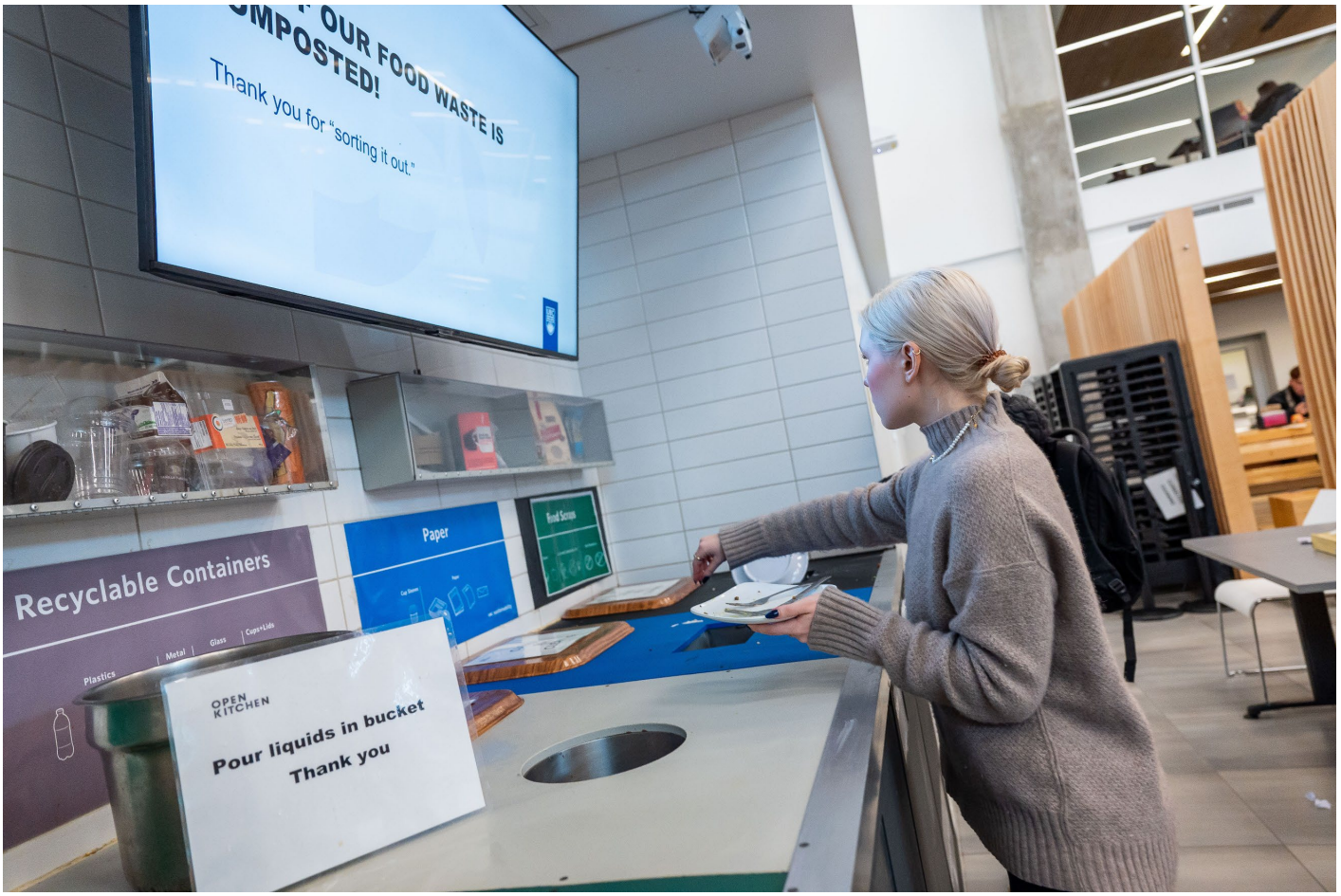
UBC Vancouver Solid Waste Infrastructure Guidelines

Updated March 2025 | Version 2.1



THE UNIVERSITY OF BRITISH COLUMBIA

1 Table of Contents

1 Table of Contents 2

2 Background 3

.1 *Scope* 3
.2 *Rationale* 3

3 Overview of Requirements 4

.1 *New and Renewal Buildings* 4
.2 *Existing Academic Buildings* 4
.3 *Submittals and Approvals* 4

4 Interior Waste Sorting Stations 6

.1 *General Requirements* 6
.2 *Rationale* 6
.3 *High-Waste-Generating Areas* 7
.4 *Low-Waste-Generating Areas* 10
.5 *Custom Stations* 11
.6 *Student Residences* 12

5 Other Building-Related Infrastructure 15

.1 *Waste and Recycling Storage Areas* 15
.2 *Containers and Bins* 15
.3 *Other Supporting Equipment and Space* 18
.4 *Rationale* 18

6 Exterior Waste Sorting Stations 19

.1 *Locations* 19
.2 *Full-size Outdoor Station* 19
.3 *Placement* 20
.4 *Rationale* 20

7 Appendix: Design Specifications and Drawings 21

.1 *Signage and Colours* 21
.2 *Indoor Waste Sorting Stations* 22
.3 *Other Building-Related Infrastructure* 29
.4 *Exterior Waste Sorting Stations* 31

2 Background

.1 Scope

.1 This document provides guidelines and requirements for incorporating solid waste infrastructure into new and existing buildings, as well as outdoor public spaces on the UBC Vancouver Academic Campus.

.2 The guidelines are applicable to all spaces on the academic campus, not including the UBC neighbourhoods. However, the guidelines may be used to inform designs for waste infrastructure in other areas.

.3 This document is intended as a reference for architects, designers, contractors, UBC staff and the UBC community to determine waste infrastructure requirements for a particular project, and provide space and budget for it accordingly.

.4 This document is distinct from the Technical Guidelines by providing details about solid waste infrastructure and its spatial requirements, appropriate placement of infrastructure, as well as the importance of waste diversion and the means to achieve it. It does not provide details on technical building design components such as ventilation, floor drains, etc.

.5 Solid waste infrastructure covered in this guideline includes, but is not limited to, waste sorting stations (also known as recycling stations), waste carts, dumpsters, compactors, storage areas, and collection areas.

.2 Rationale

UBC's Zero Waste Action Plan 2030 identifies waste reduction as the key priority, but where waste is produced, waste diversion is still necessary to maximize circularity and minimize environmental impact. Making provisions in accordance with this guideline will result in increased waste diversion from landfill and incineration through recycling and composting, helping to achieve UBC’s aggressive Board-endorsed waste reduction goals. It will also facilitate the efficient disposal, collection, and transfer of waste, while reducing operational costs and adverse environmental impacts.

A key requirement for successful waste diversion and management is to achieve consistency in the design of solid waste infrastructure and waste sorting signage across campus; thus it is essential that all buildings and spaces are designed in accordance with this guideline. The following designs and specifications for solid waste infrastructure have been pilot tested and refined through several iterations. This document will continue to be reviewed and adjusted every two years based on lessons learned and emerging opportunities.

3 Overview of Requirements

.1 New and Renewal Buildings

.1 All new buildings and major renewal projects must include waste infrastructure conforming to this guideline within the scope of the project.

.2 Existing Academic Buildings

.1 Retrofits to waste infrastructure within existing buildings should follow this guideline as closely as possible, with consideration to existing spatial constraints.

