

# WASTE HANDLING GUIDELINES



  
**CITY OF**  
**Fremont**  
Environmental Services Division  
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# I. DESIGN REQUIREMENTS

## A. General Garbage, Recycling, and Composting Requirements

1. The Waste Handling Guidelines document includes:
  - a. Information on design, construction and operational phases of residential, commercial and institutional projects
  - b. Waste generation guidelines to help assess the level of garbage and recycling service required for each project
  - c. Details on sample garbage and recycling container sizes
  - d. Instruction on the design, dimensions, placement and construction of trash enclosures
  - e. The following terms may be used interchangeably in this document:
    - Municipal solid waste, garbage, and trash
    - Yard waste, organics, and compost
    - Dumpster and bin
2. Weekly garbage, recycling, and organics services are required for all residential properties.
3. Weekly garbage and recycling services are required for all commercial properties. Organics services are required for food service facilities.
4. Garbage, recycling and organics services are provided by Republic Services on an exclusive franchise basis.
5. All garbage, recycling, and organics receptacles must be stored out of public view, except when Republic Services empties the containers on collection day.
6. Applicants and owners must be made aware of these requirements during the permit application process.
7. Each project must provide on-site access for garbage, recycling, and organics service with sufficient space for trucks to drive through or turn around. Trucks will not enter or exit on adjacent private properties without expressed written consent from the neighboring property.
8. Commercial garbage collection is available up to six (6) days per week. Commercial recycling collection service is available up to five (5) days per week (M-F). Commercial composting collection services are currently available three (3) days per week. (MWF)
9. The Alameda County Waste Management Authority prohibits landfilling plant and tree debris. The material must be composted or delivered to an approved facility. Additional fees apply if green waste is not separated from other debris.

## B. Residential Design Requirements

### 1. Single-Family Residential and Multi-Family Residential with Individual Cart-Based Service

- Garbage, recycling, and organics are collected once per week during weekdays only.



#### a. Internal Storage Requirements:

- i. All residential units must have internal storage space to store garbage, recycling, and organics materials (e.g., under kitchen sink or in pantry).
- ii. *\*Installing a built-in recycling center earns points on the **Build It Green Single Family GreenPoint Checklist.***

#### b. External Storage Requirements:

- i. Storage space for three (3) wheeled carts: one garbage cart, one recycling cart, and one organics cart.
- ii. Storage space is 27 square feet of floor space, and 48” high.
- iii. Cart storage requirements are in addition to required parking areas or other designated storage areas.
- iv. Carts vary from 32-gallon to 96-gallon capacity. Maximum dimension of a 96-gallon cart is 3' wide x 2' deep x 4' high.
- v. If sufficient garage space is not available for storing garbage, recycling, and organics carts, residents must have the same required amount of exterior storage in a side or back yard, to ensure that the carts are always screened from public view on non-collection days.
- vi. A grass, concrete or other all-weather surface should be provided to smoothly roll the carts between the cart storage area and set out area on the street in front of the dwelling unit. Steps are prohibited along the path from the cart storage area to the set-out location.

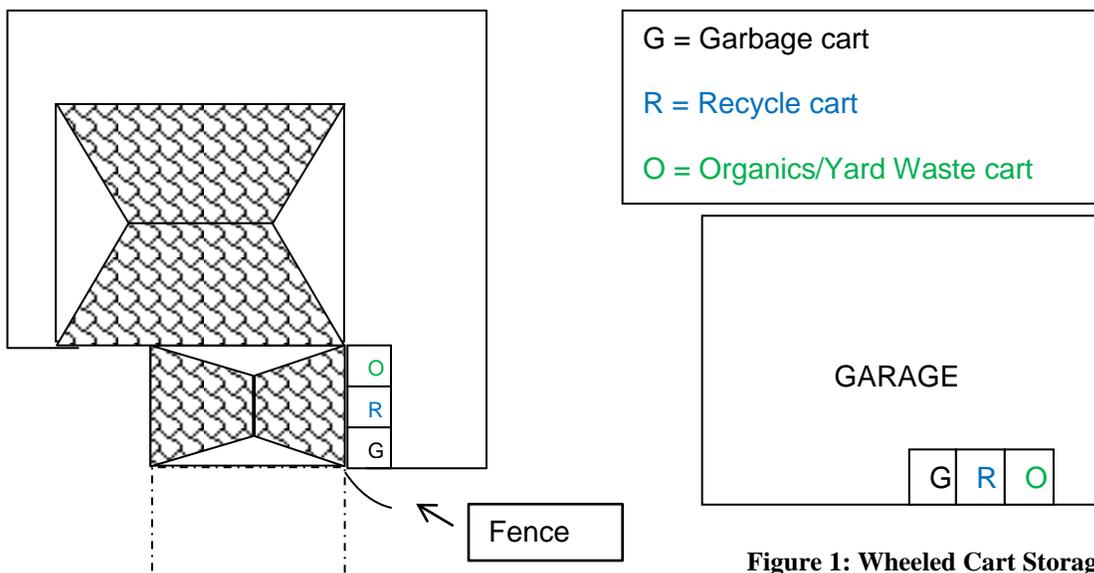


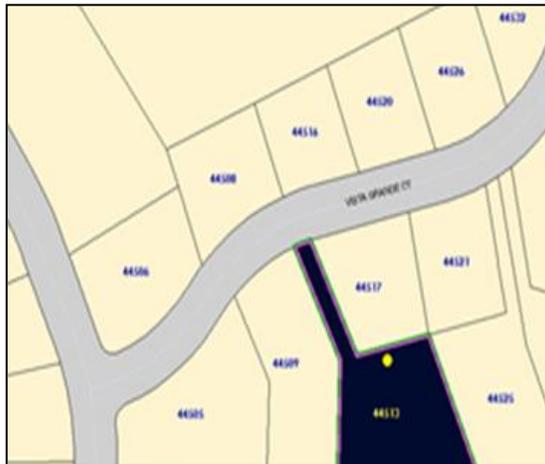
Figure 1: Wheeled Cart Storage

**Table 1: Wheeled Cart Dimensions**

Wheeled Carts	Length (feet)	Width (feet)	Height (feet)	Height w/ Lid Open (feet)	Footprint (sq. ft.)
32 gallon	2	1.5	3	5	3
64 gallon	2	2	3.5	5.5	4
96 gallon	3	2	4	6.5	6

c. Truck Access Requirements:

- i. Garbage, recycling and organics are serviced by three different trucks on the same day.
- ii. The collection trucks are equipped with an automatic arm that services residential carts from the **right side only**. If there is no turnaround or drive through path, this requires the truck to make four passes down the private street.
- iii. Trucks cannot back up more than 150 feet.
- iv. Backup must be on an unobstructed straight path.



**Figure 2: Flag Lot Example**

- v. Flag Lots – Republic Services cannot drive into flag lots, because they are private driveways. All residents who live on flag lots must wheel their carts down to the public street.
- vi. Slope – Trucks cannot access streets with a slope of more than 15%



## 2. Multi-Family Residential with Centralized Service Locations *Apartment/Condo/Flats*

- Garbage may be collected up to six times per week. Recycling may be collected up to five times per week. Organics may be collected only on Mondays, Wednesdays, and Fridays. Twice a day pick up is not available.



### a. Internal Storage Requirements:

- i. All residential units need internal storage space to store garbage, recycling, and organics materials (e.g. under kitchen sink or in pantry).
- ii. Equal amount of space should be reserved for storage of garbage, recycling, and organics materials.
- iii. Chutes:
  1. Chute systems must be pre-approved by the Environmental Services Division because of the unique space and access design challenges.
  2. Applicant must provide two chute systems side by side, one for garbage and one for recycling. Storage for organics collection must be provided in a centrally located area, in the trash room and/or in the trash enclosures. Chutes are not required or recommended for organics.
  3. The design and construction of chutes shall conform to the requirements in Fremont Municipal Code, the Fremont Waste Handling Guidelines, and the Site Plan and Architectural Approval standards.
  4. Chute vestibule rooms must be distributed to prevent any resident from traveling more than 250 feet to dispose of waste.

5. Chute vestibule rooms must observe requirements of the current California Building Code regarding accessibility to solid waste collection receptacles for persons with disabilities (CCR Title 24, Part 2).
6. Chute systems must comply with current building codes for 2014 fire sprinkler requirements.



