

# Standard Design Requirements for Collection & Storage of Trash, Recyclables & Organics

## Commercial (Business) Properties

### Section 1: Collection Requirements:

1. All businesses must subscribe to at least weekly trash service with the City's franchisee, Waste Management Alameda County.
2. All businesses must separate recyclables and arrange for weekly collection of mixed recyclables, e.g., paper; food and beverage containers made of glass, metal and plastic.
3. All businesses that regularly generate food waste, food-soiled paper or plant debris must separate those organic materials and arrange for weekly collection. Additionally, all businesses that generate 4 or more cubic yards of garbage and/or recycling per week, also must arrange for weekly collection of organics per ACWMA Ordinance 2008-01.
4. If carts or bins are placed curbside or streetside for collection, such carts or bins shall not be placed earlier than 6:00 a.m. on the day before scheduled collection, and shall be retrieved and removed from public view by midnight on the day of collection per Hayward Municipal Code 5-1.15.
5. Information about separate collection of mixed recyclables and organics (both available at a discount from regular trash service) is available at this link: [http://www.hayward-ca.gov/CITY-GOVERNMENT/DEPARTMENTS/PUBLIC-WORKS-UES/documents/2014/bus\\_Mandates\\_2014.pdf](http://www.hayward-ca.gov/CITY-GOVERNMENT/DEPARTMENTS/PUBLIC-WORKS-UES/documents/2014/bus_Mandates_2014.pdf)

### Section 2: Container Capacity and Storage Space

1. Adequate indoor and outdoor storage space for recyclables and organics is required by state law (California Public Resources Code 42910-42912), and storage space for recyclables and organics shall be at least equivalent to the space allocated to trash (Hayward Municipal Code 5-1.27.)
2. Plans must indicate the size (in cubic yards or gallons), number, and type of containers (i.e., cart or bin) for trash, recyclables, and organics (if applicable).
3. Calculating Container Capacity: Containers may be stored indoors or outdoors. Outdoor storage of trash, recyclables, and organic materials may be in separate enclosures or one combined enclosure. The minimum container capacity required for weekly trash collection must be calculated as follows:

<b>Formula to Determine Minimum Trash Container Capacity in Cubic Yards</b>
___ # of employees x ___ lbs. of trash generated per employee/week (table on next page) ÷ 150 = ___ CY/week

<b>Container Capacity for Recyclables Must be Equivalent to Capacity Allocated to Trash</b>
Trash CY/week calculation from above = ___ CY/week of recyclables

The number of employees may be an estimate. This formula must be included on the site plan, along with the container size(s) and enclosure dimensions.

### Commercial Disposal Rates

Business Type	Pounds Per Employee Per Week
Construction	115
Manufacturing-Apparel / Chemical / Electronic / Industrial / Paper / Metal	35
Manufacturing-Food / Kindred	62
Manufacturing-Furniture / Fixtures	92
Manufacturing-Printing / Publishing	31
Public Administration	16
Retail Trade-Automotive Dealers & Service	23
Retail Trade-Building Material and Garden	127
Retail Trade-Food Store	112
Retail Trade-General Merchandise Stores	12
Retail Trade-Restaurants	119
Services-Business Services	65
Services-Education	31
Services-Hotels / Lodging	81
Services-Medical / Health	58
Trucking and Warehousing	73
Wholesale Trade-Durable Goods	35
Wholesale Trade-Nondurable Goods	35

Source: CalRecycle; data were compiled from waste characterization surveys conducted statewide.

4. The available container sizes and their dimensions are listed below. (Four cubic yard bins are the largest bins with casters and are the largest bins allowed in an enclosure.)