.3 Submittals and Approvals

.1 As part of the development approval process, the proposed design and siting of waste infrastructure for any project must be reviewed by one or more of the following units, depending on the scope of the project, prior to the finalization of plans:

- **UBC Facilities, Custodial Services**: interior waste infrastructure including space allocation for areas serviced by Custodial.
- **UBC Student Housing and Community Services (SHCS)**: interior and exterior waste infrastructure including space allocation for areas serviced by SHCS.
- **UBC Facilities, Waste Management**: waste storage areas (both interior and exterior), vehicle collection points including loading bays, and public realm infrastructure such as outdoor waste sorting stations.
- **UBC Campus and Community Planning, Sustainability and Engineering**: LEED/green building design issues, interior waste infrastructure not serviced by UBC Custodial (such as residences, UBC Food Services and Athletics buildings).

.2 **Development approval submittals must**:

.1 Identify locations and spatial requirements of proposed waste infrastructure on floor plans, including interior and exterior waste sorting stations as well as waste storage and collection areas.

.2 Provide a brief written narrative and supporting information to explain how the proposed waste and recycling infrastructure is to be used to achieve objectives that enable high levels of waste diversion. Specific objectives include:

.1 Convenient location of multi-stream waste sorting stations for all building occupants and users.

.2 Sufficient capacity to accommodate anticipated waste volumes within custodial staff waste collection schedules.

.3 Efficient and ergonomic transfer of waste and recycling from waste sorting stations to storage and collection areas.

.4 Rationale for any proposed variances from the guideline.

.3 In addition to the above, **building permit approval submittals must**:

.1 Provide specifications on proposed types and designs of waste sorting stations and bins, as well as waste and recycling storage and collection area layouts, in accordance with options presented in this guideline.

4 Interior Waste Sorting Stations

.1 General Requirements

.1 All spaces across campus must include multi-stream waste sorting stations rather than stand-alone garbage receptacles.

.2 Where waste sorting stations are provided, existing standalone garbage cans in the vicinity should be removed.

.3 The default arrangement of streams for multi-stream waste sorting stations includes **food scraps, recyclable containers, paper, and garbage**. Custom arrangements may be necessary based on the specific needs of the space.

.1 In some cases, one or more streams may be omitted based on certain conditions (e.g. omitting food scraps bins in food-prohibited zones).

.2 Additional streams like cardboard, donations, e-waste and/or soft plastics may be added where appropriate, and where collection services are available. Spaces should be adaptable to emerging demands.

.4 Waste streams must be arranged in the same left-to-right order listed above.

.5 Waste sorting station designs must be consistent with standards in colours and materials as outlined in the Appendix, Section 7.1.

.6 Waste sorting stations must be sized and placed to accommodate expected waste volumes, with full-size stations typically servicing 1,000 m² of building floor space.

.7 Station placement must ensure visibility, clearance and egress must be sufficient to meet any Building Code and Technical Guideline requirements, and the positioning of the station must not block fixtures or equipment such as fire alarm pulls, light switches, ventilation openings, etc.

.8 If specific waste sorting needs are not covered by this guide (e.g. back-of-house setups for commercial and retail tenants), please contact UBC Waste Management and/or Sustainability and Engineering to see if an alternative existing solution is available.

.9 Any proposed variance from the following design guidelines must be submitted for approval prior by the owner group as specified in 3.3.1.

.2 Rationale

In most areas, the majority of operational waste can be diverted from landfill or incineration through the food scraps, recyclable containers, and paper recycling streams at waste sorting stations. Stand-alone garbage cans undermine diversion efforts and should be replaced with multi-stream waste sorting stations.

The arrangement and colors of the four waste streams are standardized to minimize confusion and encourage proper sorting. Streams should be “read” from left to right, starting with food scraps—due to their high diversion potential—and ending with garbage as the last resort if waste cannot be sorted into the other streams.

For renewal projects, it is recommended to consolidate multiple garbage can locations into a single waste sorting station to reduce custodial workload.

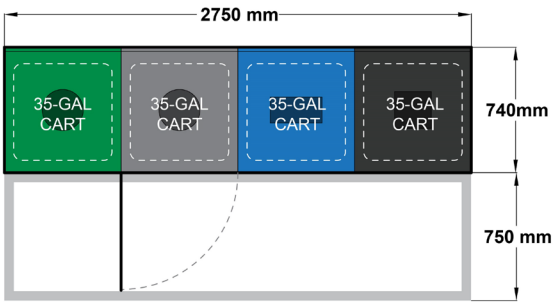
.3 High-Waste-Generating Areas

.1 Locations

High-waste-generating areas can include:

- Lobbies and concourses
- Hallways in academic areas
- Laboratories
- Retail food service outlets
- Residence dining halls and commonsblocks
- Libraries
- Study areas

.2 Full-Size Stations

Example	Footprint
	
A full-size station in the AMS Student Nest, with display boxes attached.	*Standard footprint and clearance for a full-size station.*

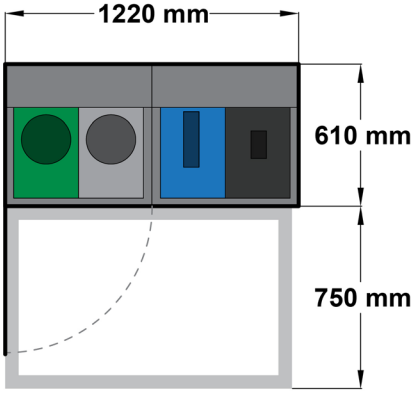
.1 High-waste-generating areas must be serviced by full-size waste sorting stations.

.1 Full-size stations may be supplemented with smaller stations only when full-size stations are not feasible. See “Medium-Size Stations” and “Small-Size Stations” below.

.2 For back-of-house areas within food service outlets and dining halls, alternative waste receptacles can be used.

.1 In these cases, ensure that the receptacles can accommodate the expected volume of waste, allow the waste to be sorted into 3 or 4 streams as reflected above, and have appropriate signage.

.3 Medium-Size Stations

Example	Footprint
	
A rendering of a CleanRiver custom TIM102-4 model, used in several retail food outlets on campus.	*Standard footprint and clearance for a medium-size station.*

.1 In cases where waste generation is medium to high in a busy location, but space cannot be allocated for full size stations, an alternate, medium-size station may be used.

.1 This station design does not accommodate Schaefer carts, so Custodial Services or the servicing department must be consulted to develop an appropriate solution on a case-by-case basis.

.4 Placement

.1 Waste sorting stations must be situated such that most building visitors will be able to see at least one full-size station when entering or leaving the building through main entrances.

.1 If the area spans multiple stories, at least one station should be visible from stairwells and elevators.

.2 Waste sorting stations near classrooms must be located within 5 m (for large classrooms or lecture halls) or 10 m (for smaller classrooms) of the main classroom entrance, typically in the hallway.

.1 Stations must not be positioned inside classrooms.

.3 Waste sorting stations near laboratories must be located within 10 m of the main lab entrance, typically in the hallway.

.1 Standalone general waste bins may be provided to laboratories as required depending on the activities and anticipated waste generated by lab operations. Provisions should be made to ensure space is available in the lab for these receptacles.

.2 Garbage bins in laboratories should be similar to the Rubbermaid 10-Gal Black trash bin, must be labelled “Garbage Only”, and must be lined in clear plastic.

