

City of Cupertino

Guidelines for Non-Residential Building Trash and Recycling Enclosures

1. SOLID WASTE REQUIREMENTS

During the development review process, prior to issuing grading, demolition, tenant improvement or building permits, the following conditions and requirements must be addressed. Other conditions and requirements that pertain to an individual development project may be identified during the Planning entitlement review process or the Development Organization process. The design standards enumerated below must be clearly identified on all plans submitted for review

- Commercial, public, industrial, and institutional buildings must have enclosures for garbage, recycling and organics containers. Enclosures shall be adequate in capacity, number and distribution to serve the development. An adequate number of bins and containers to allow for storage and collection of garbage, recyclables and organics shall be supplied for each enclosure.
- Enclosures are required for all waste compactors and must be designed to cover all hydraulic lines and accessory components required for operation of the compactor.
- The enclosure should be configured and located on the property so as to allow ease of access by collection vehicles. Review of plans by the City's franchised waste and recycling hauler is required to ensure access.
- Municipal solid waste (MSW) collection service is required for all occupied commercial properties, and is provided by the City's franchised waste hauler on an exclusive basis. The City's franchised waste hauler provides collection services for garbage, recyclables and organic materials (food waste and other compostables).
- At a minimum, garbage, recyclables, and organics must be collected once a week, but service must be adequate to maintain the property and to keep material intended for disposal in containers with closed lids.
- Any debris generated during construction or remodeling should be handled in accordance to the City of Cupertino's C&D recycling ordinance (CMC 16.72). Contact the Environmental Programs Division at 408-777-3354 for additional information.

2. NON-RESIDENTIAL BUILDING SPACE REQUIREMENTS

Non-residential buildings and uses within all zoning districts must provide internal and external storage areas for garbage, recyclables and organics. The amount of space to be set aside for internal and external storage depends on the type of use, business activity and square footage of operating space (See Section 6 below). The exact size and location of the storage area(s) must take into account

the types and quantities of garbage, recyclables and organics to be generated by the proposed land use and business type, as well as the mode of collection to be used. Please contact the City's franchised hauler to review the specific service level needs for your development, including capacities and types of containers for garbage, recycling and organics. It is the applicant's responsibility to ensure that a trash enclosure is sized appropriately to contain all waste bins required for the property and the appropriate enclosure door, interior ceiling, and other clearances for movement of bins and staff servicing the waste containers are met.

3. REQUIREMENTS FOR TRASH ENCLOSURE DESIGN AND CONSTRUCTION

The following are minimum requirements for new construction or remodeling of Non-Residential buildings.

- Areas designed for the storage and collection of garbage, recyclables, organics or other discarded materials shall conform to any applicable architecture and site design standards and guidelines.
- Areas designed for storage and collection of garbage and recyclables at Non-Residential buildings shall observe the requirements of the California Building Code and the requirements of CCR Title 24, regarding accessibility to garbage and recycling collection containers for persons with disabilities.
- Site plan and architectural approval is required for enclosures, which must also conform to enclosure design and construction requirements set out in the Cupertino Municipal Code and in these Guidelines.
- The plans submitted to the City shall include:
 - A site plan of the overall development
 - Design, square footage, and location of the areas for garbage, recyclables and organic material storage and collection
 - The anticipated number, type, size (gallons or cubic yards) and placement of bins and containers
 - Adequate fencing, lighting, signage and other security measures to insure the safety of development's occupants, facility maintenance personnel, residents, and the public
 - Signage to strongly discourage illegal dumping into and around garbage enclosures
 - Signage(as needed) to deter scavenging and theft of materials set out for collection
 - Adequate area for closed-lid containment of recyclable materials
 - Adequate area for closed-lid containment of organic materials
 - Description of materials used for enclosure construction
 - 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
 - Adequate area for truck access routes and turning radius
 - Adequate pads or ground support in service areas for trucks (check with City's franchised hauler for requirements)
 - Relationship of enclosure to building entrances and proposed truck route
 - Other items that will be housed in the same enclosure (e.g., maintenance equipment, plumbing fixtures, etc.)