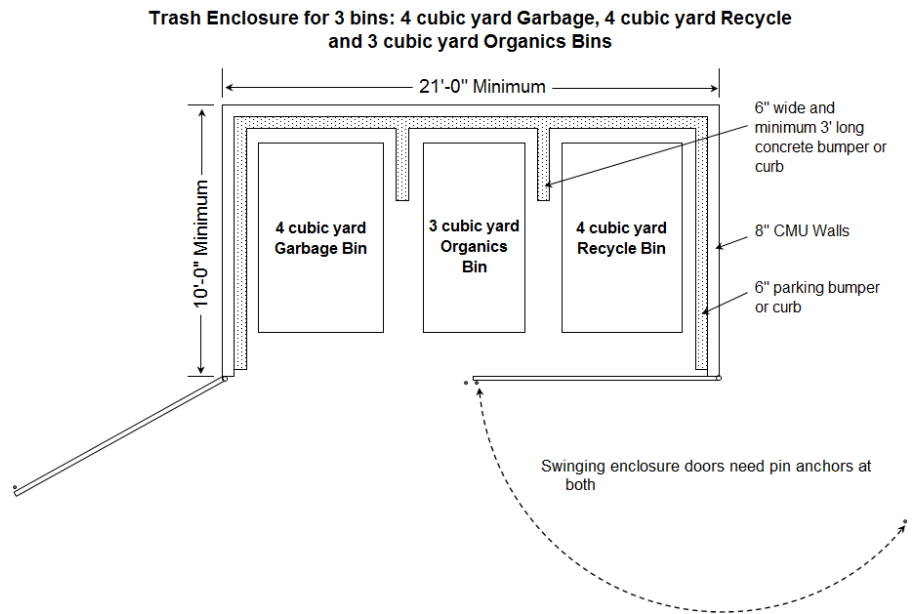
Carts	Width	Depth	Height	Service* Available
20 gallons	22 inches	25 inches	41 inches	Trash / Recyclables
32 gallons	22 inches	25 inches	41 inches	Trash/Organics/Recyclables
64 gallons	28 inches	30 inches	43 inches	Trash/Organics/Recyclables
96 gallons	30 inches	36 inches	47 inches	Trash/Organics/Recyclables
Bins	Width	Depth	Height	Service* Available
1 cubic yard (~200 gallons)	7 feet	3.5 feet	4 feet	Trash/Organics/ Recyclables
2 cubic yards	7 feet	3.5 feet	4.5 feet	Trash/Organics/ Recyclables
3 cubic yards	7 feet	4 feet	5 feet	Trash/Organics/ Recyclables
4 cubic yards	7 feet	5 feet	5.5 feet	Trash/Recyclables
6 cubic yards (no wheels)*	7 feet	6.5 feet	6 feet	Trash/Recyclables
7 cubic yards (no wheels)*	7 feet	7 feet	6 feet	Trash/Recyclables
Roll-off Boxes				
6 cubic yards*	7 feet	12 feet	2 feet	Trash
14 cubic yards*	7.5 feet	12 feet	5.5 feet	Trash
20 cubic yards*	7.5 feet	14 feet	5.5 feet	Trash
30 cubic yards*	8 feet	22 feet	5 feet	Trash
40 cubic yards*	8 feet	22 feet	7.5 feet	Trash
Compactors				
20 cubic yards*	7.5 feet	20 feet	7 feet	Trash
30 cubic yards*	7.5 feet	20 feet	7.5 feet	Trash
40 cubic yards*	8 feet	22 feet	7.5 feet	Trash

\*6 cubic yard bins, 7 cubic yard bins, roll-off boxes, and compactors used for weekly service are approved on a case by case basis.

### Section 3: Enclosure Design Requirements

The enclosure should be constructed with:

1. 8" CMU walls, fencing, or other materials approved by the Planning Division.
2. 6" wide curb or bumper must be included along the interior perimeter of the enclosure and extending at least three feet long between the bins for trash, recyclables, and organics.
3. All new trash enclosures must include a separate space for organics containers.
4. A minimum space of 12 inches between each bin and the walls of the enclosure is required to allow for maneuvering of the bins.
5. Gates should hinge from the corners of the enclosure to allow for maximum accessibility to the containers.
6. Enclosures must be constructed on a flat area with no more than a 2% grade. Trash enclosures shall have the slab floor designed to prevent run-on of surface water and run-off of pollutants.
7. A solid roof over the enclosure is required.
8. Internal height clearance within the enclosure must be more than the sum of the height and depth (listed on page 2 of this document) of the bin that will be used to allow sufficient space to open the lid while inside the enclosure. For example, an enclosure for a 4 cubic yard bin must have an internal height clearance of 10.5 feet (5.5 feet + 5 feet).
9. Signage indicating "Trash Only", "Recyclables Only", and "Organics Only" at the appropriate locations is required.
10. A concrete pad extending 20' from the enclosure to accommodate the truck weight is recommended.
11. Enclosures shall be equipped with a sanitary sewer drain (drain at center of enclosure with a 5% slope to drain). Additionally, a sand/oil/water interceptor will be required if the proposed use is a grease generating operation. Please contact Water Pollution Source Control at (510) 881-7900 for more information. Unless authorized by Water Pollution Source Control, trash enclosures shall not have hose bibs or provide hot/cold water utilities.
12. Trash enclosures may need to be modified if/when new tenants or businesses are identified. In order to accommodate any increases in the anticipated waste stream, enclosures may need to be added and/or existing enclosures may need to be modified. To minimize the need for future modifications, original construction should anticipate both near and long term possible business types or occupants.
13. A trash enclosure shall be sited no further than 100 feet from the business(es) it is designed to serve, unless the site topography is such that adhering to this standard would interfere with the collection of trash, recyclables and organics, as established in the City's Zoning Ordinance.



#### **Section 4: Collection Vehicle Access**

1. Dashed lines indicating the collection vehicles' path of travel to enter the property, service each container, and exit are required. Streets and parking lots shall be designed such that collection vehicles are not required to back up more than 150 feet. All turns and turn-around areas shall be designed with a 40-foot turning radius.
2. Collection vehicles require a minimum vertical clearance of 14 feet and a minimum width of 12 feet. If a collection vehicle must travel on a newly constructed drive or parking lot to service the containers, then the applicant must construct the driveway or parking lot to accommodate a 50,000 pound truck on a weekly basis.
3. If gates with locks are planned to limit access to the property, the applicant must provide keys or cards to the service provider, Waste Management of Alameda County (510) 537-5500. Keys and locks may also be obtained from Waste Management for a nominal fee.
4. Compactors must be positioned to allow for a backup distance of three times the length of the compactor in order to service it. The back-up distance must extend straight ahead from the end of the compactor unit. Dashed lines indicating the collection vehicle's path of travel to service the compactor is required. If a compactor is proposed for a below-grade loading area, the minimum loading height is 30 feet.