SECTION 11175 / 14560

TRASH CHUTE

Part 1 General

1.1 RELEATED 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 Architectural Refuse Solutions, LLC. Akron, OH, And represented by Ben F Perry Co., Inc at 770-441-9141

1.3 SUBMITTALS

A. Catalog Cuts: Before the trash cute 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 size and installation details specific to the project.
C. Shop drawings:
   1. Plans: Scale ¼ inch to 1 foot; indicate locations, dimensions, and required associated construction activities
   2. Elevations/Sections: Scale ¼ inch to 1 foot; indicate locations, dimensions, and required associated construction activities
   3. Details: Scale ¼ 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 Architectural Refuse Solutions, LLC.
      b. Manufacturer's certification that installer of manufacturer's product is approved.
   2. Applicable standards: National Fire Association (NFPA-82, 2009 Edition) 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.

1.4 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.

1.5 RELATED WORK BY OTHERS SPECIFIED ELSEWHERE

A. The following work is excluded from the scope of work in this section 11175 & 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 to 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.
   5. All Electrical Wiring to be done by certified electrician
   6. Attachment of door frames to wall framing shall be by the forces erecting the shaft enclosure walls in accordance with the instructions provided by the manufacturer or the manufacturer's authorized distributor.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Protection: Equipment shall be protected at all times from physical damage, dirt, water etc.
B. Under no condition shall the trash chute be used for construction trash, or any other use than what it was intended for, namely: Daily Household Garbage Deposits by the end user.

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 the project common areas for their intended use. Warranty shall apply to defects in product workmanship and materials.
B. Any use other than the intended use described in Section 1.6 B shall cause revocation of the warranty.

Part 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable manufacturers: Architectural Refuse Solutions, LLC., 525 Kennedy Road, Akron Ohio 44305.
B. Substitutions: Not permitted.
C. Components
   1. The chute shall be 24" diameter of U.S. #16 gauge aluminized steel
   2. Intakes Door: Stainless steel, 15 inches wide x 18 inches high, bottom hinged, hand operated self-closing and positive latching doors bearing an Underwriters' Laboratories Approved "B" Label 1½ rating for Chute Frame and Fire Door Assemblies with a 250° F. maximum temperature rise over 30 minutes, with stainless steel trim.
      a. Self-closing and positive latching intake door shall remain closed in the event of a latch failure during a fire emergency.
   3. Discharge: U.S. #16 gauge aluminized steel "B " label construction type "A" open end chute discharge rolling steel door with 165°F. Fusible link hold open on an inclined steel track at the bottom of the chute to close automatically when the ambient temperature reaches 165°F. as required by city or state building and/or fire codes.
   4. Vent: Chute shall extend full diameter through roof to metal top vent cap 4'-0" above roof level with counter flashing and insect screen. A roof curb (44"x 44" x minimum of 8" high) is required for flat roof conditions and is to be provided by others.
   5. Flushing Spray Head: 3/4 inch IPS flushing spray head highest intake.
   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. Access Door: Stainless steel, 12 inches wide x 12 inches high, bottom hinged, hand operated self-closing and positive latching doors bearing an Underwriters' Laboratories Approved "B" Label 1½ rating for Chute Frame and Fire Door Assemblies with a 250° F. maximum temperature rise over 30 minutes, with stainless steel trim. Door to be installed by the forces erecting enclosing shaft wall. Door to have lock. Door provides access to disinfecting & sanitizing unit above the highest intake door of the chute.
      a. Self-closing and positive latching intake door shall remain closed in the event of a latch failure during a fire emergency.
   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 #13 US gauge aluminized steel reinforcing the impact area. Offsets are not to deviate more than 15o off the vertical axis of the chute.
   9. Sprinkler System: Chute shall be protected internally by 160°F. 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 throats at alternate floor levels in building. Regardless of the alternating count, the lowest intake shall have a sprinkler head.