4. ENCLOSURE CONSTRUCTION & DESIGN, DETAIL REQUIREMENTS.

The following are specific requirements for new construction or remodeling of Non-Residential Buildings.

- The development must include adequate, accessible and convenient areas for storing and loading garbage, recyclable and organic materials. An enclosure shall be within 250 feet of the appropriate doorway of each business.
- The enclosure should be constructed on a flat area with a grade of no more than 2%, in order to ensure that containers can be safely serviced and returned to the enclosure.
- Enclosure design must be architecturally compatible with nearby buildings, topography and vegetation. The wall finish and materials for the enclosure must match or be compatible with the primary buildings at the site.
- External storage areas shall not be located in any required parking, landscaped, or open space, or any areas required by the City of Cupertino to be maintained as unencumbered.
- Enclosures shall be readily accessible to building occupants, facility maintenance personnel, and to the franchised waste hauler. Enclosures shall provide adequate access so as to minimize effort in the collection and removal of container contents from the enclosures. Site plans for enclosures should consider vehicular and pedestrian traffic patterns.
- Enclosures shall be appropriately located and screened from view on at least three sides by a wall at least six feet in height, and on the fourth side by gates not less than five feet in height. Solid metal gates with latches and bolts are one option. Applicants may propose an alternative gate design if said design accomplishes the desired visual effect. Alternative designs will be subject to the review and approval of the City of Cupertino Planning Division.
- Enclosures shall be covered to prevent rainwater infiltration into the storage area. A horizontal or sloped roof shall be designed of solid material for protection of the containers from the elements. The roof should extend sufficiently outward in all directions so that wind-blown rain will not enter the interior of the storage area. A minimum of eight feet of vertical clearance within the storage area shall be provided to allow the container lids to be fully opened and closed. If fire sprinklers or drop lighting are installed within the enclosure, the minimum vertical clearance of 8 feet will be measured from the lowest point of the sprinkler heads, lighting, or any other fixture.
- Enclosures and areas around enclosures shall be designed to prevent liquid run-on to the area and run-off from the area, and to contain litter and garbage so that it is not dispersed by the wind or runoff. Enclosures and areas around enclosures shall not discharge to the storm drain system. If proposed use of the development includes a food service facility, any drains installed in or beneath enclosure areas shall be connected to a grease removal device prior to discharging to the sanitary sewer.

- Overhead clearance of 20-feet must be provided in front of the enclosure to allow containers to be emptied by front-end loader collection vehicles.
- Driveways and travel aisles shall conform to local building code requirements for garbage and recyclables collection access and clearance (these requirements should be the same as the Fire Department regulations). Unobstructed access shall be provided for collection vehicles and collection company personnel, as well as for facility occupants and maintenance staff.
- For safety reasons, a turnaround must be provided for any street, driveway or travel aisle that would otherwise require the collection truck to back up a distance greater than 100 feet. A minimum of a 42-foot turning radius is required for solid waste collection vehicles.
- For properties that need to lock their enclosure or bins, the City's franchised hauler will supply container locks and keys at a lock charge fee in accordance with the service agreement for the property.
- The gates should be maintained in good working order and should remain closed except when in use. The enclosure opening, including gates and hinges, must provide a minimum opening of nine (9) feet to allow containers to be moved in and out of the enclosure.
- A minimum of eight inches between the walls and the bins is needed to protect the walls and insure that the bins can be removed from the enclosure to be serviced. Installation of curbing is required to protect the enclosure walls. If internal posts are used to support the walls and/or roof, padding or other suitable material shall be installed on the posts to protect damage by waste containers.
- Any internal plumbing fixtures within the enclosure shall be protected by durable shielding or curbing to prevent damage by waste containers.
- To allow ease of access in loading bins, if multiple containers are stored in one enclosure a minimum of thirty inches clearance between containers is required.
- Containers exceeding four cubic yards cannot be placed on wheels, and therefore cannot be rolled out of the enclosure for service by the collection vehicle. Enclosures that will accommodate containers six cubic yards in capacity or greater shall also incorporate the following design features:
 - Door openings shall be a minimum of ten (10) feet in width to allow for direct pickup by the collection vehicle.
 - The entrance gate should be capable of being latched open so that an eight-foot wide truck can access the enclosure.
 - A minimum of 15-foot vertical clearance is required within the enclosure so the collection vehicle can reach the bin.
 - Enclosure must provide for direct access by the collection vehicle. At a minimum, a lane, 10-foot wide by 30-feet in length, must be provided directly in front of the enclosure.
- Other design considerations for enclosures include:

- Increased collection costs (“push/pull fees”) may be incurred if containers must be moved by collection personnel more than 5 feet to be emptied.
- A minimum of eight inches between the wall and the bin is needed to protect the walls and insure that the bin can be removed from the enclosure to be serviced. Installation of curbing is required to protect the enclosure walls.
- To reduce the number of truck trips to provide garbage and recycling services to the property, it is recommended that the developer design for larger capacity containers (with less frequent service) over smaller containers (with more frequent service).
- Where a ramp leads to an enclosure, avoid placing a lip at the entrance that might impede container placement and removal.
- The floor of the enclosure should be concrete, since asphalt can buckle under heavy loads or in hot conditions.
- A concrete pad should be provided outside the entrance to the enclosure. Dimensions should be approximately 10 feet wide and 10 feet long. The pad should be capable of withstanding the impact of the bins being set down, and a 20-ton stationary load.

5. DIMENSIONS OF COMMERCIAL GARBAGE & RECYCLING CONTAINERS

FRONT-LOAD BINS

Bin Size (cubic yards)	Depth (inches)	Width (inches)	Height (inches)	Vertical Clearance (inches)
1.5	33	82	45	78
2	33.5	82	47	108
3	42	82	58	108
4	54	82	64	126
6	68	82	72	140
8	72	82	96	164

WHEELED CARTS

Cart Size (gallons)	Depth (inches)	Width (inches)	Height (inches)	Vertical Clearance (inches)
32	22	18	40	64
64	30	26	44	76
96	36	28	48	82

ROLL-OFF [DEBRIS] BOXES

Box Size (cubic yards)	Length (feet)	Width (feet)	Height (feet)	Vertical Clearance (feet)
8	12	8	2	6
16	14	8	4	7
20	18	8	5	8
30	22	8	5	8
40	24	8	6	9

6. GENERAL SPACE GUIDELINES

Different types of commercial businesses will require different levels of service. Tables 1 – 4 below provide guidelines for the minimum enclosure space for each of the four main categories of business activities. In addition to the space requirements listed in Tables 1 – 4, if multiple bins and carts are to be stored in any one enclosure, space must be provided to allow user access to each of the bins and carts. Access aisles between containers must be a minimum of 30 inches wide.

The general space recommendations below are based on State of California property development standards contained in AB 1327, the California Solid Waste Reuse and Recycling Access Act of 1991, but have been modified to fit the collection system provided in Cupertino. These guidelines are intended to provide general guidance for enclosure space requirements. Please note that these are guidelines only. Enclosures must provide sufficient space for adequate capacity, number and distribution of garbage, recyclables and organics containers to serve the development. Please contact the City’s franchised hauler (Recology South Bay at 408-725-4020) to review the specific service level needs for your development.

The space requirements listed in the tables below reflect only the size of the containers. Within each enclosure, additional space will be required for: (1) curbing to protect the enclosure walls, (2) allow for access to and maneuverability of the containers for service by the collection company, and (3) for adequate and accessible interior areas so that users of enclosure do not have to shuffle receptacles.

