



City of Sunnyvale

Solid Waste & Recycling Design Guidelines

Multi-Family Residential



MULTI-FAMILY: Four or More Units

In residential zones all trash, refuse, and recyclable materials must be placed in proper containers that are fully screened from public view by an enclosure. All structures shall provide adequate and accessible enclosures for the storage of trash, refuse, and recyclable materials containers. Specific requirements:

1. Except for uses in R-0, R-1 and R-2 zones, and unless the container is kept within a building, the screening must enclose the container on all four sides with a door/gate on one side.
 - a. At a minimum, the screening must be 6 feet high and constructed of wood or masonry materials compatible with the main building.
2. The enclosure and door/gate must be painted to match the building.
3. The service door/gate must be large enough to provide easy access for removal of containers. [Create specs.]
4. An ADA compliant door for residential access must be included.
5. Enclosures must be adequate in capacity, number and distribution to accommodate the uses in a development. [See space guidelines]
6. Enclosures shall not be located in any parking, landscape, or setback area (exceptions apply).
7. Trash and recycling enclosures within 5 ft. of a structure must be sprinklered, and containers located within a building must be surrounded by walls with a one-hour fire resistive rating.

The property owner is responsible for:

1. The clean-up of the interior of the enclosure.
2. The overall maintenance of the enclosure.
3. Closing and securing doors/gates, and containers lids when enclosures are not being serviced.

The recycling and solid waste contractors are responsible for maintenance of their respective bins and containers.



RECYCLING & SOLID WASTE COLLECTION VEHICLE ACCESS REQUIREMENTS

Attachment C has truck access requirements. It is important to consider truck access and turning radii early on in the planning process for best results.

1. Driveways or travel aisles leading to enclosures shall be a minimum of 16 feet in width.
2. Where driveways do not extend from street to street, a turnaround area will be provided for the collection vehicles (taking into account that the turning radius of collection vehicles is approximately 32 ft. inner and 47 ft. outer).
3. Driveways or travel aisles shall provide:
 - a) Unobstructed access for collection vehicles.
 - b) A minimum of 15 feet of vertical clearance. However, in loading areas minimum overhead vertical clearance shall be 20 feet for loading operations.
4. To prevent damage to driveways, a concrete pad shall be constructed in front of each enclosure. The pad needs to be large enough and correctly oriented so as to allow the service vehicle to rest on it when loading and unloading bins and containers. The pad shall have a level surface (i.e. no slope) and no floor obstructions that prevent bins from rolling freely. Paving materials for the concrete pad shall consist of 5 inches compacted aggregate base material and 6 inches Portland Cement paving (or equivalent materials approved by the director of Community Development).

REGULATIONS

The California Public Resources Code Section 42911(c) requires adequate space for collecting and loading recyclable materials in all developments, and Section 40059.1 requires diversion of at least 50 percent of wastes from the landfill. Thus, space for trash and recycling should be the same.

In addition to these standards, the City may require modifications or impose additional requirements to ensure the safe and efficient collection of solid waste and recyclable materials.

SERVICE & SPACE GUIDELINES

Multi-family properties typically* use front-load bins for garbage and plastic carts for recycling, one for mixed paper and one for bottles/cans and other containers.

*Some larger properties utilize front-load or roll-off compactors for solid waste—contact the city for requirements.



ENCLOSURE DIMENSIONS

The minimum solid waste bin capacity per each 10 units is 3-yards, plus one set of recycling carts. See Attachment A:

- Sample enclosure dimension requirements for 1-2 bins
- Common sizes for garbage and recycling containers However, the actual enclosure or bin sizes used by the building occupant may vary.

Sample enclosure layouts are shown in Attachment B.

PLAN REQUIREMENTS

A Building Permit is required for a trash enclosure. Plans need to conform to the plan submittal and content requirements for building, special development, use & design permits.

Submitted plans must show:

- 1) Proposed design, size, and location of recycling & trash enclosures (e.g. site plan, detail, and elevations).
- 2) The number, type and placement of the bins and containers within the enclosure.

To ensure that the enclosure is constructed safely and its location and design are compatible with the building and adjoining properties, the plans for the enclosure are reviewed by the Director of Community Development. The Solid Waste Program manager and the Department of Public Safety will advise the Director of Community Development on enclosure design and specific construction requirements.

ADA REQUIREMENTS

All residential enclosures to be ADA accessible.

SITE LAYOUT

The attached trash enclosure plans are provided as a courtesy. Once your dimensions are added, a completed package must include:

- 1) A completed Miscellaneous Plan Approval application.
- 2) Three copies of a plans (including site plan, detail, and elevations).
- 3) The appropriate fees.

The site plan can be hand drawn showing the dimensions of the property, any existing buildings and the location of the trash enclosure. The package should be submitted to the Planning and Building Safety Divisions at the One Stop Permit Center in City Hall.