Figure 3: Garbage and recycling chutes

b. External Storage Requirements

- i. Multi-Family residential garbage, recycling, and organics receptacles must be stored in a trash enclosure.
- ii. Trash enclosures must be distributed throughout larger complexes so that no resident will have to travel more than 250 feet to reach a trash enclosure.
- iii. Trash enclosures for multi-family units must observe requirements of the current California Building Code regarding accessibility to solid waste collection receptacles for persons with disabilities (CCR Title 24, Part 2).
- iv. Trash enclosure(s) must be shown on the site plan with receptacles to scale.
- v. Trash Enclosure Sizing:

1. Sizing Formulas for Multi-Family Residential Trash Enclosures:

**Table 2: Sizing Formulas**

Garbage	Number of units x 0.33cy/unit = amount of garbage generated per week
Recycling	Amount of garbage generated per week x 0.25
Organics	4 gallons per unit per week

- 2. After estimating the required level of garbage, recycling, and organics service, design the trash enclosure to meet the capacity. See Table 1 for Wheeled Cart Dimensions and Table 5 for Front End Loader/Bin Dimensions.



*For example, a 6-unit property is expected to generate 1.98 cubic yards of garbage and recycling per week ( $6 \times 0.33\text{cy} = 1.98\text{cy}$ ). A 2-yard bin would be large enough for garbage. 25% of the 2 yard capacity is needed for recycling, or 0.5 cubic yards. One cubic yard = 200 gallons. One half or 0.5 cubic yards is about 100 gallons. Options: Use a 1 cubic yard bin or a 96-gallon wheeled cart.*

- vi. Refer to Section E: Trash Enclosure Design Requirements

## C. Commercial and Industrial Requirements

### *Individual or centralized shared commercial service locations*

- Garbage may be collected up to six times per week. Recycling may be collected up to five times per week. Organics may be collected only on Mondays, Wednesdays, and Fridays. Twice a day pick up is not available.



#### 1. Internal Storage Requirements:

- a. Design space inside the building for the storage of all materials including racks, crates, boxes, cardboard, pallets, and other items that require storage space. Storage of any materials outside the building is prohibited.
- b. CA Green Building Code Section 5.410.1 – Building Maintenance and Operation: Recycling by occupants: Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive. The Alameda County Waste Management Authority Ordinance 2012-01 requires all businesses to recycle cardboard, paper, recyclable glass food and beverage containers, metal (aluminum and steel) food and beverage containers, PET (#1) and HDPE (#2) plastic bottles.
- c. Consider designing for in-store grease containers rather than communal containers. In-store grease container design must comply with Alameda County Health Department requirements for grease storage.

#### 2. External Storage Requirements

- a. Roofed trash enclosures are required for garbage, recycling, organics, and tallow receptacles for all commercial, industrial, and institutional developments.
- b. Trash enclosures are to be used only for the storage of garbage, recycling, organics, and tallow receptacles and must be large enough to store the amount necessary for the size and use of the businesses.
- c. Each parcel must have a minimum of one trash enclosure. A commercial and industrial development may require multiple trash enclosures to meet the required amount of capacity, at the discretion of the staff.
- d. Trash enclosures must comply with regulations from the City of Fremont, Union Sanitary District, and Alameda County Health Department, as applicable.

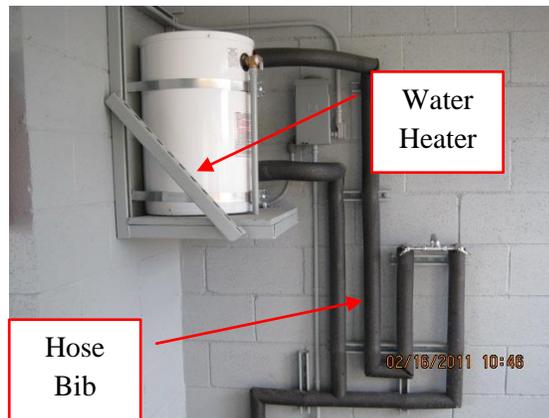
- e. Site Plan and Architectural Review approval is required. An architect or civil engineer must draft site plans for any existing or proposed trash enclosures. Plans submitted shall include:
  - i. Location of trash enclosure(s) on property for garbage, recycling, organics, and tallow container storage
  - ii. Description of materials used for enclosure construction
  - iii. Dimensioned details (width, length, height)
  - iv. Elevation and drainage detail of enclosure and surrounding area, demonstrating that runoff and litter from the enclosed area will not enter the City's storm drain system and run-on of storm water into the enclosure will not occur.
  - v. Structural details for roof and footings
- f. The size and location for trash enclosures depend on:
  - i. Square footage of the commercial building space
  - ii. Proposed land use and business type
  - iii. Quantities of garbage, recyclables, and organic materials to be generated
  - iv. Frequency of collection of materials
  - v. Whether collection by the garbage truck can be automated
  - vi. Space limitations
- g. Refer to Section E: Trash Enclosure Design Requirements



### 3. Additional Requirements for Food Service Facilities and Institutional Facilities

- a. Food service facilities include, but are not limited to: restaurants, markets, grocery stores, gas stations, bakeries, liquor stores, bars, certified farmers' markets, food service at fairs and festivals, catering trucks, hot dog carts, ice cream trucks, produce vehicles, and food vending machines/distributors.
- b. All NEW food service facilities of any size require a trash enclosure with:
  - i. A solid metal roof, painted with rust inhibitive paint
  - ii. Space for trash, recycling, organics, and grease/tallow receptacles
  - iii. A mechanism for secondary containment of spilled oil/grease receptacles, per approval from Union Sanitary District
  - iv. Two-compartment sump or grease interceptor connected to the sanitary sewer (per Union Sanitary District)
  - v. Sanitary sewer line with a hot/cold water hose bib (per Alameda County Health Department)
  - vi. The interior pad sloped to drain toward the 2-compartment sump within the enclosure.
- c. Tenant improvement plans for existing food service facilities (using an existing trash enclosure) must be submitted to Union Sanitary District, Alameda County Health Department, and City of Fremont for review on a case by case basis.
- d. The applicant must contact and submit plans to Union Sanitary District (510-477-7500) for specific sanitary sewer connection and discharge requirements, including oil-water or grease separators or interceptors.
- e. The applicant must contact and submit plans to the Alameda County Health Department (510-567-6815) for restaurant specifications and requirements.
- f. Certain "institutional facilities" may also require a new trash enclosure or upgrade to an existing trash enclosure under the following conditions:
  - i. Banquet facilities associated with a hotel or motel, or stand-alone facilities
  - ii. Any facility with a commercialized kitchen
  - iii. A facility serving large volumes of food (i.e. frequent meal service, feasts, holiday service, fairs and festivals)
  - iv. Any facility with a historical record in the past two years of stormwater discharge violations.

- v. A “recreational, amusement or sports” (e.g. movie theaters, bowling alleys, billiards, night clubs, sports complexes) and “care or treatment” (e.g. hospitals, medical centers, retirement homes, nursery homes, etc.) facilities not categorized as food-related facility that serves or sells food and beverages.
- g. Refer to Section E: Trash Enclosure Design Requirements for additional trash enclosure requirements.



**Figure 4: Hot/Cold Hose Bib**



**Figure 5: Sanitary connection with sump**

## D. Roll-Off / Compactor Requirements

### 1. General Requirements:

- a. Compactors must be approved by the Environmental Services Division and are subject to Site Plan and Architectural Approval.
- b. Compactors must be serviced by Republic Services a minimum of once per month. Twice a day pickup is not available.
- c. Compactors are not recommended for garbage service, except in large commercial, industrial, institutional or other large scale applications.
- d. Use of a compactor or baler for recyclable material such as cardboard or paper is encouraged.
- e. Sharing of balers among tenants within an office, commercial or retail center is also highly recommended
- f. When a compactor is proposed, indicate waste stream for compactor (e.g. trash, recycling, or organics), and provide specs and size of compactor (e.g. stationary, top-load, etc.).
- g. A business or residential development using an approved trash compactor must still recycling the following materials as required by the Alameda County Mandatory Recycling Ordinance: paper, cardboard, recyclable food and beverage receptacles, metal (aluminum and steel) food and beverage cans, and plastic PET/HDPE #1-2 bottles.
- h. Recyclable materials must be stored within a trash enclosure or on a shipping, receiving, or loading dock area that is readily accessible and convenient to building occupants, facility maintenance personnel, and to the collection service provider.
- i. Site plans must show location of all compactors and indicate truck routes, including turning templates.
- j. Republic Services does not sell, lease, or provide compactors. Applicant must provide written agreement from Republic Services to the Environmental Services Department that the compactor may be serviced.
- k. Compactors shall comply with trash enclosure standards for location, access, screening, and design requirements.