.3 All other streams of waste in laboratories must follow the guidelines set forth in the Green Labs Guide and the UBC Hazardous Waste Disposal Guide.

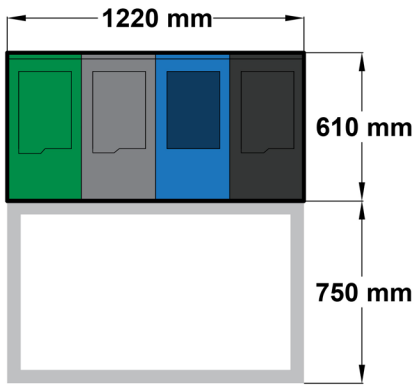
.4 Low-Waste-Generating Areas

.1 Locations

Low-waste-generating areas can include:

- Shared office space
- Small lunch rooms and kitchenettes
- Circulation areas

.2 Small-Size Stations

Example	Footprint
 *An example of a Busch Systems 4-stream Waste Watcher, used as the standard small-size station on campus.*	 *Standard footprint and clearance for a small-size station.*

.1 Low-waste generating areas must be serviced by small-size stations **at a minimum.**

.3 Placement

.1 Small-size stations must be within 25m of all offices and on the same level.

.1 Food scraps and recyclable containers streams may be omitted from an office station, provided these streams are provided at another station within 25m (e.g. a lunch room).

.2 Individually-assigned offices and desks should be equipped with deskside blue recycling and mini black garbage bins (the “My Waste, My Responsibility” system).

.3 Where there are hot desking/shared desk arrangements, there must be a centralized small-size station near each desk cluster.

.4 In lunch rooms and kitchenettes, waste sorting stations must be located within the same room, or within 3 m of the food preparation / dining area.

.1 Where space is constrained, and there is already a paper recycling bin or station nearby, a three-stream station with the paper bin omitted may be used.

.5 Custom Stations

.1 Custom waste sorting stations must be vetted and approved prior to construction and installation.

.2 Custom stations must be appropriately designed and sized according to location and expected waste generation as described in previous sections.

.3 Custom stations must follow design specifications to ensure consistency with the standard UBC waste sorting stations. Elements that must conform to standard specifications outlined in this document include:

.1 Overall dimensions

.2 Ability to accommodate the appropriate recycling bins (e.g., 35-gallon Schaefer carts, 23-gallon Waste Watcher bins)

.3 Placement, shape and dimensions of openings for waste

.4 Ability to mount standard UBC printed signage, including correct placement and dimensions

.5 Serviceability by UBC Custodial Services or other service staff

.6 User Accessibility

.4 Design elements with some flexibility include:

.1 Materials, colours of panels, and countertop materials, provided that they meet durability and architectural requirements. See Section 7.1 for more details on colours and materials.

.6 Student Residences

.1 General Requirements

.1 Ensure waste sorting areas are convenient and accessible for all residents, including those with restricted mobility.

.2 Minimize the total one-way horizontal distance residents need to travel to a recycling area, targeting it to 50 m or less.

.3 Waste sorting areas must be reasonably lit, covered, and ventilated.

.4 Co-locate multiple streams i.e. food scraps, recyclable containers, paper, garbage and cardboard to provide equal convenience for each waste stream.

.5 Ensure sufficient space is allocated to support the volumes and types of waste generated based on the number of residents and the frequency of collection from the stations, during normal operations and at times of high volume, such as move-in or move-out time.

.6 Provide standardized bin types and colours. Refer to sections 4.3-4.4 for more information on bin types and typical locations. Wheeled carts can also be used, refer to section 5.2.1 for cart standards.

.7 Provide clear visual cues and signage to support residents in proper sorting of waste materials (e.g. wall colours, standardized UBC signage).

.8 Provide additional recommended waste streams as needed. This can include pizza boxes, clothing/textiles, household goods, electronic waste, deposit beverage containers and potentially others.

An example of a "best practice" recycling room at Marine Drive Residence. Note the bright lighting, clear separation of streams, and appropriate signage for each stream.

.2 Location and Types of Waste Sorting Areas

.1 As part of development permit and building permit submissions, identify space(s) on floor plans for waste sorting areas within 50m of all residential units. Some of these options include:

.1 A waste sorting area or station on each residential level of the building, preferably within 5m of elevators. This arrangement is strongly recommended for residential towers.

.2 Multi-stream waste chute systems on each residential level of the building, provided they can achieve equivalent or improved levels of waste diversion.

.1 Proposed waste chute systems must be reviewed prior to approval to assess operations and maintenance costs, efficiency and convenience when compared to recycling stations.

.3 Centralized waste sorting rooms with space for all necessary waste streams (food scraps, recyclable containers, paper, garbage, and cardboard).

.1 Centralized waste rooms are ideally located at-grade, or no more than one level below grade.

.3 Waste Collection Areas

.1 Waste collection areas (e.g. loading bays) must be accessible to waste vehicles. Refer to UBC Technical Guidelines for further details.

.2 Waste collection areas may also function as centralized waste sorting rooms.

.3 If waste collection areas are separate from centralized waste-sorting rooms, ensure segregated waste streams can be transferred efficiently from recycling areas to collection areas.

.4 Common Areas

.1 In common areas, such as commons blocks, lobbies, and food service areas, provide waste sorting stations as per section 4.3-4.4.

.5 Rationale

Studies have shown that convenient access to waste sorting areas is critical to effective waste diversion in residential settings. Shorter walking distances and accessible waste receptacles significantly improve recycling rates and reduce contamination compared to centralized waste rooms. Thus, it is preferential, although not appropriate in all settings, to provide designated spaces for waste sorting in close proximity to every unit.

Multi-stream waste chutes offer an efficient alternative for waste management in residential towers. However, proposed waste chute systems must be extensively reviewed prior to approval to assess operational costs, efficiency, and convenience when compared to waste sorting stations on each floor.

If centralized waste rooms are necessary, minimize obstacles like elevators, long hallways, and undesirable paths to improve access.

5 Other Building-Related Infrastructure

.1 Waste and Recycling Storage Areas

.1 There must be a designated space within a building, or an approved enclosure outside of the building, to store all appropriate waste bins and materials.

.1 Storage and collection areas include “front-of-house” and “back-of-house” types, as well as outdoor areas attached to the building (e.g. loading bays).

.2 Storage areas must be large enough to accommodate all waste streams for the building between collection days, while permitting easy movement of the bin-carts.

.3 All waste storage/collection areas must:

.1 Be designed only for waste management purposes, with no sharing of other uses.

.2 Accommodate an appropriate number of bins and carts that will not overflow between collection days. See chart in Section 5.2 for guidance.

.3 Have a floor area of 2 – 2.5 times the footprint of the waste infrastructure within the area, with a minimum size of 6.7m x 6.7m.

.4 Be accessible to all occupants of the building, ideally with secure access (electronic card access).

.5 Be located on ground level near service entry to the building.

.6 Have the door to the room swinging out.

.7 Have a floor drain and hose bib.

.8 Have concrete floors if installing a compactor.

.2 Containers and Bins

.1 Wheeled Bin-Carts

.1 Bin-carts used to collect recycling streams must be the Schaefer Universal System Design (Model USD) wheeled carts.

