

# Carey Automatic Door, LLC

## AIRLOCK & INTERLOCK DOOR SYSTEMS

### 100% Pneumatic (ALL AIR), Explosion Proof Airlock & Interlock Door Systems

The airlock & interlock system consists of two pairs of swinging (IN or OUT) or sliding doors with a specific requirement to ensure that one pair of doors is disabled while the other set of doors is in motion. In addition, pneumatic exit devices can be incorporated into the swinging door system for automatic unlatching and safe exiting. The entire system is driven by pneumatic cylinders and valves without the use of electrical or electronic components. All moving components are manufactured from non-sparking materials. State of the art valves with condensed valve configuration. Time delay option (1 to 60 seconds) available on opening and closing cycle. Reopening feature during closing cycle.

See Page C-3 for additional ALL AIR and Explosion Proof information.

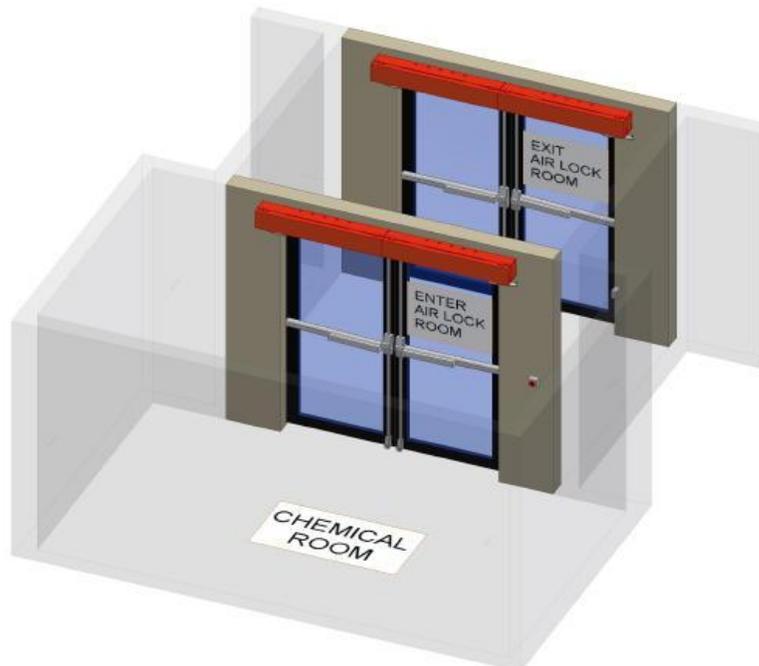
### Description of a Swinging and Sliding Airlock & Interlock Door System

The OPERATOR is an air powered cylinder which is activated by pneumatic push plates or pull cords which in turn introduces air into the power cylinder through a series of valves.

When one of the (4) four push plates and/or pull cords is activated, the following occurs:

1. A signal is sent through a series of valves and sets the priority for either Doors IN or OUT to be activated.
2. At that point, a signal is sent to the pneumatic cylinder of the vertical exit device corresponding to priority according to Step No. 1.
3. With this signal, the pneumatic exit device is retracted allowing the doors to be opened freely.
4. A built-in time delay temporarily delays the signal to the operator to ensure exit device is retracted.
5. Upon the completion of the opening cycle of the power cylinder, a pneumatic trip rod switch is actuated which allows air to be exhausted and the springs to close the door.
6. At the end of the cycle of the power cylinder, the pneumatic exit device is retracted to the closed position.
7. At any point in closing cycle, system can be reactivated to re-open door.
8. In the event of an emergency, the pneumatic exit devices can be used under manual conditions allowing safe exit.

Note: A detailed schematic is available upon request.



<p style="text-align: center;"><b>Carey Automatic Door, LLC</b> <b>OSX ALL AIR (EXPLOSION PROOF) OPERATOR PACKAGES</b></p>
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**100% PNEUMATIC (ALL AIR) & EXPLOSION PROOF OPERATORS**

**100% Pneumatic (ALL AIR) Door Systems:** pneumatically operated with no electronics.

**Explosion Proof Door Systems:** pneumatically operated with no electronics as well as all moving components are manufactured from non-sparking materials.

**100% Pneumatic (ALL AIR) & Explosion Proof Operators:**

**Air Opening and Air Closing (no electricity involved)** - pneumatically controlled from central air supply or separate compressor. Opening and closing action will be individually controlled by separate built-in pressure regulators and opening and closing valves, which are all adjustable for pressure and volume for required speed and power. All regulators and valves can be self-contained within a control box at the door location. The operator will be capable of operating doors against wind velocities (and equivalent stack pressures) up to 40 miles per hour. Built-in two-stage checking cylinders for both opening and closing limits. The operator will instantaneously recycle the door to the full open position from any point in closing cycle. The operator will be activated by two pneumatic push plate or pull cord assemblies. The entire system is driven by pneumatic cylinders and valves without the use of electrical or electronic components.

**FACTORS TO CONSIDER BEFORE ORDERING:**

**OPENING:** Determines size of operator required

**HAND:** Swinging Doors:  
Specify Right Hand for clockwise, Left Hand for counterclockwise

Sliding Doors:  
Specify Right Hand if door slides to the left to open, Left Hand if door slides to right

**HEIGHT CLEARANCE:** Distance required from top of door to ceiling or obstruction

**SIDE CLEARANCE:** Distance required between jamb and side wall for door bracket

**REVEAL:** Distance from back of operator case to inside surface of door in closed position.  
Varies with door thickness and hanging.

**AVAILABLE ACTIVATION OPTIONS:**

Standard: Push palm button or pull cord to open, hold open with 0 - 30 second time delay, automatic close (single acting spring close or double acting power close depending on weight of door)

Optional: Push palm button or pull cord to open, stays open, push palm button or pull cord to close

***Carey Automatic Door, LLC, its employees and associates are not architects, engineers or building code experts. Automatic doors if not installed or maintained properly can cause serious bodily injury. Always consult the proper experts before purchasing a system in a hazardous area.***