WASTE HANDLING GUIDELINES

Single - Family Residential

Multi - Family Residential

Commercial

Trash Enclosures

Construction and Demolition Debris

Roll-Offs and Compactors

CITY OF
Fremont
Environmental Services Division
January 2018
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I. FREMONT 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 trash management for 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 single-family and multi-family residential properties.

3. Weekly garbage and recycling services are required for all commercial properties. Organics collection services are required for businesses and institutions that generate a significant amount of organic material per week, such as restaurants and grocery stores.

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 are to 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 (M-Sat). Commercial recycling collection is available up to five (5) days per week (M-F). Commercial composting collection is available five (5) days per week. (M-F).

9. Alameda County Ordinance 2008-01 prohibits landfilling plant and tree debris. The plant material must be composted or delivered to an approved recycling facility. Additional fees may apply if plant debris is not separated from other debris.
B. Residential Design Requirements

1. Single-Family 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. **Cart Storage Requirements:**

   i. All garbage, recycling, and organics carts must be stored in the garage out of public view. If sufficient garage space is not available for storing garbage, recycling, and organics carts, residents must have the 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.

   ii. Storage space required for three (3) wheeled carts: one garbage cart, one recycling cart, and one organics cart is 27 square feet of floor space by 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. A grass, concrete or other all-weather surface must 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 and pavers are prohibited along the path from the cart storage area to the set-out location.

![Figure 1: Wheeled Cart Storage](image)
Table 1: Wheeled Cart Dimensions

<table>
<thead>
<tr>
<th>Wheeled Carts</th>
<th>Length (feet)</th>
<th>Width (feet)</th>
<th>Height (feet)</th>
<th>Height w/ Lid Open (feet)</th>
<th>Footprint (sq. ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 gallon</td>
<td>2</td>
<td>1.5</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>64 gallon</td>
<td>2</td>
<td>2</td>
<td>3.5</td>
<td>5.5</td>
<td>4</td>
</tr>
<tr>
<td>96 gallon</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>6.5</td>
<td>6</td>
</tr>
</tbody>
</table>

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 aisle, the truck must make four passes up and down the street.

iii. Trucks cannot back up more than 150 feet. Backup must be on an unobstructed straight path. Truck will not back out into a public street.

iv. Slope – Trucks cannot access streets with a slope of more than 15%

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

- Garbage may be collected up to 6 days per week.
- Recycling may be collected up to 5 days per week.
  Organics may be collected up to 5 days per week.
  Twice daily 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. Separate storage for organics
           collection must be provided in the same area as the chutes, and in
           the trash room and/or in the trash enclosures. Chutes are not
           required for organics.

        3. Chute vestibule rooms must be distributed throughout the
           complex so no one must travel over 250 feet to dispose of
           garbage, recycling and organics.

        4. 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).

        5. Chute systems must comply with current CA building codes for 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 or trash room for all units without access to an individual garage.

ii. Trash enclosures/rooms must be distributed throughout larger complexes so that no resident will have to travel more than 250 feet to reach a trash enclosure/trash room.

iii. Trash enclosures/rooms 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**

<table>
<thead>
<tr>
<th>Garbage</th>
<th>Number of units x 0.33cy/unit = amount of cubic yards of garbage generated per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling</td>
<td>Amount of garbage generated per week x 0.50</td>
</tr>
<tr>
<td>Organics</td>
<td>4 gallons per unit per week</td>
</tr>
</tbody>
</table>

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

   *Example for a 6-unit property - 6 units x 0.33cy/unit = 1.98 cubic yards of garbage and recycling per week.*

   A 2-cubic yard bin would be large enough for weekly garbage. 50% of the 2-yard bin capacity is needed for recycling, or 1 cubic yard. One cubic yard = approximately 200 gallons.