Additional requirements may apply. For further information you can contact the Planning, Building Safety of Fire Prevention Divisions at (408) 730-7444, or by visiting the One Stop Permit Center at 45 West Olive Avenue between the hours of 8:00 a.m. and 12:00 p.m.

FIRE SAFETY REQUIREMENTS

When a trash enclosure is located within 5 feet of a building (or inside), an automatic fire sprinkler system must be installed. If the existing building is not required to have a sprinkler system, the sprinkler system for the trash enclosure may be connected to the domestic water supply, if the supply line is a minimum of 1 inch in diameter.

- An approved accessible shut-off valve is to be provided on the line.
- An approved means of securing the valve in the open position shall be provided where valves are subject to vandalism.
- All exposed water lines have to be brazed copper or metal.
- If the enclosure does not have a ceiling, a heat baffle, 18 square inches in area, shall be attached not more than 6 inches above the sprinkler head.



Three copies of the detailed fire sprinkler plans must be submitted by the fire sprinkler contractor. These plans must be reviewed by the Fire Prevention personnel in the Building Safety Division.

STORMWATER MANAGEMENT GUIDELINES

In addition to general requirements for solid waste and recycling enclosures, the guidelines below must be accounted for in the design:

- Do not locate trash storage areas in the immediate vicinity of storm drain inlets.
- Design trash container areas so that drainage from adjoining roofs and pavement is diverted around the area(s) to avoid run-on. This might include berming or grading the waste handling area to prevent run-on of stormwater.
- Provide roofs or awnings over enclosures, or attached lids on all trash containers to minimize direct precipitation and prevent rainfall from entering containers.



CONSTRUCTION & DEMOLITION DEBRIS MANAGEMENT

1. During demolition and construction and pursuant to SMC8.16.170-180, mixed debris of any type must be disposed of in containers provided and serviced by the City's franchised hauler (except for exclusions granted where applicable, SMC 8.16.110).
2. Project must maintain and use a debris box for all mixed material from the franchised hauler onsite for the entire duration of work. This requirement shall be shown on the Building Permit plans and will be enforced during building demolition and construction.
3. At project start-up, contact the franchised hauler, Specialty Solid Waste & Recycling, at 408-565-9900 to order debris boxes. NOTE: All solid waste rates are established by the City Council, and are based upon the cost of service.
4. Recyclable material that is separated from mixed debris on the job site may be hauled by an independent recycling company holding a current Sunnyvale Business License (list available upon request), provided that the following conditions are met:
 - a. On-site debris boxes for mixed debris disposal are provided and hauled by the franchised waste company.
 - b. The material to be recycled is separated onsite from non-recyclable material or mixed debris that is collected by the franchised waste hauler.
 - c. The material is actually recycled or reused, and is not disposed of or used for 'alternative daily cover' at a landfill.
 - d. The recycler must maintain a valid Sunnyvale business license.



Attachment A

MINIMUM NUMBER OF CONTAINERS

Land Use	Development Size	Minimum Space Required For Garbage and Recycling Containers
Multi-family Residential (4 or more units)	Each 10 Units	Space for one 3-yard bin and two recycling carts Alternatively, in large complexes front-load compactors may be used

SAMPLE ENCLOSURE SIZES

Number of Bins	Interior Dimensions	Minimum <i>Interior</i> Clearances*
One plus Set of Recycling Carts	12.5' W x 9' D	1' between bin and enclosure walls 4' user walkway from the entry to access all containers in enclosure.
Two plus Set of Recycling Carts	13' W x 12.5' D	