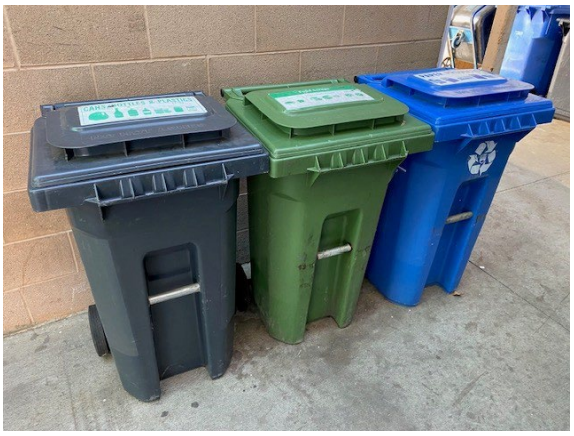
.2 Recyclable containers and paper recycling streams must be collected in 35, 65, and 95-gallon carts.

.3 Food scraps must be collected in 35-gallon carts only.

.4 The chosen size and quantity of carts must be appropriate to the expected volume of waste generated and number of waste sorting stations within the building. Refer to the chart below for a general guideline on how many carts to provide based on the building floor area.

.5 Carts must be in three colours for the three streams described above: green, grey, and blue.

.6 Carts must have appropriate decals on the cart lid to indicate the stream type and accepted materials.



Three 35-Gallon Schaefer wheeled bin-carts. From left to right, the colours represent recyclable containers, food scraps, and paper, respectively.

.7 For specific dimensions of the Schafer USD wheeled carts, refer to Section 7.3.

FLOOR AREA (M^2)	Recyclable Containers	Paper	FOOD SCRAPS
	95GAL Cart #		35GAL Cart #
1-500	1	1	2
501-600	1	1	4
601-900	1	2	4
901-1,000	1	2	6
1,001-2,000	2	4	10
2,001-3,000	3	6	14
3,001-4,000	4	7	20
4,001-5,000	5	9	24
5,001-10,000	+6	+9	+24

This chart can be used to estimate how many bin-carts are required based on building floor area.

.2 Dumpsters

.1 Garbage and cardboard must be collected in slant-top, front-load dumpster containers, primarily in a 6-yard size with plastic lids.

.2 All dumpsters must be ergonomically designed to facilitate the opening of the lid and disposal of material.

.3 A building must have access to a minimum of one dumpster for garbage and another for cardboard.

.4 The exterior surface of the dumpsters should be coloured and labelled according to the waste stream.

Example of a blue garbage dumpster and a green cardboard dumpster in a loading bay area.

.3 Compactors

.1 Where space permits, and the volume of waste surpasses the capacity of a standard dumpster, a waste compactor must be utilized for garbage and/or cardboard.

.2 Compactors must be compatible with UBC Waste Management vehicles, sized between 25-28 yards, with the appropriate guide rail system.

.3 Prior to compactor installation, ensure the facility has the necessary infrastructure to support its installation and operation as per UBC Technical Guidelines (e.g. concrete pad, drainage, electrical connection).

.4 Ensure compactors are equipped with fill-level monitoring that can be connected to the Building Management System (BMS).

A photo and rendering of a compactor from the rear and front.

.4 Dimensions

.1 Standard dimensions of Schaefer carts, dumpster containers and compactors are as follows:

Type	Description	Approximate Size (W x D x H) (mm)
Schaefer Cart	35 gallon	580 x 570 x 975
	65 gallon	660 x 675 x 1075
	95 gallon	705 x 805 x 1175
Dumpster	3 cubic yard, front load	2010 x 1070 x 1220
	4 cubic yard, front load,	2010 x 1375 x 1220
	6 cubic yard, front load	2010 x 1680 x 1475
Compactor	28 cubic yard, self-contained	6620 x 2600 x 2720

.3 Other Supporting Equipment and Space

.1 Space must be provided to fit access/utility carts on each floor of the building.

.1 A dedicated room does not need to be provided, but equipment should remain out of general circulation areas and must not require any lifting for use.

.2 UBC Custodial Services may request space for an EV tugger, in which case space must be provided at ground level and close to the exit leading to the nearest dumpster or compactor. This space may be independent of the custodial room.

.4 Rationale

The above provisions for other building-related waste infrastructure will facilitate current waste management processes. Additional supporting equipment and space for UBC Custodial Services staff is necessary in circumstances where they are required to carry waste over longer distances due to the absence of nearby dumpsters. This equipment will help maintain cleanliness, minimize disruptions, reduce labor requirements, and ensure safety.

6 Exterior Waste Sorting Stations

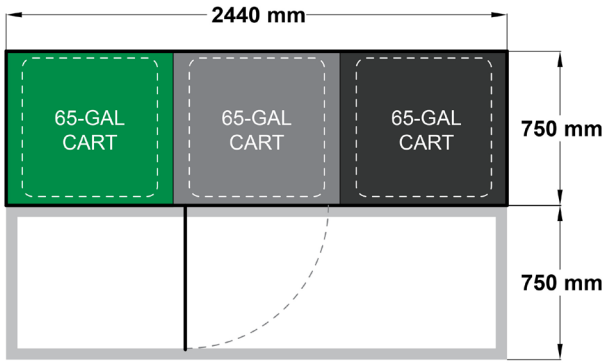
.1 Locations

Locations suitable for outdoor waste stations can include:

- Plazas
- Major pedestrian intersections
- Campus activity hubs
- Commercial/retail areas

.2 Full-size Outdoor Station

.1 Specific designs for outdoor stations must be vetted by UBC Waste Management, or SHCS if within SHCS-managed areas. The following two stations are examples of stations currently being used on campus:

Example	Footprint
 *A standard 3-stream outdoor station near a food outlet at Brock Commons South, a major pedestrian area.*	 *Standard footprint and clearance for a full-size outdoor station.*
 *Waste Management is currently exploring options to increase the number of multi-stream outdoor stations across campus with more affordable bin designs, such as this recently piloted 3-stream unit.*	

.2 Outdoor stations must be sized to fit a standard 65-gallon wheeled cart inside each stream.

.3 As with indoor stations, the design of outdoor stations must be consistent with standard colour schemes, materials, sizes, and signage.

.4 Exterior stations must be designed to withstand weathering and precipitation, with front-facing holes for each stream.

.3 Placement

.1 Outdoor waste sorting stations must be readily visible, easily accessible by the public and Waste Management staff and vehicles, and within a convenient distance for users, regardless of site layout.

.2 For large open spaces, stations must be positioned so that users can see them easily from anywhere within that open area.

.3 Stations must not be placed near obstacles that impede visibility (e.g. dense bushes, structures, or topography).

.4 Stations should be strategically placed in high-traffic zones, such as the locations listed above, or wherever people congregate and generate waste.

.5 Along key pedestrian routes, outdoor stations should be placed at least every 100m to always keep the next station visible.

.4 Rationale

Exterior waste sorting stations are necessary to ensure convenient access to multi-stream waste disposal across campus, encouraging waste sorting and reducing litter. These stations have been gradually replacing single-stream garbage bins in the public realm. Exterior waste sorting stations follow the same standards as interior waste sorting stations, with a few differences. Typically, only 3 streams are provided at outdoor stations: food scraps, recyclable containers, and garbage. The paper stream is absent because there is often low generation of paper waste in outdoor settings; however, it may be appropriate when close to food service outlets that use disposable packaging, to accommodate expected volumes of paper bags (though these can also be accepted in the food scraps stream).