- l. Compactor areas for food service facilities must include a roof and sanitary sewer drainage connection.
  - m. Late or unplanned addition of a compactor requires additional approval. Additional space and electrical connections, as well as separate building permits may be required.
  - n. Immediate approach to a compactor or roll-off box should be on a flat and level surface. Guide rails shall be installed inside the enclosure for the compactor to prevent the compactor from being dragged on the ground, which may ruin the asphalt/concrete prematurely.
  - o. Enclosure gates or doors of the enclosure shall open 180 degrees, like barn doors, laying flush against the enclosure.
2. Dimension requirements:
- a. In order to allow adequate space for the truck driver to hook and unhook the compactor, there must be a minimum 30 feet plus an additional 50-60 feet of space required in front of the compactor unit. This distance must extend straight ahead from the end of the compactor.
  - b. Compactors require a minimum overhead clearance of 30 feet for truck servicing.
  - c. For safety reasons, a site plan requiring a backup distance greater than 150 feet to service the compactor will not be approved.
  - d. Enclosures for roll-offs/compactors require much more space, both for the units themselves, and the access space required for the truck to maneuver to load/unload. Width must be at least 14 feet to allow room to maneuver and to provide clearance from objects, structures or vehicles on either side of the backup length.
  - e. Refer to Resource B: Republic Services Container Dimensions for additional dimension requirements.

**Table 3: Typical Compactor Dimensions**

<b>Commercial Compactors*</b>	<b>Length (feet)</b>	<b>Width (feet)</b>	<b>Height (feet)</b>
20 cubic yards	14 – 18	8	6 -8
30 cubic yards	20 – 25	8	7 – 8
40 cubic yards	22 - 26	8	7.5

\*Compactor box lengths vary by manufacturer and size; dimensions listed are most common by size. Compactors are not provided by Republic Services, though they must be serviced by Republic Services.



**Figure 6: Trash enclosure for compactor**

**Table 4: Typical Roll-Off Box Dimensions**

<b>Commercial Roll-Off Boxes*</b>	<b>Length (feet)</b>	<b>Width (feet)</b>	<b>Height (feet)</b>	<b>Footprint (sq. ft.)</b>
6 cubic yards	7.3	8	5.0	58
10 cubic yards	13	8	5.5	104
14 cubic yards	13	8	7	104
20 cubic yards	19	8	6.5	150
30 cubic yards	20	8	8.5	160
40 cubic yards	22	8	8.5	176

\*Dimensions above based on roll-off boxes provided by Republic Services.



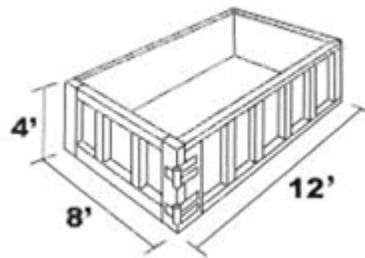
**Figure 7: Standard Roll-Off dumpsters**

**10 cubic yard roll-off dumpster**

12' x 8' x 3' | 4 ton weight limit

**14 cubic yard roll-off dumpster**

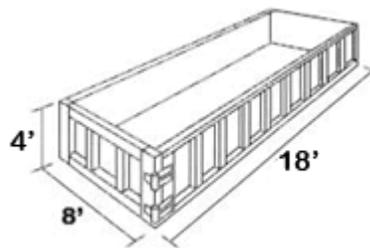
12' x 8' x 4 1/2' | 5 ton weight limit



**Figure 8: 14 cubic yard roll-off dumpster**

**20 cubic yard roll-off dumpster**

18' x 8' x 4' | 5 ton weight limit



**Figure 9: 20 cubic yard roll-off dumpster**



**Figure 10: Roll-Off Servicing**

For additional roll-off dumpster options, refer to Resource B: Republic Services Container Dimensions.

## E. Trash Enclosure Design Requirements

All trash enclosures must be enclosed on four sides and meet the requirements below:



1. Location

- a. Trash enclosures shall not be located:
  - i. Along any frontage streets or roadways
  - ii. Visible from residential properties
  - iii. Adjacent to or along a shared property line or single-family and multi-family residential properties
  - iv. Adjacent to a storm drain in which grading will result in drainage of stormwater into the storm drain. See Stormwater requirements below.
  - v. Greater than 250 feet away from a residential or commercial facility
  - vi. Trash enclosures must be located on the property so a tenant will not have to travel more than 250 feet to reach a trash enclosure.

2. Access / Clearance

- a. Trash enclosures for garbage, recyclables, and organics at multi-family and condominium housing shall observe the requirements of the California Building Code and the requirements of CCR Title 24, regarding accessibility to garbage, recycling, and organics collection receptacles for persons with disabilities (CCR Title 24, Part 2).
- b. The applicant is required to provide sufficient vehicular access to enter and exit the property and adequate space for the collection trucks to service each container on site.
- c. Trash enclosures shall be readily accessible and convenient to building occupants, facility maintenance personnel, and to the collection service provider.
- d. Truck Specifications:
  - i. Trucks are 8 feet wide plus an additional 12-20 inches for mirrors.
  - ii. If collection trucks must enter under a building, parking garage or gate, there must be 14 feet of overhead clearance.
  - iii. Overhead clearance of 24 feet is required from ground surface to lowest point of overhead obstruction (e.g. tree, rafter, roof, fixtures, etc.) to service or empty the container over the truck.
  - iv. If on-street parking is allowed, more width is required to maneuver safely.

- v. Front end loader vehicles need unobstructed clearance to access the trash enclosure. Commercial collection vehicles access the trash enclosure at the front of the vehicle.

e. Turnaround Requirements:

- i. Each project must provide on-site access with sufficient space to drive through or turn around.
- ii. The required outside turning radius for collection trucks is 37.5 feet, to make a 180 degree turn without stopping.
- iii. If trucks must backup instead of turn around, the maximum safe backup distance is 150 feet unobstructed.
- iv. Collection trucks cannot back out on to a major street or thoroughfare.



**Figure 11: Front End Loader/Bin Servicing**

3. Dimensions

- a. All enclosures must have sufficient space for solid waste, recycling, organics, and tallow bins associated with the quantity of waste generated by the tenants on the property.
- b. A minimum of 12 inches between the wall and each receptacle is needed to accommodate container removal.
- c. A 6-inch wide curb or parking bumper along the interior perimeter of the enclosure is required to protect the walls from being damaged by the receptacles.
- d. Enclosures used by food-related facilities must provide additional space for separate food/organics bin(s) and a grease barrel/tallow bin of sufficient size.
- e. All bins must be configured inside the enclosure so as to ensure tenants have full access to each bin.
- f. Tallow receptacles must be placed so they will not interfere with the collector's ability to service the enclosure, either by blocking access or as a result of leaking oil that creates a hazard for drivers.
- g. Enclosures shall be based on the size of bins, the number of bins, the tenant or property use.

- h. All enclosures shall have walls with a minimum height of 6 feet and a maximum height of 7 feet. The total maximum height of the enclosure shall be 10 feet including the roof. The height of the wall shall ensure that no materials or receptacles are visible from public view. If the wall height is 6 feet, a screen shall be included between the top of the wall and the base of the roof to prevent entry.
- i. See Section D: Roll-Off / Compactor Requirements for compactor/roll-off dimension requirements.
- j. See Table 1 for Wheeled Cart Dimensions and Table 5 for Front End Loader/Bin Dimensions

**Table 5: Front End Loader/Bin Dimensions\***

Front End/Bin Loader	Length (feet)	Width (feet)	Height (feet)	Height w/ Lid Open (feet)	Footprint (sq. ft.)
1 cubic yard (200 gallons)	7	3	3	5.5	21
2 cubic yards	7	4	4.5	8	28
3 cubic yards	7	4	5	8.5	28
4 cubic yards	7	5	5.5	10.5	35
6 cubic yards (no wheels)	7	6	6	11	42
7 cubic yards (no wheels)	7	6	6.5	11.5	42
8 cubic yards (no wheels)	7	6	7.5	12.0	42

\*Above dimensions include additional space for ease of maneuverability.



**Figure 12: Front End Loader/Bin**



**Figure 13: 6 yard front end loader/bin**

4. Stormwater

- a. Stormwater is prohibited from entering the enclosure. See Roof requirements.
- b. Grading around the trash enclosure shall be designed to drain stormwater away from the enclosure and not into a storm drain.
- c. The enclosure pad shall be designed to prevent run-on from outside the trash enclosure and runoff from inside the trash enclosure.
- d. The enclosure shall be built to contain litter and garbage and prevent scattering by wind or runoff.
- e. A hose bib shall be provided for periodic wash down inside the enclosure only for food service facilities.
- f. Applicant must contact Union Sanitary District (USD) for specific sanitary sewer connection and discharge requirements for food service facilities
- g. Any connection to the sanitary sewer, including grease interceptors and two-compartment sumps, shall seek approval from USD prior to any building permit approval and issuance by the City of Fremont for food service facilities.

5. Pad Interior

- a. The door edge of the enclosure pad surface shall be the same elevation as the apron threshold.
- b. On the open side of the enclosure, a grade break line shall be constructed at the inside edge of wall with the slab sloping inwards toward the inside away from the outside.

