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SECTION 11172 / 14560

TRASH COMPACTOR

This section is based on a system produced by:

Architectural Refuse Solutions, LLC
525 Kennedy Road
Akron, Ohio 44305

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 waste compactor Model: CP1-C5 with two 2 cubic yard containers front or rear load and ancillary equipment as indicated on the Drawings and as specified within and as manufactured by Architectural Refuse Solutions, LLC. and represented by Ben F. Perry Co., Inc. at 770-441-9141

1.3 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.
- C. Quality Assurance/Control Submittals:
 - I. 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
 - II. Applicable standards
 - a. National Fire Protection Association (NFPA-82, 2009 Edition) Standards as referenced herein.
 - b. National Electric Code
 - c. ANSI Z-245-1 (Compactor and Containers)
- D. Close-out Submittals:
 - a. Operation and Maintenance Data
 - b. Warranty Documents: Issued and executed by the manufacturer and installer of the system.

1.4 QUALITY ASSURANCE

CP1-C5 COMPACTOR SPECS 2009

- A. Qualifications:
 - I. Manufacturer: Minimum five (5) years-documented experience producing products specified in this section and shall maintain a servicing and replacement parts system for at least 3 years after installation of equipment.
 - II. Installer: Approved by the Manufacturer, and having a minimum of five (5) years experience.
 - III. The work in this section shall be subject to all applicable provisions of governing building codes and ordinances.

1.5 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.
 - I. Concrete work – Section 03300 “Cast in Place Concrete”
 - II. Rubbish Chute – Section 11175 “Chutes and Collectors” (See:Architectural Refuse Solutions)
 - III. Floor drains, hose bibs, and sprinkler system – Division 15 “ Mechanical”
 - IV. Electrical wiring to control panels, and wiring from control to disconnect box panels – Division 16 “Electrical”

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 circumstances shall the compactor be used for construction trash, or any other use other than what it was intended for, namely: Normal, Daily Household Garbage Deposits by the end users.

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.
- B. Any use other than the intended use described in Section 1.6 B shall cause revocation of the warranty.

Part 2 PRODUCTS

CP1-C5 COMPACTOR SPECS 2009

2.1 COMPACTOR

A. General

- I. 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

- I. The compactor operation shall be automatically controlled when the compaction chamber fills to the level where the photo sensor activates the compaction ram.
- II. The compactor ram shall compact the material into the attached container and shall continue to cycle until all refuse is cleared from the chamber.
- III. When the container is full, the compactor shall automatically shut down and activate the "Full" display on the LCD read out

C. Structural

- I. The compactor Main Frame/Hopper shall be an integral 1/4" plate.
- II. The Ram shall be 1/4" plate top and bottom with a 3/8" plate face.
- III. Impact plate shall be 1/4" reinforced plate.
- IV. The compactor Floor plate shall be 3/8".

D. Hydraulic System

- I. The Hydraulic System shall include a 4 gpm pump, 5 HP motor,
- II. 18 gallon gasketed reservoir, and 4" bore x 30" stroke cylinder.
 - a. The Hydraulic System shall be rated at 3000 psi.

E. Electrical System

- I. 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.
- II. All components are to be U.L. labelled.
- III. The use of limiting switches and/or relays shall not be acceptable.

F. Photo Sensor

- I. The compactor shall be fitted with a reliable photo electric sensor
- II. with delayed start up.
- III. Wiring to the control panel to be in "Sealtite" or liquid tight connectors & plastic coated sealed conduit.

G. Control Panel

- I. The control panel shall be mounted to the remote power pack and
- II. 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

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- I. The compactor shall be controlled and monitored by a microprocessor
 - II. which shall visually allow the user to read the various operations of the compactor.
 - III. LCD screen will display operations & shall include: photo eye fault, pressure switch failure, overload fault, 80% and 100% full.
- I. Automatic Shut Off Control
 - I. Compactor door shall be fitted with a magnetic proximity switch to shut the machine down when the access door is opened.
 - II. The compactor shall also shut down after 15 minutes of continuous
 - III. operation indicating possible photo sensor malfunction.
- J. Performance
 - I. Compactor shall displace not less than 30 cu. yd. of material per hour
 - II. with a cycle time not to exceed 35 seconds.
 - III. A ram face pressure of 51 psi shall insure a total packing force of
 - IV. 27,700 lbs.
- K. Container
 - I. Compactor provider shall furnish two (2 each) 2 cu. yd. Containers per compactor

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. General

- I. Compactor is to be installed in accordance with approved drawings.

B. Field Assembly Work

- I. Perform minor field assembly work to install certain fragile or projecting
- II. parts that were not installed at the factory.

C. Set, Level and Align

- I. Set each component of work securely and accurately, level and properly
- II. aligned with other components and other work.

D. Anchorage

- I. Drill foundation, furnish and install $\frac{3}{4}$ " drop in anchors to secure the compactor legs.

E. Motor Rotation

- I. Check that the motor rotates in the clockwise direction when engaged.

3.3 TESTING AND INSTRUCTIONS

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

Part 3 ACCESSORIES

4.1 OPTIONAL ADD-ONS

- A. 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.

*** END OF SECTION ***