

Section 11 80 00 – Zero Waste Collection and Equipment (Material Handling for Zero Waste Diversion)

ZERO WASTE STANDARD OVERVIEW

*****Please involve the Zero Waste Program in all aspects of the project. Contact 541-346-0961 to schedule a walk-through of existing spaces to assess current equipment and office/department clean-out needs prior to move. Provide program with timeline such that equipment can be moved, inventoried and scheduled for use in temporary space. Program will assist in design phase to determine equipment and service requirements for completed project. It is the responsibility of the project to fund new zero waste equipment determined in the following standards.***

The University of Oregon strives for a zero waste campus model. This includes creating a waste management system that favors waste reduction and recovery as follows:

- no stand-alone garbage cans inside and outside campus buildings
- always site garbage with zero waste collection as a waste (discard) management system
- recommended siting for zero waste stations is one per floor with additional units with compost near entrances and exits
- zero waste stations (to include landfill-garbage) serve as waste (discard) management system inside buildings
- public drop-off sheds (sited with garbage collection) serve public areas/ loading dock zero waste staging/cardboard recycling dumpsters and garbage dumpsters serve exterior building locations
- compost collection is sited in common areas, where food is consumed and in areas that generate food and compostable waste (i.e. cafes and kitchens)
- building users are encouraged to participate in system through implementation of zero waste desksiders that require users to centralize all discards to a zero waste station (including landfill items)
- elimination of classroom “garbage” cans is encouraged/site zero waste stations central to areas of classrooms/lecture halls for collecting classroom discards
- consider event/meeting/conference space(s) waste generation and ensure spaces function with zero waste goal
- make zero waste the rule and not the exception

General information on siting equipment:

- zero waste stations should be located in central areas such as public egresses
- all department kitchen locations should employ recycling and compost opportunities as well as landfill
- All mail rooms and printing areas require bags and racks to capture paper waste
- cardboard collection and removal is the responsibility of the building user due to fire code
- work with Zero Waste Program to determine special needs for equipment siting, special collections and to develop a system for handling discards within and outside of campus buildings
- always site zero waste stations in heavy use areas, ensure they are highly visible and within physical proximity to waste generating activity

Other options for resource conservation and zero waste in campus buildings/areas:

- install water refill equipment in all campus buildings to reduce plastic bottle use and disposal
- create reusable office supply spaces in department and building areas for departments to share office supplies to assist in maximizing campus resource use

Program Materials Handling list and Services:

<https://cpfm.uoregon.edu/zerowaste-resources>

Zero Waste Campus Toolkit:

<https://cpfm.uoregon.edu/zerowaste-resources>

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Zero Waste is Higher Education!

Overview of Zero Waste Equipment Guidelines

* All equipment meets ADA standards; Due to changing prices, contact FASS Purchasing to get equipment quote



Location:

Equipment:

Location	PAGE REFERENCE	Cardboard Recycling Dumpster	50-Gallon Fiber Barrels	55-Gallon Plastic Barrels	Domed Lids	32-Gallon Tote	96-Gallon Totes	Combo 4-Part PDO and 2 Barrel Shed	14-Gallon Inserts	4-Part PDO w/ 2-4 Barrel Recycling Shed	4-Part Max-R ZW Station w/ Inserts	3 Part Max-R ZW Station w/ Inserts	Bagit Steel Enclosures	Bagits and Racks	3-Tiered Boxes	Zero Waste Desksiders	7-10 Gallon Recycle Bin	Step-to-Open Compost Bin	Residence Hall In-Room /Apartment Bins	2-5 Gallon Kitchen Waste Event Services	Order or Provide Zero Waste Event Services	Eliminate Stand-Alone Garbage Cans	All Discards to Hallways	Occupants Centralize	
Athletics Facilities Interior	14												X	X										X	
Athletics Facilities Exterior	5	X						X	X	X														X	
Bathrooms	15																								
Building Loading Docks	4	X	X	X																				X	
Cafes	15											X		X					X					X	
Classrooms/Lecture Halls	15																							X	
Commercial Kitchens	6	X	X	X	X	X	X	X																X	
Common Spaces	15												X	X										X	
Event Spaces	15											X	X	X					X					X	
Fam. Housing/Univ. Apts Exterior	7	X	X	X	X	X	X	X	X	X														X	
Fam. Housing/Univ. Apts Interior	19																						X	X	
Kitchens/Break Rooms	20													X	X				X				X	X	
Labs	16												X	X										X	
Mail Copy/Printer Rooms	16															X								X	
Offices - Individual	12															X	X	X	X	X	X	X	X	X	X
Offices - Suites	13															X	X	X	X	X	X	X	X	X	X
Public Space Exterior	8									X	X	X												X	
Public Space Interior	10													X	X									X	
Reception Areas/Lobby	15													X	X		X							X	
Residence Hall Exterior	6	X	X	X	X	X	X	X	X	X	X													X	
Residence Hall Rooms	18																							X	
Studios	16													X	X									X	

**Plan space in offices for confidential materials collection: http://library.uoregon.edu/records/conf_recyc.html

Section 11 80 00 – Collection & Disposal Equipment continued

BUILDING EXTERIOR ZERO WASTE COLLECTION

1. ACADEMIC BUILDING EXTERIOR ZERO WASTE COLLECTION

**Design of facilities that involve storage and/or disposal of industrial and/or special materials, chemicals, waste, etc. will require a report and recommendation from Facilities EH&S.

