Division 12 Furnishings

12 00 00 Furnishings

12 00 03 General Provisions

1. The Architect/Engineer (A/E) shall provide layouts of both fixed and freestanding furnishings/moveable equipment as identified in the project pre-planning documents and include them as part of the 35% review documents. These plans provide an important means to confirm function and space usage for each room or space within the project.

2. The A/E shall coordinate all required power/voice and data services leading to fixed and furnishings/moveable equipment locations as shown within these documents and make corrections and updates as needed based on review comments. In addition, the A/E shall provide any details and/or drawings necessary to preserve critical dimensions and locations for the furnishings.

3. The construction documents released for bidding shall include furnishings plans, noted as being for informational purposes only, so that the contractors are given as much information on the use of each space as possible and understand the reasoning behind locations of outlets, etc.

4. Care shall be taken to coordinate furniture locations with window locations, perimeter mechanicals, door swings, thermostat, outlet, and switch locations, behind-the-door elements such as coat hooks, floor boxes, and ceiling based light fixture locations.

5. The A/E shall coordinate the height of outlets with any modesty or structural panel related to furnishings to the extent known by the design team so that outlets do not become inaccessible. This includes power base feed connections and data locations related to systems furniture. Access to the wall receptacles must be possible without disassembly of any or all the workstation panels.

6. The A/E shall be responsible for the location of all needed wall blocking and therefore shall confirm with the building occupants, their known needs and locations for blocking to support walk mounted items such as coat hooks, mirrors, wall mounted furnishings i.e. storage, tack boards, marker boards, etc.

7. Private offices shall be designed in such a way as to be able to be turned into multi-person offices at some point including provisions for voice, data, power, and fire alarm.

8. The Guidelines for Planning and Design of UW-Madison Facilities shall take precedence over DFD Guidelines, but the A/E shall discuss all conflicts within the guidelines and specifications with the UW-Madison Project Manager.

9. The goals and guiding principles of the UW-Madison Campus Master Plan (latest edition) shall be considered and referenced as part of the planning, design, detailing, and material section for every project.

12 05 00  Common Work Results for Furniture Selection

12 05 05  General Requirements for Furniture Selection

1. It is the goal of the University of Wisconsin – Madison to use sustainable (green) and locally sourced products to the greatest extent possible. Locally sourced shall be defined as products which are harvested or manufactured within a 500-mile radius of the campus.

2. All specified furniture shall meet the mandates set forth by the State of Wisconsin. Per an agreement with the Wisconsin Department of Corrections, the UW–Madison has a Memorandum of Understanding (MOU) regarding the purchase of Badger State Industries (BSI) furnishings to purchase product as specified by State of Wisconsin mandate. See UW-Madison Purchasing Services web page for furniture purchasing guidelines.

3. Purchasing

3.1. UW-Madison shall buy exclusively from BCE:

3.1.1. Metal Book Shelves.

3.1.2. Metal Files and Storage.

3.1.3. Fixed Base Tables with Laminate Tops.

3.2. UW-Madison shall either purchase from BCE or include BCE in the process to competitively price the following items:

3.2.1. Private office desking systems (metal base/laminate tops).

3.2.2. Open office furniture / panel-mounted workstations.

3.2.3. Non-ergonomic seating.

3.2.4. Custom designed office furniture.

3.2.5. Parking wayfinding signs.

3.3. UW-Madison shall have automatic waivers from BCE for the following products:

3.3.1. Wood veneer or other custom material tables.

3.3.2. Tables with power/data, flip top, or mobile capabilities.

3.3.3. Private office desking systems (wood veneer).

3.3.4. Wood veneer furniture (i.e. file cabinets, tables).

3.3.5. Ergonomic seating.

3.3.6. Bicycle racks, lockers and other storage.

3.4. Additional Situations on Auto Waiver:
3.4.1. BCE confirms they cannot meet delivery dates.

3.4.2. BCE declines to provide quote.

3.4.3. Cost of BCE items exceeds cost for similar products.

3.4.4. Product being purchased will match existing furniture installations.

4. Ergonomic chairs are considered “customer choice” and will be evaluated individually by the projects’ design team, typically through a “chair fair” process.