   *Options: Use a 1 cubic yard bin or two 96-gallon wheeled carts for recycling.*

vi. Refer to Section D: Trash Enclosure Design Requirements
C. Commercial and Industrial Requirements

Individual or centralized shared commercial service locations

- Garbage may be collected up to 6 days per week. Recycling may be collected up to 5 days per week. Organics may be collected up to 5 days per week. Twice daily 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. These items are not permitted to be stored in the trash enclosure. 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 businesses to recycle cardboard, paper, recyclable glass food and beverage containers, aluminum and steel food and beverage containers, (#1) PET and (#2) HDPE plastic bottles, food scraps and compostable paper. Visit www.recyclingrulesac.org for more information.

2. External Storage Requirements

   a. A trash enclosure is required as part of any commercial, industrial, institutional, or residential development for which a building permit application is required.

   b. Roofed trash enclosures are required for garbage, recycling, organics, and tallow receptacles for commercial, industrial, and institutional facilities.

   c. Trash enclosures must be large enough to store the size and amount of garbage and recycling containers necessary for the businesses.

   d. Each parcel/lot must have at least one trash enclosure and each
standalone building must have access to a trash enclosure. A commercial or industrial development may need multiple trash enclosures to meet the required amount of capacity and make it readily accessible to tenants, at the discretion of the staff.

e. Site Plan and Architectural Review approval is required. An architect or civil engineer must draft site plans for existing or proposed trash enclosures. Plans submitted shall include:

   i. Location of trash enclosure(s) on property
   ii. Description of materials used for enclosure construction
   iii. Elevation and dimensioned details (width, length, height)
   iv. 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.
   v. Structural details for roof and footings
   vi. Easements, if any.

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
   vi. Space limitations

  g. Review the Fremont Municipal Code Planning and Zoning Section 18.190.440
3. **Commercial and Industrial Requirements for Food Service Facilities**
   
a. Trash enclosures are required to store garbage, recycling, organics, and tallow receptacles for commercial, industrial, and institutional food service facilities. Food service facilities include, but are not limited to: restaurants, markets, grocery stores, bakeries, bars, catering facilities, and food vending machine/distributors, etc.

b. All NEW food service facilities require a trash enclosure with:

   i. A solid metal roof and solid metal gates, painted with rust inhibitive paint

   ii. Space for trash, recycling, organics, and grease/tallow receptacles

   iii. Two-compartment sump or grease interceptor with a drain connected to the sanitary sewer (per Union Sanitary District)

   iv. A hot/cold water hose bib (per Alameda County Health Department)

   v. The interior concrete pad must be sloped to drain toward the 2-compartment sump within the enclosure

   vi. A mechanism for secondary containment of spilled oil/grease, per approval from Union Sanitary District.

c. Trash enclosures must comply with regulations from the City of Fremont, the Union Sanitary District and the Alameda County Environmental Health Department, as applicable.
d. The applicant must contact and submit plans to Union Sanitary District for specific sanitary sewer connection and discharge requirements, including oil-water or grease separators or interceptors (www.unionsanitary.com). The applicant must submit plans to the Alameda County Environmental Health Department for restaurant specifications and requirements www.acgov.org/aceh/index.htm – Contact ACEHD at (510) 567-6700.

e. Consider designing space for indoor grease/tallow containers instead of having outdoor communal containers. This avoids having multiple containers in the trash enclosure for each restaurant, and eliminates the potential for spillage to the enclosure. Indoor grease container design must comply with Alameda County Environmental Health Department requirements for grease/tallow storage.

f. Tenant improvement plans for existing food service facilities (using an existing trash enclosure) must be submitted to the City of Fremont, Union Sanitary District, Alameda County Health Department, and for review on a case by case basis.

g. Certain facilities may also require a trash enclosure upgrade under the following conditions:

i. **ADD TRIGGERS FROM FMC**

   ii. Banquet facilities associated with a hotel or motel, or stand-alone facilities

   i. 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. “Recreational, amusement, sport”, (e.g. movie theaters, bowling alleys, billiards, night clubs, sports complexes) “care or treatment” (e.g. hospitals, medical centers, retirement homes, nursery homes, schools, etc.) facilities that provide food and beverages.
D. Trash Enclosure Design Requirements

