



# Commercial Trash Enclosures Design Considerations



City of Cheyenne Guidance Document  
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## INTRODUCTION

The purpose of this document is to inform owners, architects and builders of the dimensional and aesthetic requirements for commercial trash enclosures. The City of Cheyenne Sanitation Division utilizes front load style garbage trucks for all new commercial applications. This requires certain specifications be met to allow for the safe servicing of the trash containers. These specifications and diagrams are included in this document.

## DESIGN OBJECTIVES

Trash and recycling areas must be enclosed such that they are screened from public view. Enclosures must be positioned such that they can be approached easily, and the containers can be serviced safely.

### Materials:

#### Pursuant to Section 5.8.5 of the City's Unified Development Code (UDC):

1. The enclosure shall be constructed of durable, opaque materials, such as wood or masonry, and shall be compatible in coloring with the structure to which it is associated.
2. Enclosure areas should be constructed on a concrete pad, for longevity and safety of handlers. Gravel, packed dirt and asphalt will not be allowed.
3. Construction of the approach to the enclosure should be rated to 75,000lbs to support the weight of a fully loaded truck.
4. Gates on the enclosure shall be opaque and may be constructed of metal or some other comparable opaque durable material, shall be painted to match the enclosure, and shall be properly maintained.
5. Hardware should be of sufficient strength to accommodate repetitive swinging and of sufficient ease of use that individuals with gloves will be able to open them.

### Features:

1. Gates should be positioned to swing clear of the enclosure's front width (past 90 degrees). **See figures # 1, 2 & 3.**
2. Gate pins/holes should be installed to hold gate open as well as closed for integrity and safety. **See figures # 1, 2 & 3.**
3. Enclosures shall have a backstop consisting of either a curb or bollards to protect the back of the enclosure while maintaining the minimum depth requirements. **See figures # 1, 2& 3.**

4. It is recommended that enclosures should be designed to allow walk in access by users of the dumpster without having to open the main enclosure service gates if possible.
5. The enclosure should be constructed at least one foot taller than the tallest available container which measures 74 ½" (8yard front load container).

See figure # 9.

## DESIGN

### Layout:

1. If the collection truck must enter your property to service bins, the truck must be able to circulate the parking area without backing up (except to back away from the container). **See figures # 4 & 5.**
2. A forward exit path must be available with a turning radius of no less than 40' at any point. **See figure # 4.**
3. The direction the of truck shall be in the direction of travel if the driveway is one way. **See figures # 4 & 5.**
4. The enclosure shall be placed in such a way that the truck can properly approach and back away from the container straight in the enclosure. 40' straight in front of the enclosure is required. **See figures # 4, 5, 6, & 7.**
5. 45 degrees is the maximum angle from center line of the drive path to a straight approach to the enclosure. **See figure # 7.**
6. A minimum 15' wide clear space is required anywhere the truck will be required to drive to service the container and to exit the property. **See figure # 5.**
7. A minimum of 25' of overhead clearance is required over the entire enclosure and final straight approach space. **See figure # 6.**
8. A minimum of 15' of overhead clearance is required anywhere the truck will be required to drive to service the container and exit the property.
9. Enclosure shall be positioned so that the truck is not obstructing traffic during the dumping process.
10. Enclosure shall be positioned so that the truck does not back into traffic as it backs away from the container.
11. Parking spaces near the enclosure cannot encroach on the 15' of clear width required for the truck to drive, open doors properly and service the container.
12. Tree growth should be considered when placing trees near the enclosure and along the path the truck will travel to assure overhead clearance will not become obstructed over time.

## SPACE ALLOCATION FOR RECYCLABLES

How much space is adequate for the collection and loading of recyclable materials? This is a hard question to answer due to the variability in development types and collection methods. A chart is provided below to help estimate capacity. See figure # 8. Dimensions of the containers are also shown below. See figure # 9.

Restaurants should allow additional space for grease and oil management containers.

The amount of space provided for the collection and storage of recyclable materials shall be designed to accommodate collection and storage containers consistent with the recyclable materials generated. It is recommended the area be at least as large as the amount of space provided for the collection and storage of refuse materials.