5. The following UW-Madison furniture contracts are designed to offer users a variety of manufacturers and distributors from which they can purchase furniture and furniture related accessories. There are also DOA and UW System Contracts which can be used. See this link for an index of contracts. https://businessservices.wisc.edu/purchasing/contracts/
   5.1. MISCELLANEOUS EDUCATION RELATED FURNITURE (18-5665)
   5.2. MISCELLANEOUS FURNITURE STORAGE (18-5843)
   5.3. LABORATORY FURNITURE (18-5846)

6. The goal of the campus is to purchase a minimum of 5% of the total furniture package from minority business enterprises (MBE), when available. See http://www.bussvc.wisc.edu/purch/contract/furncont.html

7. Process: When included in the A/E contract, the UW-Madison Project Manager shall direct the design/procurement process on all projects and will work directly with the design team representative (if the contract for design services includes) and/or user group representatives from the School or College on the selection of furniture, finishes, and equipment (FF&E). When contracted for services, the design team shall:
   7.1. Develop a complete schedule for the FF&E design process, coordinated with the main project schedule
   7.2. Develop the departmental programming needs for the project’s FF&E.
   7.3. Provide the user groups with a variety of options and styles for each category of furnishings.
   7.4. Develop a preliminary budget package for review and options for items that exceed the budget if it becomes necessary.
   7.5. Develop a full package of specifications and coded furniture plans for distribution to vendors for pricing and procurement by UW-Madison Facilities Planning and Management (FP&M) staff.
   7.6. Work closely with the UW-Madison Project Manager to develop a well-coordinated delivery and installation schedule.
   7.7. Develop a complete punchlist after installation is complete, facilitate vendor follow-up and sign off.
   7.8. Provide two sets of the complete record of all purchased and installed products including specifications, coded plans, cost information, vendor and manufacturer
contact information, and images of each component, organized by product type, in binders for future reference by the building occupants.

8. Installation Responsibilities:

8.1. All vendors/installers shall wear an ID badge while on campus with photo, name, and company name.

The UW-Madison shall no longer permit access to trucks over 30 ft. in length on several designated streets on this campus. The exceptions are trucks necessary for the delivery or pick up of perishable commodities, private construction vehicles, vehicles carrying radioactive materials, and campus service vehicles. For specific policy language, a campus map and restrictions go to the UW-Madison Transportation Services website.

8.2. Vendor Parking. The University parking is very limited. Each vendor and/or employee(s) shall make their own arrangements for parking through UW-Madison Transportation Services in Room #120 WARF Building, 610 Walnut Street, Madison, WI (608) 263-6666. No additional costs shall be allowed for parking fees or violations. Unauthorized vehicles parking in University lots or loading docks without permits will be ticketed and or towed.

8.3. All debris shall be removed from University premises and properly disposed of by the vendor/installer at the end of each work day per UW-Madison and State contract. Dumpsters shall be placed within the construction fence or coordinated with UW-Madison Transportation Services.

8.4. The telecom/electrical contractor shall install power and data lines to the location where panel systems will be installed. They shall also order the data jacks and notify the furniture installer of the model/size of outlets.

8.5. The electrical contractor hardwires the base power feed whips to the junction box in the floor or wall. The furniture installer shall be responsible for providing the whips to the Electrical Contractor in a timely manner ahead of the delivery of the panels systems so that all infrastructures are in place prior to installation of the furniture.

12 05 20 General Requirements for Non-Furniture Moveable Equipment

1. There are items other than furniture that shall be purchased with “Moveable Equipment” funds. Non-Furniture Moveable Equipment shall be purchased for project:

1.1. Fire extinguishers as determined by UW-Madison Environment, Health and Safety (EH&S).

1.2. Janitorial/Maintenance equipment as determined by UW-Madison Custodial.

1.3. Aerial lift if required to clean/maintain windows, clerestories, skylights and lighting.

1.4. Freestanding waste and recycle bins for public and personal use.

1.5. Under counter refrigerators.

1.6. Dumpsters.
1.7. UW-Madison standard exterior building and direction signs (relocation and disposal of existing signs) and commissioned art recognition plaques

1.8. Bio-safety cabinet certification, if required

1.9. Access control system equipment, one line documents and commissioning determined by UW-Madison Electric Shop.

1.10. Network electronics for MDF/IDF determined by UW-Madison DO-IT.

1.11. Wireless network access points

2. Equipment to be designed by the A/E, purchased by owner, and installed by contractor:

2.1. Compactors determined by UW-Madison Custodial.

2.2. Keys, keying, and cylinders shall be determined by UW-Madison Lock Shop with contractor to install. See Division 08 – Doors and Windows for hardware details.