Trash enclosures must be enclosed on four sides and meet the requirements below:
D. Trash Enclosure Design Requirements (continued)

1. **LOCATION**
   a. Trash enclosures shall be located so that they are convenient and accessible to tenants, maintenance personnel and Republic Services.
   
b. Trash enclosures/rooms must be located on the property so a tenant will not have to travel more than 250 feet to reach a trash enclosure/trash room.
   
c. Trash enclosures shall not be located along any frontage streets or roadways.
   
d. Trash enclosures shall not be located adjacent to or on top of a storm drain where the grading will result in drainage of runoff into the storm drain. See Stormwater requirements.

2. **ACCESS / CLEARANCE**
   a. 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, not on the public streets.
   
b. Each project must provide on-site access with sufficient space to drive through or turn around (ie, in a hammerhead). The required outside turning radius for collection trucks is 37.5 feet, inside radius is 22.5 feet.
   
c. Commercial collection trucks access the trash enclosure and bins at the front of the vehicle. Front end loader vehicles need unobstructed clearance to access the trash enclosure.
   
   ![Figure 7: Emptying a Front End Load Bin](image)

   d. If collection trucks must enter under a building, parking garage or gate, there must be 14 feet of overhead clearance to drive under, without servicing the bin.
   
e. To service/empty the container, overhead clearance of 24 feet is required from ground surface to lowest point of overhead obstruction (e.g. tree, rafter, roof, fixtures, etc.)
   
f. Containers, including tallow containers, must be placed so they will not interfere with the collector’s ability to service the bins in the trash enclosure, either by blocking access or as a result of leaking oil that creates a hazard for drivers.
D. Trash Enclosure Design Requirements (continued)

3. **DIMENSIONS**
   a. All trash 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. Standard trash enclosures shall be 18’ x 19’.

   c. A 6-inch wide x 6-inch high curb or parking bumper along the interior perimeter of the enclosure is required to protect the walls from damage by the receptacles.

   d. Trash 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.

   e. Allow 12 inches between the wall and each receptacle to accommodate container removal and to ensure tenants have full access to each bin.

   f. Trash 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.

   g. Trash enclosures shall be designed based on the size of bins, the number of bins, the tenant or property use, but should remain under 500sf. If additional capacity is required, another trash enclosure may be needed.

   h. See Table 5 for Front End Loader/Bin Dimensions.
D. Trash Enclosure Design Requirements (continued)

Table 5: Front End Load Bin Dimensions*

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

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

Figure 8: Front End Load bin

Figure 9: A 6-cubic-yard Front End Load bin
D. Trash Enclosure Design Requirements (continued)

4. **STORMWATER**
   a. Stormwater is prohibited from entering the trash 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 trash enclosure pad shall be designed to prevent runoff from inside the trash enclosure entering the storm drain system.
   
   d. The trash enclosure shall be built to contain litter and garbage and prevent scattering by wind or runoff.
   
   e. For food service facilities, a hose bib shall be provided for periodic wash down of the inside the trash enclosure only.
   
   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 require approval from USD prior to receiving any building permit approval by the City of Fremont.

5. **PAD INTERIOR**
   a. If there is an interior floor drain connected to the sanitary sewer inside the trash enclosure, the pad shall slope toward the interior drain.

   ![Drainage flow line](image)

   **Figure 10: Pad interior drainage to sanitary sewer** (plan view)

   **Figure 11: Pad interior drainage to sanitary sewer** (section)
d. If an interior floor drain connecting to the sanitary sewer is not provided, the inside pad shall drain out to the landscaping, preventing all runoff from entering the storm drain system.

Figure 12: Pad interior drainage to landscaping (plan view and section)
D. Trash Enclosure Design Requirements (continued)

6. **APRON**
   a. The concrete 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. Do not place a lip/berm at the entrance that could impede container removal.