- c. If there is an interior floor drain inside the enclosure, the pad shall slope draining toward the interior drain.

→  
Drainage flow line

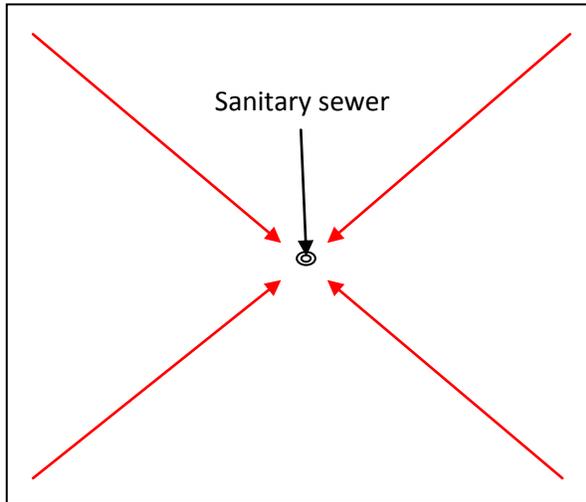


Figure 15: Pad interior drainage to sanitary sewer (plan view)

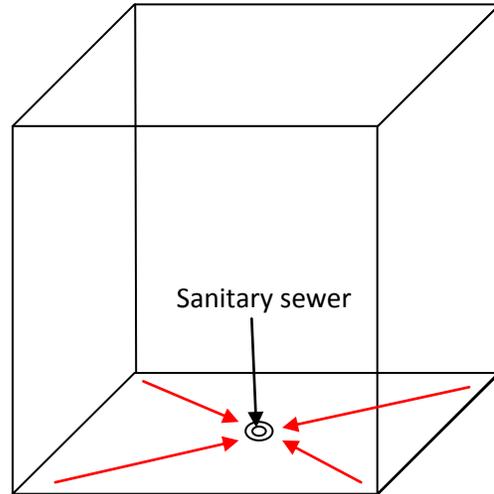


Figure 14: Pad interior drainage to sanitary sewer (section)

- d. If an interior floor drain is not available, the inside pad shall be designed to drain to the nearest available landscaping, preventing all runoff from entering a storm drain.

→  
Drainage flow line

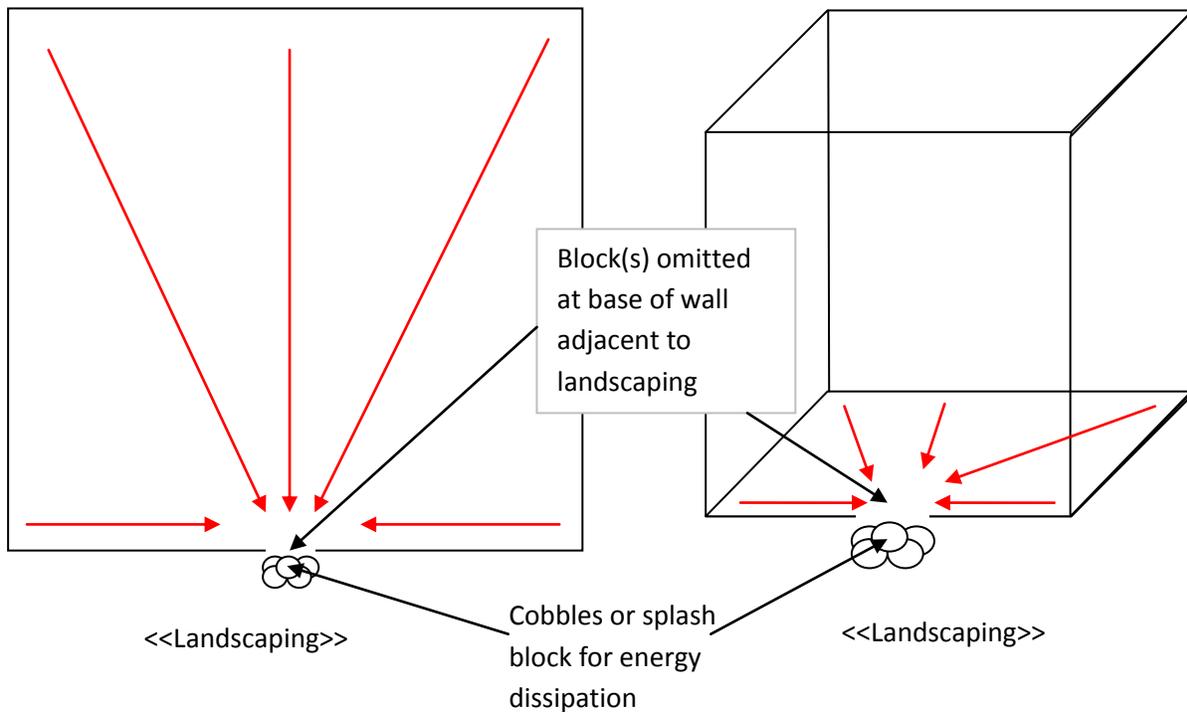


Figure 16: Pad interior drainage to landscaping (plan view and section)

## 6. Apron

- a. The apron surface shall be the same elevation as the enclosure pad threshold and the surrounding surfaces, with a minimum slope of 1/8 inch (1% grade) per foot away from the enclosure pad to drain run off or storm water away from the enclosure.
- b. The apron shall extend 10 feet from the enclosure pad and be the width of the enclosure opening.
- c. The apron shall be designed to withstand up to 35,000 pounds.
- d. A sufficient strength of concrete shall be used to prevent chipping.
- e. Do not place a lip/berm at the entrance that would impede container placement and removal.

## 7. Materials

- a. Chain link fencing with wooden/plastic slats enclosures and wooden enclosures are prohibited.
- b. The design of the enclosure shall incorporate the same materials used for primary building for a coordinated look and feel to the development.
- c. The materials shall be of high quality with architectural interest to ensure design compatibility.
- d. A graffiti resistant coating is required.
- e. Rooves shall be painted with rust-inhibitive paint.
- f. Fire Code:
  - i. Waste receptacles exceeding 1.5 cubic yard capacity shall not be stored in buildings or placed within 5 feet of combustible walls, openings, or combustible roof eave lines.
  - ii. A trash enclosure is considered a building structure, and must follow these Automatic Fire Extinguishing System (AFES) requirements:
    1. All enclosures are required to be made of CMU, Type I or Type II fire resistive construction.



**Figure 17: Prohibited chain link fence**

2. Enclosures less than 500 square feet:
  - a. Do not require an AFES
  - b. Shall be located at least 10 feet from other buildings or building openings
3. Enclosures between 500 and 1,500 square feet shall:
  - a. Have a fire alarm system
  - b. Be located at least 5 feet away from the property line and 10 feet from any building

## 8. Gates

- a. All enclosures shall have metal gates with latches and be secured in the open/closed positions with cane bolts. Latch shall be no higher than 5 feet.
- b. Gates shall be hinged on the outside and must be flush with the enclosure wall to allow adequate maneuverability of the receptacles in and out of the enclosure.
- c. The gates should be capable of being latched open so that an 8-foot wide truck can access the enclosure.
- d. Double gates are required for all enclosures.
- e. Gates shall be free hanging with no center pole.
- f. All gates must be lockable using a standard padlock.
- g. Gates to the trash enclosure should open to 120 degrees.



**Figure 18: Metal Trash Enclosure Gates**

## 9. Roof

- a. Rooves are required for all enclosures.
- b. The roof shall extend past any open side of the enclosure, except the front gates to allow access to the bins by garbage trucks.
- c. The lowest part of the ceiling cannot be lower than 8 feet high to allow for complete opening of the container lid.

- d. All metal rooves, including galvanized rooves, must be coated with rust-inhibitive paint.
- e. Rooves shall be sloped to drain to available landscaping. Landscaping shall be designed with adequate energy dissipation (e.g. splash blocks, cobbles, etc.) to prevent erosion from roof runoff. If landscaping is not available, the roof may be sloped to drain away, avoiding run-on into the enclosure.

10. Landscaping

- a. Additional screening may be required that includes landscaping or decorative materials to enhance the appearance of the proposed trash enclosure structure.
- b. Landscape requirements subject to change in response to State Executive Order B-29-15 (Drought State of Emergency).

Optional Design Considerations:

11. Signage

- a. All new enclosures should be equipped with effective signage.
- b. Signage must be placed in locations easily viewable by patrons.
- c. Signage must be updated to reflect new regulations. Signage is available at [www.recyclingrulesac.org](http://www.recyclingrulesac.org)



Figure 19: Signage and lighting within trash enclosure

12. Lighting

- a. The area around and inside the enclosure should be adequately lit for safety reasons. Existing lights in parking lots may be adequate to provide enough required lighting.
- b. A motion sensor is recommended.

