Introduction
The City of Santa Cruz Department of Public Works is issuing this standard design policy for refuse container storage facilities. The recent adoption of Chapter 16.19 “Storm Water and Urban Runoff Pollution Control” of the City Municipal Code has created new requirements which are described in the design policy.

Materials for Construction
Refuse storage facilities shall be constructed to the following minimum standards:
- Floors – cast in place concrete
- Walls – masonry block or equal; wood frame with protective blocking
- Gates – Constructed of metal with greater than 90-degree swing capability

Configuration and Site Planning
It is the preference of the City Sanitation Division to serve commercial and multi-family residential properties with front load service. Front load service is more efficient and is less costly to the consumer. This service requires the collection vehicle to enter the property. A fire lane (i.e. 20-foot wide lane free of parking) is required for any collection vehicle to enter private property. For new site development developers are encouraged to plan for front load service.

Refuse storage facilities shall be designed with double swing gates located on the long dimension of the structure. The double swing gates shall be as wide as the long dimension of the structure as possible. A personnel door shall be provided on one of the structures other elevations. The minimum size of a refuse storage facility shall 13-feet by 8-feet clear dimensions. Such a facility will accommodate a 1 or 2 yard container for refuse and several recycling containers.

Storm Water Pollution Control Best Management Practices
Refuse container storage facilities shall have an all weather roof with an 8-feet minimum high ceiling for rear load service and a 12-feet minimum high ceiling for front load service. A floor drain will be installed in the slab and connected to the sanitary sewer. The slab shall be warped with slopes at approximately 1% (1/8-inch per foot) to collect any effluent. A hose bib will be installed for the purpose of cleaning the interior of the structure.
City of Santa Cruz  
Refuse Container Design Standard 

General:  
1. Enclosures will be designed with at least 50% of volume capacity for recycling containers, typically one refuse container and one recycling container.  
2. Dimensions vary based on projected usage. When multiple containers are needed, allow 30" between containers.  
3. Containers must be placed on a flat surface in the enclosure, free of dips and bumps. The container should be left in the position that the driver services it.  
4. A personnel access door is recommended on one of the short length walls.  
5. Customer is responsible for maintaining enclosure. Enclosure must be kept free of all litter, storage of other materials, rodents and insects other offensive odors. Materials shall not be allowed to accumulate such that a visual or public health or safety nuisance is created.  
6. Enclosures are to be used for refuse and recycling removal equipment only. Storage of other equipment or material will not be allowed.  
7. As a condition of service, property owners and other customers accept all risk of property loss or liability for damages occurring from normal service operations.  
8. Variance from these design and construction standards is allowable only with written authorization from the Sanitation Division. Enclosures not built to design standards are subject to premium service charges. 

Pads and Access Areas:  
1. All access to the enclosures should be engineered to withstand a fully loaded refuse truck, up to 30 tons. Concrete surfacing is recommended for all pads and access areas.  
2. Concrete cast in place will be used for the enclosure floor at a minimum. It is recommended that this be constructed with at least six inch reinforced concrete.
3. If asphalt is used on the approach, the interface between the concrete and the asphalt is susceptible to premature failure from the weight of the refuse trucks. Sanitation will not be responsible for any damage where asphalt is used.

4. Floors will slope approximately 1% (1/8 inch per foot) to collect any effluent. A floor drain will be installed and connected to the sanitary sewer. It is illegal to drain refuse enclosures directly to stormwater.

5. The drain must be installed so that it is not under the wheels of the containers nor in path of the servicing vehicle.

6. A hose bib will be installed for cleaning of the interior of the enclosure. It must be installed so that it is protected from damage as the containers are moved for service.

Height:
1. An all weather roof is required with a twelve-foot ceiling.
2. If a one or two-yard container is all that will be utilized, the ceiling height may be eight-feet.
3. Twenty-foot vertical clearance from overhead obstruction is required where the vehicle lifts the container. Generally this is within eight feet from the enclosure.

Access:
1. Approach to the container requires a clear fifteen-foot lateral approach to service the container. The vehicle must be able to directly approach the service container.
2. With gates open, the service vehicle must be able to directly access the container, without the driver readjusting the location of the container.
3. A minimum turning radius of forty-five feet must be maintained for the collection vehicle.
4. If the collection vehicle must back up, a clear distance of seventy feet is required.
Walls:
1. Walls to be constructed in masonry block or equal. Wood frame may be utilized with protective blocking.
2. Lid ears and bin pockets will rub enclosure wall. Wood or metal protection will protect the enclosure from damage. Mounting bolts should be inset to protect users from injury.

Gates:
1. Enclosures will be designed with double swing gate located on the long dimension of the structure.
2. Gates must have a clear-span of 8' minimum. Gates should be two inches off the ground and hung on the outside, so that when open they are out of the container's way.
3. Gate hardware should be of sufficient strength to accommodate repetitive swinging, and individuals wearing gloves should be able to operate them.
4. Gates will be constructed of metal with swing more than 90°

Clearances:
1. Vertical approach and exit clearances for service vehicles must be maintained at least fifteen (15') feet high.
2. Vertical dumping height for a service vehicle must be maintained at twenty (20') feet. This distance is located up to eight feet away from the enclosure, on the service pad.

Container Sizes:

<table>
<thead>
<tr>
<th>Container</th>
<th>Width</th>
<th>Depth</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carts</td>
<td>25”</td>
<td>34”</td>
<td>46”</td>
</tr>
<tr>
<td>1 yard rear load container</td>
<td>81”</td>
<td>36”</td>
<td>52”</td>
</tr>
<tr>
<td>2 yard rear load container</td>
<td>81”</td>
<td>40”</td>
<td>52”</td>
</tr>
<tr>
<td>4 yard front load container</td>
<td>81”</td>
<td>55”</td>
<td>76”</td>
</tr>
<tr>
<td>6 yard front load container</td>
<td>81”</td>
<td>71”</td>
<td>76”</td>
</tr>
</tbody>
</table>
City of Santa Cruz
Refuse Container Design Standard

Front Loader
6 yard Refuse Container
4 yard OCC

Service Pad Approach

Drain to Sanitary Sewer

6 yard Refuse

4 yard Cardboard

209 Inches

96 Inches

156 Inches
City of Santa Cruz
Refuse Container Design Standard

Front Loader
6 yard Refuse Container
2 yard OCC
Recycling Carts

Service Pad Approach

Drain to Sanitary Sewer

6 yard Refuse

2 Yard Cardboard

96 Inches

209 Inches

81 inches

40 inches

156 Inches
City of Santa Cruz
Refuse Container Design Standard

Rear Loader
2 yard Refuse Container
Recycling Carts

Service Pad Approach

Drain to Sanitary Sewer

96 Inches
40 Inches
156 Inches

2 yard Refuse
City of Santa Cruz
Refuse Container Design Standard

Rear Loader
2 yard Refuse Container
Recycling Carts

156 Inches
81 inches
96 Inches

Service Pad Approach

Drain to Sanitary Sewer

2 yard Refuse
City of Santa Cruz
Refuse Container Design Standard

Front Loader
4 yard Refuse Container
4 yard OCC Container

Service Pad Approach

Drain to Sanitary Sewer

4 yard Refuse

4 yard Cardboard

96 Inches

209 Inches

81 inches

156 Inches
City of Santa Cruz
Refuse Container Design Standard

Front Loader
4 yard Refuse Container
Recycling Carts

209 Inches
Drain to Sanitary Sewer

81 inches
4 yard Refuse

96 Inches

156 Inches
Service Pad Approach