7 Appendix: Design Specifications and Drawings

.1 Signage and Colours

Food Scraps	Recyclable Containers	Paper	Garbage
CMYK: 100, 10, 100, 10 #00C800	CMYK: 0, 0, 0, 60 #666666	CMYK: 85, 50, 0, 0 #2680FF	CMYK: 0, 0, 0, 100 #000000

.1 Waste stations and accompanying signage must be colour-coded according to the table above.

.1 Receptacle tops should match the colour codes as closely as possible, subject to the manufacturer.

.2 Station enclosures/bodies should be black or dark grey. Avoid white and stainless-steel surfaces for ease of maintenance.

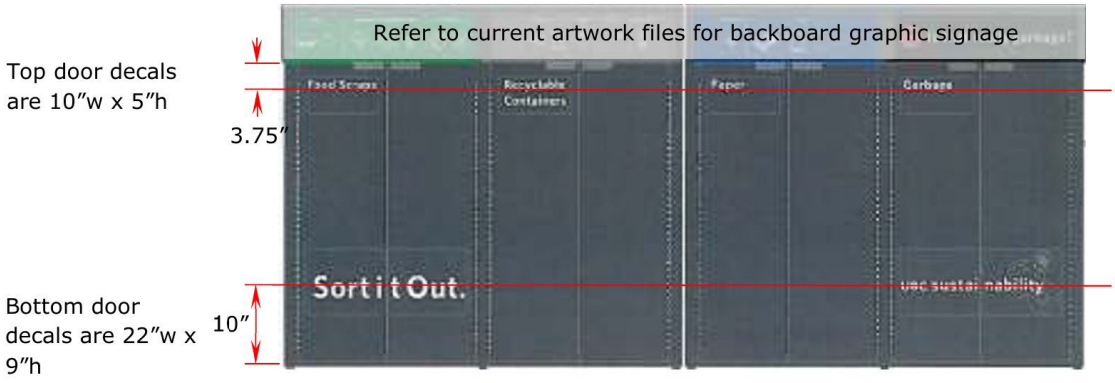
.3 Printed signage for waste sorting stations should match the colour codes above, be written in UBC's official font Whitney, and contain standardized illustrations of waste items for each stream.

.4 Pre-designed signage and vector illustrations can be found online at sustain.ubc.ca/get-involved/campaigns/sort-it-out/sorting-guides.

.2 Full-Size Station Signage Requirements

.1 "Sort-it-Out" signage must be mounted to the station's backboard or backsplash in transparent frames, either 6.25" x 27" (full width of the cabinet), or 11" x 17".

.2 Door fronts must have standard text as illustrated below:

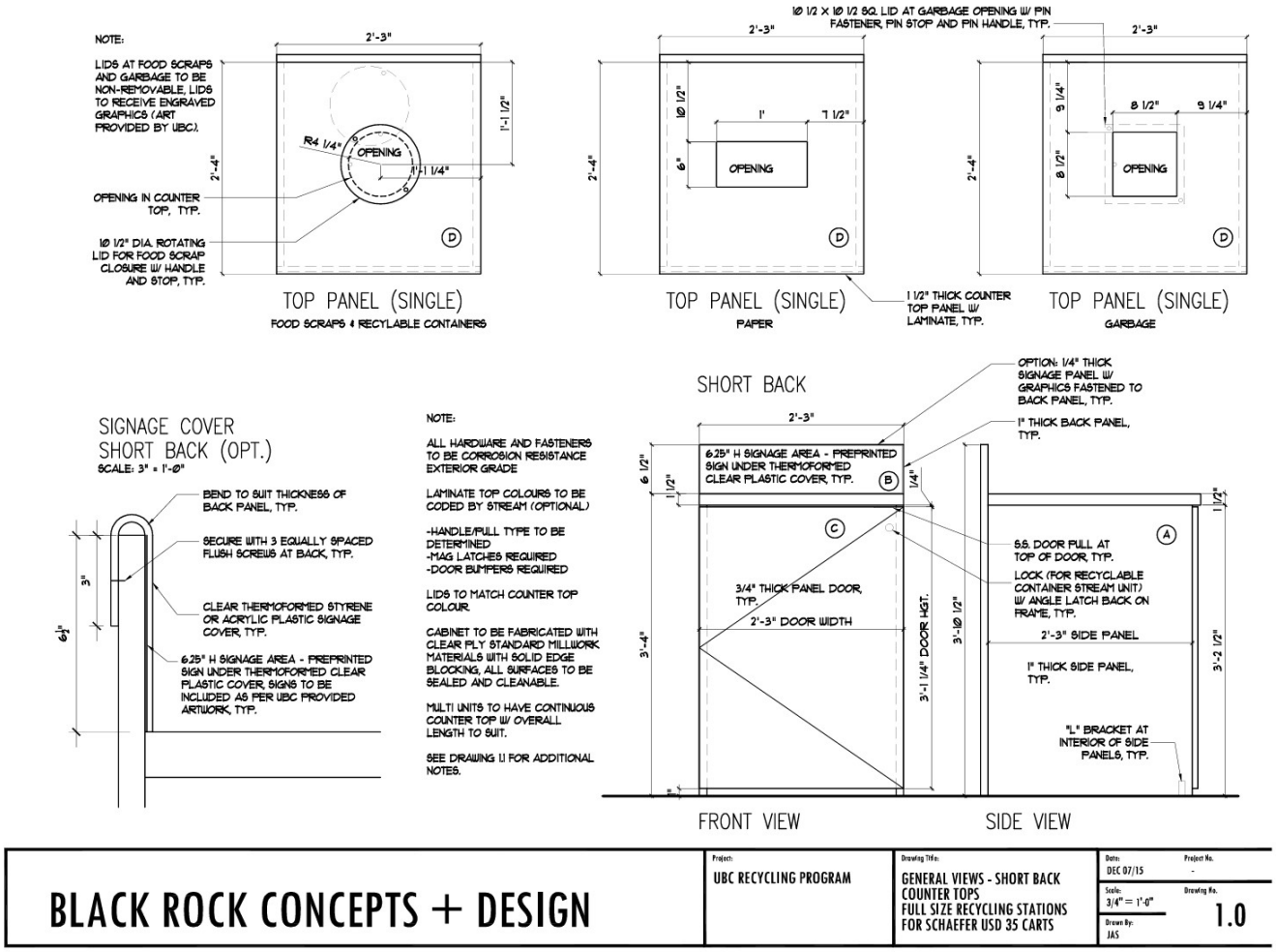


.3 Small-Size Station Signage Requirements

.1 “Sort-it-Out” signage must be mounted to the bins’ backboard or backsplash, in 8.5” x 11” size.