13. If the gate opening is greater than 12 feet wide, a separate personnel door on the side of the enclosure shall be provided for individual access.



Figure 20: Personnel door (bollards not required)

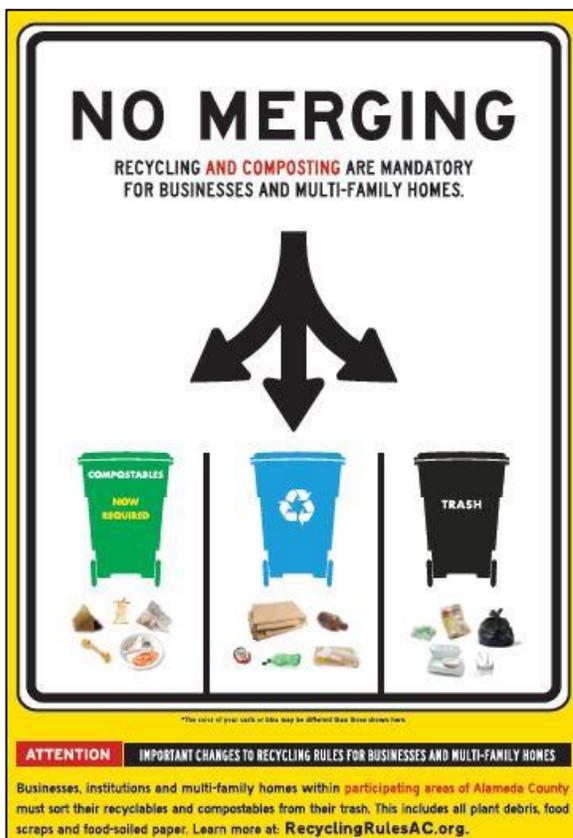


Figure 21: [Alameda County Ordinance](http://Alameda County Ordinance) Sample Signage

## II. OPERATIONS

1. Garbage, recycling and organics services are provided exclusively by Republic Services.
2. CA Green Building Code Section 5.410.1 – Building Maintenance and Operation: Recycling by occupants: Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.
3. Maintenance and cleaning of the trash enclosure is the day-to-day responsibility of the occupant or owner of the premises.
4. Trash enclosures are required to be maintained in good working condition and in the condition that they were approved.
5. The enclosure is only for storage of solid waste, recycling, cardboard, organics and tallow receptacles only.
6. All receptacles are required to remain or be returned and stored inside the trash enclosure. The storage of anything outside the trash enclosure is prohibited.
7. All solid waste must be contained within the appropriate water-tight, covered container at all times.
8. Ongoing landscaping and plant debris must be placed into the green organics cart for composting, not thrown in the garbage. If no green cart service is available on site, the landscaper must take the plant debris to an approved facility for composting.
9. Washing out the trash enclosure to a storm drain system is prohibited. Wash water must be collected and discharged to the sanitary sewer only.
10. If the pad interior drains to landscaping, the landscaping must be periodically cleaned of debris to prevent vector concerns.
11. Compactors containing putrescible municipal solid waste must be serviced at least once per week. If



**Figure 22: Solid waste inadequately contained**



**Figure 23: Prohibited storage of materials within a trash enclosure**

compactors are found leaking, alternative service may be required to prevent on-going storm water violations.

12. Use of equipment to compact or bale cardboard, office paper, plastic shrink wrap and other recyclable materials is encouraged. Sharing balers for recycling material among tenants within an office, commercial or retail center is also encouraged.
13. Weight of a roll-off container cannot exceed 10 tons when full (legal street limit). Customers may incur overweight charges when the container exceeds 5 tons.
14. If gates with locks limit access to the enclosure or to the property, cards or keys must be provided to Republic Services. Republic Services can provide container locks and keys upon request. If keys or cards are not provided, then the property manager must ensure that all secured gates are open at 3:00 a.m. for commercial collection and 6:00 a.m. for residential collection. The gate should be maintained in good working order and should remain closed except when in use.
15. Push / Pull Services: Republic Services will only push out a commercial front load bin under the following circumstances:
  - a. max distance 100 feet one way
  - b. slope 0-3%
  - c. smooth surface required
  - d. additional fees apply
16. All signage shall be kept up to date according to the [Alameda County Waste Management Authority](#) and City of Fremont requirements.

### III. CONTRACTOR REQUIREMENTS

#### A. General Requirements

1. Effective January 2013, Republic Services is the exclusive debris box hauler for all construction debris.

It is illegal to hire a 3<sup>rd</sup> party trucking or hauling company to remove construction debris.

2. Separated single commodity loads of soil, asphalt, or concrete may be hauled by any approved hauling company. Individual loads of recycling must contain at least 90% recyclable material. Loads containing more than 10% garbage or other non-recyclable material must be hauled by Republic Services.



3. Contractors can self-haul construction debris if all of these conditions are met:
  - a. Contractor is providing a construction or demolition service onsite and the debris removal is an incidental part of the construction or demolition work performed by that person; and
  - b. Contractors use their own employees, company vehicles and equipment; and
  - c. Contractors deliver the construction debris to an approved facility; and
  - d. Contractors and subcontractors must be licensed to do business in Fremont.

#### B. Recycling Requirements

1. The City of Fremont requires reuse, recycling, and proper disposal of construction debris. Recyclable debris includes, but is not limited to: cardboard, wood, scrap metal, scrap drywall, asphalt and concrete. Only specific haulers and facilities shall be used.
2. Projects subject to recycling requirements:
  - a. All demolition projects, regardless of value
  - b. All new residential projects

- c. All residential remodel projects that increase the building's floor area, volume, or size
- d. All new commercial projects
- e. All commercial tenant improvements with a permit value of \$200,000 or more
- f. All commercial tenant improvements that add 1,000 square feet or more

## **C. Reporting Requirements**

### **1. PRIOR to demolition/construction and prior to permit issuance:**

- a. Applicant/contractor must:
  - i. Estimate of the amount and type of debris that will be generated from the projects.
  - ii. Submit a **Waste Handling Plan** form and **Construction Debris Hauler Acknowledgement Form**.
  - iii. Determine whether a Republic Services will be used or contractor will self-haul debris.
  - iv. List the recycling facilities and services that will be used as selected from the List of Approved Recycling Facilities.
  - v. Provide a copy of both completed forms to all subcontractors.
- b. The Waste Handling Plan must be approved by Environmental Services staff before any permits are issued.

### **2. DURING demolition/construction:**

- a. Applicant/contractor must:
  - i. Reuse or recycle 100% of all asphalt, concrete, and dirt
  - ii. Reuse or recycle 50% of all remaining project debris
  - iii. Reuse or recycle 65% for new residential construction projects
  - iv. Separate and compost 100% of plant and tree debris. Plant and tree debris cannot be landfilled in Alameda County.
  - v. Comply with the latest CalGreen recycling requirements, if stricter than Fremont's Construction and Demolition Debris Recycling Ordinance.

- b. Contractors and subcontractors must keep all receipts for construction materials delivered to disposal or recycling facilities. Receipts must document that the minimum recycling requirements were achieved.
3. **AFTER** completion of demolition/construction:
- a. In order to receive final approval on the project, recycling receipts must be submitted with a final report at the end of the project, but **prior to receiving final approval from the Building Inspector.**
  - b. Applicant/contractor must:
    - i. Submit a **Debris Diversion and Disposal Report**
    - ii. Document actual tonnages or volumes of material recycled and disposed
    - iii. Attach copies of receipts, gate or weight tags, or other documentation verifying actual tonnages or volumes recycled and disposed to achieve the minimum recycling required.

## **IV. FORMS**

- A. List of Approved Recycling Facilities
- B. Construction Debris Hauler Acknowledgement Form
- C. Waste Handling Plan
- D. Debris Diversion and Disposal Report

## **A. List of Approved Recycling Facilities**

### *Approved Recycling Facilities for Self-Haul of Construction Debris*

#### **Alameda County**

**Fremont Recycling & Transfer Station**  
41149 Boyce Road, Fremont  
510-252-0500  
www.fremont-recycling.com

**Pleasanton Transfer Station and Recycling Center**  
3110 Busch Road, Pleasanton  
925-846-2042

**Commercial Waste & Recycling**  
725 Independent Road, Oakland  
510-836-0852

**Vasco Road Landfill**  
4001 N. Vasco Road, Livermore  
925-447-0491

**Davis Street Transfer Station**  
2615 Davis Street, San Leandro  
510-838-2303

#### **Santa Clara County**

**Guadalupe Landfill**  
15999 Guadalupe Mines Rd, San Jose  
408-268-1670

**Zanker Materials Processing Facility**  
675 Los Esteros Road, San Jose  
408-263-2384

**Newby Island Landfill**  
1601 Dixon Landing Road, Milpitas  
408-262-1401

### *Approved Facilities for Self-Haul of Contaminated Soil*

**Vasco Road Landfill**  
4001 N. Vasco Road, Livermore  
925-447-0491

**Altamont Landfill**  
10840 Altamont Pass Road, Livermore  
925-455-7300

**\*\*Be advised that all material delivered and disposed in a landfill outside of Alameda County is subject to the countywide Solid Waste Facility Fee of \$4.34/ton (Alameda County Waste Management Authority Ordinance 2009-01**

## B. Construction Debris Hauler Acknowledgement Form

Download at: <http://fremont.gov/DocumentCenter/View/19778>



Community Services Department | Environmental Services Division  
 39550 Liberty Street, Fremont, CA 94538  
 510-494-4570  
[www.fremont.gov](http://www.fremont.gov)

### CONSTRUCTION DEBRIS ACKNOWLEDGEMENT FORM

Effective January 15, 2013, Republic Services is the only approved debris box hauler at construction sites.