- a. All Zero Waste collection equipment to be determined and located with the UO Zero Waste Program by 100% DD.
- b. Collection shall be sited alongside building garbage collection whenever possible and applicable.
- c. Additional loading dock requirements may be applied based upon project, program, scope, etc.
- d. Office and Academic Buildings require the following at a minimum:
 - Concrete or asphalt pad for siting of a 3 yard cardboard dumpster and a 3-yard garbage dumpster (TBD by Garbage Services)
 - Recycling collection/staging area in the form of a weather-protected loading dock, an enclosed shed, or a covered enclosure. Size must be sufficient to hold 6 barrels that are 55-gallon size (TBD by UO Zero Waste Program).
 - Compost collection/staging area in the form of a weather-protected loading dock, an enclosed shed, or a covered enclosure. Size must be sufficient to hold 2 roll carts that are 96-gallon size (TBD by UO Zero Waste Program).
 - Room for other specialized collection as needed by building, minimum 1 96-gallon roll cart
 - Service vehicle parking or dock space sufficient for a large step-van with tailgate
 - Ensure enough space in loading dock area access and loading dock area, for maneuvering of large step vans to back into the dock for ease in loading and to exit safely.

Building Exterior Zero Waste Equipment:

- Cardboard Recycling Dumpster
 - i. Provided through cardboard recycling contract. Sizes vary by building size, from 1-yard to 4-yard capacity
 - ii. Siting/applications: All campus buildings and residential areas
 - iii. Signage by UO Zero Waste Program

- 55-gallon plastic barrels
 - i. For loading dock staging areas
 - ii. Provided by UO Zero Waste Program
 - iii. Siting: Various
 - iv. Signage by the UO Zero Waste Program
 - v. Dimensions: h 37” x dia. 22”



Section 11 80 00 – Collection & Disposal Equipment continued

Building Exterior Zero Waste Collection (continued) - Academic Building Exterior

- 50-gallon fiber barrels
 - i. For loading dock staging areas
 - ii. Provided by UO Zero Waste Program
 - iii. Siting: Various
 - iv. Signage by the UO Zero Waste Program
 - v. Dimensions: h 38.5” x dia. 22”



- 96-Gallon & 32-Gallon Roll Carts
 - i. For centralized building collection
 - ii. Manufacturer: Toter Inc.
 - iii. Part Number: EVR® II
 - iv. Siting/applications: Various
 - v. Signage by UO Zero Waste Program
 - vi. Finish: Brown, green or black (varies by size)
 - v. Dimensions: 95 gal - h 46.5” x w 29” x d 35”
32 gal - h 37” x w 25” x d 25”



- 64-Gallon Roll Carts With Casters
 - i. For centralized building collection
 - ii. Manufacturer: Toter Inc.
 - iii. Part Number: EVR® II
 - iv. Siting/applications: Building loading docks
 - v. Signage by UO Zero Waste Program
 - vi. Finish: Bluestone
 - v. Dimensions: 95 gal - h 44” x w 24” x d 32”



2. ATHLETIC FACILITIES EXTERIOR COLLECTION

a. Athletic Facilities, as an auxiliary, to be in synch with the rest of the campus system, is recommended the following for zero waste implementation:

- PDO (Public Drop-Off's) and/or recycling shed at all major entrances and exits for collection of bottles, cans, and paper
- Concrete or asphalt pads for cardboard and garbage dumpsters (TBD by Athletics)
- As needed, consult with UO Zero Waste Program to determine siting and collection system for materials recovery to stay in synch with UO Zero Waste Program

Recommended Athletic Facility Zero Waste Equipment:

- Public Drop Off (PDO) recycling shed – 4-part
 - i. Mfg./Supplier: Wastequip, Albany, OR
 - ii. Part No: Contact Wastequip.
 - iii. Holds four 14-gallon inserts (see item below)
 - iv. Siting/applications: Campus-wide outdoor public, high- traffic pedestrian areas
 - v. Signage by the UO Zero Waste Program
 - vi. Finish: UO Green
 - vii. Dimensions: h: 50” x w 36” x d: 24”



Section 11 80 00 – Collection & Disposal Equipment continued

Building Exterior Zero Waste Collection (continued) - Athletic Facility Equipment

- Cardboard Recycling Dumpster
 - i. Provided through cardboard recycling contract. Sizes vary by building size, from 1-yard to 4-yard capacity
 - ii. Siting/applications: All campus buildings and residential areas
 - iii. Signage by UO Zero Waste Program



3. RESIDENCE HALLS EXTERIOR COLLECTION

- a. Residence Halls require the following at a minimum:
 - Zero waste staging area in the form of a weather-protected loading dock or a covered enclosure/ Size must be sufficient to hold 12 barrels that are 55-gallon size per residence hall
 - Service vehicle parking or dock space sufficient for a large step-van
 - The following exterior collection areas are required for centralizing resident materials:
 - i. Exterior resident zero waste collection areas for each major wing of a residence hall in the form of a covered enclosure or an area sufficient to hold 8 barrels that are a 55-gallon size with domed lids
 - ii. The use of 2- and 4-part sheds for Residence Hall exterior public collection is preferred
 - iii. One 3-yard cardboard dumpster
 - iv. One 3-yard garbage dumpster (TBD by Garbage Services)
 - Concrete or asphalt pad for siting of any additional 3 yard cardboard dumpster and 3-yard garbage dumpsters
 - Any kitchen area operating within a Residence Hall complex requires an additional recycling staging area separate from recycling collection sites used by Residence Hall residents. Site must be sufficient to hold 12 barrels that are 55-gallon size and a 3-yard cardboard dumpster.
 - Any kitchen area within the Residence Hall/Housing complex (including Catering), require an additional compost staging area. The site must be sufficient to hold 6 roll carts that are a 96-gallon size and 8 roll carts that are 32-gallon.

