SECTION 11175

LINEN CHUTE

This section is based on a system produced by:

Midland Chutes 9545 W. Ainslie Schiller Park, IL 60176 Telephone: 847-678-4007

Part 1 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.

B. Pre-Installation Meetings:

- 1. Convene at job site a minimum of seven (7) calendar days prior to scheduled beginning of construction activities of this section to review requirements of this section.
- 2. Require attendance by representatives of the following:
 - a. Linen chute manufacturer or designated representative
 - b. Installer of this section
 - c. Other entities directly affecting, or affected by, construction activities of this section.
 - d. Notify Architect four (4) calendar days in advance of scheduled meeting date.

1.6 RELATED WORK BY OTHERS SPECIFIED ELSEWHERE

- A. The following work is excluded from the scope of work in this section 11175 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 wash down system (flushing head provided by this contractor).
 - 3. Water supply to fire sprinkler system (sprinkler heads provided by this manufacturer).
 - 4. Installation of the plumbing access door provided under this section is to be by the forces erecting the shaft enclosure walls.
 - 5. Drain pipe from hopper where required

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.

Part 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable manufacturers: Midland Chutes, 9545 W. Ainslie Street, Schiller Park, IL 60176
- B. Substitutions: Not permitted.
- C. Chute must be manufactured in the USA.
- D. Components:
 - 1. The chute shall be minimum 24" diameter of helical seamed spiral pipe of aluminized or galvanized steel as manufactured by Midland Chutes. Intakes shall be constructed of U.S. #16 gauge sheet and shall include a recessed housing for automatic fire sprinklers to prevent snagging of material. Sprinkler shields are not permitted.
 - 2. Intakes Door: Stainless steel, 21 inches wide x 21 inches high, side hinged, cylinder locked, with the full 180° opening swing, hand operated self-closing positive latching doors bearing 1-1/2 hour, Underwriters Laboratories "B" Label designation and rated for a 250° F maximum door temperature rise over 30 minutes, with stainless steel trim in a UL® approved, "B" Label, 1½ hour assembly.
 - 3. Interlocks (optional)- Doors shall be equipped with electric interlocks. Doors shall be normally locked. When system is energized by opening one door, the remaining doors shall remain locked until system is available. Provide control panel that operates interlocks and disinfecting unit from discharge room.
 - 4. Discharge: Midland, U.S. #16 gauge aluminized steel type "H" hopper with minimum 24" wide x 30" high, top hinged, hand operated doors bearing 1-1/2 Hr. 250° F UL "B" label with counter balance and 165°F fusible link. Reinforced bottom with #12 gauge impact plate. Hopper to be supported with 4 legs for ease of installation and equipped with 2" IPS drain flange for connection by plumber, as required by city or state building and/or fire codes.
 - 5. Vent: Chute shall extend full diameter through roof to metal top vent cap 4'-0" above the flushed roof level with counter flashing and insect screen. A roof curb (40"x40") is required for flat roof conditions and is to be provided by others.
 - 6. Accessories: 1/2 inch sprinkler head above highest intake. Additional 1/2-inch sprinkler heads at every second intake (counting from the top) and at lowest intake or as required by local code.
 - 7. Disinfecting and Sanitizing: Equip chute with 1/2-inch flush spray head above highest intake and disinfecting & sanitizing unit. Connection to flushing spray head, back flow prevention valve and electric control switch by others. Supply 1 gallon of manufacturer's recommended solution. Provide 15"x15" right hinged, hand operated, self closing, positive latching, 1-1/2 hour UL "B" labeled access door and trim for installation by forces erecting enclosing shaft wall. Door for access to D&S unit above highest intake door of chute.
 - 8. 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 #12 US gauge steel reinforcing the impact area. Offsets are not to deviate more than 15° off the vertical axis of the chute except above highest intake.

A. The linen chute shall be fully factory assembled and all joints, except those required to separate the sections for shipment. 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. 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.

Part 3 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:
 - 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 *