## LOCATION

Trash and recycling should be in the same enclosure to provide a convenient centralized drop-off, storage and collection point.

Enclosure shall be built in a location that is accessible to the truck and meets all the accessibility requirements that follow.

## ACCESSIBILITY

All areas designated for collection and loading material (trash and recyclables) should provide access for those who deposit the material as well as those responsible for collecting and loading the materials.

It is recommended that enclosures be designed to allow walk in access without having to open the main enclosure service gates if possible.

## SCREENING

Trash and recycle areas must be enclosed such that they are screened from public view. Screening requirements are defined in The Unified Development Code sections 5.8.5, 6.7.6 and 6.9.5 (a & b).

Outdoor storage, trash collection and/or compaction, loading or other such uses shall be screened from view of all streets.

## SIGNAGE

It is a good idea to provide signage in and around trash and recycling areas, especially with larger commercial facilities. Clear signage is imperative to proper circulation of traffic and can also help reduce inappropriate or illegal dumping. See figure # 2.

## MAINTENANCE

The property owner is responsible for maintaining adequate containers for recycling and waste disposal. The trash and recycle enclosure shall be maintained, cleaned and repaired when necessary by the property owner. The types of materials used in the construction of the enclosure can greatly impact future maintenance requirements.

## VARIANCES

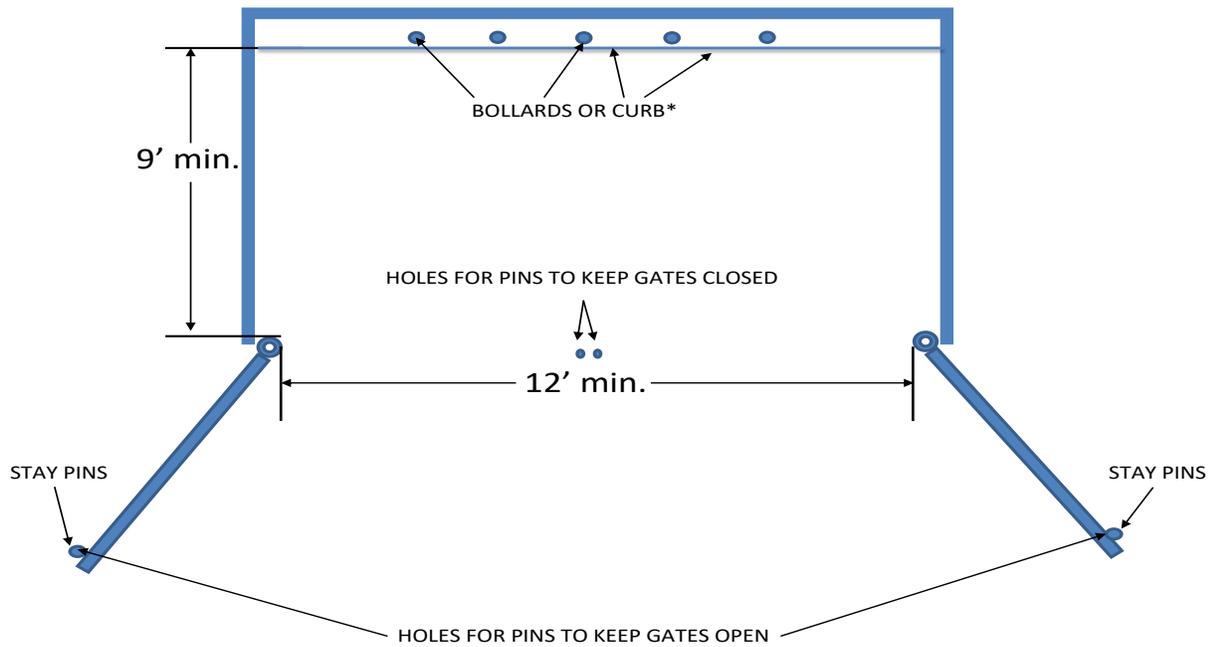
Exceptions may be granted by the City or a designee thereof for existing buildings where this provision will negatively impact parking stall requirements or other existing conditions prevent its practical application.