Residence Hall Exterior Zero Waste Equipment:

- 55-gallon plastic barrels
 - i. For loading dock staging areas
 - ii. Provided by UO Zero Waste Program
 - iii. Siting: Various
 - iv. Signage by the UO Zero Waste Program
 - v. Dimensions: h 37" x dia. 22"
- Domed lids
 - i. For 55-gallon plastic barrels
 - ii. Manufacturer/Supplier: Recycle Away, LLC
 - iii. Part Number: RC-55
 - iv. Siting: Various
 - v. Signage by the UO Zero Waste Program
 - vi. Dimensions: h 11.5" x dia. 25"



Section 11 80 00 – Collection & Disposal Equipment continued

Building Exterior Zero Waste Collection (continued) - Residence Hall Exterior

- 50-gallon fiber barrels
 - i. For loading dock staging areas
 - ii. Provided by UO Zero Waste Program
 - iii. Siting: Various
 - iv. Signage by the UO Zero Waste Program
 - v. Dimensions: h 38.5” x dia. 22”



- Cardboard Recycling Dumpster
 - i. Provided through cardboard recycling contract. Sizes vary by building size, from 1-yard to 4-yard capacity
 - ii. Siting/applications: All campus buildings and residential areas
 - iii. Signage by UO Zero Waste Program



- 96-Gallon & 32-Gallon Roll Carts
 - i. For centralized building collection
 - ii. Manufacturer: Toter Inc.
 - iii. Part Number: EVR® II
 - iv. Siting/applications: Various
 - v. Signage by UO Zero Waste Program
 - vi. Finish: Brown, green or black (varies by size)
 - v. Dimensions: 95 gal - h 46.5” x w 29” x d 35”
32 gal - h 37” x w 25” x d 25”



4. FAMILY HOUSING AND UNIVERSITY APARTMENTS EXTERIOR COLLECTION

a. Off-campus Apartment Units/Family Housing Complexes:

- Shall be equipped with complete, self-contained recycling sites (may or may not include compost), preferably in covered enclosures or designated areas with 55-gallon barrels and domed lids.
- One recycling site for each 15-20 apartments; units or apartments configured in a sprawling layout could require a greater number of sites per unit (TBD by UO Zero Waste Program)
- Each site consists of the following (TBD by UO Zero Waste Program):
 - i. One 4-part PDO with 14-gallon curbside inserts and one 4-part Recycling Shed with 55-gallon barrels OR;
 - ii. 55-gallon barrels with domed lids, number sited to be determined
 - iii. One 3-yard cardboard dumpster
 - iv. One 3-yard garbage dumpster (TBD by Garbage Services)

Section 11 80 00 – Collection & Disposal Equipment continued

Building Exterior Zero Waste Collection (continued) - Family Housing and University Apartments

Family Housing and University Apartments Zero Waste Equipment:

- Public Drop Off (PDO) recycling shed – 4-part
 - i. Mfg./Supplier: Wastequip, Albany, OR
 - ii. Part No: Contact Wastequip.
 - iii. Holds four 14-gallon inserts (see item below)
 - iv. Siting/applications: Campus-wide outdoor public, high- traffic pedestrian areas
 - v. Signage by the UO Zero Waste Program
 - vi. Finish: UO Green
 - vii. Dimensions: h 50” x w 36” x d 24”



- Recycle Shed -Combo 4-part and 2-barrel
 - i. Mfg./Supplier: Wastequip, Albany, OR
 - ii. Part No: Contact Wastequip
 - iii. Holds four 14-gallon inserts and two 55-gallon barrels
 - iv. Siting/applications: Campus-wide outdoor public, high- traffic pedestrian areas and other campus special-application areas
 - v. Signage by the UO Zero Waste Program
 - vi. Finish: UO Green
 - vii. Dimensions: h 51” x w 86.5” x d 28”



- Cardboard Recycling Dumpster
 - i. Provided through cardboard recycling contract. Sizes vary by building size, from 1-yard to 4-yard capacity
 - ii. Siting/applications: All campus buildings and residential areas
 - iii. Signage by UO Zero Waste Program



5. PUBLIC SPACES EXTERIOR COLLECTION

The Zero Waste campus standard is no stand-alone garbage receptacles. For all campus public exterior areas, as is possible, pair garbage receptacles with zero waste collection unit. If not possible, at a minimum require outside zero waste collection as follows:

- Require a Public Drop Off Shed (PDO) on high traffic areas and gathering spots.
- One or more PDO's shall be sited at the following locations:
 - i. Established entries to and exits from campus
 - ii. Major pedestrian intersections throughout campus
 - iii. Well-used pedestrian walkways and traffic pattern locations
 - iv. Athletic facilities
 - v. Erb Memorial Union and Housing facilities exterior
 - vi. Each PDO site shall be paired with least one garbage receptacle

Section 11 80 00 – Collection & Disposal Equipment continued

Building Exterior Zero Waste Collection (continued) - Public Spaces Exterior

Public Spaces Exterior Zero Waste Equipment:

