

SECTION 08300 - SPECIAL DOORS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Work includes rolling insulated interior mounted overhead doors, access panels, rolling shutter and motorized rolling overhead grille.

1.02 QUALITY ASSURANCE

- A. Provide a complete properly operating installation for each type of special door including all hardware, mounting and installation components.
- B. Wind Loading: Rolling insulated door shall withstand a 20 PSF wind load pressure.
- C. Fabricate rolling grille to permit:
 - 1. Emergency exiting from interior during power failure and when grille is closed.
 - 2. Manual lifting for emergency entry upon operation of a secure exterior mounted release device in the event of a power failure.
- D. Fire Rated Assemblies (when required); comply with NFPA 80 and provide UL label confirming compliance with ASTM E-2074 including automatic closing in event of fire.
- E. Any deviation from Walgreens required finishes, colors, etc., must be approved by Walgreens and fully coordinated with all similar and related systems

1.03 SUBMITTALS

- A. Submit manufacturer product data and shop drawings (except access panels).

PART II - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS (overhead doors, rolling shutters, rolling grilles)

- A. Subject to compliance with requirements, provide products of one of the following:
 - AlumaTek, Inc.
 - The Cookson Company
 - Cornell Iron Works
 - Overhead Door Corp.

2.02 MATERIALS

- A. Steel Door Curtain slats: Structural quality, cold rolled galvanized steel sheets complying with ASTM A 653, Grade A, with G90 zinc coating, complying with ASTM A 653, and phosphate treated before fabrication. Provide a 22-gauge minimum exterior skin, 24 gauge minimum interior skin.

Furnish standard "flat-face" slats.

- 1. Insulation (receiving door): fill slats with pressure - foamed-in-place urethane, polyurethane or polyisocyanurate, fully bonded to interior and exterior skins.

- B. Grille Curtain: A network of 5/16" minimum diameter horizontal rods spaced approximately 2" o.c. Interconnect rods by vertical links approximately 5/8" wide, spaced approximately 9" apart and rotating on the rods in a straight pattern.
1. Aluminum Grilles: ASTM B 221, with clear, satin anodized finish.
- C. Endlocks: Malleable iron castings galvanized after fabrication, secured to curtain slats with galvanized rivets. Provide locks on alternate curtain slats for curtain alignment and resistance against lateral movement.

End Locks (Rolling Grille): Continuous end links or other devices at ends of rods, locking and retaining grille curtain in guides against excessive pressure, maintaining curtain alignment and preventing lateral movement.

- D. Bottom Bar: Consisting of 2 angles, each not less than 1-1/2" x 1-1/2" x 1/8" thick, either galvanized or stainless steel to suit type of curtain slats.

Provide a replaceable gasket of flexible vinyl or neoprene between angles as a weather seal and cushion bumper (at receiving).

Bottom Bar (Rolling Grille): Manufacturer's standard extruded shape with clear anodized finish.

- E. Curtain Jamb Guides: Fabricate of steel angles, or channels. Build-up units with minimum 3/16" thick steel sections, galvanized after fabrication. Slot bolt holes for track adjustment.

Secure continuous wall angle to wall framing by 3/8" minimum bolts at not more than 30" o.c., unless closer spacing recommended by door manufacturer. Extend wall angles above door opening head to support coil brackets. Place anchor bolts on exterior wall guides so they are concealed when door is in closed position. Provide removable stops on guides to prevent over-travel of curtain, and continuous bar for holding windlocks.

Guides (Rolling Grille): Manufacturer's standard extruded aluminum shape, clear anodized finish, having curtain groove with return lips or bars to retain curtain. Furnish pile strips, rigid vinyl liner, or other nonmetallic inserts to prevent metal-to-metal contact and minimize noise of travel.

- F. Weather Seals (At Receiving): Provide vinyl or neoprene weather-stripping. At door heads, use 1/8" thick continuous sheet secured to inside of curtain coil hood. At doorjamb, use 1/8" thick continuous strip secured to exterior side of jamb guide.