# LAYOUT SUGGESTIONS/ILLUSTRATIONS/SPECS.

For a single front load trash container (any size) and a single 1.5 yard recycle dumpster.



**FIGURE # 1**



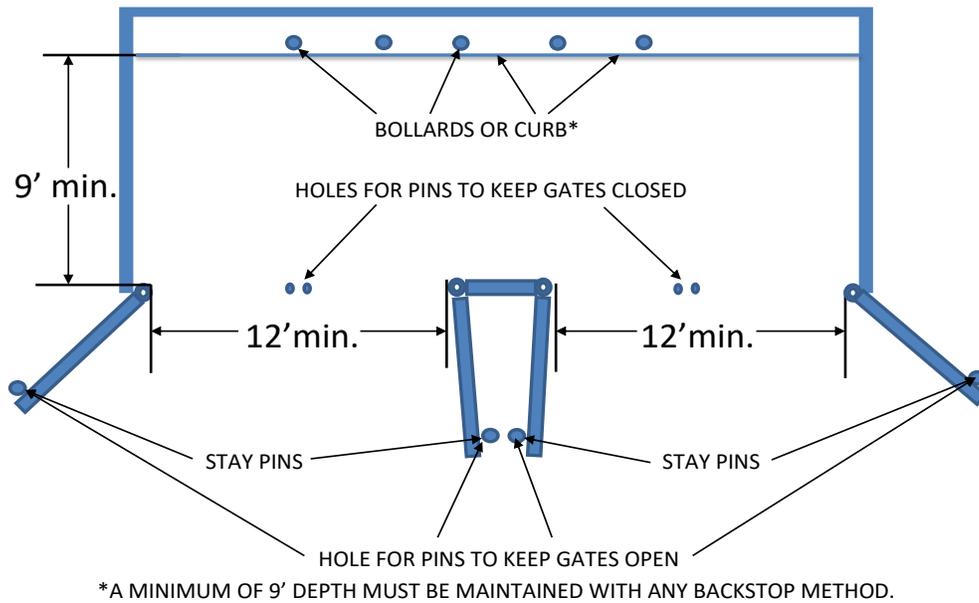
\*A MINIMUM OF 9' DEPTH MUST BE MAINTAINED WITH ANY BACKSTOP METHOD.

# LAYOUT SUGGESTIONS/ILLUSTRATIONS/SPECS.

For two front load trash containers (any size) and a 1.5 yard recycle dumpster.



**FIGURE # 2**

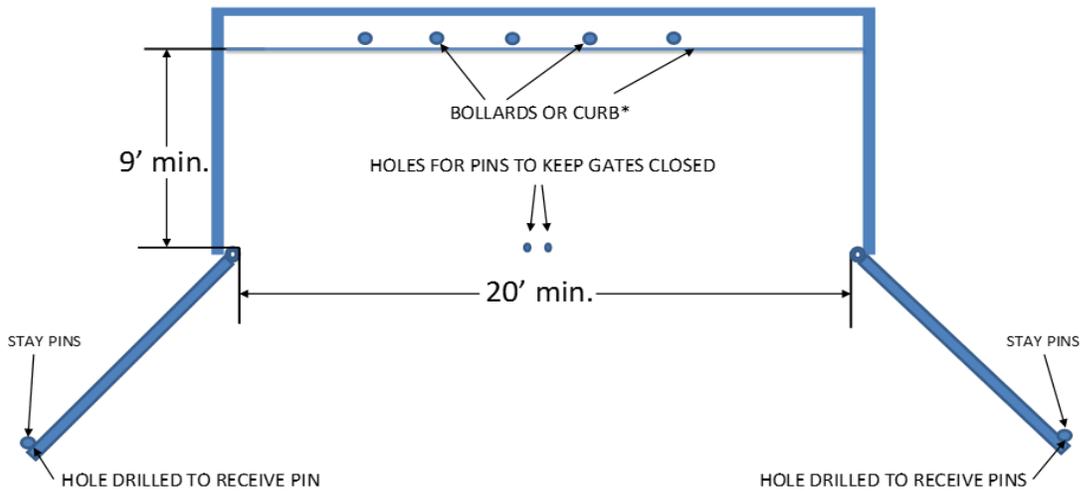


# LAYOUT SUGGESTIONS/ILLUSTRATIONS/SPECS.

For two front load trash containers (any size) and a 1.5 yard recycle dumpster.



