

APPENDIX – Zero Waste / Recycling

Document revision history: 04/2022 – Original Publication

Date	Section	Description of Change

PART 1 – GENERAL

1.1 Design Summary

a. Zero Waste Standard Overview:

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:

- All Zero Waste collection equipment needs (spaces) to be determined during programming and physically located by the end of the Schematic Design Phase of every project, in coordination with the UO Zero Waste Program.
- Building central exterior waste collection location should not only be covered, but have restricted access for students and/or university employees; this should be addressed during schematic design
- Additional loading dock requirements may be applied based upon project, program, scope, etc.
- Through coordination by the Owner’s Representative, work with Zero Waste Program to determine special needs for equipment siting, special collections and to develop a waste management system within and outside of campus buildings.
- 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 Environmental Health & Safety.
- Interior trash and recyclables to be collected via all-inclusive ‘zero waste stations’
- Recommended siting for zero waste stations is at least one per floor. Could be more, based on square footage.
- Consider event/meeting/conference space(s) to ensure they function with the goal of zero waste.
- For special event spaces, temporary collection strategies may be incorporated to support large gatherings.

1.2 Spatial Considerations

a. General information on siting equipment

- All department kitchen locations should employ recycling 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. Will require coordination with building user group to determine how best to resolve this.

1.3 Building exterior zero waste collection

a. Academic buildings require the following at a minimum:

- Trash/recycling collection equipment staging area in the form of a weather-protected loading dock, enclosed sheds, or covered enclosure (to be coordinated with UO Zero Waste Program) with restricted access for University staff only.
- Room for other specialized collection as needed by building
- Service vehicle parking or dock space sufficient for a large step-van with tailgate

b. Athletic facilities exterior collection

- Athletic Facilities are recommended to be consistent with the rest of the campus system

c. Residence halls exterior collection

- Residence Halls require the following at a minimum:

- Trash/recycling collection equipment staging area in the form of a weather-protected loading dock, enclosed sheds, or covered enclosure (to be coordinated with UO Zero Waste Program) with

- restricted access for University students and staff only.
- ii. Service vehicle parking or dock space sufficient for a large step-van with tailgate
- iii. Any kitchen area within a Residence Hall complex requires an additional waste collection equipment staging area separate from the sites used by residents (to be coordinated with UO Zero Waste Program) with restricted access for University staff only.
- iv. Any kitchen area within the Residence Hall/Housing complex require additional space for compost collection (TBD by UO Zero Waste Program)
- d. Family housing and university apartments exterior collection
 - Off-campus Apartment Units/Family Housing Complexes:
 - i. One trash/recycling collection equipment site for each 15-20 apartments preferably in covered enclosures (TBD by UO Zero Waste Program) with restricted access for residents and University staff only.
- e. Public spaces exterior collection
 - Pair public trash and recycling enclosures whenever possible.
 - Public enclosures 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

1.4 BUILDING INTERIOR ZERO WASTE COLLECTION

- a. Public spaces
 - Trash and recyclables to be collected via all-inclusive waste stations (referred to as zero waste stations)
 - 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 near entrances and exits depending upon building size.
 - The following represent the standard waste management approach for interior spaces, which would result in more than one per floor:
 - i. A full public zero waste station consists of a 3-part collection system for Trash, Paper, Glass/Metal/Plastic
 - ii. One fire-rated (If purchased equipment, rather than built-in) zero waste station for each major wing of each floor of a building
 - iii. One fire-rated (If purchased equipment, rather than built-in) zero waste station for each 4 classrooms
 - iv. Bag-it original hanging bag recycling system recommended for copy room and/or mail room
 - v. Additional sites as dictated by occupant needs
- b. Casework
 - Built-in zero waste station cabinets or casework must fit UO Zero Waste Program specifications. Each cabinet must fit a 23-gallon rectangular insert.
- c. Office suites
 - Office within suites will be outfitted with individual trash and recycling containers; Office suites should serve as a location for offices to centralize recycling and waste; Ensure office suites have one central zero waste station at a minimum. (A group of offices located along a corridor should also be considered in this category as it relates to placing zero waste stations)
- d. Offices/work stations
 - Offices and workstations will be outfitted with individual trash and recycling containers; It is recommended that the design considers that office occupants centralize all recycling to the nearest zero

