SECTION 11175 - GARBAGE CHUTE

This section is based on a system produced by:

Wilkinson Chutes Canada
Toronto, Ontario, CANADA
416-746-5547

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” inch (600 mm) diameter trash chute as manufactured by Wilkinson Chutes Canada 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 6 mm to 300 mm; indicate locations, dimensions, and required associated construction activities.

2: Elevations/Sections: Scale 6 mm to 300 mm; indicate locations, dimensions, and required associated required construction activities.

3: Details: Scale 6 mm to 300 mm; 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 the equipment manufacturer.
D. Quality Assurance/Control Submittals:
   1. Contractor’s Certification that:
      a) Products of this section are manufactured by Wilkinson Chutes Canada, as distributed by Wilkinson Chutes Canada.
      b) Manufacturer’s certification that installer of manufacturer’s product is approved.
      c) Applicable standards: National Fire Protection Association (NFPA/82), and the Ontario Building Code standards as referenced herein.

E. Close-out Submittals:
   1. Operation and Maintenance Data:
      a) Manufacturer’s printed Operation Manual
   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 Manufacturer, 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. Trash chutes 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 flushing and fire sprinkler heads
   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.
Part 2  PRODUCTS

2.1  MANUFACTURERS

A.  Acceptable manufacturers: WILKINSON CHUTES CANADA as distributed by Wilkinson chutes Canada, Toronto, Ontario, CANADA. Telephone: 416-746-5547

B.  Substitutions: Not permitted.

C.  Components:

1.  The chute shall be 24” inch (600 mm) diameter of U.S. #16 gauge (1.6 mm) aluminized steel as manufactured by Wilkinson Chutes Canada.

2.  Intake Doors: Stainless steel, 15” inches wide x 18” inches high (380 mm x 450 mm), bottom hinged, hand operated self-closing positive latching doors bearing 1½ hour, „U. L.® (Underwriters Laboratories “B” Label) designation, and rated for a 250°F (121°C) maximum door temperature rise over 30 minutes, with stainless steel trim in a „U. L.® approved, “B” Label, 1½ hour assembly.

3.  Discharge: Wilkinson Chutes Canada type “AC” open end chute discharge door with 165°F. (74°C) fusible link at the bottom of the chute discharge to close automatically when the ambient temperature reaches 165°F. (74°C) as required by city or provincial building and/or fire codes. Unit with „U.L.® rating as described above.

4.  Vent: Chute shall extend full diameter through roof to metal top vent cap 40” inches (1016 mm) above roof level with counter flashing and insect screen. A roof curb [44” (1117 mm) x 44” (1117 mm) x minimum of 8” high (203 mm)] is required for flat roof conditions and is to be provided by others. Specify stainless steel for aggressive environments.

5.  Accessories:  3/4” inch (19 mm) IPS flushing spray head and 1/2” inch (12.5 mm) sprinkler head above highest intake. Additional 1/2” inch (12.5 mm) sprinkler heads at every second intake (counting from the top) or as required by local code.

6.  Provide Disinfecting & Sanitizing unit for installation in line to the flushing spray head. Connection to flushing spray head, back flow prevention valve and electric control switch by others.

7.  Provide 15” inches (381 mm) wide x 15” inches (381 mm) high right side-hinged, hand operated, self closing, positive latching, „U.L.® 1 1/2-hour. “B” labeled, stainless steel plumbing access door having stainless steel door trim for installation by forces erecting enclosing shaft wall. Door for access to disinfecting & sanitizing unit above the highest intake door of the chute.

8.  Offsets (bends) in the chute, if required, shall be made the same diameter as the chute of #16 US gauge (1.6 mm) aluminized steel and have an additional layer of # 13 US gauge (2.26 mm) aluminized steel reinforcing the impact area. Offsets are not to deviate more than 30° off the vertical axis of the chute.

9.  Provide rubberized sound coat vibration dampening compound to the exterior of the chute only. Include sound isolator pads at each floor support frame.
10. 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 building over two stories in height with mandatory sprinkler located at the lowest service level.

2.2 FABRICATION

A. The trash chute shall be fully factory assembled and all joints, except those required to separate the sections for shipment and installation shall be welded or 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. 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 trash chute and components.
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 trash 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 *
VENT TO EXTEND FULL DIAMETER THRU ROOF TO A HEIGHT OF 1000 mm. VENT TO BE COVERED WITH A HINGED RAINCAP WITH 25mm AIR SPACE AND HOLDOWN CLIPS. ROOF EXTENSION TO BE ALUMINIZED/SATIN COTE STEEL FINISH AND VENT SHALL BE ALUMINIZED/SATIN COTE STEEL DUCT.

CHUTE RISER TO BE 600mm DIA. FABRICATE WITH 16ga. ALUMINIZED / SATIN COTE STEEL.

TYPICAL INTAKE DOOR WILKINSON TYPE DOOR W5B 450 mm HIGH, BOTTOM HINGED, INSWINGING, STAINLESS STEEL. TOP HINGED INSWINGING BARES BEARING A CANADIAN UNDERWRITERS' LABORATORIES 1-1/2 HR., TEMPERATURE RISE 250F. 30 MIN. LABEL EMBOSSED "RUBBISH" TRIM SET.

DISCHARGE TYPE "AC" HORIZONTAL ACCORDIAN, SPRING LOADED HELD OPEN ON A FUSIBLE LINK ASSEMBLY. ASSEMBLY BEARS 1-1/2 HOUR U.L.C. FIRE RATING.

FLUSHING SPRAY HEAD WITH 19mm CONNECTOR READY FOR CONNECTION BY OTHERS.

TYPICAL CHUTE SUPPORT BY MEANS OF CUPS WELDED AT QUARTERS TO SIT ON ANGLE IRON AND BAR GRID TYPE FLOOR FRAME. STEEL TO BE 5mm THICK MINIMUM.

155F. BULB SPRINKLERS TO BE INSTALLED AT TOP INTAKE AND ALTERNATE INTAKES BELOW AND READY FOR CONNECTION BY OTHERS. SPRINKLERS ARE ON:

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DETAIL OF ROUNDABOUT JOINTS

WILKINSON CHUTES CANADA