Sample enclosure configurations are provided in Figure 1 and Figure 2.

Offices. Office buildings are required to provide a minimum of one container each for garbage, recycling and organics.

Table 1. Minimum Office Building Waste Handling Enclosure Requirements

Building Size (sq. ft)	Garbage (sq. ft)	Recyclables (sq. ft)	Organics (sq. ft)	Total Area (sq. ft)
0-20,000	28	35	21	84
20,001-40,000	28	42	21	91
40,001-60,000	28	70	28	126
60,001-80,000	28	70	28	126
80,001-100,000	35	105	35	175
> 100,000	Offices larger than 100,000 square feet shall require an additional 28 square feet for garbage, 28 square feet for recyclables, and 28 square feet for organics for each additional 40,000 square feet of building.			

Retail Shops. Retail shops are required to provide a minimum of one container each for garbage, recycling and organics.

Table 2. Minimum Retail Shop Waste Handling Enclosure Requirements

Building Size (sq. ft)	Garbage (sq. feet)	Recyclables (sq. ft)	Organics (sq. ft)	Total Area (sq. ft)
0-8,000	28	32	8	68
8,001-16,000	28	42	8	78
16,001-24,000	56	70	21	147
24,001-32,000	56	70	21	147
32,001-40,000	84	70	28	182
> 40,000	Retail shops larger than 40,000 square feet shall require an additional 28 square feet for garbage, 35 square feet for recyclables and 8 square feet for organics for each additional 40,000 square feet of building.			

Food Service Establishments. Restaurants, grocery stores and other businesses that dispose of food wastes are required to provide a minimum of one container each for garbage, recycling and organics. Food service businesses are also required to provide space for storage of grease/fats/oils awaiting collection (usually by a tallow company).

Table 3. Minimum Food Service Waste Handling Enclosure Requirements

Building Size (sq. ft)	Garbage (sq. feet)	Recyclables (sq. ft)	Organics (sq. ft)	Grease/Fat /Tallow	Total Area (sq. ft)
0-5,000	21	35	28	8	92
5,001-10,000	21	42	28	8	99
10,001-15,000	28	70	28	8	134
15,001-20,000	28	70	28	8	134
20,001-25,000	28	84	56	8	176
> 25,000	Restaurants larger than 25,000 square feet shall require an additional 21 square feet for garbage, 28 square feet for recyclables, 21 square feet for organics and 8 square feet for tallow for each additional 10,000 square feet of building.				

Large Venues. Large venues are those that accommodate more than 2,000 paid visitors per day (such as a multiplex theater). Large venues are required to provide one container each for garbage, recycling and organics. If the venue serves prepared food (other than just popcorn), they are also required to provide space for grease/fats/oils awaiting collection (usually by a tallow company).

Table 4. Minimum Large Venue Waste Handling Enclosure Requirements

Building Size (sq. ft)	Garbage (sq. feet)	Recyclables (sq. ft)	Organics (sq. ft)	Total Area (sq. ft)
0-10,000	28	35	21	84
10,001-20,000	35	56	28	119
20,001-40,000	56	84	28	168
40,001-60,000	84	140	56	280
60,001-80,000	112	196	84	392
> 80,000	Every additional 20,000 square feet shall require an additional 28 square feet for garbage and 35 square feet for recyclables and 21 square feet for organics.			

Note: Should the amount of garbage or recyclables exceed the capacity of the bin storage space at any non-residential building, the frequency of collection service must be increased. The City does not allow uncontained, covered and enclosed storage of materials which are intended for disposal.