3. The following is a list of equipment sometimes thought to be “furnishings,” but which need to be specified by the A/E and purchased and installed by the contractor:


3.2. Wall mounted brochure or other type racks (blocking required).

3.3. Coat hooks/racks (blocking required).

3.4. Display cases.

3.5. Interior and Way-Finding Signage. See Division 10 for requirements.

3.6. Digital Signage and building directories as required. This can include a connection to the campus-wide “green screen” project which affords the department an opportunity to visually display their utility usage and sustainability goals.

3.7. Computer systems for teaching podiums.

3.8. Ice machines (water connection required).

3.9. Residential stoves with required commercial exhaust hoods are discouraged. When required, they shall be approved by the UW-Madison Project Manager and then furnished and installed by the contractor.

3.10. All Type 1 kitchen hood ventilation systems shall be equipped with an approved fire suppression system. All fire suppression system designs shall be shared with EH&S Fire & Life Safety for review.

3.11. Tack boards and marker boards (blocking required).


3.13. Window coverings (blocking and/or architectural “pocket” required).

3.15. Site furnishings including benches, outdoor tables, waste/recycle/ash containers, and bike racks. See Division 12 93 00 Other Furnishings.

4. Items not covered under FF&E and are the responsibility of each Department:

4.1. Move Coordination with Space Management. Consult Relocation Guide found at address below:
https://fpm-www3.fpm.wisc.edu/SpaceManagementOffice/LinkClick.aspx?fileticket=OJmoFCa7tmg%3d&tabid=78&mid=460

4.2. Phone Activation and/or transfer.

4.3. Equipment: Fax machines, copiers, scanners, or leasing of equipment.

4.4. Parking access control equipment.

5. All thermostats shall be located directly adjacent to light switches in private offices and conference rooms. These shall be placed next to the latch side of the door or side light so the remainder of the wall is open for furniture placement. Coordinate furniture plans with electrical and control plans.

12 20 00 Window Treatments

1. The A/E shall provide treatment to all windows applicable to the building design and user functions. All window treatments, interior and exterior, are integral to the energy management of the building as well as the control of light and comfort of the occupants.

2. All proposed manufacturer’s products and hardware shall be rated for extra heavy duty commercial use.

3. A/E shall include all structural requirements, blocking, services and construction coordination for the installation of all window treatments.

4. All product specifications including accessories, colors, finishes, applications, and details shall be approved by the UW-Madison Project Manager prior to the final development of the construction documents.

5. All window treatments specified with operating hardware shall include the necessary power and electrical controls for proper installation.

6. Bird Strike Mitigation. Window treatments shall be considered in the context of the building envelope design to mitigate bird collisions. Architectural glazing (type, quantity, and orientation), awnings, overhangs, exterior screens, grilles, sunshades, and visual markers are methods of bird collision deterrence. Consider products which have been tested and evaluated by the American Bird Conservancy.

7. For windows near a green roof, the glass type and glazing shall be considered to minimize sunlight reflection burning plants.
12 21 00 Window Blinds
1. All window blinds shall be considered fixed equipment and are funded within the construction budget.

2. In existing buildings there may be a desire to match existing window blinds. Consult with the UW-Madison Project Manager to determine if this is appropriate.

3. All colors, finishes, applications and details shall be approved by UW-Madison Project Manager prior to the final development of the construction documents.

12 22 00 Curtains and Draperies
1. All curtains and draperies shall be considered fixed equipment and are funded within the construction budget.

2. In existing buildings there may be a desire to match existing curtains and draperies. Consult with the UW-Madison Project Manager to determine if this is appropriate.

3. All colors finishes applications and details shall be approved by UW-Madison Project Manager prior to the final development of the construction documents.

12 24 00 Window Shades
1. All Window Shades shall be considered fixed equipment and are funded within the construction budget.

2. In existing buildings there may be a desire to match existing window shades. Consult with the UW-Madison Project Manager to determine if this is appropriate.

3. All colors finishes applications and details shall be approved by UW-Madison Project Manager prior to the final development of the construction documents.

12 30 00 Casework
1. The A/E shall specify all utility fittings and fixtures for casework equal to that specified for the plumbing, HVAC, electrical and data connections.