- Public Drop Off (PDO) recycling shed – 4-part
 - i. Mfg./Supplier: Wastequip, Albany, OR
 - ii. Part No: Contact Wastequip.
 - iii. Holds four 14-gallon inserts (see item below)
 - iv. Siting/applications: Campus-wide outdoor public, high- traffic pedestrian areas
 - v. Signage by the UO Zero Waste Program
 - vi. Finish: UO Green
 - vii. Dimensions: h 50” x w 36” x d 24”



- 14-gallon Curbside Recycling Bins
 - i. Inserts for 4-part recycle shed
 - ii. Mfg./Supplier: Busch Systems International, Barrie, Ontario, Canada
 - iii. Part Number: BC2000, color Kelly Green, stamped 'We Recycle'
 - iv. Siting/applications: Inserts for 4-part PDO-style DeWald units, above (Units used are ordered in kelly green)
 - v. Signage by supplier
 - vi. Dimensions: h 13.5” x w 20” x d 16”



- Recycle Shed 4-barrel
 - i. Mfg./Supplier: Wastequip, Albany, OR
 - ii. Part No: Contact Wastequip.
 - iii. Holds four 55-gallon barrels
 - iv. Siting/applications: Campus-wide outdoor public, high- traffic pedestrian areas and other campus special-application areas
 - v. Signage by the UO Zero Waste Program
 - vi. Finish: UO Green
 - vii. Dimensions: h 52.5” x w 106” x d 31.5”



- Recycle Shed -Combo 4-part and 2-barrel
 - i. Mfg./Supplier: Wastequip, Albany, OR
 - ii. Part No: Contact Wastequip.
 - iii. Holds four 14-gallon inserts and two 55-gallon barrels
 - iv. Siting/applications: Campus-wide outdoor public, high- traffic pedestrian areas and other campus special-application areas
 - v. Signage by the UO Zero Waste Program
 - vi. Finish: UO Green
 - vii. Dimensions: h 51” x w 86.5” x d 28”



Section 11 80 00 – Collection & Disposal Equipment continued
BUILDING INTERIOR ZERO WASTE COLLECTION

1. PUBLIC SPACES INTERIOR COLLECTION

- a. Interior waste management equipment and siting of same are suggested to be consistent with a “Zero Waste” approach to waste management. Landfill materials (formerly referred to as waste, trash, garbage), recyclables, and compostables, to be collected via all-inclusive waste management stations that may or may not include compostables (see below and referred to as “Zero Waste” sites). Ideally, zero waste stations with compost would be sited in cafes and department kitchens, and break areas where food waste is generated. Other public sites can be sited without compost. Ideally, zero waste stations would be located centrally to serve 10 work stations or offices; within sight of classrooms.
- b. Zero waste stations are to be determined and located in consultation with the UO Zero Waste Program by 100% DD. Recommended siting for zero waste stations is one per floor with additional units with compost near entrances and exits. It is also recommended that zero waste desksiders be implemented to all building occupants.
- c. The following represent the standard waste management approach for interior spaces:
 - A full public zero waste site will consist of a 4-part collection system for: Paper; Cartons/Glass/Metal/Plastic; Compostable materials; and landfill materials (trash) to be sited in a food producing or food collection area such as department break areas and kitchens; Steel enclosures and foot-pedal compost bins are recommended for these areas
 - Other 3-part zero waste stations without compost can be sited in non-food producing areas
 - One 3-part, fire-rated, public zero waste site for each major wing of each floor of a building
 - One 3-part, fire-rated, public zero waste site for each 4 to 6 classrooms
 - Additional receptacles, bags and racks recommended, for copy room and/or mail room
 - Additional receptacles, bags and racks recommended, for mailroom bulk mail collections
 - Additional sites as dictated by occupant needs
 - For fire-rated sites, preference is given to Max-R units or Bag-it Steel Enclosures (see below)

CASEWORK

In the past, casework has been utilized in place of steel enclosures or zero waste units. In order to maintain consistency, casework is no longer accepted as a standard. Standards have been set to create consistency of equipment and have been identified due to servicing requirements. It is vital that these standards are consistent and meet the program servicing and collection requirements.

As casework has been employed to recess equipment into a wall, the standard is for the project to make a recess into a wall that will accommodate one of the standard Max-R units identified.

Section 11 80 00 – Collection & Disposal Equipment continued

Building Interior Zero Waste Collection (continued) - Public Spaces Interior

Public Spaces Interior Zero Waste Equipment:

- 3-part Max-R Zero Waste Stations

This is the standard, stations can be customized and size reduced for low-traffic areas that do not generate compost

- i. Manufacturer – Max-R, Sussex, WI
- ii. Part Number: Oxford Collection, part number varies by configuration and color
- iii. Standard: 3-part unit for Paper, Cartons/Glass/Metal/Plastic, and Landfill/Trash
- iv. Options: Custom options include number of partitions (3-, 4-part), height and materials
- v. Colors: Various, but preference for green panels with brown trim
- vi. Siting applications: Fire-rated areas
- vii. Dimensions: h 50.5” x w 39.5” x d 24”



Contact FASS purchasing for specialty pricing on these units

- Bagit Steel Enclosures for modified zero waste system in small spaces

- i. Mfg./supplier: The Bag Connection, Dundee, OR
- ii. Part Number: N/A
- iii. Installed in multiples with Bagit Original bags
- iv. Siting/Applications: Public egress areas
- v. Signage by the UO Zero Waste Program
- vi. Finish: Any color
- vii. Dimensions: h 35.5” x w 18” x d 12”



