10 Specialties

NOTE: Significant revisions or additions to the previous standards are highlighted in italics.

GENERAL
Designers shall verify that all applicable portions of these standards are incorporated into the project’s design, drawings, specifications and final construction. Requests for variances from these standards shall be submitted in writing to the DCM Project Manager, using the KU Standards Variance Request Form found in Appendix A1.1, for review and written approval or rejection as indicated on the form.

RELATED DOCUMENTS & REQUIREMENTS
Refer to the following for requirements that also apply to work of this section.

- Division 1 - General Requirements
- Appendix A1.5 - Classroom Standards
  - "Centrally-Scheduled Classrooms, Room Types", which includes a description of KU's typical media/technology provided in each type of classroom, can be viewed at: [http://classrooms.ku.edu/types.shtml](http://classrooms.ku.edu/types.shtml).
- Appendix A10.1 - Signage
- Appendix A10.2 - Interior Signage Drawings (.PDF & .DWG)
- Appendix A10.3 - Building Directory Drawings (.PDF & .DWG)
- Appendix A10.4 - Groundbreaking & Dedication Plaque Drawings (.PDF & .DOC)
- Appendix A10.5 - Jobsite Signs (.PDF)
- Appendix A10.6 - Bus Shelters (.PDF)

VISUAL DISPLAY BOARDS – 101100
General: Refer to Appendix A1.5 for KU’s Standard Classroom Guidelines and KU’s Policy on Bulletin Boards, Posting of Materials and Sidewalk Chalking at the KU Policy Library for relevant design and use guidelines.
 Bulletin boards provided in classrooms or clearly marked for use by university units (e.g., departmental posting) may not be used for commercial advertising or other non-unit related information.

 Bulletin boards designated as “general use” and installed at appropriate campus sites are intended primarily for use by KU students, faculty, and staff. Informational, non-academic materials may be posted only on general use bulletin boards.

 Project Designers shall verify the types, sizes & locations of visual display boards with the user group(s) for each project. Designers are encouraged to provide units of adequate number and size to avoid non-approved posting of information on campus (taped to walls, doors, light poles, etc.).

Tackable Display Units: Typically provide one outside each departmental office, for posting of notices, schedules and general info. Provide with enclosed, lockable, glass door fronts to minimize vandalism.

Markerboards / Whiteboards or Chalkboards: Provide either type, as preferred by the applicable user representatives or Building Committee.

 Markerboards / whiteboards are the standard display units in classrooms.

 Glass marker boards with a steel magnetic back are preferred when affordable, due to their improved ease of cleaning without leaving ghosting or residue.

 Portable marker boards may be considered, and are typically procured with the furnishings contract.

 Chalkboards are preferred in classrooms used for Asian language courses.

 KU-FS will provide chalk and dry-erase markers for markerboards or whiteboards.

Trim for Chalkboards, Tackboards, Markerboards or Whiteboards: Heavy-duty, extruded aluminum trim, in a natural anodized finish.

 Fabricate with mitered corners and all cut edges deburred and eased.

 Install with concealed anchorage to wall substrates, and to adjacent trim pieces.

DISPLAY CASES – 101200

General: Designers shall confirm the need for protected information display units with the building occupants during the early design phases, and shall clearly indicate where all display case units are included in the project scope.

 Metal finishes shall match the predominant finishes elsewhere in the building.

 Keyed locks shall be provided on all display cases.

BUILDING DIRECTORIES – 101300

Refer to Appendix for requirements.

PLAQUES – 101416

Refer to A10.2 - Signage and Appendix A10.4 for drawings and requirements.
DIMENSIONAL LETTER SIGNAGE - 101419
Refer to Appendix A10.2 - Signage for requirements, as well as design guidelines for exterior signage.

INTERIOR SIGNAGE - 101423
Refer to Appendix A10.2 - Signage for requirements, as well as design guidelines for interior signage.

TOILET COMPARTMENTS – 102113
Toilet and urinal compartment panels shall be either solid plastic or stainless steel materials, due to lower vandalism and better maintenance. Baked enamel metal, plastic laminate and other materials are not to be used, unless otherwise approved by DCM due to location, type of users or budget. Exception: In partial remodels of existing toilet rooms, match existing type and appearance.