7. **MATERIALS**
   a. The design of the enclosure shall incorporate the same materials used for the primary building for a coordinated look and feel.

   b. The walls shall be constructed of CMU.

   c. Chain link fencing with wooden/plastic slats are prohibited.

   d. A graffiti resistant coating is required.

   e. Roofs and gates shall be solid metal, 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 trash enclosures are required to be made of CMU, Type I or Type II fire resistive construction.
2. Trash 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 must have solid metal gates with latches and be secured in both 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. Double gates are required for all enclosures.
   
   d. All gates must be lockable using a standard padlock.
   
   e. Gates to the trash enclosure should open to 120 degrees.
   
   g. A smaller personnel access door should be installed to facilitate ease of use.
   
   h. The gates should be capable of being latched open so that an 8-foot wide truck can access the enclosure.

  ![Figure 14: Metal Trash Enclosure Gates](image14)

  ![Figure 15: Personnel door on enclosure](image15)
9. **ROOF**  
   a. Solid metal roofs are required for all trash enclosures.

   b. The roof shall extend past any open side of the enclosure, except over 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 roofs, including galvanized roofs, must be coated with rust-inhibitive paint.

   e. Roofs shall be sloped to drain to available landscaping. If landscaping is not available, the roof may be sloped to drain away, avoiding run-on into the enclosure.

10. **LANDSCAPING**  
   a. Landscaping shall be designed with adequate energy dissipation (e.g. splash blocks, cobbles, etc.) to prevent erosion from roof runoff.

   b. Additional screening may be required such as landscaping or decorative materials to enhance the appearance of the trash enclosure structure.

   c. Landscape requirements subject to change in response to State Executive Order B-29-15 (Drought State of Emergency).
D. Trash Enclosure Design Requirements (continued)

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 reflect current regulations. Signage is available at www.recyclingrulesac.org

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.
E. Roll-Off / Compactor Requirements

1. Roll-Off Containers
Roll-off containers are typically used in larger industrial locations or for temporary use on a construction site.

![30 yard Roll-Off container](image1)

**Figure 18: 30 yard Roll-Off container**

<table>
<thead>
<tr>
<th>Commercial Roll-Off</th>
<th>Length (feet)</th>
<th>Width (feet)</th>
<th>Height (feet)</th>
<th>Footprint (sq. ft.)</th>
<th>Weight Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 cubic yards</td>
<td>7.3</td>
<td>8</td>
<td>5.0</td>
<td>58</td>
<td>4 tons</td>
</tr>
<tr>
<td>10 cubic yards</td>
<td>12</td>
<td>8</td>
<td>3</td>
<td>104</td>
<td>4 tons</td>
</tr>
<tr>
<td>14 cubic yards</td>
<td>12</td>
<td>8</td>
<td>4</td>
<td>104</td>
<td>5 tons</td>
</tr>
<tr>
<td>20 cubic yards</td>
<td>18</td>
<td>8</td>
<td>4</td>
<td>150</td>
<td>5 tons</td>
</tr>
<tr>
<td>30 cubic yards</td>
<td>20</td>
<td>8</td>
<td>8.5</td>
<td>160</td>
<td>5 tons</td>
</tr>
<tr>
<td>40 cubic yards</td>
<td>22</td>
<td>8</td>
<td>8.5</td>
<td>176</td>
<td>6 tons</td>
</tr>
</tbody>
</table>

![20 cubic yard roll-off dumpster](image2)

**Figure 19: 20 cubic yard roll-off dumpster**
Figure 20: Roll-Off Servicing
E. Roll-Off / Compactor Requirements

2. **Compactors**
   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. 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.).
   f. 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.
   g. 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.
   h. Site plans must show location of all compactors and indicate truck routes, including turning templates.
   i. Republic Services does not sell, lease, or provide compactors. Applicant must provide written agreement from Republic Services to the Environmental Services Department that the specific compactor may be serviced.
   j. Compactors shall comply with trash enclosure standards for location, access, screening, and design requirements.
   k. Compactor areas for food service facilities must include a roof and sanitary sewer drainage connection.
1. Late or unplanned addition of a compactor requires additional approval. Additional space and electrical connections, as well as separate building permits may be required.

m. 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 will ruin the asphalt/concrete prematurely.