- Bag-it Original Hanging Bag Recycling System

- i. Mfg./supplier: The Bag Connection, Dundee, OR
- ii. Part description:
 - Blue 14-gallon paper recycling bag
 - White 14-gallon paper recycling bag
 - Green 14-gallon paper recycling bag
 - 14-gallon leak-proof bottle/can recycling bag (blue)
 - Single bag free-standing rack
 - Double bag freestanding rack
 - Green 20-gallon leak-proof bottle/can recycling bag
- iii. Siting applications: Non-fire-rated sites for Paper & Cartons/Glass/Metal/Plastic collections; office suites, copy rooms, etc.
- iv. Dimensions: h 29” x w 20” x d 15.5”



Section 11 80 00 – Collection & Disposal Equipment continued

Building Interior Zero Waste Collection (continued) - Office/ Work Stations Interior

2. OFFICES/ WORK STATIONS INTERIOR COLLECTION

All offices will be outfitted with a recycling and small waste container at a minimum. With the zero waste deskside system, it is recommended that the office occupant centralizes all recycling, compost and landfill to the nearest zero waste station.

**With this system custodians will need to be notified if occupants are utilizing the zero waste system and will be centralizing all discards (including garbage) to zero waste stations.

Through this process, a project must work with building, custodial and zero waste staff to implement this system.

Individual Office Zero Waste Equipment:

- Deskside Bins
 - i. Mfg./supplier: Busch Systems International, Barrie, Ontario, Canada
 - ii. Part number: BC1001-6-gallon Desksider, color Kelly Green, stamped 'We Recycle', BC 1500-23, BC 1200-23, BC 1500L-23
 - iii. Siting/applications: Zero Waste Desksider to be serviced by user
 - iv. Signage by UO Zero Waste Program
 - v. Dimensions: h 7" x w 14.5" x d 11"



- 3-Tiered Boxes
 - i. Supplied by UO Zero Waste Program
 - ii. Signage by the UO Zero Waste Program
 - iii. Siting/Applications: Office desks
 - iv. Dimensions: h 15.5" x w 12.5" x d 13.5"



- 7- or 10-Gallon Recycling Container
 - i. For recycling collection in various spaces
 - ii. Manufacturer: Rubbermaid
 - iii. Part Number: 2956-73 or 2957-73
 - iv. Siting/applications: Laboratories
 - v. Finish: Blue
 - vi. Dimensions: h 12.1" x w 11.4" x d 8.25"



Section 11 80 00 – Collection & Disposal Equipment continued

Building Interior Zero Waste Collection (continued) - Office Suites Interior

3. OFFICES - SUITES INTERIOR COLLECTION

All offices in suites will be outfitted with a recycling collection and waste container as above for all offices. Office suites can serve as a location for offices to centralize recycling and waste. Ensure office suites have one central zero waste station at a minimum. Follow additional specs for other office suite spaces i.e. copy rooms (see page 16).

Office Suites Zero Waste Equipment:

- Bag-it Original Hanging Bag Recycling System
 - i. Mfg./supplier: The Bag Connection, Dundee, OR
 - ii. Part description:
 - Blue 14-gallon paper recycling bag
 - White 14-gallon paper recycling bag
 - Green 14-gallon paper recycling bag
 - 14-gallon leak-proof bottle/can recycling bag (blue)
 - Single bag free-standing rack
 - Double bag freestanding rack
 - Green 20-gallon leak-proof bottle/can recycling bag
 - iii. Siting applications: Non-fire-rated sites for Paper & Cartons/Glass/Metal/Plastic collections; office suites, copy rooms, etc.
 - iv. Dimensions: h 29” x w 20” x d 15.5”

- Bagit Steel Enclosures for modified zero waste system in small spaces
 - i. Mfg./supplier: The Bag Connection, Dundee, OR
 - ii. Part Number: N/A
 - iii. Installed in multiples with Bagit Original bags
 - iv. Siting/Applications: Public egress areas
 - v. Signage by the UO Zero Waste Program
 - vi. Finish: Any color
 - vii. Dimensions: h 35.5” x w 18” x d 12”



4. ATHLETIC FACILITIES INTERIOR COLLECTION

- a. (see Office And Academic Building Interior Zero Waste Collection)

Section 11 80 00 – Collection & Disposal Equipment continued

Building Interior Zero Waste Collection (continued) - Special-Use Building Interior

5. SPECIAL-USE BUILDING INTERIOR COLLECTION

a. Special-Use Buildings

Special-use buildings such as the Erb Memorial Union, Recreation Center, etc. require area- specific zero waste equipment and staging areas. These types of buildings have low permanent occupancy and high transient occupancy. At a minimum, the following will generally be required in these areas:

- A generous allotment of collection equipment per occupant or user
- Allowance for a greater variety of materials
- Extensive staging and/or loading dock equipment storage areas
- Generous cardboard collection sited with garbage dumpsters
- Allowances for the collection of special materials (bulk mail, CD's, arts and crafts recycling, etc.)
- A secure room or space for the storage of UO Zero Waste Program service equipment (hand-trucks, PPE, barrels, etc.) and a small crew office with telephone and data hook-ups as determined by project and level of service required

b. Bathrooms

The standard for bathrooms is to provide only garbage service because of the potential for biohazardous material contamination. Paper towels cannot be composted from bathroom areas.

c. Cafes

There are two waste generation areas in cafes, behind the counter and in the public space. The standard for behind the counter is to include space for collection of Paper, Cartons/Glass/Metal/Plastic, and compost (32 -gallon roll carts). Work with UO Zero Waste Program to determine any additional needs for outside 32- or 96-gallon roll carts for cafes to use for overflow.

