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**SECTION 08 38 00**  
**DOUBLE ACTING IMPACT TRAFFIC DOOR**  
**[ImpacDor® RD-175]**

GENERAL NOTES TO SPECIFIER:

EDIT CAREFULLY TO SUIT PROJECT REQUIREMENTS. MODIFY AS NECESSARY AND DELETE ITEMS THAT ARE NOT APPLICABLE. VERIFY THAT REFERENCED SECTION NUMBERS AND TITLES ARE CORRECT.

**PART 1 GENERAL**

1.1 SUMMARY

- A. Section Includes: Double acting, self-closing, fully insulated, 1-3/4 inch thick, impact traffic door.

INCLUDE APPROPRIATE SECTION(S) BELOW FOR OPENING FRAMING AND DOOR FRAMES. RECOMMENDED FRAME IS A 6 INCH STEEL CHANNEL WITH A 3/8 INCH WEB (MC6 X 18.0).

- B. Related Sections:

1.2 SUBMITTALS

- A. Reference Section 01 33 00–Submittal Procedures; submit the following items:
1. Product Data.
  2. Shop Drawings: Show fabrication details and anchorage. Include door elevations, head, jamb and meeting stile details including perimeter air seals.
  3. Samples: Full range of manufacturer's standard color selections for facing material.
  4. Quality Assurance/Control Submittals:
    - a. Manufacturer's Installation Instructions.
  5. Closeout Submittals:
    - a. Cleaning and Maintenance instructions.
    - b. Warranty

1.3 QUALITY ASSURANCE

- A. Qualifications:
1. Manufacturer Qualifications: regular manufacturer of impact traffic doors for at least five years.

1.4 DELIVERY STORAGE AND HANDLING

- A. Reference Section 01 66 00–Product Storage and Handling Requirements.
- B. Verify doors were shipped in upright position.

1. Note specific doors shipped in other than upright position on bill of lading and contact manufacturer.

C. Store in upright position and follow manufacturer's instructions printed on carton.

## 1.5 PROJECT/SITE CONDITIONS

A. Existing Conditions: Frames installed under other sections shall be level and plumb.

## 1.6 WARRANTY

A. One year against defects in materials and workmanship.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

A. Manufacturer: Aleco, a Division E.S. Robbins Corp.; 2720 E. Avalon Ave.; Muscle Shoals, AL. Telephone: (800) 633-3120, (256) 248-2402. Fax: (800) 750-9616. Website: [www.aleco.com](http://www.aleco.com)

B. Model: ImpacDor® RD-175

### 2.2 DOOR COMPONENTS

AVAILABLE WITH WASH DOWN PACKAGE. CONTACT ALECO FOR DETAILS AND MODIFY SECTION TITLE(S) AND SUMMARY ARTICLE(S) ACCORDINGLY.

A. Internal Frame: 3-1/2 x 1-1/2 inch PVC extrusions, full height of nose and jamb edge. 1-1/2 inch square PVC extrusions at top, bottom and above and below vision panel.

B. Core: 1-1/2 inch thick closed cell polystyrene foam.

C. Facings: 1/8 inch thick ABS plastic, 5,400 psi tensile strength, color as selected by architect.

SELECT HARDWARE FROM BELOW; RETAIN ALL SUBPARAGRAPHS. ZINC PLATED EZ HINGE IS STANDARD.

#### [D. EZ Hinge Offset Pivot Hardware:

##### 1. Top Assembly:

- a. 11 gauge [zinc plated] [stainless] steel enclosure with screw adjustable "V" plate bearing guide.
- b. 11 gauge [zinc plated] [stainless] steel door mounting bracket with case hardened steel clevis pin and two 7/8-inch diameter steel bearings.
- c. 11 gauge [zinc plated] [stainless] steel head/jamb mounting angle.

##### 2. Bottom Assembly:

- a. Internal mounted 1-5/16 inch diameter solid steel plug turned to 3/4 inch diameter at bearing point.
- b. Floor/jamb mounted [zinc plated] [stainless] steel jamb guard with integral, low friction, igus bearing.]

OR

[D. Hardware:

1. Cam: "V" cam design; [3/4 inch standard rise] [1-1/2 inch rise], cast Meehanite, minimum 45,000 psi compressive strength, ASTM B 633 zinc plated.

SINGLE ACTING (90 X 0 DEGREE SWING) DOORS ARE AVAILABLE. CONTACT ALECO FOR DETAILS AND MODIFY SECTION TITLE AND SUMMARY ARTICLE ACCORDINGLY.