2. All Casework shall be considered fixed equipment and are funded within the construction budget, all colors, finishes applications and details shall be approved by UW-Madison Staff prior to the final development of the construction documents.

12 40 00 Furnishings and Accessories

12 46 00 Furnishing Accessories

12 46 33 Waste Receptacles
1. Preferred personal sized waste/recycling containers for offices are from Rubbermaid.

2. Public areas have the option to either purchase waste and recycling containers with FF&E or coordinate with the architecture as a built-in.

3. All built-in waste/recycling receptacles shall be specified with a liner.
12 48 00 Rugs and Mats

12 48 13 Entrance Floor Mats and Frames

1. Campus buildings with heavy student or public traffic shall incorporate walk-off mats, recessed in the floor, at building entries. They shall be easily removable for cleaning and the texture shall be selected to clean shoes quickly. The type of walk-off mat is left to the discretion of the design team, working in collaboration with UW-Madison Facilities Planning & Management staff. Sections of the mat material should be run opposite to the flow of traffic. It shall be expected that despite the best efforts of the design team, there may be seasons where additional mats are placed over these by UW-Madison Custodial.

2. If project funds allow, it shall be suggested that seasonal walk-off mats be designed and purchased specific to the building. Campus standards for these types of mats are governed by UW-Madison Custodial and the mats are presently available from Mats, Inc. through Kleenmark. From their available products, the campus standard is to use “Supreme Nop” with all four edges bound and base color charcoal #07. It shall be acceptable to specify the solid color mat or to have a custom UW-Madison crest logo cut into the mat. If the logo is cut in, Mats, Inc. will provide the mats with a solid backing sheet added to secure the cut logo. Approved UW-Madison Crest logo colors are as follows: #05 Natural shall be used for the “Gold” and #49 Autumn Red shall be used for the “Red” portions of the crest.

3. The pile height and edge of an area rug shall not cause a trip hazard and shall be easily removable for cleaning.

12 50 00 Furniture

12 50 05 Furniture Quality Standards

1. Durable/low maintenance finishes shall be required.

2. Lecture hall chairs shall be ergonomic and armless unless otherwise approved.

3. Use of tablet armchairs shall be reviewed by UW Project Manager and the Space Management Office in the design of new facilities. In renovation projects, where replacement of existing tablet armchairs is required, tablets shall be finished with high pressure laminate, of an appropriately large size, and supported by a structure able to withstand a 200 pound load.

4. It is preferred but not required to have all office and other furniture be self-supporting, not attached to walls to facilitate changes without wall repair.

5. Fabrics for lounge and other high use furniture shall be a minimum of 90,000 double rubs. Other seating fabrics must meet 40,000 double rubs. Fabric patterns and colors should be selected for their ability to hide soiling and wear.

12 56 00 Institutional Furniture

12 56 53 Laboratory Furniture

1. Laboratory equipment may be purchased out of the moveable equipment budget after furniture requirements are satisfied. Service agreements cannot be paid for using project funds.
2. All casework shall be provided and installed by the contractor. The required utility connections make casework unworkable as a separately purchased item.

3. All bench tops shall be epoxy. Gray is the campus standard, but if user needs require, black can be specified.

4. Reagent racks and shelves are to be supported above the countertop and fully adjustable.

12 61 00 Audience Seating

The A/E shall indicate complete specifications showing manufacturer, product number, materials and details from a select product and at least two additional manufactures, product numbers, materials and details showing equal capability.

12 90 00 Other Furnishings

12 91 00 Parking Structure Furnishings

1. Trash receptacles and ash urns shall be bracketed and mounted to the wall near all stairwells on each floor and any pedestrian ground level exit/entry point.

2. Receptacles shall be Brown, Rubbermaid 35 gallon, hinged (on one side) top containers without liners. Receptacles shall match the ones currently used by UW-Madison Transportation Services.

3. Ash Trays shall be brown stone panel wall mounted urn – approximately 10 inches square x 13 inches high and be mounted interior to the facility.

4. All trash receptacles and ash urns located outside the parking facility shall match current campus standards. See Section 12 93 23 Waste, Recycling, and Ash receptacles.

5. Supply of cans and installation shall be the responsibility of the contractor and shall be done before final completion.