COMMON CONTAINER SIZES

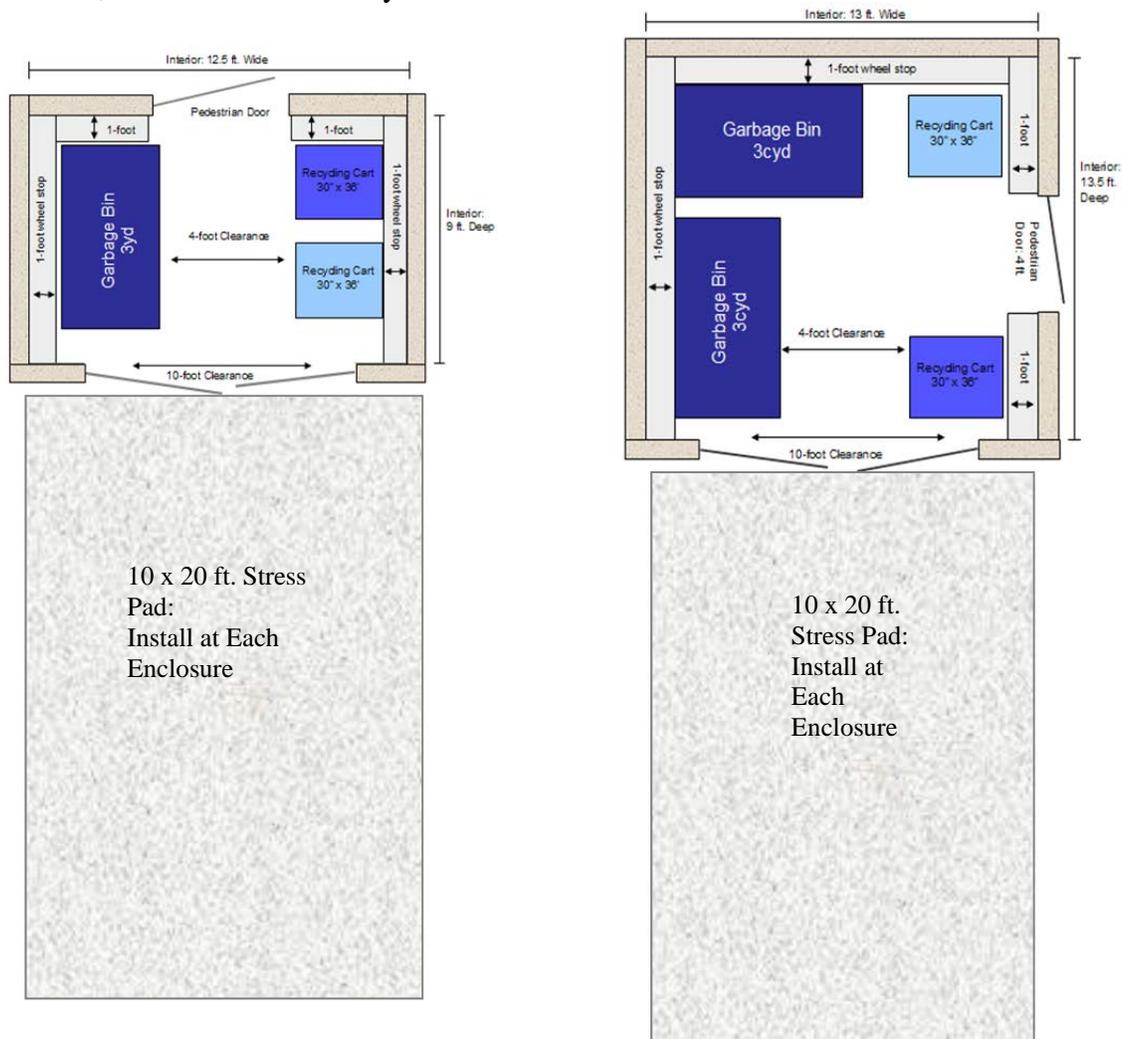
Bin Size	Bin Dimensions	Minimum <i>Interior</i> Clearances*
4-cubic yard	6'9" W x 51" D	1' between bin and enclosure walls 4' user walkway from the entry to access all containers in enclosure.
3- cubic yard	6'9" W x 3'6"D	
2- cubic yard	6'9"W x 3'1"D	1' between other containers and enclosure walls
Recycling carts (96-gallon)	2'7"W x 3'D x 3'10"H	Set of two carts, one light blue and one dark blue

*See bin layouts, Attachment B.

Attachment B

EXAMPLES OF BIN LAYOUTS*

- Layouts shown for 1 to 2 typical 3-yd garbage and two 96 gallon recycling bins. Dimensions are approximate and not to scale.
- Interior clearance: One foot between containers and other obstructions.
- Aisle to the back of enclosure: Four feet wide to assure easy access to all containers.
- Vertical clearance: Nine-feet to allow lids to open (from ground to top of lid).
- Wheel stops: To be one foot from interior walls, generally on three sides.
- Service door: Nine feet wide with offset hinges to easily remove bin for collection.
- Paving: Level surface inside trash area through door to collection point (travelway), without stamped concrete or other textures.
- Tallow Containers: Do not store inside enclosure, but provide space for container outside, and include secondary containment



*Bin Layouts Show ***Interior*** Dimensions

Attachment C

TRUCK ACCESS REQUIREMENTS:
Multi-family with Centralized Collection Service

Multi-family with bin service	<i>Inside</i> turning radius: 32' <i>Outside</i> turning radius: 47'
Travel-aisle: horizontal and vertical clearance:	16 ft. wide and 15' high
Loading Clearance	20 ft. vertical clearance for bins 15 ft. vertical clearance for carts

For safety reasons, in residential areas a truck turnaround is required for any street, driveway or travel-aisle does not extend from street to street. Sample turning templates are attached. Use "Front-load & Recycling" for multi-family developments

TOWNHOME-TYPE PROPERTIES WITH INDIVIDUAL
CART COLLECTION SERVICE*

Turning Radius	<i>Inside</i> turning radius: 33' <i>Outside</i> turning radius: 48'
Minimum Street Widths	22 ft. for collection on straight-aways Adequate width required for all turns

For safety reasons, in residential areas a truck turnaround is required for any street, driveway or travel-aisle does not extend from street to street.

*Additional requirements may apply