- Type: Overhead-braced, floor-mounted. Other types, such as ceiling-hung, are not permitted due to poor durability experiences KU has had with them in the past.
- Special Wall Mounting Requirements: Urinal screens & toilet compartment dividing wall shall be specified to be secured to walls with continuous wall brackets, in lieu of individual mounting brackets, for greater durability.
- Hardware shall all be stainless steel and heavy-duty quality.

WIRE MESH PARTITIONS - 102213
**General:** Wire mesh partitions shall include provisions for installation of standard locksets or deadbolts which utilize KU's standard Medeco key cylinders in all lockable doors.

DEMOUNTABLE PARTITIONS - 102219
**General:** KU has a strategically-sourced negotiated procurement contract for DIRT T demountable partition systems, which shall be given preference by Project Designers when demountable partitions are deemed appropriate for a project.

- The KU Construction (KUC) group will be consulted and given the option to install the DIRT T systems for all projects using them. If they decline to perform the installation, KU's DIRT T vendor can perform the installation.
- Demountable partition systems shall be installed by factory-trained & certified installers.

FOLDING PANEL PARTITIONS – 102233
**General:** The use of folding panel partitions to divide one room into two smaller rooms is discouraged, since KU's experience has been that movable panel partitions are rarely used, they provide less acoustical isolation between adjacent spaces and they add project cost that outweigh the actual advantages they may offer. Designers proposing to use them shall discuss with DCM and the University Architect prior to proposing them to KU clients.
**Horizontal Sliding Fire Doors**: Fire-rated operable panel partitions, such as those manufactured by Won-Door Corporation, shall **not** be used on KU projects, due to performance problems and reliability/maintenance issues that KU has experienced with these systems on past KU projects.

**WALL AND DOOR PROTECTION - 102600**

Project Designers shall provide permanent, heavy-duty corner guards to protect outside drywall corners from damage in main corridors and other heavily-used areas where damage is likely. One-piece stainless steel or aluminum assemblies and recessed models, or two-piece stainless steel and metal mounting plate units are preferred, attached with concealed fasteners or full-bed silicone sealant adhesive.

- Standard-grade plastic or vinyl corner guards, and/or snap-on-cover assemblies may only be used in low-traffic locations, where approved by DCM.

**TOILET ROOMS – GENERAL DESIGN GUIDELINES**

DCM can provide examples of typical University toilet room elevations and detail options. Designers shall give particular attention to toilet room layouts, to verify that sight lines are controlled and appropriately screened for privacy from outside.

- **Unisex, Family or Gender-Neutral Restrooms**: Typically provide one per floor, but at least one per building, with both a water closet and a urinal in each shared-use restroom.

- **Entrances**: Multi-occupant toilet rooms shall be designed to screen all sightlines into them as necessary to maintain visual privacy from adjacent corridors/spaces.

- **Entry Doors**: Toilet room doors shall always swing out in new buildings, additions and renovations, for improved hygiene, since this doesn’t require users to grip a door lockset or pull to open an in-swinging door.
  - Exception: Renovations where out-swinging doors are technically infeasible.
  - Power operators shall be provided if ADA side clearances are technically infeasible in renovation projects.

- **Finishes**: Ceramic tile, *porcelain tile or resinous flooring* on floors and wall base, and full-height tile on walls.
  - Seamless sheet vinyl goods may be considered in single, uni-sex or family toilet rooms, subject to DCM approval on a per-project basis.
  - Floor and wall base shall have matching tile and grout, with mid-range or darker colors for soil hiding ability over time.
  - **Wall tile may be lighter colored tile and grout, above a medium-to-dark color wall base (tile and grout) that is at least 4” high.**

- **Continuous Countertops or Vanity Tops**: Solid composition (Corian or equal), quartz or granite materials, in lieu of plastic laminate for long-term durability.

- **Plumbing Fixtures**: Urinals, lavatories and water closets shall be wall-mounted, with concealed hangers/supports.
Pipe Chases: Designers shall layout toilet and shower rooms in new buildings, additions or full renovations to have pipe chases that are not less than 24" clear interior width, and preferably 36" clear width for maintenance access.

Access to pipe chases shall be by means of standard, full-height swing doors for maintenance access, unless infeasible. Access doors, if required, shall be 24"W x 36"H; verify locations with FS and DCM.

Bookracks are often desirable within toilet rooms, but if provided, shall be ADA-compliant regarding reach ranges and protruding objects.

Toilet Accessories: Provide as noted elsewhere in this document. Show and note all toilet accessories on plans and interior elevation drawings.