6. Animal waste receptacles should be provided at all parking structures. Color shall be matte black. Black if matte is not available.

12 93 00 Site Furnishings

1. All site furnishings, also referred to as site amenities, shall meet current campus standards and be reviewed by UW-Madison Campus Planning & Landscape Architecture (CPLA). Furnishings include but are not limited to: benches, trash/recycle/ash receptacles, tables, cluster seating, bicycle racks, bollards, lighting, bus shelters, plant containers, signage, plaques, and memorials.

2. Site furnishing locations shall be identified in the 35% and 100% review documents. Detail drawings and specifications for each shall be provided in the plan set.

3. Site furnishings shall be located such that they do not limit access to accessible door hardware or key access pads at entrances.
4. UW-Madison Campus Planning & Landscape Architecture shall review all exterior site furnishing submittals to ensure campus standards are followed.

5. Existing nonstandard site furnishes within a project boundary shall be replaced with the current respective campus standard and paid for by project.

6. Consult UW-Madison Campus Planning & Landscape Architecture regarding existing historically significant, donor, or inscribed memorial site furnishings within the project scope and boundary.

12 93 13 Bicycle Racks

1. The campus standard bicycle rack is the UW-Madison Duckbill rack. Galvanized finish, single sided or double sided, surface mounted. See Appendix- Division 12 for details.

2. The campus standard high density bicycle rack is the UW-Madison Regent rack. Galvanized finish, single or double sided, surface mounted. Consult UW-Madison Transportation Services and Campus Planning & Landscape Architecture on their use. See Appendix- Division 12 for details.
   
   2.1. The Regent bicycle rack is manufactured by Madrax. Typical lengths are 5 foot double-sided racks (8 stalls) and 10 foot single-sided racks (8 stall).
   
   2.2. In situations where a project requires Regent racks, include a small quantity of Duckbill racks to accommodate bicycles with components or accessories that may not fit in the Regent racks.

3. The Duckbill and Regent bicycle racks are customized, sole source items. No product substitutions or alternates will be approved. DFD requires a Class 1 notice to be included in the specification.

4. All bicycle racks shall be surface mounted.

   4.1. All bicycle racks shall be surface mounted to concrete using 316L stainless steel or galvanized 3/8” x 3” self-threading concrete anchors.”

5. Each bicycle parking stall shall be accessible without having to move another bicycle and its placement shall not result in a bicycle obstructing a required walkway.

6. Project and project contractor shall furnish, assemble, and anchor all bicycle racks.

7. Bicycle parking at UW-Madison is determined at a “campus district” level and not per each individual building or site, project boundary, and/or destination. Consideration is given to the type, use, and location of buildings, sites and/or destinations within the entire campus context. Bicycle parking shall be provided at each campus building, site, and/or destination in a quantity determined by UW-Madison Transportation Services. This may require projects to provide additional bicycle parking spaces if there is a determined deficiency within the area.

7.1. The minimum number of spaces per a destination shall adhere to the Campus Master Plan. The baseline quantities are:

   7.1.1. One (1) space per five (5) student seats in classroom.
7.1.2. One (1) space per 20% of non-classroom student occupancy space (i.e. study rooms, flex space, etc.)

7.1.3. One (1) space per six (6) employee workstations.

7.2. At UW-Madison Residence Halls, campus standard bicycle racks shall be provided one (1) space per two (2) beds.

7.3. Site locations for the required number of bicycle parking spaces shall be included in the 35% review documents along with detail drawings and specifications.

7.4. Include nearby large lecture halls within the scope when determining bicycle rack quantities for the project.

7.5. Buildings shall include provisions for bicyclists to shower and change.

8. Bicycle Parking Layout

8.1. See Appendix- Division 12 for Bicycle Parking Layout details.

8.2. Bicycle racks should be conveniently located to destinations and should be sited within clear view of building entrances most people will want to use.

8.3. Avoid pedestrian/bicycle conflicts in pedestrian spaces. Coordinate with locations of outdoor gathering places and seating areas.

8.4. Consider site design and arrival sequence to create welcoming entry spaces at building entrances when locating bicycle racks.

8.5. Bicycle parking shall not impede or conflict with pedestrian and bicycle circulation, vehicle and moped circulation, snow clearing operations, and other site amenities.