**FIGURE # 3**

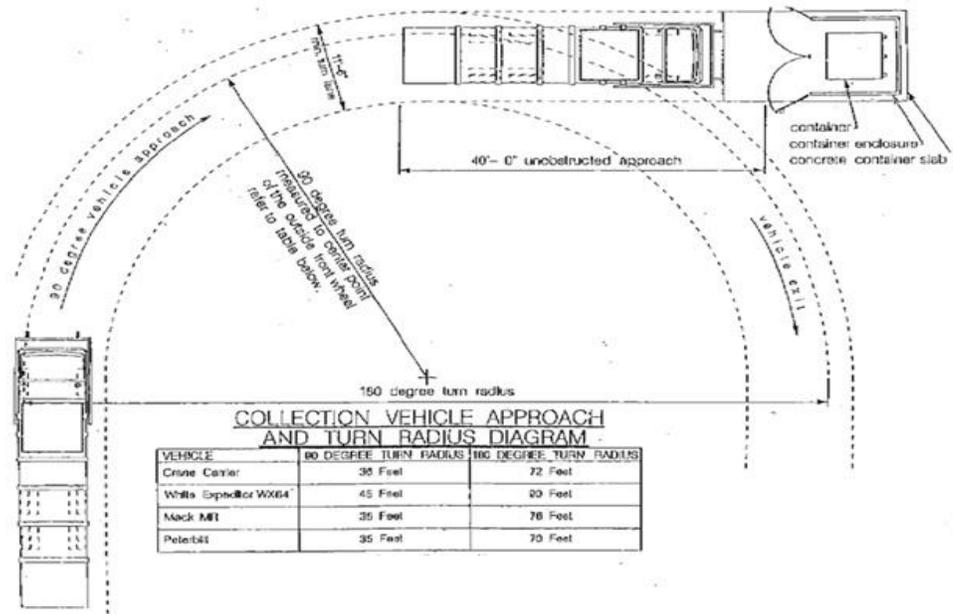


\*A MINIMUM OF 9' DEPTH MUST BE MAINTAINED WITH ANY BACKSTOP METHOD.

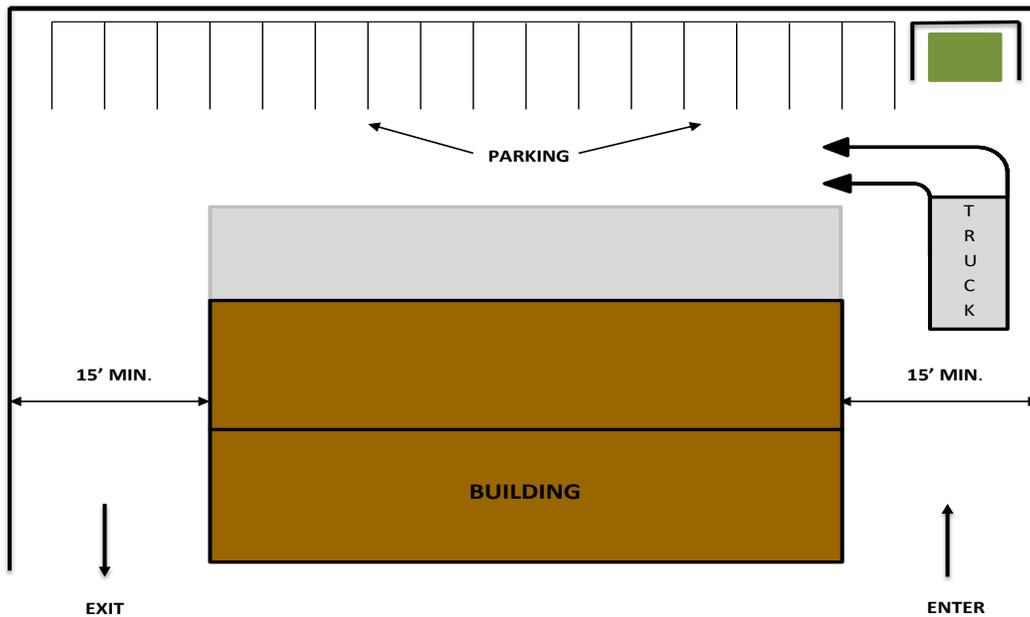
# LAYOUT SUGGESTIONS/ILLUSTRATIONS/SPECS.