.2 Indoor Waste Sorting Stations

.1 Full-Size Stations



SWING LID HARDWARE	PART
JCB - C BOLT	JCBN144ØMR 4Ømm x 1/4" dia
HEXAGON LOCK NUT	HNLN2142ØVP 1/4 - 2Ø
FLAT WASHER	FW214LB9S
BREAK-OFF MACHINE SCREW	8-32 x 2"

OPENINGS VARY (SEE DWG. 1Ø FOR DIMENSIONS OF OPENINGS)

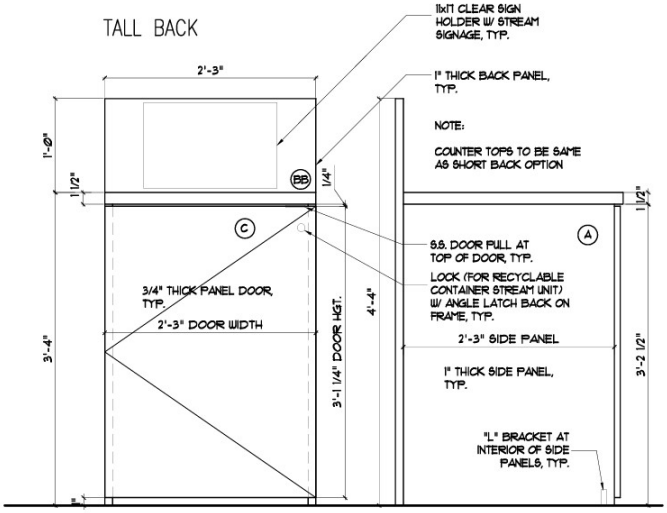
STREAM	COLOUR CODE REFERENCE (OPTIONAL)
FOOD SCRAPS	GREEN PANTONE 355C OR SIMILAR
RECYCLABLE CONTAINERS	LIGHT GREY CØ, MØ, YØ, K6Ø
PAPER	BLUE PANTONE 3Ø1C OR SIMILAR
GARBAGE	BLACK

CART/CONTAINER	HEIGHT	WIDTH	DEPTH
SCHAEFER: USD 35 CART	36.25"	22.75"	22.35"

MILLWORK PANELS	HGT/DPT	WIDTH	THICK
A (SIDE)	38.5"	27"	1"
B (SHORT BACK)	46.5"	27"	1"
BB (TALL BACK)	52"	27"	1"
C (DOOR)	37.25"	27"	3/4"
D (TOP - W/ LAMINATE)	28"	27"	1 1/2"

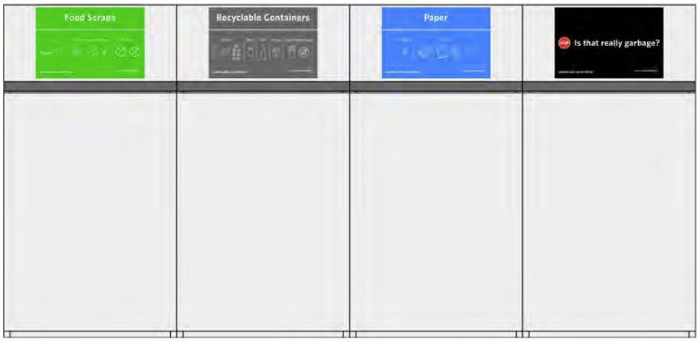
NOTE:

COUNTER TOPS SAME AS SHORT BACK STATIONS. SEE DRAWING 1Ø.



BLACK ROCK CONCEPTS + DESIGN

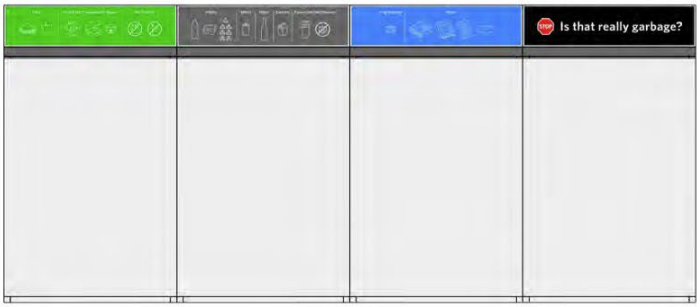
Project:	Drawing Title:	Date: / Project No.
UBC RECYCLING PROGRAM	GENERAL VIEWS + NOTES TALL BACK W/ 11x17 SIGNAGE FULL SIZE RECYCLING STATIONS FOR SCHAEFER USD 35 CARTS	DEC 07/15 / -
		Scale: 3/4" = 1'-Ø" / Drawing No. 1.1
		Drawn By: JAS



FRONT VIEW (TALL BACK)

PERSPECTIVE VIEW (TALL BACK)

COVERS NOT SHOWN ON THIS VIEW



FRONT VIEW

PERSPECTIVE VIEW

Note that these renderings only have the signage appropriately-coloured. Stations should have dark-grey bodies and colored top surfaces indiciating the respective waste streams.

BLACK ROCK CONCEPTS + DESIGN	Project: UBC RECYCLING PROGRAM	Drawing Title: GENERAL + PERSPECTIVE VIEWS FULL SIZE RECYCYING STATIONS FOR SCHAEFER USD 35 CARTS	Date: DEC 07/15 · Project No. - · Scale: NTS · Drawing No. 1.2 · Drawn By: JAS

.2 Medium-Size Stations

CUSTOMER SPECIFIC

CleanRiver
RECYCLING SOLUTIONS

DATE:_____

SIGNATURE:_____

NOTE: Unit colours may vary from render and printing depending on real world lighting conditions

Product Name:

TIM102-4 w Diorama Box
University of British Columbia (UBC)
Version 1
Revision A

Opening Shapes:

Green Circle ~~5"~~ 8"
Dove Grey Circle ~~5"~~ 8"
Blue Rectangle 2" x 9"
Black Rectangle 2 1.2" x 4 1/2"

Mobility Option: Casters
Bin Dimensions: 47 1/2" (W) x 23" (D) x 58 1/4" (H)