8.6. Bicycle parking layout shall consider site security, including lighting accommodations.

8.7. Incorporate shade trees, planting beds, and pervious pavers/surfaces within and along edges of bicycle parking areas to break up large massings of racks, reduce urban heat island effect, and manage stormwater.

8.7.1. Bicycle rack areas receive considerably less snow removal, no heavy equipment traffic, and little to no direct application of deicing agents (at time of guideline update). This creates opportunities regarding surface material, detailing, and vegetation section.

8.8. The landscape and site design shall consider future growth for bike racks.

8.9. The provision of covered bicycle parking is encouraged. Techniques may include under a building canopy, using a covered architectural element, or within a storage locker.

8.10. Bicycle parking areas shall be accessible to bicyclists via curb cuts, curb ramps, rolled curbs, etc.
8.11. Bicycle parking spaces shall have vertical clearance of at least 6 feet and an accessible aisle that is at least 5 feet wide.

8.12. Where appropriate, exterior stairs will have bicycle ramps to accommodate pedestrians accessing bicycle facilities.

8.13. Bicycle racks will not be located in areas solely accessible by stairs.

9. Bicycle Parking in Parking Structures

9.1. Above ground and underground parking structures/ramps shall provide bicycle parking. A minimum of twenty-two (22) spaces near the entrance is required.

9.2. Bicycle parking can be level with adjacent grade, assuming slopes accommodate for drainage and water is not directed into the structure.

9.3. Refer to Division 32 for moped parking requirements.

12.93.23 Waste, Recycling, and Ash Receptacles

1. The project contractor shall assemble, purchase, and install all waste, recycling, and ash receptacles.

1.1. If anchoring is needed, use tamperproof 316L stainless steel or galvanized anchor sleeves and bolts. Follow manufacturer’s specifications for installation.

2. Waste, recycling, and ash receptacles purchased with funds outside of project shall follow campus standards and be reviewed and approved by UW-Madison Campus Planning & Landscape Architecture.

3. The campus standard for trash receptacles is Wausau Tile #MF3200, 36 gallon unit, Metal Armor finish, textured black color.

3.1. The campus standard trash can is a sole source item. No product substitutions will be approved. DFD requires a Class 1 notice to be included in the specifications.

4. The campus standard ash urn is the Rubbermaid Commercial Products Metropolitan Smokers’ Station. Model number R93400BK, color textured black.

4.1. The campus standard ash urn is a sole source item. No product substitutions will be approved. DFD requires a Class 1 notice to be included in the specifications.

4.2. The old campus standard ash urn is the Wausau Tile, #MF4005, Metal Armor finish, textured black color. It may be used with approval from Campus Planning and Landscape Architecture.

4.3. Ash Urns shall be placed a minimum of 25 feet away from building entrances, building windows that open, and building air intakes. Each ash urn should be paired with a waste receptacle, and a recycling container.
5. The campus standard recycling receptacle is Wausau Tile #MF3252, 36-gallon unit, Metal Armor finish, matte black color. Lid color (blue) and labels identified in MF3252 detail. Each recycling unit shall be paired with a waste receptacle.

5.1. The campus standard recycling receptacle is a sole source item. No product substitutions will be approved. DFD requires a Class 1 notice to be included in the specifications.

5.2. See Appendix- Division 12 for MF3252 detail.

129343 Site Seating and Tables

1. Project contractor shall assemble, purchase, install, and anchor all site seating, benches and tables.

1.1. All site seating, benches, and tables shall be anchored to concrete or other hardscape using tamperproof 316L stainless steel or galvanized anchor sleeves and bolts. This will allow for temporary removal or relocation without drilling new holes into the concrete or pavers.

2. Site seating, benches, and tables purchased with funds outside of project shall follow campus standards and be reviewed and approved by UW-Madison Campus Planning & Landscape Architecture.

3. Skateboards, roller blades, and BMX bikes cause damage to site seating, benches, and tables. All projects shall include features to deter such damage. See Division 32 32 00, Item 9.

4. The campus standard bench (excluding the Lakeshore Nature Preserve, which has its own standards) is Wausau Tile #MF2207 (5-foot bench, arched back). Metal Armor finish, textured black color.

4.1. #MF2204 (6 foot bench, arched back with center arm rest), Metal Armor finish, textured black color may be considered in certain situations.

4.2. The campus standard exterior benches are sole source items. No product substitutions will be approved. DFD requires a Class 1 notice to be included in the specifications.