2.03 COUNTERBALANCING MECHANISM:

- A. Counterbalance: Provide adjustable steel helical torsion spring, mounted around a steel shaft and mounted in a spring barrel and connected to door curtain. Use grease-sealed bearings or self-lubricating graphite bearings for rotating members.
- B. Hood: Entirely enclose coiled curtain and operating mechanism, including chain gear assembly at opening head. Provide a weather seal to prevent airflow, insects, etc., from entering hood. Contour to suit end brackets to which hood is attached. Roll and reinforce top and bottom edges for stiffness. Provide closed ends for surface-mounted hoods, and any portion of between-jamb mounting projecting beyond wall face.

1. Fabricate steel hoods for doors of not less than 24 gage hot-dip galvanized steel sheet with G 90-zinc coating, complying with ASTM A 653. Phosphate treat before fabrication.
2. Fabricate hoods for aluminum grilles of alloy 3003 aluminum sheet not less than 0.032" thick, finished to match curtain.
3. Furnish removable metal soffit when hood is mounted above ceiling, of same material and finish as curtain.

2.04 OPERATORS

- A. Chain Hoist Operator (At Receiving): Provide endless steel manual chain hoist operator, chain pocket wheel and guard, and geared reduction unit with maximum 35 lbs. pull for door operation. Provide self-locking mechanism allowing curtain to be stopped at any point in its travel and to remain in position until reactivated. Furnish chain holder secured to operator guide.

1. Provide ¼" minimum thickness, heavy duty slide bolt for padlock at inside bottom bar.

- B. Manual Push-Up Operation (At Conveyor): Required lift or pull for door operation shall not exceed 25 lbs. Curtain shall be easily stopped at any point in its travel and remain in position until reactivated.

Provide lifting handle and slide bolt with cylinder lock on bottom bar.

- C. Electric Grille Operator: By grille manufacturer; complete with electric motor and factory-prewired motor controls, gear reduction unit, solenoid operated brake, remote control stations, and control devices.

Provide hand-operated disconnect or mechanism for automatically engaging a sprocket and chain operator and releasing brake for emergency manual operation. Mount disconnect and operator at 48" above finish floor. Include an interlock device to automatically prevent motor from operating when emergency operator is engaged. Provide "Power-Out Entry Terminal" (P.E.T.) by Storefront Security Closures, Inc. 1-800-767-3667.

1. Key stations: One (1) exterior type, secure tamper-proof, recessed mounted, heavy duty, weatherproof, constant contact OPEN/CLOSE with spring return to center, NEMA Type 4, key switch.

One (1) interior, flush mounted, constant contact OPEN/CLOSE with spring return to center, NEMA Type 4, key switch.

- D. Automatic Reverse Control: Furnish and install when required by authorities having jurisdiction. Provide units with electrically or pneumatically actuated automatic bottom bars. Only provide units with heavy duty retracting reels, which conceal cord/tube from view when grille is opened.

2.05 ACCESS PANELS

- A. Provide 24" x 36" doors, with 16 Ga. frames, 14 Ga. doors, continuous concealed hinges, cylinder lock with two keys and prime painted finish unless noted otherwise. Units with plaster bead flanges may be used (contractors option) at EIFS soffits. Provide

fire rated units when required by local authorities. At glass tower, provide units with flush screwdriver operated locks with steel ring cam.

- B. Acceptable Manufacturers: Acudor; model UF-5000, PS-5030 (plaster flange), FW-5050 (fire rated).
Babcock-Davis: Cierra Products model; B-NT, B-NP (plaster), B-IT (fire rated)
JL Industries, Inc.; model TM, model FD (fire rated)
Karp Assoc., Inc.; model DSC-214M, DSC-214 pl (plaster), KRP-150 FR (fire rated).
Larsen's Manufacturing Co.; model L-MPG, L-FRAP (fire rated).
Milcor; style M, style K (plaster), UFR (fire rated).
Mifab Manufacturing; style UA, CAD-FL-PL (plaster), MPFR (fire rated)

PART III - EXECUTION

3.01 INSTALLATION

- A. Install grilles and operating equipment complete with necessary hardware, in accordance with final shop drawings, and manufacturer's instructions.
- B. Painting: See Section 09910.
- C. Upon project completion lubricate, test and adjust doors/grilles to operate easily, free from wrap, twist or distortion.

END OF SECTION