The standard for the public space is to include a collection for Paper, Cartons/Glass/Metal/Plastic, and compost. The public space collection may be a Max-R station, built-in cabinets, step-on bin for compost collection, and/or steel enclosures.

d. Classrooms

The suggested zero waste standard for classrooms is to eliminate any discard/garbage collection in classrooms. Site zero waste stations such that 4-6 classrooms are within close visual and physical proximity for convenient access to centralized zero waste stations.

e. Common Spaces/Lobbies/Reception Areas

Site zero waste stations in common spaces which are often heavily used by individuals and groups.

f. Event Spaces

Campus events are held in multiple locations throughout campus. Installing a permanent set-up for events is recommended, including: Compost, Paper, Cartons/Glass/Metal/Plastic and Landfill. If there is not room for a permanent set-up, another option is for the building to attain a collection of portable event bins for use during campus events. The UO Zero Waste Program will provide outside building collection to centralize this material and provide free servicing of centralized zero waste event material.

Upon request, the UO Zero Waste Program will provide Zero Waste event services as a fee, paid for by the event, if existing building services are not available. Incorporating zero waste into all campus events and space use is highly encouraged as garbage service is already included in space rentals and reservations. The UO Zero Waste Program utilizes the event zero waste collection containers (p. 15) for requested events.

Section 11 80 00 – Collection & Disposal Equipment continued

Building Interior Zero Waste Collection (continued) - Special-Use Building Interior

g. Laboratories - Research

Laboratories generate a variety of waste streams including: recycling, cardboard, specialized waste and waste. Being located in locked areas, it is the responsibility of the labs to centralize recyclable materials to public collection sites. In planning for laboratory spaces, it is important to identify waste production and determine a system of collection and service. As cardboard is bulky to store and handle. Of note: it is the responsibility of the lab to move cardboard to exterior cardboard collection as per fire code. Options for collection containers are at the discretion of the lab as the Zero Waste Program does not handle any interior lab discards.

h. Laboratories - 3D Printers

3D printers generate unrecyclable plastic waste. With this new technology there are opportunities to house plastic recovery equipment that turns 3D plastic printer waste, back into feedstock for new production. The Zero Waste Program is available to discuss options for 3D printer output recycling.

i. Mail/Copy/Printer Rooms

The standard for mail/copy/printer rooms is to have hanging bags and racks for Paper. Another option is to add a hanging leak-proof bag and rack for Cartons/Glass/Metal/Plastic.

j. Studios

Depending upon design, studios typically are small spaces that utilize hanging bags and racks for material collection. With larger studios, several hanging bags and racks are stationed throughout the studio. As with laboratories, the standard is for studios to have a designated discard management site within the studio to reduce clutter, adhere to fire code and ensure proper service of materials. With moveable equipment, it is difficult for the material to be serviced since often equipment is moved around the studio.

* Depending upon studio access, studios may be responsible for centralizing recycling to hallway zero waste stations or arrange to set out full containers on pick-up days.

Special-Use Building Interior Zero Waste Equipment:

- Bag-it Original Hanging Bag Recycling System
 - i. Mfg./supplier: The Bag Connection, Dundee, OR
 - ii. Part description:
 - Blue 14-gallon paper recycling bag
 - White 14-gallon paper recycling bag
 - Green 14-gallon paper recycling bag
 - 14-gallon leak-proof bottle/can recycling bag (blue)
 - Single bag free-standing rack
 - Double bag freestanding rack
 - Green 20-gallon leak-proof bottle/can recycling bag
 - iii. Siting applications: Non-fire-rated sites for Paper & Cartons/Glass/Metal/Plastic collections; office suites, copy rooms, etc.
 - iv. Dimensions: h 29” x w 20” x d 15.5”



Section 11 80 00 – Collection & Disposal Equipment continued

Building Interior Zero Waste Collection (continued) - Special-Use Building Interior

- 3-part Max-R Zero Waste Stations

This is the standard, stations can be customized and size reduced for low-traffic areas that do not generate compost

- i. Manufacturer – Max-R, Sussex, WI
- ii. Part Number: Oxford Collection, part number varies by configuration and color
- iii. Standard: 3-part unit for Paper, Cartons/Glass/Metal/Plastic, and Landfill/Trash
- iv. Options: Custom options include number of partitions (3-, 4-part), height and materials
- v. Colors: Various, but preference for green panels with brown trim
- vi. Siting applications: Fire-rated areas
- vii. Dimensions: h 50.5” x w 39.5” x d 24”



Contact FASS purchasing for specialty pricing on these units

- 4-part Max-R Zero Waste Stations

For use in dining areas and cafes

- i. Manufacturer – Max-R, Sussex, WI
- ii. Part Number: Oxford Collection, part number varies by configuration and color
- iii. 4-part unit for Paper, Cartons/Glass/Metal/Plastic, Compostables, and Landfill/Trash
- iv. Options: Custom options include number of partitions (3-, 4-part), height and materials
- v. Colors: Various, but preference for green panels with brown trim
- vi. Siting applications: Fire-rated areas
- vii. Dimensions: h 50.5” x w 58” x d 24”



NOTE: **Project may utilize any type of Max-R unit as long as the holes, signage and logo are configured as noted above: <http://www.max-r.net/> Non-standard Max-R units will not receive special pricing. Discounted pricing is only available on above units.

