

SECTION 11175

TRASH 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 trash chute as manufactured by Midland Chutes, as specified below.

1.3 SUBMITTALS

- A. Catalog Cuts: Before the trash 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 trash chute, but not supplied by trash 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 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. Hot water supply to sanitizing system (optional), backflow preventer, valves, and solenoid when required. (Sanitizing unit and solution provided by manufacturer)
 - 3. Water supply to fire sprinkler system (sprinkler heads provided by this manufacturer).
 - 4. 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 24" diameter of U.S. #16 gauge (0.060) aluminized or galvanized steel.

2. Intakes Door: 304 Stainless steel, 15 inches wide x 18 inches high, bottom hinged, cylinder locked, hand operated self-closing positive latching doors bearing 1-1/2 hour, Underwriters Laboratories "B" Label with stainless steel trim.
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. Include control switch to lock out doors for maintenance.
4. Include heat and smoke detector to lock out chute doors in event of excessive heat and/or smoke.
5. Discharge: Midland Chutes Horizontal Rolling Discharge door of "B" label construction but not bear a label. HRD shall be spring loaded, equipped with wheel rollers and 165 degree fusible link which shall close when fused by excessive heat.
6. 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. Vent shall be made of non-ferrous material.
A roof curb (40"x40") is required for flat roof conditions and is to be provided by others.
7. Accessories: NPS 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.
8. Disinfecting and Sanitizing: Equip chute with NPS 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.
9. 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.
10. Sound & Vibration Control: Provide manufacturer's recommended sound coat vibration dampening compound to the exterior or the chute only. Include 3x3 neoprene isolators at each level.
11. Odor Control: Provide Midland Chutes Odor Control System with solution.

2.2 FABRICATION

- A. The trash chute shall be fully factory assembled at 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. Offsets, where required, shall be reinforced and separately supported in the impact area.

Part 3 EXECUTION

3.1 INSTALLATION

1. Install and test chutes before installing enclosing chase construction.
2. Install chutes according to NFPA 82 and manufacturers written instructions.
3. Install chutes plumb, without obstructions that might prevent materials from free falling within chutes.
4. Anchor flanges of chute vents to roof curbs before installing the roofing and flashing. Install chute vent counterflashing after roofing and roof penetration flashings are installed.
5. Electrical Interlock System: Install according to applicable NFPA 70 recommendations.
6. Test and adjust chute components after installation. Operate doors, locks, and interlock systems to demonstrate that hardware operates properly and smoothly and electrical wiring is connected correctly.
7. Test heat and smoke sensing devices for proper operation where required.

3.3 DEMONSTRATION

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