- waste station
- e. Bathrooms
 - The standard for bathrooms is to provide only trash collection because of the potential for biohazardous material contamination. Paper towels cannot be composted from bathroom areas.
 - f. 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 Trash, Paper, Glass/Metal/Plastic, and compost (32 - gallon roll carts).
 - The standard for public cafe space is to include at least one zero waste station
 - g. Classrooms
 - The suggested standard for classrooms is to eliminate any trash collection in classrooms; site one zero waste station for every four classrooms, within the public corridor.
 - h. Common Spaces/Lobbies/Reception Areas
 - Site zero waste stations in common spaces which are often heavily used by individuals and groups
 - i. Laboratories
 - 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. Options for collection containers are at the discretion of the lab as the Zero Waste Program does not handle any interior lab waste.
 - j. Mail/Copy/Printer Rooms
 - The standard for mail/copy/printer rooms is to have the Bag-It original hanging bag recycling system
 - k. 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.
 - l. Residence halls: the residence hall interior collection
 - following represent general guidelines:
 - i. One Residence Hall in-room bin provided for each residential unit
 - ii. One zero waste station per major wing of each residence hall and common floors
 - iii. Containers for Paper and Glass/Metal/Plastic recycling for each service center
 - iv. Receptacles for mail area collection of bulk mail

1.5 Qualifications

- a. NA

1.6 References

- a. Other options for resource conservation and zero waste in campus buildings/areas:
 - Program Materials Handling list and Services: <https://cpfm.uoregon.edu/zerowaste-resources>
 - Zero Waste Campus Toolkit: <https://cpfm.uoregon.edu/zerowaste-resources>

PART 2 – PRODUCTS

2.1 Exterior Equipment

- a. CARDBOARD RECYCLING DUMPSTER
 - Provided through cardboard recycling contract.
 - Sizes vary by building size, from 1-yard to 4-yard capacity
 - Siting/applications: All campus buildings and residential areas
 - Signage by UO Zero Waste Program



- b. 55-GALLON PLASTIC BARRELS
 - For loading dock staging areas
 - Provided by UO Zero Waste Program
 - Siting: Various
 - Signage by the UO Zero Waste Program
 - Dimensions: h 37" x dia. 22"



- c. DOMED LIDS
 - For 55-gallon plastic barrels
 - Manufacturer/Supplier: Recycle Away, LLC
 - Part Number: RC-55
 - Siting: Various
 - Signage by the UO Zero Waste Program
 - Dimensions: h 11.5" x dia. 25"



- d. 96-GALLON & 32-GALLON ROLL CARTS
 - For centralized building collection
 - Manufacturer: Toter Inc.
 - Part Number: EVR® II
 - Siting/applications: Various
 - Signage by UO Zero Waste Program
 - Finish: Brown, green or black (varies by size)
 - Dimensions: 95 gal - h 46.5" x w 29" x d 35" 32 gal - h 37" x w 25" x d 25"



- e. 4-PART PUBLIC RECYCLING ENCLOSURE
 - Mfg./Supplier: Wastequip, Albany, OR
 - Part No: Contact Wastequip.
 - Holds four 14-gallon inserts (see item below)
 - Siting/applications: Campus-wide outdoor public, high- traffic pedestrian areas
 - Signage by the UO Zero Waste Program
 - Finish: UO Green
 - Dimensions: h: 50" x w 36" x d: 24"



f. RECYCLE SHED 4-BARREL

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



g. 14-GALLON CURBSIDE RECYCLING BINS

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



2.2 Interior Equipment

a. 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
- Manufacturer – Max-R, Sussex, WI
- Part Number: Oxford Collection, part number varies by configuration and color
- Standard: 3-part unit for Paper, Glass/ Metal/Plastic, and Landfill/Trash
- Options: Custom options include number of partitions (3-, 4-part), height and materials
- Colors: Various, but preference for green panels with brown trim
- Siting applications: Fire-rated areas
- Dimensions: h 50.5” x w 39.5” x d 24”
- Contact FASS purchasing for specialty pricing on these units



b. 23-GALLON RECTANGULAR INSERT FOR CASEWORK OR MAX-R

- For material collection inside Max-R units
- Manufacturer: Tough Guy
- Part Number: 4PGU9
- One per cabinet inside casework or Max-R waste stations
- Dimensions: H: 29-13/16” L: 11-5/16” W: 20-1/16”



c. BAG-IT ORIGINAL HANGING BAG RECYCLING SYSTEM

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



d. CONFIDENTIAL MATERIAL COLLECTION CONTAINER

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



e. 3-TIERED BOXES

- Supplied by UO Zero Waste Program
- Signage by the UO Zero Waste Program
- Siting/Applications: Office desks
- Dimensions: h 15.5" x w 12.5" x d 13.5"



f. 7- OR 10-GALLON RECYCLING CONTAINER

- For recycling collection in various spaces
- Manufacturer: Rubbermaid
- Part Number: 2956-73 or 2957-73
- Finish: Blue
- Dimensions: h 12.1" x w 11.4" x d 8.25"



g. 7- OR 10-GALLON TRASH CONTAINER

- For trash collection in various spaces
- Manufacturer: Rubbermaid
- Part Number: 2956 or 2957
- Finish: Black
- Dimensions: h 12.1" x w 11.4" x d 8.25"



h. 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:



- Cardboard must be serviced by users to loading docks as per fire code



- Signage for off-campus locations



- 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>

2.3 MEP Systems

- a. Plumbing
 - Install water refill equipment in all campus buildings to reduce plastic bottle use and disposal