



**SECTION 08370**  
**KNOCK & LOCK™ BREAKAWAY DOOR SYSTEM**  
**Optional Feature for the following Series (591,592,595,599,400)**

**PART 1 GENERAL**

**1.01 RELATED DOCUMENTS:**

- A. All of the Contract Documents, including General and Supplementary Conditions and Division 1 General Requirements, apply to the work of this Section.

**1.02 SUMMARY:**

- A. The work described in this section includes manufacturing, delivery and installation of Knock & Lock™ Breakaway Door Systems.
- B. Related Sections: Other specifications sections which directly relate to the work of this section include, but are not limited to, the following:
  - a. Section 05500 – Miscellaneous Metal; metal framing and supports
  - b. Section 08710 – Finish Hardware; key cylinders for locks
  - c. Section 09900 – Painting; field painting
  - d. Section 16100 – Electrical; wiring

**1.03 REFERENCES:**

- A. Applicable standards; standards of the following, as referenced herein:
  - 1. American Society for Testing and Materials (ASTM)

**1.04 SUBMITTALS:**

- A. Product Data: Submit manufacturer's product data and installation instructions for each type and size of Knock & Lock™ Breakaway Door System. Include operating instructions, maintenance information and complete information describing the operating system including instructions.
- B. Shop Drawings: Submit shop drawings for prior approval to fabrication. Include detailed plans, elevations, details of framing members, required clearances, anchors, and accessories. Include relationship with above materials.

**1.05 QUALITY ASSURANCE:**

- A. Manufacturer: Knock & Lock™ Breakaway Door System shall be manufactured by a firm with a minimum of five years experience in the fabrication and installation of sectional doors. Manufacturers proposed for use, which are not named in these specifications, shall submit evidence of ability to meet performance and fabrication requirements specified and

include a list of five projects of similar design and complexity completed within the past five years.

- B. Installer: Installation of Knock & Lock™ Breakaway Door Systems shall be performed by an authorized representative of the manufacturer.
- C. Single-Source Responsibility: One manufacturer shall furnish through its authorized representative, each Knock & Lock™ Breakaway Door System as a complete unit as well as any doors, tracks, hardware, motors and accessories for each type of door. Secondary components may be provided from an approved secondary source if acceptable to manufacturer of primary components.
- D. Pre-Installation Conference: Schedule and convene a pre-installation conference just prior to commencement of field operations to establish procedures, maintain optimum working conditions and coordinate this work with related and above work.

#### **1.06 DELIVERY, STORAGE AND HANDLING**

- A. Deliver materials and products in labeled protective packages. Store and handle in strict compliance with manufacturer's instructions and recommendations. Protect from damage from weather, excessive temperatures and construction operations.

#### **1.07 WARRANTY:**

- A. Manufacturer shall warrant:
  - 1. Door panel interior skin constructed of Valtra®, for a period of ten (10) years from date of installation.
  - 2. Panel retractile cord for a period of ten (10) years from date of installation.
  - 3. Door panel, hardware and exterior, for a period of two (2) years from date of installation.
- B. Manufacturer shall warrant defects in material and workmanship for one (1) year from date of installation.

### **PART 2 PRODUCTS**

#### **2.01 ACCEPTABLE MANUFACTURER:**

- A.** Provide Knock & Lock™ Breakaway Door System by Overhead Door Corporation, Dallas, Texas; **telephone; (800) 275-3290 or (469) 549-7100; fax (972) 906-1499**

#### **2.02 OVERHEAD DOOR KNOCK & LOCK™ BREAKAWAY SECTIONAL DOOR PANELS:**

- A. Trade Reference: Knock & Lock™ Breakaway Door System by Overhead Door Corporation
- B. Breakaway Door Panel Assembly: Panel shall be Metal/Valtra® Interior Skin with insulation/metal sandwich panel construction, with

1. Interior Panel:

- a. Valtra<sup>®</sup> rubber modified styrenic copolymer (with tensile strength of 4500PSI).
- b. Shall be able to stretch at room temperature to 55% of its dimension without breaking.
- c. Shall comply with food additive regulation 21CFR177.1640.
- d. Standard panel color is white.

2. Panel Breakaway Design:

- a. Panel shall not engage roller assembly to activate breakaway feature.
- b. Panel shall not require any manual force to reposition the roller assembly on track or to reset the panel. (Automatic Reset).

3. Exterior Panel:

- a. Panels consist of painted galvanized steel.
- b. Panel color is to be white.

4. Wind Load Design:

- a. Panel shall withstand a minimum wind load condition of 14 lbs. /sq. ft. at standard pressure & temperature.

5. Panel Structure:

- a. Each panel envelops an upper and lower structurally reinforced PVC square tube with additional 20-gauge steel stiffeners.

6. Panel Insulation:

- a. Complete 2" thick panels have insulation rating of R-8.56
- b. The panel insulation is comprised of a highly efficient thermal insulation composed of a rigid polystyrene foam core.

7. Seals:

- a. Door seals are to be a highly durable PVC material to seal the perimeter of the door. Upper and lower edge seal to be comprised of a loop and single-flap seal configuration. Side panel seals to be comprised of a single-flap configuration.

8. Locks:

- a. Panels shall feature dual slide locks as standard equipment on every bottom and intermediate panel.
- b. When slide locks are engaged on single and double panel, breakaway feature shall be disabled for added level of security.

## **PART 3 EXECUTION**

### **3.01 PREPARATION:**

- A. Take field dimensions and examine conditions of substrates, supports and other conditions under which this work is to be performed. Do not proceed with work until unsatisfactory conditions are corrected.

### **3.02 INSTALLATION:**

- A. Consult installation manual prior to and during installation.
- B. Install door panel and operating equipment complete with necessary hardware and supports in accordance with manufacturer's product data and as specified herein.
- C. Secure panel to hinges, plumb, level and true to line.
- D. Anchor hinges at spacing required.
- E. Provide additional support as necessary for attachment of panel.
- F. Instruct owner's personnel in proper operating procedures and maintenance schedule.

### **3.03 ADJUSTING AND CLEANING:**

- A. Test sectional doors for proper operation and adjust as necessary to provide proper operation without binding or distortion.
- B. Touch-up damaged coatings and finishes and repair minor damage to door panel, hardware and operators. Clean exposed surfaces using non-abrasive materials and methods recommended by manufacturer of material or product being cleaned.