# **DIVISION 11 EQUIPMENT**

# SECTION 11 82 00 FACILITY SOLID WASTE HANDLING EQUIPMENT

#### PART 1 - GENERAL

# 1.1 SUMMARY

A. Provisions must be made for handling and recycling waste materials, both on the inside and outside of buildings. While the needs of different buildings vary according to their function and size, the following are generally required:

# **1.2 REFUSE DISPOSAL FACILITIES**

- A. A minimum of one dumpster pad, located so as to permit safe and convenient servicing by a standard 40 cubic yard front-end loader or rear-end garbage trucks.
  - a. Typical requirements include a dumpster pad made with 3000 psi concrete reinforced with welded wire mesh that is approximately 12-ft wide x 8-ft deep x 6in thick with a surface slope of 1/8" per foot for drainage and approximately 40-ft long x 10-ft wide straight-in approach drive for the refuse truck. Overhead clearance at the site must be at least 22 feet (14.5 feet on approach drive). A full width rear block to guide dumpster placement shall be provided. Where front wheels sit during dumping cycle, concrete needs to be able to withstand up the 32,000-lb. load that bounces
  - b. For dining service areas and residence halls where food waste will be collected, the dumpster pad shall be provided with a drain connected to a sanitary sewer system. Hot and cold-water supply shall be provided at the pad in accordance with local, state, and federal building and health codes and standards. The pad must be provided with adequate slope to divert any liquid waste to the sanitary drain.
  - c. Larger facilities may require an additional pad or compactor-type refuse container installation. Compactor-type refuse containers shall have ozone generators with size and power requirements coordinated with Project Manager.
  - d. Due to campus growth and changes in building functions, new structures may need to incorporate provisions for management of waste generated by adjacent facilities. Consult with Project Manager for consideration of special needs and design considerations.
  - e. As far as possible, dumpster pads shall be hidden from public view by landscaping or an architectural barrier.
  - f. Access by Housekeeping shall be discussed with EH&S through Project Manager.

# **1.3 SUPPORT FACILITIES**

- A. Exterior Service Area
  - a. Provide an exterior service area with access and parking for service vehicles and delivery vans

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- B. Service Area
  - a. Provide a service entrance suitable for admitting large furniture and equipment with easy access to an elevator.
- C. Loading Dock
  - a. Provide a loading dock for larger buildings and buildings whose function involves the frequent receipt and issue of heavy items/materials delivered by trucks (including printing materials, chemicals, compressed gases, books, research equipment, stage sets, special-event furnishings, equipment, etc.). The loading dock shall have a surface slope of 1/8" per foot away from building.
- D. Materials Handling Area
  - a. Provide an interior materials handling area away from the means of egress for the temporary storage of deliveries, recyclables, bulky refuse, and other materials awaiting pick-up or shipment.

# **1.4 RECYCLING**

Recycling requirements vary with facility function, but the following general requirements apply.

- A. Residential Facilities
  - a. Per Unit: Allow interior space to accommodate containers for both garbage and recyclable materials (typically cans, glass, paper, and plastics).
  - b. Per Facility: Provide an exterior vehicle-accessible pad or enclosure adjacent to refuse area for placement of collection containers for paper, cans, glass, and other recyclables. Typically, allow two 12-ft wide x 8-ft deep x 6-in thick pads per 200 residents: one for a cardboard container (a dumpster), the second for bins for other recyclables. Exterior pad shall meet the same design requirements as described above for refuse disposal facilities. Same trucks may service.
- B. Administrative/Academic Facilities
  - a. Administrative and academic facilities typically generate paper products and beverage cans. Provide recessed areas in corridors for placement of collection containers for refuse and recycling.
  - b. Typical space requirement is approximately 60" wide, 21" deep, and 54.5" high (10 sq. ft.) for three streams (mixed paper, comingled, and landfill) per floor at a minimum.
  - c. Space for additional paper collection containers shall be required in major office suites and copy centers.
  - d. It may be necessary to provide a dumpster pad for cardboard collection based on the needs of the occupants of the new building, as well as those of adjacent buildings. Consult with Project Manager for consolidation of special needs and design considerations.

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