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 25 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.

Figure 21: Compactor servicing
Table 5: Typical Compactor Dimensions

<table>
<thead>
<tr>
<th>Commercial Compactors*</th>
<th>Length (feet)</th>
<th>Width (feet)</th>
<th>Height (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 cubic yards</td>
<td>14 – 18</td>
<td>8</td>
<td>6 – 8</td>
</tr>
<tr>
<td>30 cubic yards</td>
<td>20 – 25</td>
<td>8</td>
<td>7 – 8</td>
</tr>
<tr>
<td>40 cubic yards</td>
<td>22 – 26</td>
<td>8</td>
<td>7.5</td>
</tr>
</tbody>
</table>

*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.
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. Upgrades to the trash enclosure are required by the City of Fremont and are the responsibility of the property owner.

4. Trash enclosures are required to be maintained in good working condition and in the condition that they were approved.

5. The trash enclosure is only for storage of solid waste, recycling, cardboard, organics and tallow receptacles only.

6. All receptacles are required 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 interior pad 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
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 – Construction & Demolition

1. Republic Services is the exclusive debris box hauler for all construction debris, except for separated loads of soil, asphalt or concrete.

3rd party trucking or hauling company use is prohibited.

2. Separated single commodity loads of soil, asphalt, or concrete may be hauled by any approved hauling company. Individual loads of recycling must contain 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 recycling facility;
   d. City of origin must be listed as Fremont on all weight tags and receipts.

B. Recycling Requirements

1. The City of Fremont and the CA Green Building Code 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 (additions)

d. All new commercial projects

e. All commercial tenant improvements with a permit value of $200,000+

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 65% of all remaining project debris

      iii. Separate and compost 100% of plant and tree debris. Plant and tree debris cannot be landfilled in Alameda County.
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. Visit [www.fremont.gov/construction](http://www.fremont.gov/construction) for more information
# IV. RESOURCES

A. Republic Services Container Dimensions

## Dimensions of Solid Waste & Recycling Containers

<table>
<thead>
<tr>
<th>Wheeled Cart</th>
<th>Length (inches)</th>
<th>Width (inches)</th>
<th>Height Lid Closed (inches)</th>
<th>Height Lid Open (inches)</th>
<th>Footprint (sq ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 gallon</td>
<td>24</td>
<td>18</td>
<td>37</td>
<td>31</td>
<td>3.17</td>
</tr>
<tr>
<td>94 gallon</td>
<td>24</td>
<td>22</td>
<td>46</td>
<td>36</td>
<td>4.17</td>
</tr>
<tr>
<td>30 gallon</td>
<td>32</td>
<td>30</td>
<td>41</td>
<td>75</td>
<td>7.06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bins / Dumpsters</th>
<th>Length (inches)</th>
<th>Width (inches)</th>
<th>Height Lid Closed (inches)</th>
<th>Height Lid Open (inches)</th>
<th>Footprint (sq ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 cubic yard</td>
<td>60</td>
<td>36</td>
<td>51</td>
<td>56</td>
<td>15.97</td>
</tr>
<tr>
<td>2 cubic yards</td>
<td>60</td>
<td>36</td>
<td>50</td>
<td>92</td>
<td>21.27</td>
</tr>
<tr>
<td>3 cubic yards</td>
<td>60</td>
<td>42</td>
<td>56</td>
<td>102</td>
<td>24.33</td>
</tr>
<tr>
<td>4 cubic yards</td>
<td>60</td>
<td>41</td>
<td>56</td>
<td>123</td>
<td>28.33</td>
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<tr>
<td>6 cubic yards</td>
<td>60</td>
<td>67</td>
<td>72</td>
<td>150</td>
<td>37.92</td>
</tr>
<tr>
<td>7 cubic yards</td>
<td>80</td>
<td>72</td>
<td>72</td>
<td>156</td>
<td>40.56</td>
</tr>
<tr>
<td>6 cubic yards</td>
<td>80</td>
<td>75</td>
<td>36</td>
<td>147</td>
<td>40.66</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commercial Roll-Off Boxes</th>
<th>Length (feet)</th>
<th>Width (feet)</th>
<th>Height (feet)</th>
<th>Footprint (sq ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 cubic yards</td>
<td>7.75</td>
<td>8</td>
<td>6.67</td>
<td>99.00</td>
</tr>
<tr>
<td>10 cubic yards</td>
<td>13</td>
<td>8</td>
<td>5.25</td>
<td>164.00</td>
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<tr>
<td>20 cubic yards</td>
<td>16</td>
<td>12</td>
<td>2.75</td>
<td>304.00</td>
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<tr>
<td>30 cubic yards</td>
<td>18</td>
<td>15</td>
<td>3.25</td>
<td>460.00</td>
</tr>
<tr>
<td>40 cubic yards</td>
<td>22</td>
<td>20</td>
<td>3.25</td>
<td>576.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commercial Compactors</th>
<th>Length (feet)</th>
<th>Width (feet)</th>
<th>Height (feet)</th>
<th>Footprint (sq ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 cubic yards</td>
<td>74</td>
<td>6</td>
<td>6</td>
<td>112.00</td>
</tr>
<tr>
<td>30 cubic yards</td>
<td>74</td>
<td>6</td>
<td>7</td>
<td>160.00</td>
</tr>
<tr>
<td>40 cubic yards</td>
<td>74</td>
<td>6</td>
<td>7</td>
<td>176.00</td>
</tr>
</tbody>
</table>