- a. Swing: [90x90] [90x180] [90x135] degree swing.
2. Cam Follower: 1-1/8 inch diameter by 5/8 inch wide stud mounted needle bearing roller mounted to cast iron arm; 2,100 lbf bearing dynamic capacity.
3. Bottom Bearing: [Standard, extruded aluminum bearing.] [Combination bottom bearing and jamb guard, cast Meehanite, minimum 45,000 psi compressive strength, ASTM B 633 zinc plated.]
4. Hinge Shaft: 1-5/16 inch diameter full height steel tube, 62,000 psi tensile strength.]

F. Seals: Less than 5 cfm air infiltration per linear foot of seal per ASHRAE Bulletin 90-75

1. Jamb and Nose Edge: Replaceable polymer impregnated woven nylon fabric in hollow-loop configuration.
2. Header: Field installed, adjustable, polymer impregnated woven nylon fabric in hollow-loop configuration.
3. Sill: 1/16 inch thick neoprene rubber, factory installed; fixed.
4. Hardware Cutouts: 1/16 inch thick neoprene rubber, factory installed; fixed.

14" X 16" VISION PANEL IS STANDARD; OPTIONS INCLUDE 7-1/2" X 10-1/2", 11-1/2" X 15-1/2", 16" X 18" AND 24" X 24". SHOW PANEL SIZE AND LOCATION ON DRAWINGS.

- G. Vision Panel: [3/16 inch thick polycarbonate, double glazed in [rubber gasket with radiused corners] [ABS sub frame with mechanical fasteners] and set flush with both door faces.] [Recessed 3/16 inch thick polycarbonate, single glazed in ABS subframe with mechanical fasteners.]

DELETE FOLLOWING HOLD OPEN PIN IF EZ HINGE OFFSET PIVOT HARDWARE IS SELECTED.

- H. Hold Open Pin: 1/4 inch diameter steel pin with wire ring and 8 inch chain for attachment to jamb.

DELETE FOLLOWING CAM SHIELDS IF EZ HINGE OFFSET PIVOT HARDWARE IS SELECTED.

- I. Cam Shields: [1/16 inch black rubber flap.] [ABS plastic, color to match door facing.]

FOLLOWING ACCESSORIES ARE OPTIONAL. SELECT AS DESIRED AND DELETE OTHERS.

## 2.3 ACCESSORIES

SHOW BUMPER SIZE AND LOCATION ON DRAWINGS.

- A. Spring Bumpers: 1/4 inch thick molded polyethylene.
  1. Width: [12 inch] [42 inch]
  2. Height: [12 inch] [18 inch] [24 inch] [36 inch] [48 inch] high.
- B. Impact Panels: [12 inch] [24 inch] [36 inch] [48 inch] high, [1/8 inch thick ABS, pad type, color as selected by Architect] [18 gauge stainless steel].

DELETE FOLLOWING JAMB GUARDS IF "COMBINATION BOTTOM BEARING AND JAMB GUARDS" WERE SELECTED IN 2.2 D.3.

- C. Jamb Guards: 1/4 inch bent steel plate, 3 x 6 x 8-3/4 inches.

## 2.4 FABRICATION

- A. Shop Assembly: Fabricate door components without visible fasteners on face into 1-3/4 inch thick unitized assembly with facings sonic welded to frame. [Secure hardware assembly to door with 3 inch steel screws through edge of door into internal sub blocking.] [Secure top offset pivot hardware to door with through bolts into internal frame; bottom offset pivot hardware with through bolts into door body.]

## 2.5 SOURCE QUALITY CONTROL

- A. Fabrication Tolerances: Width and height of each leaf: + 0, -1/8 inch.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Examine opening in which door will be installed.
- B. Coordinate with responsible entity to perform corrective work on unsatisfactory conditions.
- C. Commencement of work by installer is acceptance of opening conditions.

### 3.2 INSTALLATION

- A. Follow manufacturer's instructions.
- B. Install door with necessary anchors, hardware and accessories.
  - 1. Drill bottom bearing for hold open pin.

### 3.3 ADJUSTING

- A. Follow manufacturer's instructions as required to:
  - 1. Clean and lubricate operating parts.
  - 2. Adjust to open and close smoothly and freely without binding.
  - 3. Check seals for proper fit.

### 3.4 CLEANING

- A. Clean surfaces soiled by work as recommended by manufacturer.
- B. Remove surplus materials and debris from the site.

END OF SECTION