4.3. Bench layout design shall include companion seating per ADA requirements. See Appendix- Division 12 for detail.

5. The campus standard outdoor table is the Landscape Forms, Inc. Carousel table series with attached seating.

5.1. The campus standard outdoor table is a sole source item. No product substitutions will be approved. DFD requires a Class 1 notice to be included in the specifications.

5.2. Table details and locations shall be approved by UW-Madison Campus Planning & Landscape Architecture.

5.3. The Carousel table product line has a growing list of various component details which may be considered but require approval from Campus Planning & Landscape Architecture. The standard table details are identified below.
5.4. Standard color is matte black.

5.4.1. The color can be coordinated with the site and adjacent building architecture. Requires approval by UW-Madison Campus Planning & Landscape Architecture.

5.5. The standard seat type is metal grid and match color with rest of table unit. There is the option for backed or backless seats.

5.6. The standard tabletop is steelhead perforated with umbrella hole.

5.7. The number of accessible tables shall follow ADA guidelines.

5.8. Tables w/ umbrellas shall be anchored to concrete or hard surface.

5.9. Tables shall be located on an accessible surface and not within lawn areas unless on concrete or paver surface.

5.10. Tables shall be anchored to concrete, other hard surface, or concrete footing. Use tamperproof 316L stainless steel or galvanized anchor sleeves and bolts. Follow manufacturer’s specifications.

6. All site amenities on roof tops and green roofs shall be approved by Campus Planning & Landscape Architecture.

6.1. Follow manufactures specifications and instructions regarding placement on a rooftop.

6.2. Specify site amenities that will anchored in place or heavy enough to prevent amenities from being blown off rooftop by wind.
Division 12 Appendix - Details

See following attachment
Notes:
1. See Guidelines for Planning and Design of UW-Madison Facilities, Division 12 93 13 Bike Racks, for more information regarding bike rack campus standards.
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1. See Guidelines for Planning and Design of UW-Madison Facilities, Division 12 93 13 Bike Racks, for more information regarding bike rack campus standards.

Double side duckbill racks shall be placed so that bicycles in the end spaces are parked on alternate sides.
Notes:
1. See Guidelines for Planning and Design of UW-Madison Facilities, Division 12 93 13 Bike Racks, for more information regarding bike rack campus standards.
Notes:

1. See Guidelines for Planning and Design of UW-Madison Facilities, Division 1293-13
   Bike Racks, for more information regarding bike rack campus standards.
Notes:

1. See Guidelines for Planning and Design of UW-Madison Facilities, Division 12 93 13 Bike Racks, for more information regarding bike rack campus standards.

2. Regent Bike Racks shall be placed so that "low" stall at the end of one rack is adjacent to "high" stall at the end of the next rack.
Notes:

1. See Guidelines for Planning and Design of UW-Madison Facilities, Division 12 93 13 Bike Racks, for more information regarding bike rack campus standards.

2. Regent Bike Racks shall be placed so that "low" stall at the end of one rack is adjacent to "high" stall at the end of the next rack.
**TOP VIEW**

- Ø5" OPENING
- 700841-0
- TOP, BLUE

**ELEVATION VIEW**

- 700654 LINER
- 200590-90 CONTAINER, BLACK
- Container finish shall be Metal Armour Textured Black
- (3) Ø400132
- 3/8-16 x 1.5 LG.
- ELEVATOR BOLTS

**SECTION "A"**

- Ø23 1/4"

**NOTE:**

Liner not shown for clarity

**SIGN BELOW IF DRAWINGS ARE APPROVED W/ MARKED CHANGES**

**APPROVED:**

**DATE:**

(Signature above illustrates acceptance of dimensions shown.)
***Measure the 2" from outside edge of bench feet

Metal-Armor Bench, MF2207
Wausau Tile, 5'-0" flat steel bench with matte black metal armor coating. See Notes. See UW-Madison Design Guidelines

Companion Seating Space
Between 36"-48" wide, shown at 36"x48".

Lawn, Groudcover, or Planting Bed
Concrete pad. Install per UW-Madison Design Guidelines. See Notes.

Sidewalk or Hardscape Area

Notes
1. Concrete pad shall be 10'-0" long if installing a 6'-0" standard bench.
2. When possible control joints shall align with existing hardscape joints. Follow UW-Madison Design Guidelines