7. SAMPLE DIAGRAMS OF GARBAGE AND RECYCLING BIN ENCLOSURES

Figure 1. Enclosure Configuration: Square Arrangement

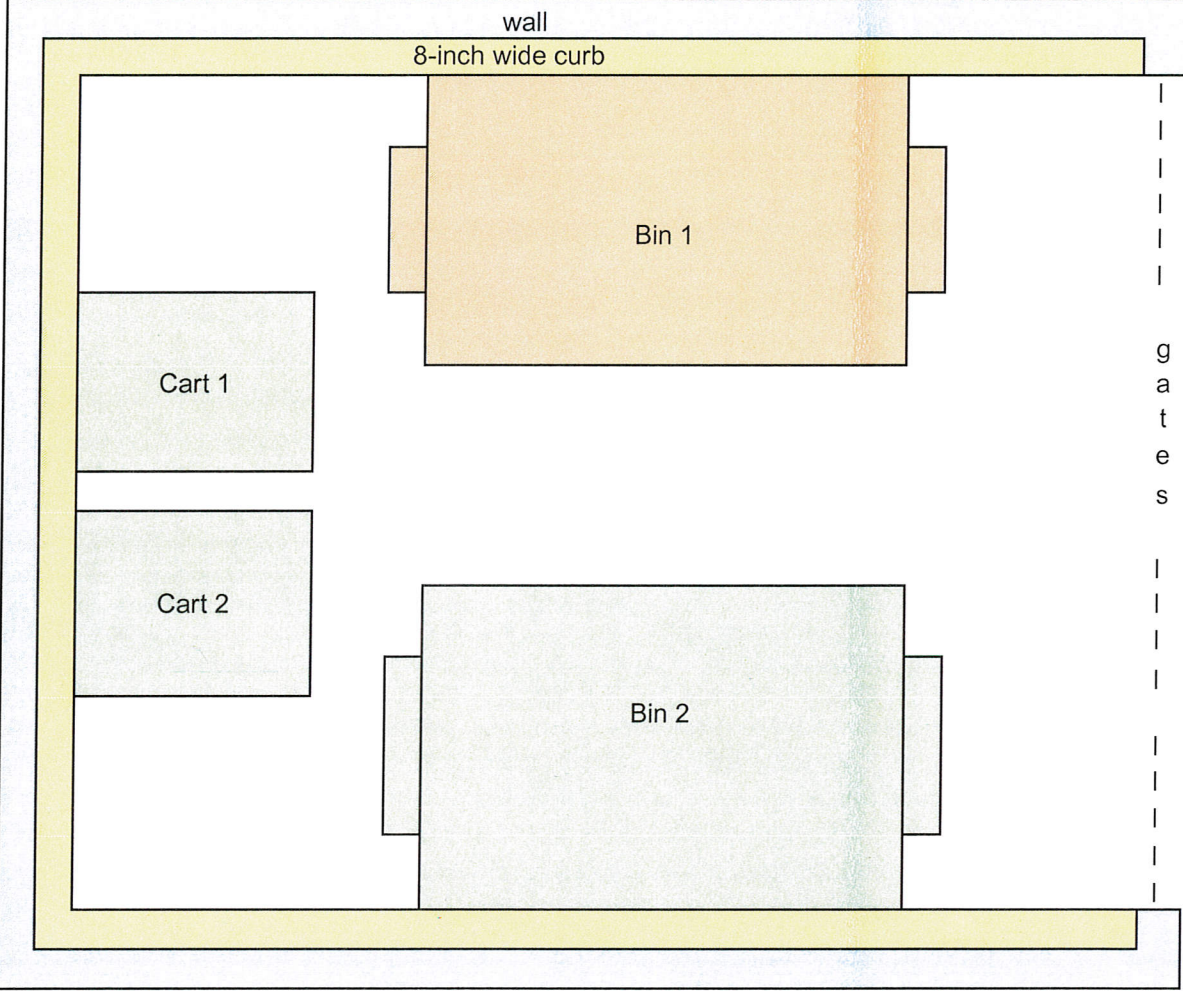


Figure 2. Minimum Garbage and Recycling Enclosure Configuration: Elongated Arrangement

