

SECTION 08330
ROLLING COILING DOORS

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 of this Section includes the Rolling Coiling, 45 Minute-Rated, Fusible Link, Door Number 129A at Storage # 129, and the Insulated Rolling Coiling Door 132A at the Parts Department # 132.
- B. Related Sections: Other specification sections which directly relate to the work of this Section includes, but are not limited to, the following:
 - 1. Section 05500 - Miscellaneous Metal; metal framing and supports.
 - 2. Section 08710 - Finish Hardware; key cylinders for locks.
 - 3. Section 09900 - Painting; field painting.

1.03 SYSTEM DESCRIPTION

- A. Design Requirements:
 - 1. Wind Loading: Supply doors to withstand up to 100 MPH maximum wind load.
 - 2. Cycle Life:
 - a. Design doors of standard construction for normal use of up to 20 cycle per day maximum.

1.03 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each type of sectional door. Include both published data and any specific data prepared for this project and Sample Warranty.
- B. Shop Drawings: Submit shop drawings for approval prior to fabrication. Include detailed plans, elevations, details of framing members, required clearances, anchors, and accessories. Include relationship with adjacent materials.
- C. Closeout Submittals:
 - a. Operation and Maintenance Manual.
 - b. Certificate stating that installed materials comply with this specification.
 - c. Warranty

1.04 QUALITY ASSURANCE

- A. Manufacturer: Sectional doors 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 the rolling, coiling doors shall be performed by the authorized

representative of the manufacturer.

- C. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.

1.05 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.

1.06 WARRANTY

- A. Standard Warranty: Two years from date of shipment against defects in material and workmanship.
- B. Maintenance: Submit for owner's consideration and acceptance of a maintenance service agreement for installed products.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURER

- A. Manufacturer:
- B. Or equal per Section 01600 – Substitutions.

2.02 MATERIALS

- A. Curtain:
 - 1. Slats: No. 5F, 22-gauge, Grade 40 steel, ASTM A 653 galvanized steel zinc coating.
 - 2. Bottom Bar: Two 2x2x1/8 inch (50x50x3.2 mm) structural steel angles.
 - 3. Fabricate interlocking sections with high strength nylon end locks on alternate slats each secured with two 1/4" (6.35 mm) rivets. Provide wind locks as required to meet specified wind load.
 - 4. Slat Finish:
 - a. GalvaNex™ Coating System and phosphate treatment followed by baked-on polyester powder coat, color as selected by Architect from manufacturer's standard RAL selection; minimum 2.5 mils (0.065 mm) cured film thickness; ASTM D-3363 pencil hardness: H or better.
 - 5. Bottom Bar Finish:
 - a. Steel: Phosphate treatment followed by baked-on polyester powder coat, color as selected by Architect from manufacturer's standard RAL selection; minimum 2.5 mils (0.065 mm) cured film thickness; ASTM D-3363 pencil hardness: H or better.
- B. Guides: Fabricate with structural steel angles. Provide wind lock bars of the same material when wind locks are required to meet specified wind load. The top of inner and outer guide angles to be flared outwards to form a bell mouth for smooth entry of curtain into guides. Provide removable guide stoppers to prevent over travel of curtain and bottom bar.
Top 16 1/2" (419.10 mm) of coil side guide angles to be removable for ease of curtain installation and as needed for future curtain service.
 - 1. Finish:
 - a. Steel: Phosphate treatment followed by a corrosion inhibitive baked-on zinc-rich gray polyester powder coat; minimum 2.5 mils (0.065 mm) cured film thickness.

Color as selected from manufacturer's standard RAL selection.

- C. Counterbalance Shaft Assembly:
 - 1. Barrel: Steel pipe capable of supporting curtain load with maximum deflection of 0.03 inches per foot (2.5 mm per meter) of width.
 - 2. Spring Balance: Oil-tempered, heat-treated steel helical torsion spring assembly designed for proper balance of door to ensure that maximum effort to operate will not exceed 25 lbs (110 N). Provide wheels for applying and adjusting spring torque.
- D. Brackets: Fabricate from minimum 3/16-inch (5 mm) steel plate with permanently lubricated ball or roller bearings at rotating support points to support counterbalance shaft assembly and form end closures.
 - 1. Finish:
 - a. Phosphate treatment followed by baked-on polyester powder coat, color as selected by Architect from manufacturer's standard RAL selection; minimum 2.5 mils (0.065 mm) cured film thickness; ASTM D-3363 pencil hardness: H or better.
- E. Hood: 24-gauge galvanized steel with reinforced top and bottom edges. Provide minimum 1/4-inch (6.35 mm) steel intermediate support brackets as required to prevent excessive sag.
 - 1. Finish:
 - a. GalvaNex™ Coating System and phosphate treatment followed by baked-on polyester powder coat, color as selected by Architect from manufacturer's standard RAL selection; minimum 2.5 mils (0.065 mm) cured film thickness; ASTM D-3363 pencil hardness: H or better.
- F. Weatherstripping:
 - 1. Bottom Bar: Replaceable, bulb-style, compressible EDPM gasket extending into guides.
 - 2. Guides: Vinyl strip sealing against fascia side of curtain.
 - 3. Hood: Neoprene/rayon baffle to impede air flow above coil.
 - 4. Lintel Seal: Nylon brush seal fitted at door header to impede air flow.

2.03 ACCESSORIES

- A. Locking:
 - 1. Manual Chain Hoist: Pad lockable chain keeper on guide for Door # 129A.
 - 2. Electronic controlled at Door # 131A.
- B. Vision Panels: Not used
- C. Operator and Bracket Mechanism Cover: Provide 24-gauge galvanized steel sheet metal cover to provide weather resistance at car wash. Finish to match door hood.

2.4 OPERATION

- A. Manual Chain Hoist: Provide chain hoist operator with endless steel chain, chain pocket wheel and guard, geared reduction unit, and chain keeper secured to guide.

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. Examine substrates upon which work will be installed and verify conditions are in accordance with approved shop drawings.
- B. Coordinate with responsible entity to perform corrective work on unsatisfactory substrates.
- C. Commencement of work by installer is acceptance of substrate.

3.03 ADJUSTING

- A. Following completion of installation, including related work by others, lubricate, test, and adjust doors for ease of operation, free from warp, twist, or distortion.

3.04 CLEANING

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

3.05 DEMONSTRATION

- A. Demonstrate proper operation to Owner's Representative.
- B. Instruct Owner's Representative in maintenance procedures.

END OF SECTION 08360