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**SECTION 08 38 00**  
**DOUBLE ACTING IMPACT TRAFFIC DOOR**  
**[ImpacDor® XHD-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<sup>®</sup> XHD-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:

1. Perimeter: 1-1/2 inch square extruded aluminum tube, 1/8 inch wall thickness with 1-1/4 x 1-1/2 inch rubber honeycomb extrusion at safety nose edge.
2. Stile: 3 x 1-1/2 inch extruded aluminum tube, full height of mount assembly.

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

C. Facings: [1/8 inch thick ABS plastic, 5,400 psi tensile strength, color as selected by architect.] [16 gauge galvanized steel.] [16 gauge stainless steel, brushed finish.] [16 gauge aluminum, satin anodized.]

D. Hardware:

1. Cam: "V" cam design; [1-1/2 inch standard rise] [3/4 inch rise], cast Meehanite, minimum 45,000 psi compressive strength, ASTM B 633 zinc plated.
  - a. Swing: [90x90] [90x180] [90x135] degree swing.

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

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: [Combination bottom bearing and jamb guard, cast Meehanite, minimum 45,000 psi compressive strength, ASTM B 633 zinc plated.] [Extruded aluminum bearing.]
4. Hinge Shaft: 1-5/16 inch diameter full height steel tube, 62,000 psi tensile strength.

- 5. Mount Plate: Full height of door panel by 4-1/2 inch wide, 12 gauge anodized aluminum.
- E. Safety Nosing: Full height, 2-ply, reinforced rotocured rubber, 2,200 psi tensile strength with 1/16 inch vinyl loop seal (loop seal on one leaf at pairs of doors).
- F. Seals: Less than 5 cfm air infiltration per linear foot of seal per ASTM E 283.
  - 1. Jamb and Header: Polymer impregnated woven nylon fabric in hollow-loop configuration. Jamb seal: Factory installed; fixed. Header seal: Field installed; adjustable.
  - 2. Sill: 1/16 inch thick neoprene rubber, factory installed; fixed.
  - 3. Hardware Cutouts: 1/16 inch thick neoprene rubber, factory installed; fixed.
- G. Bumpers: 42 inch high, 1/4 inch thick molded polyethylene.

24 INCH HIGH BY FULL WIDTH 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.

- H. Vision Panel: 1/8 inch thick polycarbonate, double glazed in aluminum subframe mechanically attached; panels flush with both door faces.
- I. Hold Open Pin: 1/4 inch diameter steel pin with wire ring and 8 inch chain for attachment to jamb.
- J. Cam Shields: [1/16 inch black rubber flap] [ABS plastic, color to match door facing], field installed.

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

### 2.3 ACCESSORIES

- A. Impact Wear Panels: [12 inch] [24 inch] [36 inch] [48 inch] high, 1/8 inch thick ABS, pad type, color as selected by Architect.

FOLLOWING JAMB GUARD IS FOR USE WITH EXTRUDED ALUMINUM BOTTOM BEARING. DELETE IF STANDARD COMBINATION BOTTOM BEARING AND JAMB GUARD WAS SELECTED IN 2.2 D. 3.

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

#### C. Pressure and Wind Load Accessories

- 1. Compression Spring, [4" light duty] [4" heavy duty]

ADJUSTABLE SPRING COMPENSATOR REQUIRES A 8-3/4" JAMB GUARD

- 2. Adjustable Spring Compensator.
- 3. Deep seat cam.

FOLLOWING LOCKING DEVICE IS STANDARD FOR PADLOCK (NOT SUPPLIED); CONTACT ALECO FOR OTHER OPTIONS.

- D. Locking Device: 1 inch i.d. cast aluminum bushing (2 per leaf) with two 3/16 inch by 30 inch long galvanized proof coil chains.
- E. Transom Flap: 2 ply vinyl, color as selected by Architect.

### 2.4 FABRICATION

- A. Shop Assembly: Fabricate door components into 1-3/4 inch thick unitized welded aluminum frame assembly with facings through riveted and adhesive bonded to core and frame. Adhesive peel strength shall be 60 piw minimum, standard 2 inches per minute at 25 degrees C., Scott tester. Rigidly connect mount plate, stile and hinge shaft and secure hardware assembly to door with through-rivets at tubing and aluminum or stainless steel screws to stile. Align cam hardware and prepin.

## 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