
SECTION 14 91 30

LINEN CHUTE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Provide linen (laundry) chute system with fire-rated doors and accessories as required for complete, operational system.
- B. Related Sections:
 - 1. Division 22: Piping for fire sprinklers and spray head.
 - 2. Division 26: Conduit for wiring.

1.2 REFERENCES

- A. NFPA No. 82: Incinerators, Waste and Linen Handling Systems and Equipment.

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Coordination: Coordinate linen chute construction with adjacent construction to ensure compliance with applicable codes and regulations, sufficient space is provided, and chute operation is appropriate.
- B. Pre-Installation Meeting: Convene not less than one week prior to commencing work of this Section. Require attendance of those directly affecting work of this Section.
 - 1. Review installation procedures and coordination required with related work.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's product specifications, standard details, and general recommendations for total manufacturer engineered chute system.
 - 1. Mark-up data sheets to indicate actual selections for sizes and other details.
- B. Shop Drawings: Submit sections and elevation drawings, 1/2" scale typical landing plans and 1-1/2" scale details of chute fabrication and installation including roof flashing.
 - 1. Distinguish between factory fabrication and field assembly work.
 - 2. Show required piping connections for sprinklers and sanitizers, and required wiring connections and conduit runs for wiring including door interlocks.

1.5 QUALITY ASSURANCE

- A. Qualification of Fabricators: Firm with minimum five years successful experience in fabrication of chutes similar to those required for Project.

PART 2 - PRODUCTS

2.1 SYSTEMS MANUFACTURERS

- A. Chute Source LLC.
- B. Chutes International.
- C. Wilkinson Hi-Rise, LLC.
- D. Valiant Products, Inc.
- E. Substitutions: Refer to Section 01 25 00.

2.2 MATERIALS

- A. System Description: Provide linen (laundry) chute system with fire-rated doors and accessories.
- B. Regulatory Requirements, General: Comply with applicable codes and regulations.
- C. Accessibility Regulatory Requirements: Provide for assuring access for persons with disabilities in accordance with state and federal regulations.
 - 1. California Regulations: Comply with California Building Standards Code.
 - 2. Federal Regulations: Comply with Americans with Disabilities Act (ADA) Standards.
 - 3. Provide accessible hardware at chute doors complying with applicable codes and regulations.
- D. Linen Chute: Manufacturer's standard construction conforming to NFPA 82 and as follows.
 - 1. Size and Shape: 24" diameter round chute.
 - 2. Fabricate of minimum 16 gage ASTM A666, Type 304 corrosion resistant nonmagnetic stainless steel, with welded floor-support rings.
 - 3. Sound Damping Material: Manufacturer's standard heavy mastic coating to help eliminate metallic reverberations.
 - 4. Isolator Pads: Manufacturer's standard heavy-duty pads installed under supports to help eliminate sound transmission through structure.
- E. Chute Intake Door/Frame Units: Provide aluminized steel UL labeled door units with 1-hour, 30-minute temperature rise of 250 degrees F., complete with closers, in conformance with NFPA 82; provide at each landing.
 - 1. Size: Minimum 18" by 18".
 - 2. Provide hopper type doors.
 - 3. Equip doors with positive latch and latch handle.

- F. Electrical Interlocks: Provide interlock system with temperature-rise elements which lock all doors of chute at predetermined, adjustable temperature in chute.
 - 1. Design door lock units for wiring together and for connection to power source and control elements as indicated.
- G. Chute Discharge Door Units: Provide fusible-link, fire-protection, self-closing stainless steel door unit; match chute size and construction.
 - 1. Discharge: Inclined horizontal-rolling shutter-type door unit.
- H. Roof-Termination Vent Units: Vent complete with roof-deck flange designed for roof and installation types as provided for Project.
 - 1. Comply with NFPA requirements for full-sized chute extension to 4'-0" above roof, with full diameter screened vent area and metal safety cap or glass explosion-release cap.
 - 2. Provide nonferrous metal roof counter-flashing and clamping ring, compatible with chute metal.
- I. Chute Accessories: Provide manufacturer's standard chute accessories as indicated and as required for complete chute assembly and installation.
- J. Fire Sprinklers: Equip chute with sprinkler heads in accordance with NFPA Standard No. 13, ready for piping connections.
 - 1. Provide access for maintenance of heads.
 - 2. Except as otherwise indicated or required by governing regulations, provide 1/2" I.P.S. heads, one located in chute above highest intake door, and one located at intake door on alternate floors.
- K. Sanitizer Unit: Provide manufacturer's standard sanitizer system for linen chutes.
- L. Access Doors: Provide UL labeled 1-hour access doors for chute enclosure construction, where indicated and where required for use and maintenance of chute and its components and accessories.
 - 1. Provide self-closing, hinged and latched, stainless steel door and frame units with satin finish.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces and verify dimensions of in-place and subsequent construction.
- B. Installation of chute constitutes acceptance of existing conditions.

3.2 INSTALLATION

- A. Comply with manufacturer's instructions and recommendations; comply with applicable recommendations and details of "Architectural Sheet Metal Manual" by SMACNA.
- B. Assemble components with tight, non-leaking joints; anchor securely to supporting structure with sufficient anchorages to withstand impacts from uses and wind loading stresses on vent units.
- C. Provide for thermal expansion movement of chute sections.
- D. Except as otherwise indicated, install chutes plumb, without offsets or obstructions, for free fall of materials within chutes.
- E. Install chute systems complete with doors and with safety, sanitizing and fire-resistive components and accessories.
- F. Coordination with Roofing: Where roof deck curb units are not shown to receive chute roof-termination vent units, anchor vent unit support flange directly to deck before installation of roofing system.
 - 1. Install counter-flashing after roofing/flashing system has been installed.
- G. Intake and Discharge Doors: Provide anchorages, wall/chute interfaces, self-closing operation, self-latching and similar features of installation to comply with labeling and fire-resistive requirements.
 - 1. Interface door units with throat sections of chutes in manner to ensure safe, snag-proof, sanitary depositing of materials in chutes by users.
- H. Sanitizer Unit: Install sanitizer unit where indicated, cutting and patching chute wall only to extent necessary for installation.
- I. Access Doors: Deliver access door units to other trades at proper time for installation in construction of enclosures.
 - 1. Provide detailed information on required locations for operation and maintenance of chute systems.

3.3 CLEANING

- A. Cleaning: Following completion of enclosure walls and ceilings, clean exposed surfaces of finished metal components of chute system; remove foreign substances, but do not remove UL labels.

END OF SECTION