

**SECTION 118226
WASTE COMPACTORS**

This section is based on equipment produced by:

Architectural Refuse Solutions, LLC
525 Kennedy Road
Akron, Ohio 44305
1-330-733-5200

PART 1 – GENERAL

1.1 SUMMARY

- A. Furnish and install hydraulic electric waste compactor and ancillary equipment at site.

1.2 WORK INCLUDED

- A. Include all labor, materials equipment, transportation and services required to complete the installation of the waste compactor as shown on the drawings and as specified herein.

1.3 RELATED WORK SPECIFIED ELSEWHERE

- A. Concrete Work – “Section 03300-Cast-In-Place-Concrete”
- B. Rubbish Chute – “Section 11175-Chutes and Collectors”
- C. Floor drains and hose bibs – “Division 15-Mechanical”
- D. Electrical wiring to control panels, and wiring from control to disconnect box panels – “Division 16-Electrical”

1.4 QUALITY ASSURANCE

- A. The equipment shall conform to NSWMA ratings and 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 the equipment.
- C. The work in this Section shall be subject to all applicable provisions of the governing building codes and ordinances.

1.5 SUBMITTALS

- A. Product Data
 - 1. Submit manufacturer’s product specifications, performance data sheets, and installation instructions.

- B. Shop Drawings
 - 1. Submit plans, elevations, and details for work not fully shown by published product data, include rough-in dimensions and service connections

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
 - 1. The compactor shall be a model CP1-C5 container compactor, as manufactured by Architectural Refuse Solutions L.L.C. with manufacturer's standard powder coat finish.
- B. Operation
 - 1. The compactor operation shall be automatically controlled when the compaction chamber fills to the level where the photo sensor activates the compaction ram.
 - 2. The compactor ram shall compact the material into the attached container and shall continue to cycle until all refuse is cleared from the chamber.
 - 3. When the container is full, the compactor shall automatically shut down and activate the "Full" display on the LCD read out
- C. Structural
 - 1. The compactor Main Frame/Hopper shall be an integral 1/4" plate.
 - 2. The Ram shall be 1/4" plate top and bottom with a 3/8" plate face.
 - 3. Impact plate shall be 1/4" reinforced plate.

4. The compactor Floor plate shall be 3/8".
- D. Hydraulic System
1. The Hydraulic System shall include a 4 gpm pump, 5 HP motor, 18 gallon gasketed reservoir, and 4" bore x 30" stroke cylinder.
 2. The Hydraulic System shall be rated at 3000 psi.
- E. Electrical System
1. The electrical System shall include a programmable controller, convertible 208/230/416/440 volt transformer, motor starter with overload protection and NEMA 12 weather proof enclosure.
 2. All components are to be U.L. labeled.
 3. The use of limiting switches and/or relays shall not be acceptable.
- F. Photo Sensor
1. The compactor shall be fitted with a reliable photo electric sensor with delayed start up.
 2. Wiring to the control panel to be in "sealtite or liquid tight connectors & plastic coated sealed conduit.
- G. Control Panel
1. The control panel shall be mounted to the remote power pack and shall include a "LCD control panel for "manual forward/reverse switch", "emergency stop/reset button", "faulty sensor light, "80% full" ,"100% full" indicator, control Optional Odor Control System and Optional Fire Panel Monitoring hook up.
- H. Programmable Controller
1. The compactor shall be controlled and monitored by a microprocessor which shall visually allow the user to read the various operations of the compactor.
 1. LCD screen will display operations & shall include: photo eye fault, pressure switch failure, overload fault, 80% and 100% full.
- I. Automatic Shut Off Control
1. Compactor door shall be fitted with a magnetic proximity switch to shut the machine down when the access door is opened.
 2. The compactor shall also shut down after 15 minutes of continuous operation indicating possible photo sensor malfunction.
- J. Performance
1. Compactor shall displace not less than 30 cu. yds. of material per hour with a cycle time not to exceed 35 seconds.
 2. A ram face pressure of 51 psi shall insure a total packing force of 27,700 lbs.

- K. Container
 - 1. Compactor provider shall furnish two (2 each) 2 cu. yd. containers per compactor.
 - 2. A container shall be reinforced and specifically designed for internal compaction to achieve a compaction density of not less than 600 lbs. 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. Pre-Installation Inspection
 - 1. Prior to installation, inspect area and conditions under which the unit(s) is to be installed.
 - 2. In conditions are unsatisfactory, do not proceed with installation and advise contractor immediately.
 - 3. Complete installation only when conditions above have been rectified.

3.2 INSTALLATION

- A. General
 - 1. Compactor is to be installed in accordance with approved drawings.
- B. Field Assembly Work
 - 1. Perform minor field assembly work to install certain fragile or projecting parts that were not installed at the factory.
- C. Set, Level and Align
 - 1. Set each component of work securely and accurately, level and properly aligned with other components and other work.
- C. Anchorage
 - 1. Drill foundation, furnish and install ¾” drop in anchors to secure the compactor legs.
- D. Motor Rotation
 - 1. Check that the motor rotates in the clockwise direction when engaged.

3.3 TESTING AND INSTRUCTIONS

- A. Post Installation Testing
 - 1. Test each item of operational equipment.

2. Provide Maintenance Manual
3. Instruct owner's personnel in proper use, operation and maintenance of the equipment.

3.4 MAINTENANCE

- A. Semi-annually, oil reservoir should be drained and filled with new hydraulic fluid; photo sensor should be cleaned; and hydraulic fittings should be tightened.

END OF SECTION 118226-0