97 (MDS-445)

**FOR A COMPLETE PACKAGE, THE FOLLOWING EQUIPMENT MUST BE ORDERED:**

FIRE DOOR PACKAGES Nos. 55, 56 OR 57 .....	Page CP-12A
CONTROLS & RELAYS (515430) .....	INCLUDED
*FIRE EXIT HARDWARE No. ED6800A.....	From Corbin Russwin Dealer
*SMOKE AND HEAT DETECTOR .....	By Others
*DOORS (Sizes as indicated) .....	From any approved fire door mfg. company
Specify Class "A" or "B" UL Listed Doors Only	
Prepare for CB-1901, 5" x 4 1/2" Hinges and Fire Door Exit Hardware	
Stanley Door Hardware and Stanley Fire Door Latch	

**U.L. LISTED DOOR SIZES:**

**OPENING HEIGHT:** 6' - 8" TO 8' - 0"  
In 2" Increments

**OPENING WIDTH:** 6' - 0" TO 8' - 0"  
In 4" Increments

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**SWINGING FIRE DOORS**

PKG NO.	PART NO.	DESCRIPTION	SIZE OF OPENING	MAX. REVEAL SEE MDS-255	SIDE CLEARANCE
55	310267	14" DOUBLE EGRESS (Specify Oper. Hand)	72" - 96"	4"	8 1/8"
56	310268	14" PERIMETER "IN"	72" - 96"	4"	8 1/8"
57	310269	14" PERIMETER "OUT"	72" - 96"	4"	8 1/8"

PKG NO. 55	PKG NO. 56	PKG NO. 57	ITEM DESCRIPTION
2 - 103155 OR	1 - 103155	1 - 103155	OPERATOR OS 14" RH Pneumatic Operator
2 - 103156	1 - 103156	1 - 103156	OPERATOR OS 14" LH Pneumatic Operator
2 - 403257	2 - 403257	2 - 403257	SLIDE BAR UNIVERSAL
1 - 502494	2 - 502494	--	DOOR BRACKET SDB - 114 IN
1 - 502495	--	2 - 502495	DOOR BRACKET SDB - 114 OUT
1 - 409318	2 - 409318	2 - 409318	DOOR ROD
2 - 515601	2 - 515601	2 - 515601	M/S LATCH
1 - 311376	1 - 311376	1 - 311376	3 Pair CB-1901 Hinges 5" x 4 1/2" Prime Coat

*Carey Automatic Door, LLC, its employees and associates are not electrical engineers or building code experts. You should consult the proper experts before purchasing a fire door application.*

# Carey Automatic Door, LLC

## SPECIFICATIONS: FIRE DOOR PACKAGE

### I. GENERAL

**A.** Furnish and install the Automatic Swinging Fire Door Package as manufactured or supplied by Carey Automatic Door, LLC of Southbury, Connecticut. The system shall consist of: OS Pneumatic Operator and connecting hardware, control relays electric solenoid latches, control box, actuating controls and accessories.

**B. Related Work Specified Elsewhere**

The general contractor shall coordinate the work of all trades, including glass and glazing, masonry, plumbing, and electrical requirements covered in manufacturer's details and appropriate sections of specifications.

**B-1. Under Electrical Section (OS Pneumatic Operator)**

The electrical contractor shall provide 117v, 60 cycle, 1 phase supply to the manufacturer's control relay. Compressor motor shall be wired to nameplate voltage and phase supply.

**B-2. Under Electrical Section (if applicable)**

The electrical contractor shall provide electrical conduit and wiring from specified controls to control relay as outlined on manufacturer's drawings.

**B-3. Under Plumbing Section**

The plumbing contractor shall connect air compressor or central air supply to the OS Pneumatic Operator with copper tubing and brass fittings or equivalent in accordance with lengths and sizes shown on manufacturer's details and instructions. Minimum pressure in air line before operator pressure regulator shall be at least 20 p.s.i. more than required by operator. The plumbing contractor shall check with Carey representative for air requirements, since this varies with the operator application (60 p.s.i. will be maximum operator requirements). Furnish and install drain traps where necessary for all low points or pockets in the air line.

**B-4. Under Frames and Doors Section (if applicable)**

Furnish and install frames and doors as specified and shown on drawings.

**B-5. Under Masonry Section (if applicable)**

The masonry contractor shall provide recess in floor for mat frames and shall set and level frames in accordance with manufacturer's drawings and instructions.

**C.** All automatic entrance equipment is to comply fully with all sections of ANSI A156.10.

**D.** All equipment must operate between -20° degrees F and +120° degrees F.

### II. PRODUCT

**A.** OS Pneumatic Swinging Fire Door Package shall consist of the following equipment:

- 1 OS Pneumatic Operator and connecting hardware per door leaf
- 1 Control relay per operator
- 1 Electrical solenoid latch per door leaf
- 1 Control box (recess or surface)
- A/R Actuating controls
- 1 (Heat/Smoke detector system contacts by others)
- 3 Pairs of Stanley CB-1901 full mortise hinges 5" x 4 1/2"

(Continued)

# Carey Automatic Door, LLC

## SPECIFICATIONS: FIRE DOOR PACKAGE

### B. Operators

**B-1. Air Power Openings and Spring Closing** - these shall be pneumatically powered from central air supply or separate compressor. Opening action shall be individually controlled by built-in pressure regulator and shall be adjusted for pressure and volume for required speed and power at door location. Closing speed shall be controlled by power springs and valve exhaust adjustment. Built-in adjustable two-stage checking cylinders for both opening and closing limits. Operators to contain plug-in type control relays with adjustable time delay. Operators to instantaneously recycle to full open position from any point in closing cycle.

### C. U.L. Listed Frames and Doors

A or B labeled for double egress, and B labeled for simultaneous pair applications (perimeter). Doors shall be hinge hung and frame shall be designed to accommodate Carey electric solenoid latch mechanisms.

### D. U.L. Listed Fire Exit Hardware (GXHX)

Exit hardware shall be concealed or surface mounted vertical rod type device.

### E. Operating Sequence of System

Normal automatic operation of doors with power "ON" - the electric solenoid latches are held in the retracted position, electrically. This shall allow automatic use of doors. The electric solenoid latches shall prevent fire exit hardware from mechanically latching while energized.

**E.1** U.L. listed heat detectors, smoke detectors and/or central alarm systems shall be the triggering mechanism for the fire mode.

#### E-2. Power Failure Mode

In either event, the electric solenoid latch coils are de-energized. The latches are extended into the tripping position. The operators are de-energized - air is exhausted - springs close the doors. When the doors reach their closed position, they shall latch mechanically by means of exit hardware. The doors can only be opened by manually depressing the exit hardware crossbar.

#### E-3. Resetting Doors for Automatic Operation

Press magnetic control reset button on control box, electric solenoid latches will be returned to their retracted position electrically. Reset fire exit hardware by manually depressing the crossbar on each door. Doors are now in their automatic mode.

### F. Actuating Controls

Carey shall furnish specified controls such as: push plates, pull cords and other accessories as manufactured by Carey Automatic Door, LLC.

## III. EXECUTION

**A.** The general contractor shall ensure that no defects or errors are present in completed phases of the work which would result in poor application or installation, or cause latent defects of the automatic door equipment.