Permit/BLD#: \_\_\_\_\_  
 Project Address: \_\_\_\_\_  
 Applicant name: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Project Name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Email: \_\_\_\_\_

**Hauler Option 1:  
 Republic Services Debris Box**

Applicant/Contractor must order a debris box through Republic Services (510) 657-3500 or [RepublicServices.com](http://RepublicServices.com).

- Republic Services will deliver a "mixed construction debris box" to the jobsite for all the debris materials, including garbage and recycling.
- Republic Services will deliver the material to the Fremont Recycling and Transfer Station, where at least 50% of the load will be recycled, depending on the material type.
- Single commodity loads of soil, asphalt, or concrete may be hauled by any approved hauling company with a valid business license. Each load cannot have more than 10% of non-recyclable material (garbage) by weight or volume.

As site conditions permit, additional debris boxes may be used for particular phases of construction (e.g., concrete and wood) to ensure the highest recycling rate possible.

**Hauler Option 2:  
 Contractor will Self-Haul Debris**

Contractors can continue to self-haul construction debris off site, if all these conditions are met:

- Contractor is providing a construction or demolition service on-site and the debris removal is an incidental part of the work performed; and
- Contractors use their own employees, company vehicles and equipment; and
- Contractors deliver the construction debris to an approved facility and the city of origin is stated as Fremont (see reverse for list of approved facilities)
- All contractors and subcontractors must be licensed to do business in Fremont

Contractors self-hauling construction debris must save the receipts from the disposal and recycling facilities and submit the receipts to the City on a monthly basis.

I have read the hauling options for the project; I understand and agree to follow the procedures selected above. It is illegal to hire a 3rd party hauling/trucking company to take construction debris from a construction site, with some exceptions.

APPLICANT NAME	SIGNATURE	DATE

Certain types of construction and demolition projects are subject to Fremont's Construction Debris Recycling Requirements. The following projects require recycling 50% of materials, tracking of recycling receipts, and reporting to the City at the conclusion of the project, in order to get final approval.

- Demolition (all demo permits)
- Residential Remodel over \$300K
- New Residential/Commercial over \$300K
- Commercial Tenant Improvement over \$300K

## C. Waste Handling Plan

Download at: <http://fremont.gov/DocumentCenter/View/24608>



### WASTE HANDLING PLAN

Permit/BLD#: \_\_\_\_\_

Project Name: \_\_\_\_\_

Project Address: \_\_\_\_\_

Contact name: \_\_\_\_\_

Contact Phone: \_\_\_\_\_

Email or Fax: \_\_\_\_\_

To complete the form:

- Place an "X" in the box next to each type of material that will be generated from the project
  - For materials that will go in a debris box (dumpster), place the X in that column
  - For materials that the contractor will self-haul using their equipment and vehicles, place the X in that column
  - For materials that the contractor will self-haul, provide the name of an approved recycling facility where the materials will be delivered. Approved facilities are listed on the back.

Material	Republic Services Debris Box	Other Debris Box	Self-Haul by Contractor	Name of Recycling Facility
Asphalt / Concrete / Soil (100% reuse/recycle required)				
Plant or Tree Debris – (100% compost required)				
Cardboard				
Metal				
Mixed Construction & Demolition debris				
Wood - unpainted or pallets				
Garbage				
Other:				

The following projects are subject to Fremont's Construction Debris Recycling Ordinance or the CalGREEN Building Code. Applicant must track recycling receipts, and report to the City at the end of the project to get final approval:

- All Demolition permits
- All Residential Additions/Renovations
- Non Residential Additions of 1000 square feet or more
- All New Residential/Commercial Buildings
- Non Residential Alterations of \$200K or more

- RECYCLE 100% of asphalt and concrete, and RECYCLE at least 50% of remaining materials generated
- SEPARATE plant/tree debris from other material, and COMPOST 100% of plant debris

**SAVE ALL RECEIPTS FOR SUBMITTAL WITH A FINAL DIVERSION REPORT**

**Failure to provide proper documentation may result in a \$1000/ton penalty for each ton not recycled**

I have read the hauling and recycling requirements; I understand and agree to follow the procedures in the Fremont Municipal Code (Fremont Municipal Code § 4-2100-Integrated Waste Management Ordinance [www.fremont.gov](http://www.fremont.gov)).

APPLICANT PRINT NAME	SIGNATURE	DATE
CITY STAFF		

## D. Debris Diversion and Disposal Report

Download at: <http://www.fremont.gov/DocumentCenter/View/2159>



Mandatory Recycling Ordinance Effective 1/1/09

### Debris Diversion & Disposal Report (After Demolition/Construction)

*Attach copies of receipts, gate tags, or other verifying documentation.*

**Applicant must reuse or recycle 100% of asphalt/concrete and 50% of remaining items.**  
Failure to provide documentation will result in a \$1000 per ton penalty for each ton not recycled.

Permit/BLD #	<input style="width: 90%;" type="text"/>	Project Name:	<input style="width: 90%;" type="text"/>
Project Address:	<input style="width: 90%;" type="text"/>	Date:	<input style="width: 90%;" type="text"/>
Contractor:	<input style="width: 90%;" type="text"/>	Contact:	<input style="width: 90%;" type="text"/>
Phone:	<input style="width: 90%;" type="text"/>	Email:	<input style="width: 90%;" type="text"/>
Type of Project:	<input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> New Construction <input type="checkbox"/> Demolition <input type="checkbox"/> Tenant Improvement/Remodel		

Material	Tons/CY Reused	Tons/CY Recycled	Tons/CY Landfilled	Name of Recycling Facility or Service
Asphalt/ Concrete <small>(100% reuse/recycle required)</small>			N/A	
Dirt/Clean Fill			N/A	
Brick				
Building Materials (doors, etc.)				
Cardboard				
Carpet/Foam/Padding				
Dry Wall/Sheetrock (scrap)				
Film Plastic				
Metal				
Mixed Const & Demo (C&D) <small>(ie. wood, metal, drywall, film plastic)</small>				
Plant or Tree Debris <small>(100% reuse/compost required)</small>			N/A	
Plastic				
Wood - unpainted or pallets				
Wood - treated/painted	N/A	N/A		
Garbage	N/A	N/A		Republic Services
Other:				
<b>Totals:</b>				

**PROJECT SUMMARY**

A. Total tons of materials salvaged, reused, or recycled (except A/C):	<input style="width: 90%;" type="text"/>
B. Total tons of materials landfilled (not recycled):	<input style="width: 90%;" type="text"/>
C. Total tons of materials generated for the project (Line A+B):	<input style="width: 90%;" type="text"/>
D. Percentage of materials recycled/reused (divide A by C x 100%):	<input style="width: 90%;" type="text"/> %

For City Use Only:	Approved <input style="width: 90%;" type="text"/>	Not Approved <input style="width: 90%;" type="text"/>	
	Waived <input style="width: 90%;" type="text"/>	Staff Initials <input style="width: 90%;" type="text"/>	

## V. RESOURCES

### A. Websites

<u>Resource</u>	<u>Website</u>
Alameda County Health Department Trash Enclosure Requirements	<a href="http://www.acgov.org/aceh/food/plan_check.pdf">http://www.acgov.org/aceh/food/plan_check.pdf</a>
Alameda County Household Hazardous Waste Facility	<a href="http://www.fremont-recycling.com/phhwf.html">http://www.fremont-recycling.com/phhwf.html</a>
Alameda County Ordinance for Recycling and Organics Requirements	<a href="http://www.recyclingrulesac.org/">http://www.recyclingrulesac.org/</a>
City of Fremont Stormwater BMPs	<a href="http://ca-fremont2.civicplus.com/505/Stormwater-Quality-During-Construction">http://ca-fremont2.civicplus.com/505/Stormwater-Quality-During-Construction</a>
Construction & Demolition Debris Reporting Forms	<a href="http://fremont.gov/2174/Waste-Handling-Plan-Hauler-Acknowledgeme">http://fremont.gov/2174/Waste-Handling-Plan-Hauler-Acknowledgeme</a>
Fremont Transfer Station	<a href="http://www.fremont-recycling.com/">http://www.fremont-recycling.com/</a>
Republic Services	<a href="http://site.republicservices.com/site/alameda-county/en/pages/home.aspx">http://site.republicservices.com/site/alameda-county/en/pages/home.aspx</a>
Union Sanitary District	<a href="http://www.unionsanitary.com/">http://www.unionsanitary.com/</a>