visit cleanriver.com

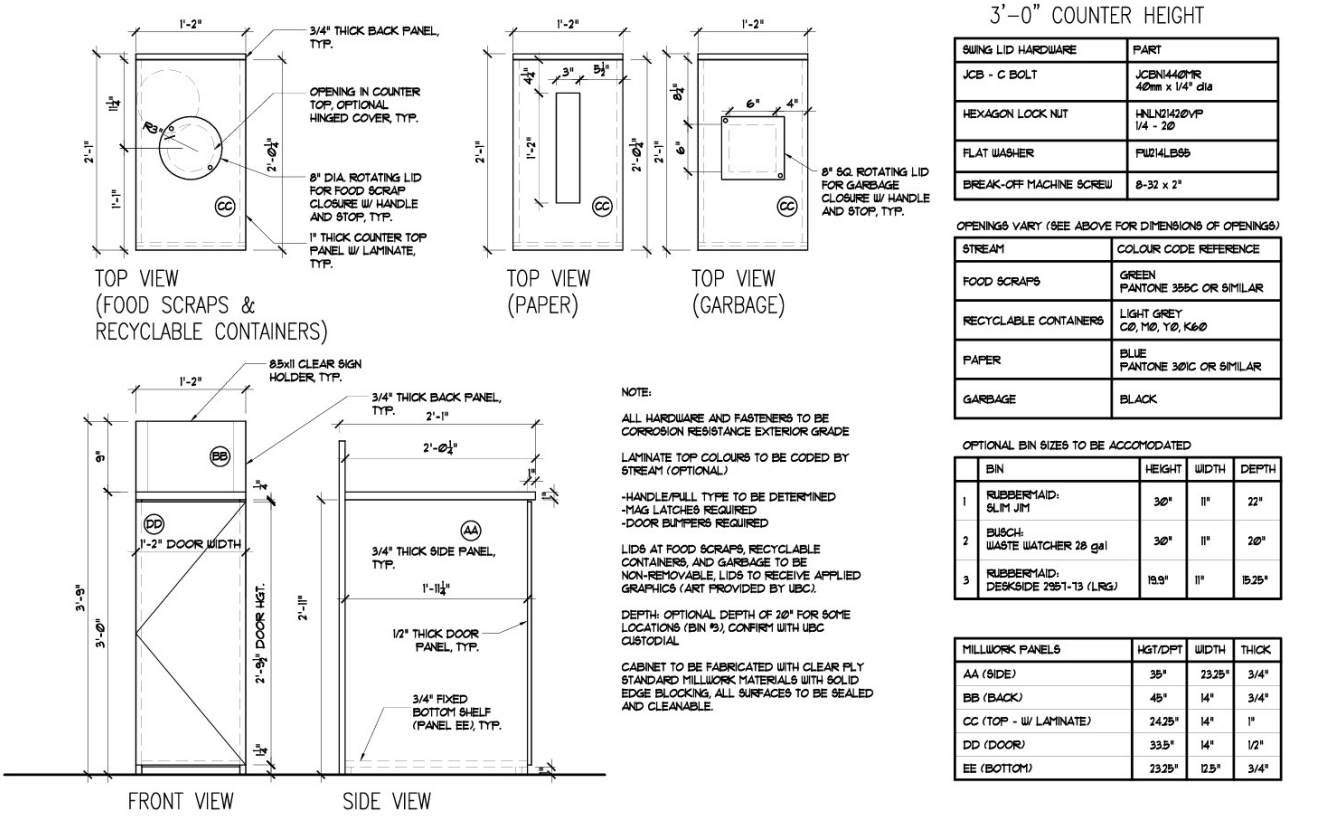
.3 Small-Size Stations

The Busch Systems Waste Watcher model is the preferred model for small-size stations. The following chart is a list of the components necessary to purchase to assemble one 4-stream Waste Watcher station. Bins can be bolted together or mounted on a dolly for easier mobility (recommended).

Image	Qty	Vendor Product ID	Description	Image	Qty	Vendor Product ID	Description
	4	199848	WASTE WATCHER - Single - Body - Black		1	199972	WASTE WATCHER - Sign Frame - Executive Grey
	1	103752	WASTE WATCHER - Dolly - Executive Grey		1	199973	WASTE WATCHER - Sign Frame - Royal Blue
	1	103778	WASTE WATCHER - Single - Lid - Solid Lift - Dark Green		1	199974	WASTE WATCHER - Sign Frame - Black
	1	103782	WASTE WATCHER - Single - Lid - Solid Lift - Executive Grey		1	--	WASTE WATCHER – Sign – UBC Food Scraps
	1	103794	WASTE WATCHER - Single - Lid - Full - Royal Blue		1	--	WASTE WATCHER – Sign – UBC Recyclable Containers
	1	103779	WASTE WATCHER - Single - Lid - Solid Lift - Black		1	--	WASTE WATCHER – Sign – UBC Paper
	1	199975	WASTE WATCHER - Sign Frame - Dark Green		1	--	WASTE WATCHER – Sign – UBC Garbage

.4 Custom Stations

The following drawings are an example of a custom small-size station.



NOTE:

ALL HARDWARE AND FASTENERS TO BE CORROSION RESISTANCE EXTERIOR GRADE

LAMINATE TOP COLOURS TO BE CODED BY STREAM (OPTIONAL)

-HANDLE/PULL TYPE TO BE DETERMINED
-MAG LATCHES REQUIRED
-DOOR BUMPERS REQUIRED

LIDS AT FOOD SCRAPS, RECYCLABLE CONTAINERS, AND GARBAGE TO BE NON-REMOVABLE, LIDS TO RECEIVE APPLIED GRAPHICS (ART PROVIDED BY UBC).

DEPTH: OPTIONAL DEPTH OF 20" FOR SOME LOCATIONS (BIN #3), CONFIRM WITH UBC CUSTODIAL

CABINET TO BE FABRICATED WITH CLEAR PLY STANDARD MILLWORK MATERIALS WITH SOLID EDGE BLOCKING, ALL SURFACES TO BE SEALED AND CLEANABLE.

3'-0" COUNTER HEIGHT

SWING LID HARDWARE	PART
JCB - C BOLT	JCBN1440MR 40mm x 1/4" dia
HEXAGON LOCK NUT	HNLN2142ØVP 1/4 - 20
FLAT WASHER	FW214LB65
BREAK-OFF MACHINE SCREW	8-32 x 2"

OPENINGS VARY (SEE ABOVE FOR DIMENSIONS OF OPENINGS)

STREAM	COLOUR CODE REFERENCE
FOOD SCRAPS	GREEN PANTONE 355C OR SIMILAR
RECYCLABLE CONTAINERS	LIGHT GREY C0, M0, Y0, K60
PAPER	BLUE PANTONE 301C OR SIMILAR
GARBAGE	BLACK

OPTIONAL BIN SIZES TO BE ACCOMODATED

	BIN	HEIGHT	WIDTH	DEPTH
1	RUBBERMAID: SLIM JIM	30"	11"	22"
2	BUSCH: WASTE WATCHER 28 gal	30"	11"	20"
3	RUBBERMAID: DESKSIDE 2957-73 (LRG)	19.9"	11"	15.25"

MILLWORK PANELS	HGT/DPT	WIDTH	THICK
AA (SIDE)	35"	23.25"	3/4"
BB (BACK)	45"	14"	3/4"
CC (TOP - W/ LAMINATE)	24.25"	14"	1"
DD (DOOR)	33.5"	14"	1/2"
EE (BOTTOM)	23.25"	12.5"	3/4"

BLACK ROCK CONCEPTS + DESIGN	Project: UBC RECYCLING PROGRAM	Drawing Title: SMALL CUSTOM RECYCLING STATIONS GENERAL VIEWS	Date: MAR '16 Project No. - Scale: 3/4" = 1'-0" Drawing No. 1.1 Drawn By: JAS

PERSPECTIVE VIEW

COVERS NOT SHOWN ON THIS VIEW

Note that stations should have dark-grey or black bodies for ease of maintennance.

FRONT VIEW

BLACK ROCK CONCEPTS + DESIGN	Project: UBC RECYCLING PROGRAM	Drawing Title: SMALL CUSTOM RECYCLING STATIONS MODEL VIEWS	Date: MAR '16 Project No. - Scale: NTS Drawing No. 1.2 Drawn By: JAS