- Bagit Steel Enclosures for modified zero waste system in small spaces

- i. Mfg./supplier: The Bag Connection, Dundee, OR
- ii. Part Number: N/A
- iii. Installed in multiples with Bagit Original bags
- iv. Siting/Applications: Public egress areas
- v. Signage by the UO Zero Waste Program
- vi. Finish: any color
- vii. Dimensions: h 35.5” x w 18” x d 12”



Section 11 80 00 – Collection & Disposal Equipment continued

Building Interior Zero Waste Collection (continued) - Special-Use Building Interior

- 23-Gallon Step-On Compost Collection Bin
 - i. For public compostable collection
 - ii. Manufacturer: Tough Guy
 - iii. Part Number: 6GAK3
 - iv. Siting/applications: Cafe public areas and department kitchens/break rooms
 - v. Signage by UO Zero Waste Program
 - vi. Finish: White or brown
 - vii. Dimensions: h 31.5” x w 16.5” x d 16”



- 96-Gallon & 32-Gallon Roll Carts
 - i. For centralized building collection
 - ii. Manufacturer: Toter Inc.
 - iii. Part Number: EVR® II
 - iv. Siting/applications: Various
 - v. Signage by UO Zero Waste Program
 - vi. Finish: Brown, green or black (varies by size)
 - v. Dimensions: 95 gal - h 46.5” x w 29” x d 35”
32 gal - h 37” x w 25” x d 25”



- Confidential Material Collection Container
 - i. Provided by Garten Services, Inc.
 - ii. UO confidential recycling guidelines at: http://library.uoregon.edu/records/conf_recyc.html
 - ii. Dimensions: h 46.5” x w 29” x d 35”



- Event Zero Waste Collection Containers
 - i. Manufacturer: Rubbermaid
 - ii. Siting/applications: For attendee use at events
 - iii. Signage by the UO Zero Waste Program
 - iv. Finish: Yellow



Section 11 80 00 – Collection & Disposal Equipment continued

Building Interior Zero Waste Collection (continued) - Residence Hall Interior

6. RESIDENCE HALL INTERIOR COLLECTION

a. Residence Halls: The following represent general guidelines:

- Residence Halls generally require residents to service in-room discards to exterior locations.
- One full service site plus landfill receptacle per major wing of each residence hall located in basements or exterior covered enclosures. The use of 2- and 4-part sheds for Residence Hall exterior public collection is preferred (see section 3-F). Site capacities will vary from 6 to 12 barrels.
- One residence hall in-room bin per resident room
- Paper and Cartons/Glass/Metal/Plastic recycling for each service center
- Receptacles for mail area collection of bulk mail
- A secure room or space for the storage of UO Zero Waste Program service equipment (hand trucks, PPE, barrels, etc.)
- One cardboard dumpster per external covered enclosure

Residence Hall Interior Zero Waste Equipment:

- Residence Hall In-Room Bins
 - *Supplied by University Housing
 - i. Individual bins for residence hall occupants.
 - ii. Manufacturer/Supplier: Busch Systems International, Barrie, Ontario, Canada
 - iii. Part Number: BC1000 6-gallon Desksider, color Kelly Green, stamped 'We Recycle'
 - iv. Siting/applications: One per each residence hall Room.
 - v. Signage by supplier



7. FAMILY HOUSING AND UNIVERSITY APARTMENTS INTERIOR COLLECTION

- As Family Housing and University Apartments require residents to centralize waste to exterior locations, as with the Residence Halls, it is highly recommended that each Family Housing and Apartment unit, are equipped with a recycling and composting collection container such that residents can participate in zero waste management that is offered in all exterior locations.
 - * Supplied by University Housing

- Apartment Unit Recycle Bins
 - i. For individual or family recycling collection
 - ii. Manufacturer: Busch Systems
 - iii. Part Number: Multi recycler 6-gallon nesting bins
 - iv. Siting/applications: One per each apartment unit
- Individual Compost Buckets
 - i. For individual or family compost collection
 - ii. Manufacturer: Busch Systems
 - iii. Part Number: KC2000 Kitchen Composter
 - iv. Siting/applications: One per each apartment unit



Section 11 80 00 – Collection & Disposal Equipment continued

COMPOST COLLECTION

1. PUBLIC SPACES INTERIOR COMPOST COLLECTION

a. The following represent the standard approach for interior space compost collection:

- All interior equipment should be in a zero waste station, casework, or in steel enclosures (see section 4, p. 7-9, for interior zero waste public equipment)
- Any public composting, interior or exterior, should always be co-located with recycling and landfill collection
- Exterior building collection requires a minimum of one 96-gallon or three 32-gallon roll carts sited in the same exterior location as garbage and cardboard dumpsters, or interior room with direct access to building egress and service vehicle parking
- One individual compost unit per building occupant requesting voluntary participation in the compost program

Public Spaces Interior Compost Collection Equipment:

- 96-Gallon & 32-Gallon Roll Carts
 - i. For centralized building collection
 - ii. Manufacturer: Toter Inc.
 - iii. Part Number: EVR® II
 - iv. Siting/applications: Various
 - v. Signage by UO Zero Waste Program
 - vi. Finish: Brown, green or black (varies by size)
 - v. Dimensions: 95 gal - h: 46.5 x w: 29 x d: 35 in
32 gal - h: 37 x w: 25 x d: 25 in
- Individual Compost Buckets
 - i. For individual compost collection for faculty, staff and departments
 - ii. Provided by UO Zero Waste Program
 - iii. Signage by the UO Zero Waste Program



2. RESIDENCE HALLS COMPOST COLLECTION

- Exterior building collection requires a minimum of one 96-gallon or three 32-gallon roll carts sited in the same exterior location as garbage and cardboard dumpsters, or interior room with direct access to building egress and service vehicle parking.