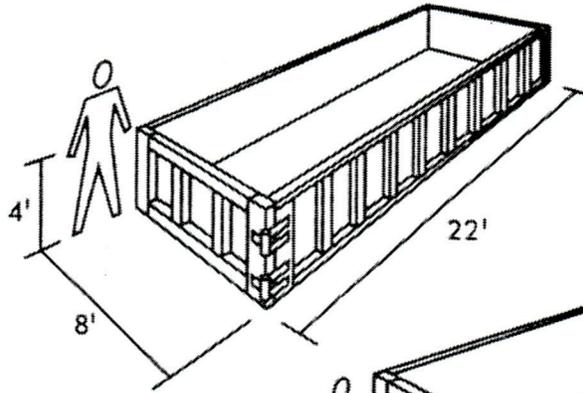
## **B. Republic Services Container Dimensions**

Continue to next page

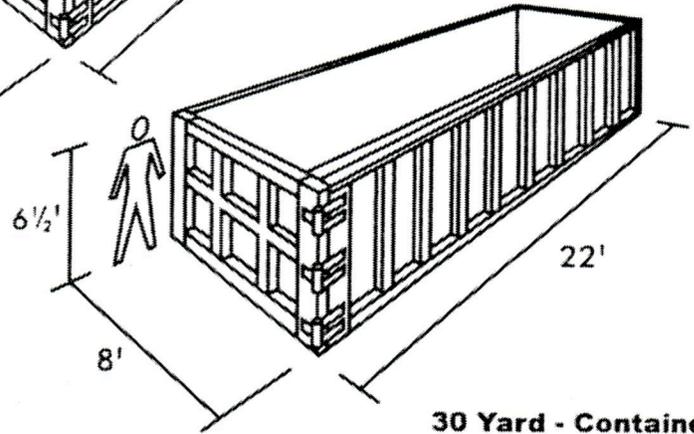
OPEN TOP CONTAINERS		
Cubic (Yard)	Height (Feet)	Length (Feet)
15	4	15
10	5	15
20	4 ½	22
30	6 ½	22
40	8	22

## ROLL-OFF CONTAINERS

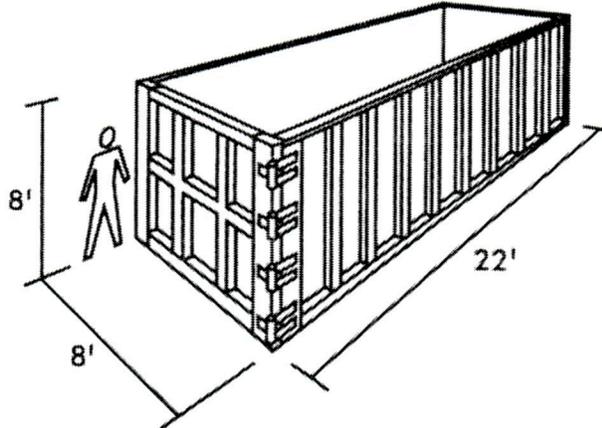
- > 20-yard containers are used for extremely heavy materials such as dirt, rock and concrete.
- > 30-yard containers are used for a mixture of materials such as wood, sheet rock and metal.
- > 40-yard containers are used mainly for larger, bulkier items that are not extremely heavy.



20 - Yard Container



30 Yard - Container



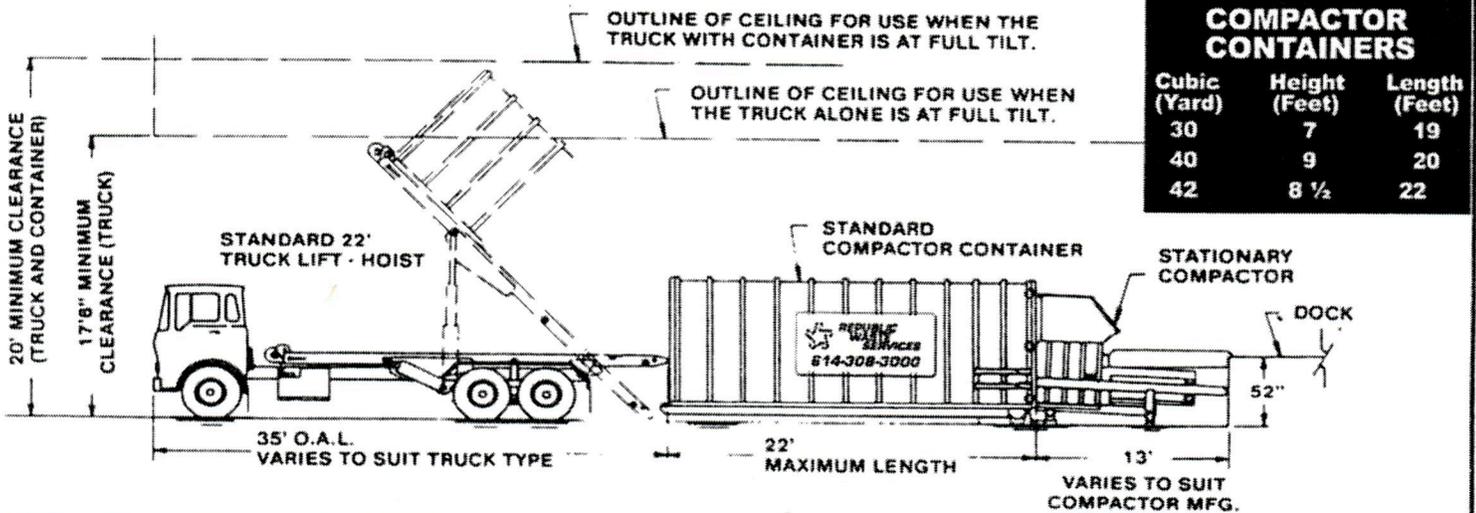
40 - Yard Container

### Help Republic Provide You With The Best Service

- > Keep the area around your container free of obstructions.
- > Fill container within guideline and refrain from overloading.
- > Make sure the rear door of a full container can be completely closed.

\* Note: Most state laws will restrict to a 10 ton load.

Design detail and specific dimensions may vary from area to area depending upon manufacturer



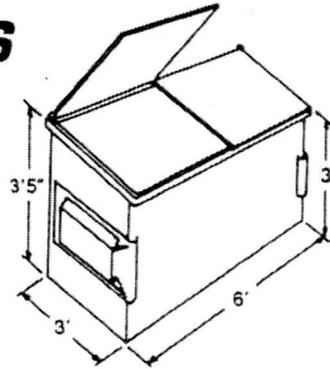
Note: All installations to be checked out with Republic Waste Services consultant for all clearance dimensions



