

**SECTION 118226
WASTE COMPACTOR**

This section is based on equipment produced by:

Chute Source, LLC
571 Kennedy Road
Akron, Ohio 44305
1-330-733-3996

Part 1 –GENERAL

1.1 DESCRIPTION

- A. Furnish and install waste compactor Model: CP2-C5 and ancillary equipment as indicated on the Drawings and as specified within.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Concrete work - Section 03300 “Cast in Place Concrete”
- B. Rubbish Chute - Section 11175 “Chutes and Collectors” See Architectural Refuse Solutions
- C. Floor drains, hose bibs, fire sprinklers - Division 15 “Mechanical”
- D. Electrical wiring to control panels, and wiring from control to disconnect box panels - Division 16 “Electrical”

1.3 QUALITY ASSURANCE

- A. The equipment shall comply with the National Electric Code, ANSI-Z245.21 and NFPA-82.
- B. Manufacturer shall have at least 5 years experience in the manufacture of the specified equipment and shall maintain a servicing and replacement parts system for at least 3 years after installation of equipment.
- C. The work in this section shall be subject to all applicable provisions of governing building codes and ordinances.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer’s product specifications, performance data sheets and installation instructions.
- B. Shop Drawings: Submit plans, elevations, and details for work not fully shown by published product data; include rough in dimensions and service connection.

1.5 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 compactor be used for construction trash, or any other use other than what it was intended for.
- C.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Protection

1. Equipment shall be protected at all times from physical damage, dirt, water, etc.
2. Store in clean, dry location in original packaging until ready for final installation.
3. Under no circumstances shall the compactor be used for construction trash or debris, or for any other use than for which it was intended, specifically, the compaction of the daily generation of normal apartment-style household waste products. Misuse shall cause revocation of the warranty.

B. Warranty

1. A one year warranty, measured from the date of Substantial Completion, is provided. Additional, optional, two (2 yr) year and five (5 yr) year warranties are available. Five year warranties require monthly maintenance and submittal of normal maintenance logs

Part 2 - PRODUCTS

2.1 COMPACTOR

- A. **General:** Compactor shall be a Model No. CP2-C5 short room machine-48"OAL. with twin 3" bore cylinders manufactured by Chute Source LLC,. Fully automatic, electric eye controlled, hydraulically operated, stationary ram compactor, displacing 54 cubic yards of refuse per hour into a heavy duty compaction container of a design compatible with local requirements. The compactor body is fabricated from 1/4" steel plate. Compactor ram is constructed of 1/4" sides, top and bottom. The ram face is 3/8" steel plate, reinforced. Header bar is 5" x 5" x 1/2" steel angle. The integral hopper is made of 1/4" steel plate with a 1/4" back plate to take the impact of falling refuse. The compactor floor is 3/8" thick steel. The CP2-C5 produces 31,100 pounds of packing force at 2200 psi.
- B. **Operation:** The operation shall be automatically controlled when the compaction chamber fills to the level that activates the photo sensor. The compactor ram shall continue to cycle until all refuse is cleared. When the container is full the compactor will automatically shut down and activate machine alarm strobe for notification.
- C. **Hydraulic System:** The hydraulic system shall include a 6.5 gpm pump, 5 HP motor, 18 gallon reservoir and LED directional control valves. System shall be rated for 3000-psi maximum operation and be located no more than 6 foot from the machine.
- D. **Electrical System:** The electrical system shall include a 5 HP, 1725 rpm motor, 208/240/480V, fuse @ 20 amps, three phase, plus ground, 60Hz. Wiring is class 2 24vdc controls with programmable controller. The control cabinet and control devices are assembled and labeled per UL 508A.
- E. **Photo Sensor:** The compactor shall be fitted with a polarized photoelectric sensor. Wiring to photo sensor shall be hermetically sealed.

- F. **Control Panel:** The control panel shall be mounted to the remote power pack and can include an optional key activated on-off switch, manual ram control, emergency stop/reset button, machine alarm, 80% and 100% full strobe light for optical notification. As an option the Electric and Hydraulic controls can be mounted directly to the rear of the compactor when space is at a premium.
- G. **Safety Features:** Compactor door shall be fitted with an EIC safety rated switch not easily defeated to shut the machine down when the access door is opened. Compactor shall automatically shut down to prevent damage from oversize or uncrushable object. Machine can be integrated into the chute door floor controls as an additional safety feature for service and maintenance personal.
- H. **Programmable Controller:** The compactor shall be controlled and monitored by a microprocessor, which shall allow alarm annunciation for the various operations of the compactor. The PLC screen will display at least the following alarms: dirty photo eye or misalignment, high oil temperature, low oil level, pressure transducer failure, overload fault, container a-way, thru-door and open access door. Compactor shall be programmed to automatically shut down after 30 minutes of continuous operation indicating possible photo eye malfunction.
- I. **Option: Smart Compactor:**
Compactor controls require a hardwired connection to the buildings internet router and can send email notifications to building maintenance personal such as compactor container full plus any alarm that can affect the compactors operation. This system can be interfaced with “Smart Chute doors” and include open door status with floor identification. This system will not require monthly monitoring service fees.

Container

1. Compactor provider shall furnish two (2 each) 2 cu. yd. containers per compactor.
2. A container to be reinforced and specifically designed for internal compaction to achieve a compaction density of not less than 600# per cu. yd.
3. A container shall be fitted with two (2) swivel and two (2) fixed, industrially rated, heavy duty phenolic resin casters.

Part 3 - EXECUTION

3.1 INSPECTION

- A. Inspect the areas and conditions under which units are to be installed. Do not proceed with the work until conditions are satisfactory.

3.2 INSTALLATION

- A. Compactors shall be installed in accordance with approved drawings.
- B. Field assembly work: perform minor field assembly work to install certain fragile or projecting parts that were not installed at the factory.
- C. Set each component of work securely and accurately, level and properly aligned with other components and other work. Anchor as required for secure operation.

3.3 TESTING AND INSTRUCTIONS

- A. Test each item of operational equipment. Provide maintenance manual. Instruct Owner's operation personnel in proper use and maintenance of equipment.