.3 Other Building-Related Infrastructure

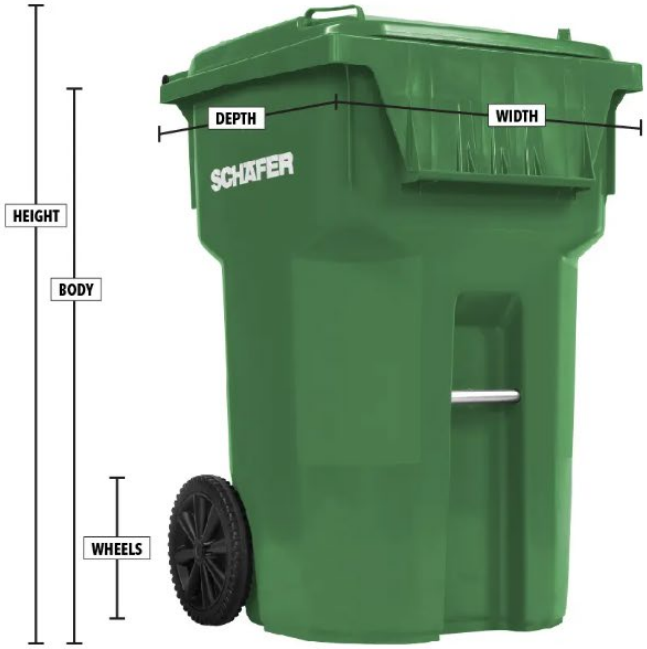
.1 Wheeled Bin-Carts

Specifications

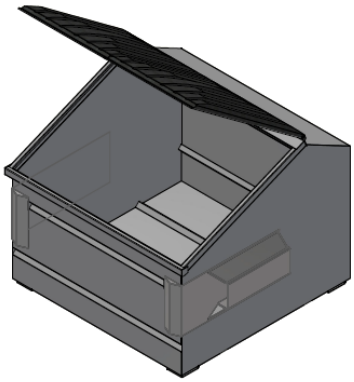
	Order #	USD 95B	USD 65B	USD 35B
1	Total Height	46.1"	42.2"	38.2"
2	Body Height	42.8"	39.5"	35.8"
3	Width	27.7"	25.9"	22.8"
4	Depth	31.6"	26.5"	22.3"
5	Wheel Diameter	12"	10"	8"
	Load Rating	340 lbs.	220 lbs.	125 lbs.
	Truckload Quantity	427	660	1,008

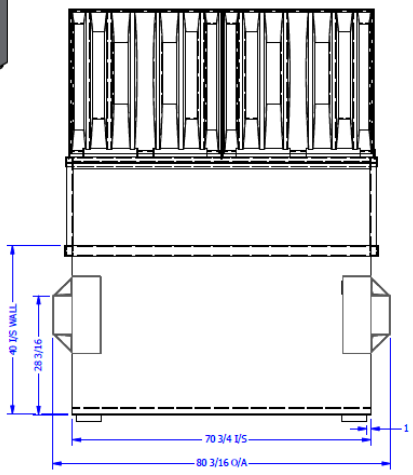
ANSI Z245.30 and ANSI Z245.60 Approved. ISO 9001 Certified. Truckload quantity based on 53' trailer. Measurements in inches.

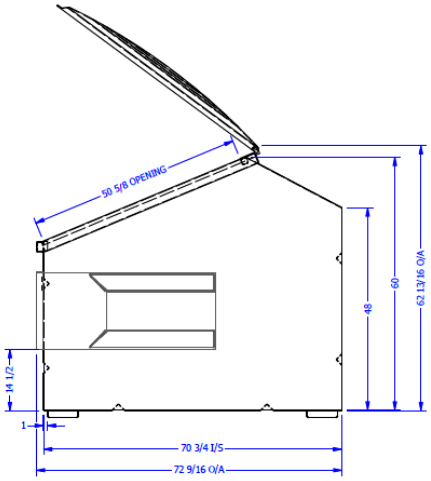
*Available on 65-gallon and 95-gallon models.



.2 Dumpsters

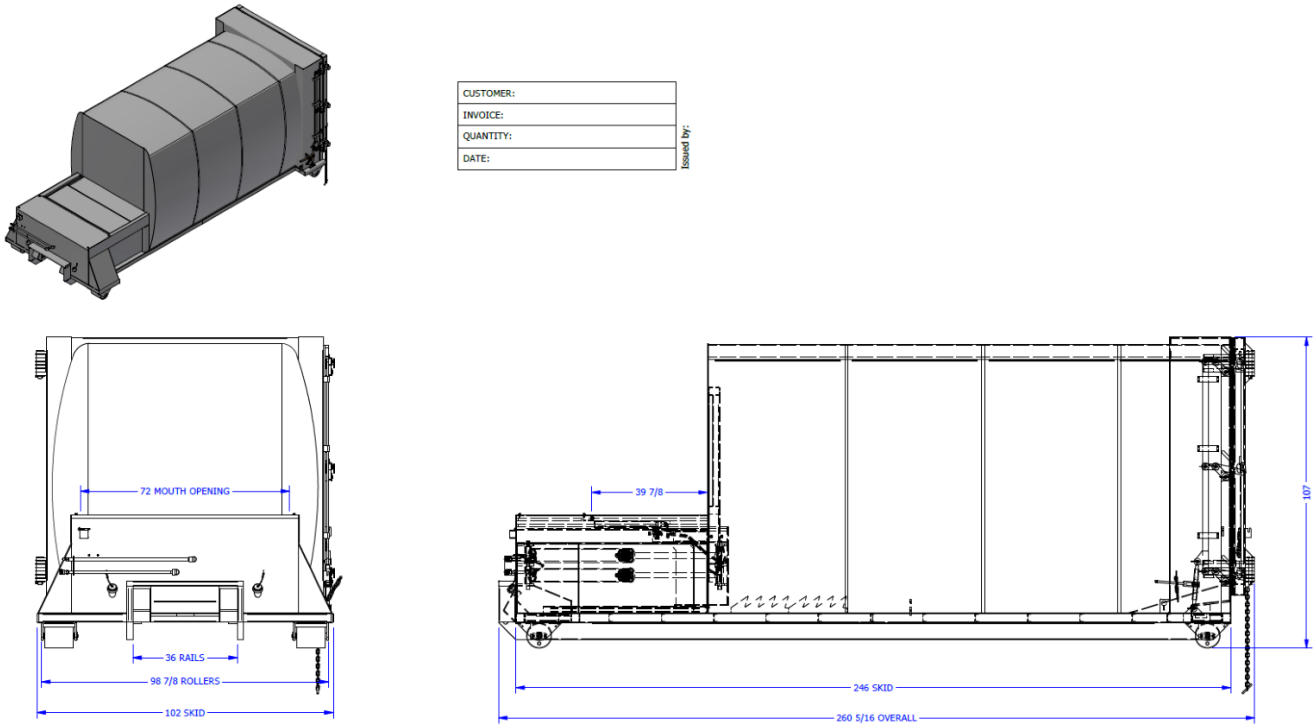






.3 Compactors

The preferred self-contained compactor model can be found at: https://www.universalhandling.com/product/self-contained.



.4 Other Supporting Equipment

The standard access/utility cart has approximate outside dimensions of 1000mm x 725 mm x 775 mm. More information can be found here: Advantage Maintenance Products :: 10 Bu. Regular Utility Starcart, Grey with Corner Casters.

The preferred EV tugger model can be found here: Might-E Tug – Canadian Electric Vehicles (canEV and icanEV).

10 Bu. Regular Utility Starcart, Grey with Corner Casters

SKU: 125ACGY

UOM: EA

- 3" threadguard casters in corner pattern
- Treated 3/4" plywood undercarriage
- Inside Dimensions: 35" x 23" x 25"
- Outside Dimensions: 39" x 27" x 30"
- 400 lb maximum load capacity
- 10 bushel/12 cu ft volume
- Sold each

.4 Exterior Waste Sorting Stations

.1 Full-Size Stations

The following full-size station design may be replaced by the updated prototype design shown in Section 6.2. Contact UBC Waste Management to confirm the most up-to-date designs.