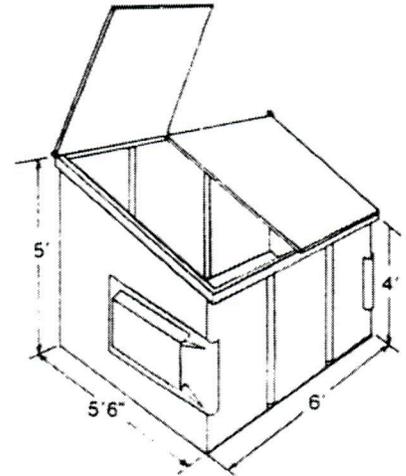
# REPUBLIC WASTE SERVICES

933 Frank Rd. Columbus, Ohio 43223

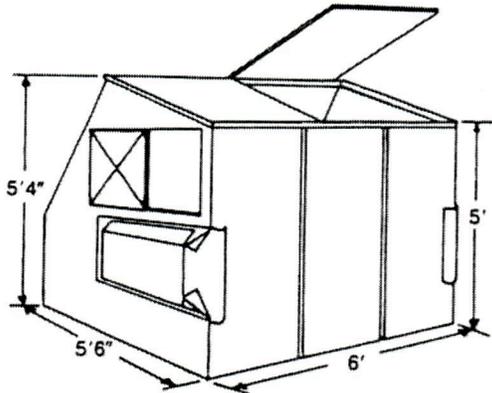
## FRONT LOADERS



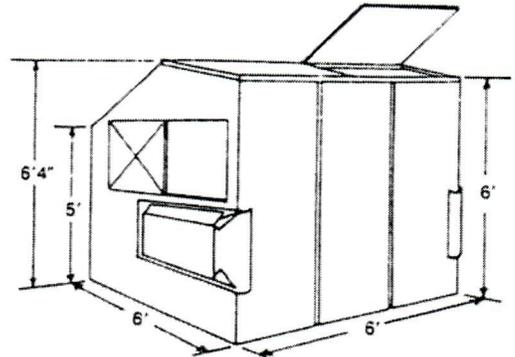
**2 YARD**



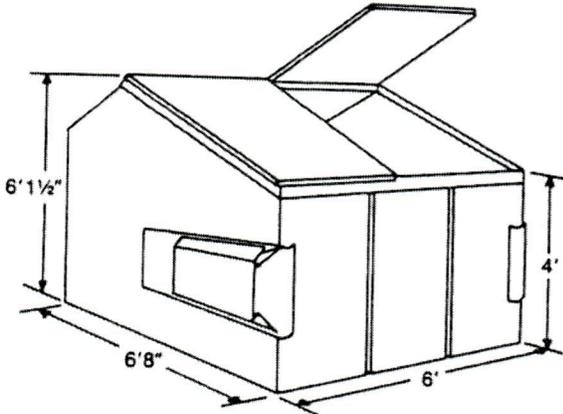
**4 YARD**



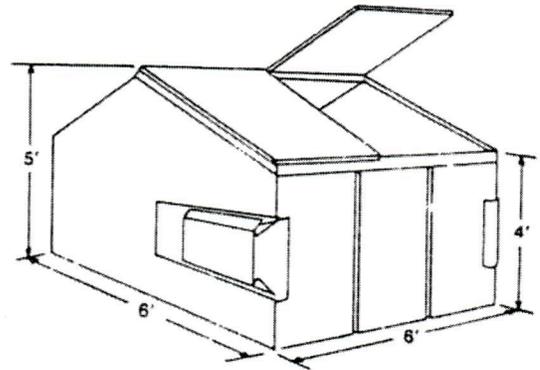
**6 YARD**



**8 YARD**

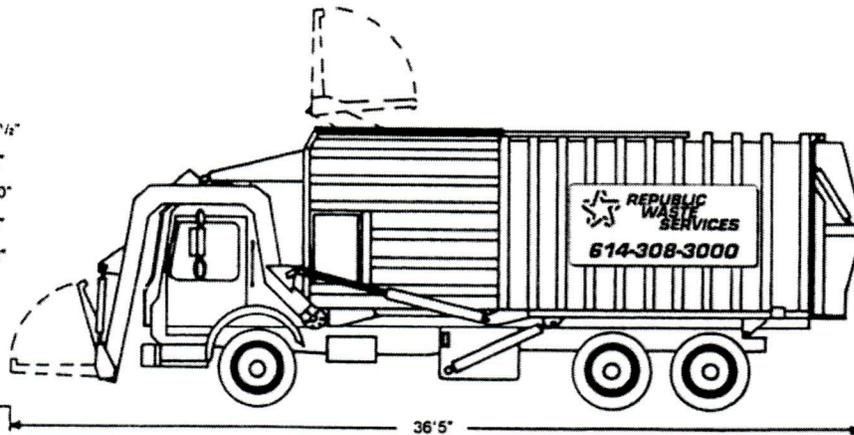


**6 YARD SLANT**



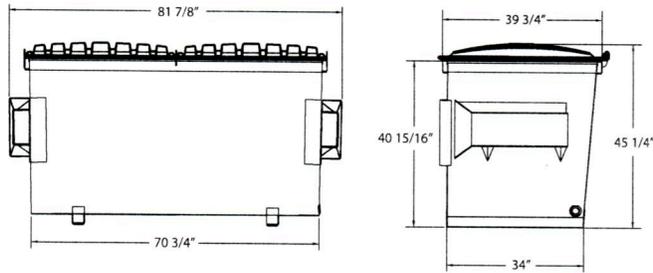
**8 YARD SLANT**

- 2 YD. 16' 4 1/2"
- 3 YD. 17' 2"
- 4 YD. 17' 10"
- 6 YD. 19' 8"
- 8 YD. 20' 2"

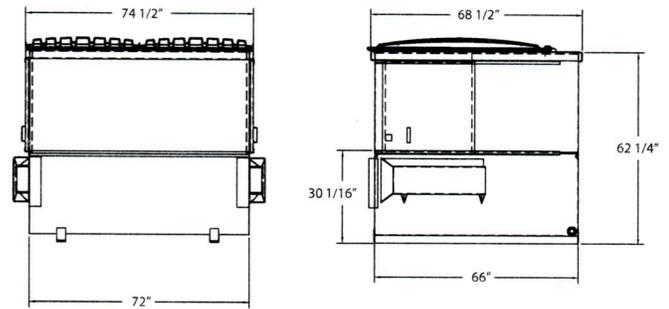


# FRONT END LOAD CONTAINERS // FLAT TOP

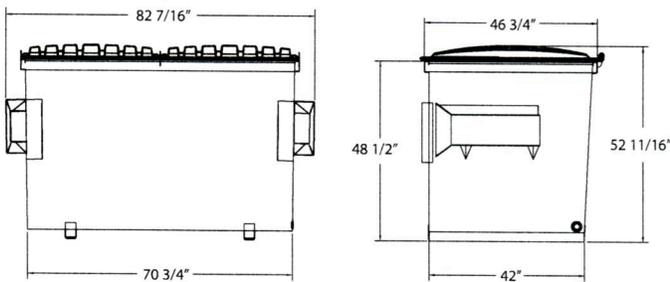
## 2 YARD FLAT NESTABLE



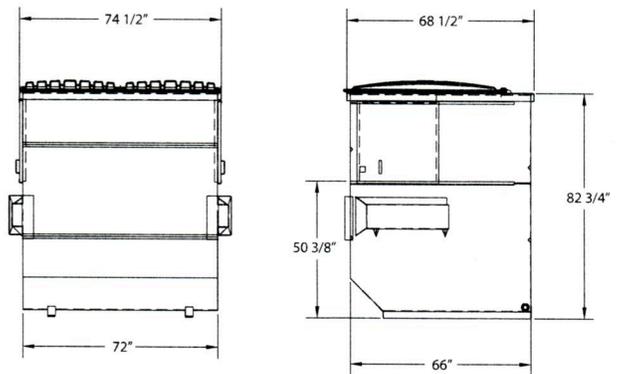
## 6 YARD FLAT



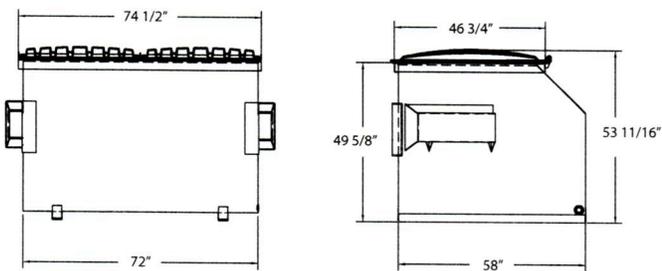
## 3 YARD FLAT NESTABLE



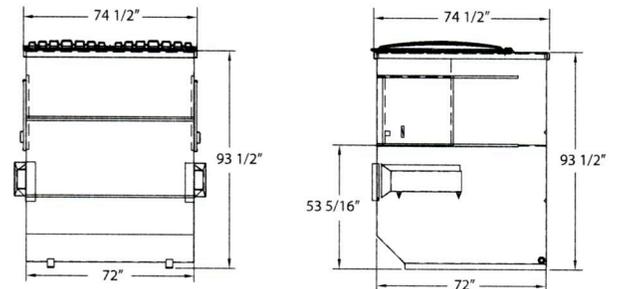
## 8 YARD FLAT



## 4 YARD FLAT



## 10 YARD FLAT



	2 YARD*	3 YARD*	4 YARD	6 YARD	8 YARD	10 YARD
<b>48 ft. trailer flat / drop</b>	42 / 52	28 / 36	18 / 18	8 / 14	8 / 8	7 / 7
<b>53 ft. trailer flat / drop</b>	45 / 57	32 / 42	20 / 20	9 / 16	9 / 9	8 / 8
<b>Plastic lid standard</b>	37" x 41" single wall	37" x 48" single wall	37" x 48" single wall	37" x 58" single wall	37" x 58" single wall	37" x 58" single wall
<b>Sides</b>	12 gauge					
<b>Bottom</b>	10 gauge					
<b>Weight</b>	505 lbs.	602 lbs.	732 lbs.	971 lbs.	1,110 lbs.	1,543 lbs.

\* Nestable