

## **SECTION 14560**

### **LINEN CHUTE**

This section is based on a system produced by:

Midland Chutes  
9545 W. Ainslie  
Schiller Park, Illinois 60176

Phone: 1.847.678.4007  
Fax: 1.847.671.3083

#### **GENERAL**

##### **1.1 RELATED DOCUMENTS**

- A. The general provisions of the contract, including General and Supplementary Conditions and Division 1, General Requirements, apply to the work specified in this section.

##### **1.2 DESCRIPTION OF WORK**

- A. Work Included: Furnish and install where shown on plans: 24" diameter linen chute as manufactured by Midland Chutes as specified below.

##### **1.3 SUBMITTALS**

- A. Catalog Cuts: Before the linen chute is delivered to the job site, submit catalog cuts to the Architect in accordance with these specifications, showing all details of installation and assembly and all requirements for work by other trades.
- B. Product Data: Manufacturer's product specifications, standard details and recommendations for project conditions; indicate selected sizes and installation details specific to the project.
- C. Shop Drawings:
  - 1. Plans: Scale 1/4 inch to 1 foot; indicate locations, dimensions, and required associated construction activities.
  - 2. Elevations/Sections: Scale 1/4 inch to 1 foot; indicate locations, dimensions, and required associated required construction activities.
  - 3. Details: Scale 1/4 inch to 1 foot; indicate:
    - a. Shop drawings specific to project conditions
    - b. Interface with adjacent construction
    - c. Dimensions and tolerances
    - d. Products required for installation of the linen chute, but not supplied by linen chute manufacturer.
- D. Quality Assurance/Control Submittals:

1. Contractor's Certification that:
  - a. Products of this section are manufactured by Midland Chutes.
  - b. Manufacturer's certification that installer of manufacturer's product is approved.
  - c. Applicable standards: National Fire Protection Association (NFPA 82), standards as referenced herein.
- E. Close-out Submittals:
  1. Operation and Maintenance Data.
  2. Warranty Documents: Issued and executed by the manufacturer and installer of the system.

## 1.5 QUALITY ASSURANCE

- A. Qualifications:
  1. Manufacturer: Minimum five (5) years-documented experience producing products specified in this section.
  2. Installer: Approved by the Manufacture, and having a minimum of five (5) years experience.

## 1.6 RELATED WORK BY OTHERS SPECIFIED ELSEWHERE

- A. The following work is excluded from the scope of work in this section 14560 and is included in other divisions of the specifications for inclusion in the scope of work of others.
  1. Flashing at the roof
  2. Water supply and valves to flushing and fire sprinkler heads
  3. Switch assembly, conduit and/or wiring for electric interlock doors or solenoid valve for the disinfecting and sanitation unit located behind a plumbing access door directly above the highest intake door.
  4. Installation of the plumbing access door provided under this section is to be by the forces erecting the shaft enclosure walls.

## 1.7 WARRANTY

- A. Manufacturer's warranty: Furnish manufacturer's standard one (1) year warranty from date of temporary certificate of occupancy or similar, locally mandated permission to use the project common areas for their intended use. Warranty shall apply to defects in product workmanship and materials.

## PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable manufacturers: Midland Chutes, Schiller Park. Illinois.  
P. 1.847.678.4007 – F. 1.847.671.3083
- B. Substitutions: Not permitted.

C. Components:

1. The chute shall be 24" diameter of helical seamed spiral pipe design U.S. #16 gauge aluminized steel as manufactured by Midland Chutes. Intakes shall be constructed of U.S. #16 gauge sheet complete with drywall flanges or masonry brackets to assure plumb alignment. Intakes are to include a recessed housing for automatic fire sprinklers to prevent snagging of material. Sprinkler shields are not permitted.
2. Intake Doors: Stainless steel, 21 inches wide x 21 inches high, side hinged, with the full 180° opening swing, hand operated, self-closing, positive latching, keyed, T-Handled door bearing 1-1/2 hour, Underwriters Laboratories® "B" Label designation with stainless steel trim embossed "SOILED LINEN".
3. Discharge: Midland Chutes D-TH hopper with 24" wide x 30" high, top hinged, hand operated door bearing 1-1/2 Hr. Underwriter Laboratories® "B" label with a 165°F fusible link. Hopper to be supported by four (4) legs.
4. Vent: Chute shall extend full diameter through roof to metal top vent cap, manufactured of U.S. #16 gauge aluminum, 4'-0" above the flushed roof level with counter flashing and insect screen. A roof curb (40"x 40" x 8" high) is required for flat roof conditions and is to be provided by others.
5. Accessories: 3/4 inch IPS flushing spray head and 1/2 inch sprinkler head above highest intake. Additional 1/2 inch sprinkler heads at every second intake (counting from the top) or as required by local code.
6. Offsets (bends) in the chute, if required, shall be made the same diameter as the chute of #16 US gauge aluminized steel and have an additional layer of U.S. #12 gauge steel reinforcing the impact area. Offsets are not to deviate more than 15° off the vertical axis of the chute.
7. Sprinkler System: Chute shall be protected internally by automatic sprinklers. This requires a sprinkler at or above the top intake door of the chute, and in addition, a sprinkler shall be installed within the chute at alternate floor levels in buildings over two stories in height with mandatory sprinkler located at the lowest service level.

## 2.2 FABRICATION

- A. The linen chute shall be fully factory assembled and all joints except those required to separate the sections for shipment and installation shall be welded or helically lock-seamed tight. The floor intake doors shall be bolted in place on throats formed into the chute. All chute sections shall flash inside the sections below and there shall be no bolts, clips, or other projections inside the chute to snag the flow of material. Where more than three sections are required on a floor chute sections other than intakes are to be bolted together. Pre-positioned support frames shall assure proper intake levels and there shall be an expansion joint in the chute between all support joints. Discharge hoppers and offsets, where required, shall be reinforced and separately supported in the impact area.

## EXECUTION

### 3.1 EXAMINATION

- A. Verification of conditions:
  - 1. Area in which system is to be located is correct size and location, and is prepared for installation of linen chute.
- B. Installer's examination:
  - 1. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if conditions under which construction activities of this section are to be performed are unacceptable.
  - 2. Beginning construction activities of this section before unacceptable conditions have been corrected is prohibited.
  - 3. General Contractor shall verify and record chute alignment with installer immediately following installation.

### 3.2 INSTALLATION

- A. Install linen chute in accordance with shop drawings and manufacturer's printed installation instructions.

### 3.3 DEMONSTRATION

- A. Arrange demonstration of system operation, conducted by manufacturer's representative, to Owner's maintenance personnel.

END OF SECTION