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. Prepositioned 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 INSTALLATION

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

3.2 DEMONSTRATION

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

Part 4 OPTIONAL ACCESSORIES

4.1 LIST OF ITEMS

A. Electric Interlocks: System that allows for only one intake door to be opened at a time locking out all other intake doors
B. Heat Detector: Accessory to Electric Interlocks that when triggered by heat locks all intake doors out in the system
C. Smoke Detector: Accessory to Electric Interlocks that when triggered by smoke locks all intake doors out in the system.
D. Cylinder Locks: Locks that can be set to "unlocked" with key removed or "locked" when key is removed.
E. Sound Dampening and Isolation Pads: Coating of Daubert 943 (or equal) vibration dampening compound on outside of chute that helps reduce noise. Includes Korfund or equal sound isolator pads to be placed between floor and floor frame on each floor. Pads help reduce vibration from chute to floor.
F. ADA Compliant Intake Door: An air-operated, palm-button actuated intake door meeting all previously specified UL criteria for intake doors. Upon pushing button the intake door opens and closes automatically after timing-out to desired time frame. This door is designed to assist handicapped individuals access to the chute. Lever or tee handles are inadequate to this function as they do not permit sufficient functionality to the handicapped regarding balance while depositing waste and further require too much pressure to open and hold open.
G. Ben F. Perry Co., Inc. Air Solution Control Unit: Deodorizer unit placed in trash room that eliminates odor and is provided with one year supply of solution.
H. Alternate Diameters: Chutes can also be made in 28", 30" and 36" diameter.
I. Alternate Materials: Chutes can also be fabricated in #430 and #340 stainless steel.
J. Assured Closing System: Allows intake doors to close even in the event of a door closer failure. The system assures that a failed door closer will not result in an open door as happens with all other manufacturers' doors, which voids all expected UL protections of the firewall penetration at the intake door. Assured Closing augments the ability of the intake door to remain closed after being meeting the code mandated "self-closing" criteria.

*** END OF SECTION ***

Part 4 OPTIONAL ACCESSORIES CHECK LIST

4.1 LIST OF ITEMS

____ A. Electric Interlocks: System that allows for only one intake door to be opened at a time locking out all other intake doors.

____ B. Heat Detector: Accessory to Electric Interlocks that when triggered by heat locks all intake doors out in the system

____ C. Smoke Detector: Accessory to Electric Interlocks that when triggered by smoke locks all intake doors out in the system.

D. Cylinder Locks: Locks that can be set to ____ "unlocked" with key removed or ____ "locked" when key is removed.

____ E. Sound Dampening and Isolation Pads: Coating of Daubert 943 (or equal) vibration dampening compound on outside of chute that helps reduce noise. Includes Korfund or equal sound isolator pads to be placed between floor and floor frame on each floor. Pads help reduce vibration from chute to floor.

____ F. ADA Compliant Intake Door: An air-operated, palm-button actuated intake door meeting all previously specified UL criteria for intake doors. Door opens and closes automatically after timing-out to desired time frame. This door is designed to assist handicapped individuals access the chute. Lever or tee handles are inadequate to this function as they do not permit sufficient functionality to the handicapped regarding balance while depositing waste and further require too much pressure to open and hold open.

____ G. Ben F. Perry Co., Inc. Air Solution Control Unit: Deodorizer unit placed in trash room that eliminates odor and is provided with one year supply of solution.

____ H. Alternate Diameters: Chutes can also be made in 28", 30" and 36" diameter.

____ I. Alternate Materials: Chutes can also be fabricated in #430 and #340 stainless steel.

____ J. Assured Closing System: Allows intake doors to close even in the event of a door closer failure. The system assures that a failed door closer will not result in an open door as happens with all other manufacturers' doors, which voids all expected UL protections of the firewall penetration at the intake door. Assured Closing augments the ability of the intake door to remain closed after being meeting the code mandated "self-closing" criteria.

*** END OF SECTION ***