Residence Hall Compost Collection Equipment:

- 96-Gallon & 32-Gallon Roll Carts
 - i. For centralized building collection
 - ii. Manufacturer: Toter Inc.
 - iii. Part Number: EVR® II
 - iv. Siting/applications: Various
 - v. Signage by UO Zero Waste Program
 - vi. Finish: Brown, green or black (varies by size)
 - v. Dimensions: 95 gal - h: 46.5 x w: 29 x d: 35 in
32 gal - h: 37 x w: 25 x d: 25 in



Section 11 80 00 – Collection & Disposal Equipment continued

Compost Collection (continued) - Dining Facilities

3. DINING FACILITIES COMPOST COLLECTION:

- Public Sites: Post-consumer collection sites based upon dining hall service levels. Max-R units are standard and may be tailored to interior décor and established collection containers including custom-sized wall recesses for equipment.
- Kitchen Interior Sites: Kitchen equipment for pre-consumer food composting as needed by staff and as dictated by space considerations. Ideally, a combination of 32-gallon roll carts and 5-gallon buckets co-located with landfill and recycling receptacles.
- Kitchen Exterior Sites: Will utilize 96-gallon roll carts as detailed above; and will contribute loads in 32-gallon roll carts as needed

Dining Facility Compost Collection Equipment:

- 96-Gallon & 32-Gallon Roll Carts
 - i. For centralized building collection
 - ii. Manufacturer: Toter Inc.
 - iii. Part Number: EVR® II
 - iv. Siting/applications: Various
 - v. Signage by UO Zero Waste Program
 - vi. Finish: Brown, green or black (varies by size)
 - v. Dimensions: 95 gal - h: 46.5 x w: 29 x d: 35 in
32 gal - h: 37 x w: 25 x d: 25 in



- Collection Buckets
 - i. For food service work stations and small café- style food outlets
 - ii. Multi-purpose 4- or 5-gallon buckets as shown
 - iii. Signage by the UO Zero Waste Program



4. INTERIOR COMMON SPACES COMPOST COLLECTION

- Post-consumer compost(ables) zero waste sites based upon area usage and proximity to food consumption areas-common spaces are often areas where users consume food
- 32-gallon roll carts are standard (see section 4, p. 7-9, for interior zero waste public equipment)
- Equipment should be co-located with landfill and recycling receptacles

5. SPECIAL-USE BUILDING COMPOST COLLECTION

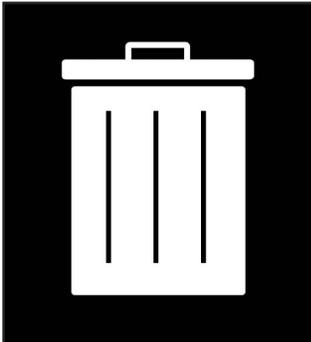
a. Satellite Cafes Compost Collection:

- See special-use building interior collection (p. 12)

b. Multi-purpose and Non-standard Building Types and Usages: Need(s) will be determined on a case-by-case basis in keeping with similar determinations for zero waste service and equipment provisions.

UNIVERSITY OF OREGON ON-CAMPUS ZERO WASTE SIGNAGE

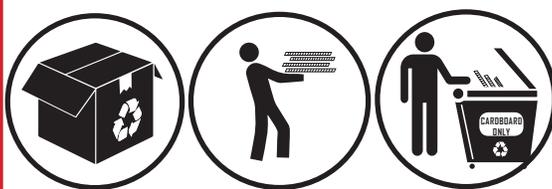
In order to maintain a complete zero waste system, please work with the UO Zero Waste Program on establishing collection categories for sited areas. This includes utilizing consistent program signage. Zero Waste station signs:

	<p>GLASS METAL PLASTIC BOTTLES & JUGS ONLY</p>		<p>PAPER OFFICE PAPER NEWSPAPER PAPERBOARD MAGAZINES</p>
	<p>COMPOST FOOD PAPER FOODWARE (NAPKINS, PLATES, BOWLS) ITEMS LABELED "COMPOSTABLE"</p>		<p>LANDFILL WRAPPERS CHIP BAGS OTHER</p>

CARDBOARD MUST BE SERVICED BY USERS TO LOADING DOCKS AS PER FIRE CODE

BE IN COMPLIANCE WITH FIRE CODE !

DO NOT LEAVE
CARDBOARD HERE



RECYCLE FLATTENED CARDBOARD AT
LOADING DOCK LOCATIONS

SIGNAGE FOR OFF-CAMPUS LOCATIONS

	<p>COMMINGLE RECYCLING PAPER PLASTIC (BOTTLES & JUGS ONLY) METAL CANS CARDBOARD NO CUPS, PLASTIC BAGS, GLASS, AEROSOL CANS</p>		<p>GLASS</p>
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For more information on accepted materials at the University of Oregon, see the Program Materials Handling list and Services: <https://cpfm.uoregon.edu/zerowaste-resources>