For entry, approach, dumping and exit of the truck.

**FIGURE # 4 - TURNING RADIUS AND APPROACH DIMENSIONS**



**FIGURE # 5 - MINIMUM WIDTH AND TRAVEL PATH FOR A FRONT LOAD VEHICLE**



Minimum width restrictions and travel path for a front load garbage truck

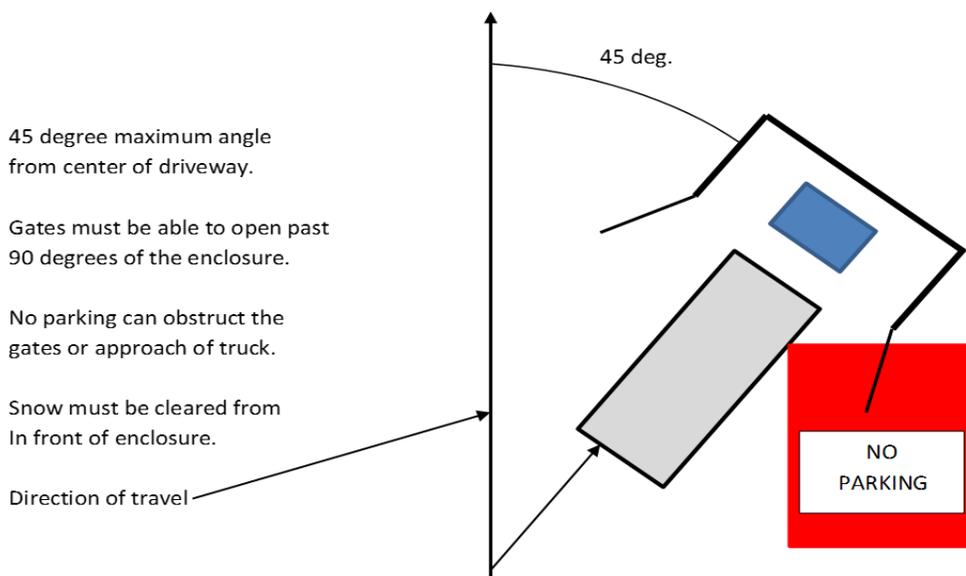
# LAYOUT SUGGESTIONS/ILLUSTRATIONS/SPECS.

For entry, approach, dumping and exit of the truck

**FIGURE # 6 – MINIMUM APPROACH AND CLEARANCE DIMENSIONS**



**FIGURE # 7 – MAXIMUM ANGLE OF ENCLOSURE FROM APPROACH**



# CAPACITY ESTIMATOR

**FIGURE # 8**

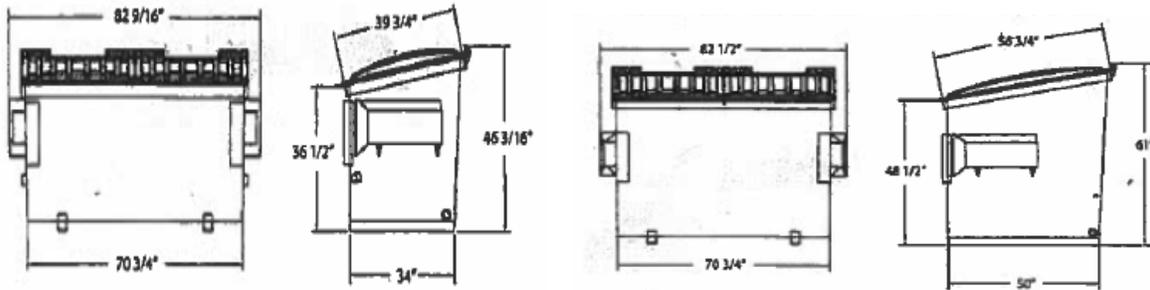
Please note that these guidelines are approximate and intended to be a guideline when observation of the current service level is not possible, or during pre-construction planning. 1 Gallon = .005 cu yd / 1 cu. yd. = Two 95-gal. carts.