* Roll-off box lengths vary by manufacturer and size; dimensions listed are most common by size
** Compactor box length varies by manufacturer; most are approximately 6' wide & 8' high

* Please review the requirements of your specific contract to ensure compliance.

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* Footprint is calculated using the largest dimension of the container.

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*Lengths and widths are approximate and may vary depending on the manufacturer and specific model.*
### B. Useful Websites

<table>
<thead>
<tr>
<th>Agency</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Fremont – Environmental Services Division</td>
<td><a href="http://www.fremont.gov/environment">www.fremont.gov/environment</a></td>
</tr>
<tr>
<td>City of Fremont Municipal Code</td>
<td>fremont.gov/73/Municipal-Code</td>
</tr>
<tr>
<td>City of Fremont Construction &amp; Demolition Debris Reporting Forms</td>
<td>fremont.gov/Construction</td>
</tr>
<tr>
<td>Alameda County Environmental Health Department – Trash Enclosure Requirements</td>
<td><a href="http://www.acgov.org/aceh/food/plan_check.pdf">www.acgov.org/aceh/food/plan_check.pdf</a></td>
</tr>
<tr>
<td>Alameda County Household Hazardous Waste Facility</td>
<td><a href="http://www.stopwaste.org/hhw">www.stopwaste.org/hhw</a></td>
</tr>
<tr>
<td>Alameda County Water District</td>
<td><a href="http://www.acwd.org">www.acwd.org</a></td>
</tr>
<tr>
<td>Alameda County Ordinance for Commercial Recycling and Organics Requirements</td>
<td><a href="http://www.recyclingrulesac.org/">www.recyclingrulesac.org/</a></td>
</tr>
<tr>
<td>Fremont Recycling and Transfer Station</td>
<td><a href="http://www.fremont-recycling.com/">www.fremont-recycling.com/</a></td>
</tr>
<tr>
<td>Republic Services</td>
<td><a href="http://local.republicservices.com/site/alameda-county">http://local.republicservices.com/site/alameda-county</a></td>
</tr>
<tr>
<td>Union Sanitary District (sewer agency)</td>
<td><a href="http://www.unionsanitary.com/">www.unionsanitary.com/</a></td>
</tr>
</tbody>
</table>