Solid Waste Generation Guidelines			
BUSINESS GROUP	GARBAGE GALLONS PER WEEK PER EMPLOYEE	RECYCLING GALLONS PER WEEK PER EMPLOYEE	NOTES
Entertainment & Recreation	35.28	20.27	Suggested min. garbage and recycling of 4 CY / week
Wholesale and Trucking	28.02	28.02	Suggest scaling for large employee counts
Education	16.16	16.16	
Hotels & Lodging	124.63	28.05	Suggest min. garbage and recycling of 8 CY / week
Manufacturing - All	63.04	40.04	Suggested min. garbage and recycling of 4 CY / week
Medical & Health	24.86	24.86	
Multifamily	18.61	18.61	
Other	39.89	39.89	
Public Administration	12.42	12.42	
Restaurants	34.24	39.23	Suggested min. garbage and recycling of 4 CY / week
Retail Trade - General	59.61	59.61	
Retail Trade - General, with some food sales	59.61	59.61	
Retail Trade - Food & Beverage Stores	36.68	36.68	Suggest scaling for large employee counts
Services - Management, Administrative & Social	25.55	25.55	
Services - Professional, Technical & Financial	52.93	52.93	
Services - Repair & Personal	26.97	26.97	Suggest scaling for large employee counts

# CONTAINER DIMENSIONS

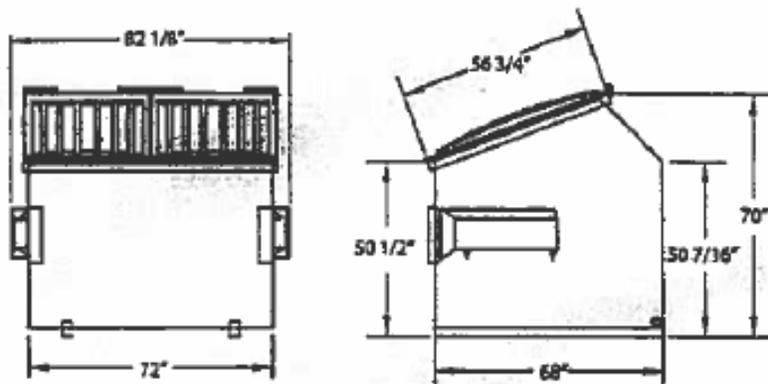
Dimensions and available container sizes.

**FIGURE # 9 – DIMENSIONS AND CAPACITIES OF CONTAINERS**

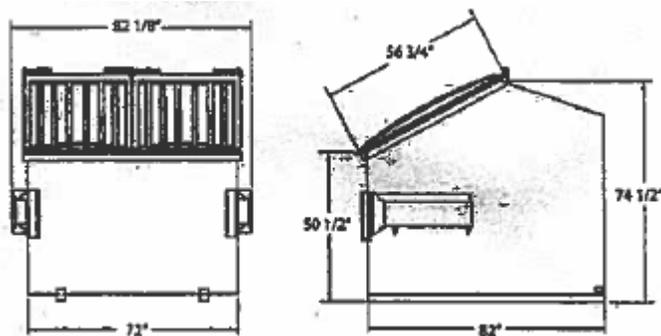


TWO YARD

FOUR YARD



SIX YARD



EIGHT YARD

## UNACCEPTABLE ENCLOSURES

The following are a few examples of enclosures that are unacceptable due to design, construction, layout and size requirements.



Enclosure at a 90-degree angle.



Enclosure poorly constructed and no durable surface to support the truck.



Container has no enclosure and is blocking a sidewalk.



Enclosure is too narrow to service safely.

## CONTACT US

For more information please contact us:

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