- Soap dispensers shall be located so that they drip into a sink or onto a countertop, not onto the floor.
- Paper towel dispensers or automatic hand dryers shall be located on plans to minimize dripping onto floors, preferably adjacent to sinks or lavatories, and not across the room.
- Baby Changing Stations: Include one wall-mounted, fold-down unit in each unisex / family restroom, or in public restrooms serving auditoriums or similar public venues.

Electric Hand Dryers: Review and confirm with DCM and FS, if proposed for use on a project. Electric hand dryers shall not be used in locations where the noise from their operation may be disruptive to office or classroom activities, and are generally more appropriate for consideration in public-use venues than in academic facilities.

TOILET ACCESSORIES – 102800

General: A careful review of the layout of toilet fixtures and accessories, especially for required mounting heights and other handicapped-accessibility requirements, shall be coordinated with the Office of Design and Construction Management. All toilet accessories shall be stainless steel materials, with satin finish, heavy-duty construction. Provide units indicated, as manufactured by Bobrick or equal, as approved by DCM.

- Project Designer shall show all toilet accessory items on floor plans and/or on restroom interior elevations, including those provided by Owner, accurately to scale and in ADA-compliant accessible locations, specifically including consideration of reach ranges, wheelchair locations and protruding object limitations.

Grab Bars: 1-1/2" actual outside diameter; satin, peened or knurled non-slip finish; concealed fasteners with snap-on mounting flange covers.

Mirrors: Surface-mounted mirrors shall be provided with fully-welded and seamless stainless steel frame or shall be frameless, tempered glass mirrors, secured with concealed theft-proof mounting.

- Lavatory and Sink Mirrors: Typically provide one above each lavatory or sink.
  - Full-height, full-width mirrors are preferred above built-in lavatory counters.
  - Omit lavatory mirrors if required to restrict sightlines into restroom, although this should be last resort to proper restroom design approach.
- Tall Mirrors: Provide one in each public restroom. Minimum size: 24" wide x 60" high, with top mounted at 6'-8" AFF. *Locate where sightlines into toilet room are not compromised.*

**Toilet Tissue Dispensers:** Units that accommodate two rolls of toilet tissue, side-by-side. The dispenser shall be mounted on the partition on the hinge-side of the toilet stall door. Dispensers shall move in complete circles and shall *not* have controlled-flow feature.
- Bobrick Model #2740, surface-mounted, two-roll dispenser.

**Paper Towel Waste Receptacles:** Built-in units shall be largest capacity feasible.
- *Under-Counter Option:* Designers may choose to detail built-in lavatories with a 6" diameter opening with a stainless steel trim ring above an under-counter waste receptacle, if ADA wheelchair access is maintained to all sinks. Designers shall also select and have the Contractor provide a readily-available waste receptacle unit for each of these locations.
- If loose units are to be provided by FS Custodial Services, *consult with FS, DCM and building occupants to verify the size and general locations of units to be provided.* Designers shall show actual locations dashed and to-scale on drawings and note as "Loose Owner-provided Waste Receptacle".
  - Locations and sizes must *not* alter accessibility *or code compliance* of toilet rooms, toilet accessories, plumbing fixtures *or egress paths*. Loose waste receptacles can violate ADA or exiting criteria if improperly placed. Designers must therefore indicate recommended locations on construction drawings which comply with ADA and building code requirements.

**Sanitary Napkin Disposal Units:** Provide one feminine hygiene disposal unit in each woman’s toilet stall.
- Bobrick Model #270.

**Sanitary Napkin Dispensers:** *KU no longer provides these units within KU buildings, given the difficulties in managing them and the costs/resources required to refill them.* If building occupants wish to propose to provide and manage them, they shall consult with DCM and FS to confirm if and how they will manage and procure these units.
Electric Hand Dryers: If approved by DCM and FS for provision on a project, Dyson AirBlade dB models shall be considered, in lieu of traditional electric hand dryers.

Shower Seats: Designers shall specify phenolic, stainless steel or other permanent, low-maintenance materials when shower seats are required.

- Wood slat or upholstered shower seats are not acceptable.

Coat & Hat Racks: Heavy-duty coat racks and shelves for hats, books or backpacks shall be provided in toilet rooms and in waiting areas, as requested by user group or DCM. Lockers may supplement this need. The use of plastic assemblies, supports and hooks is discouraged; steel or aluminum units are recommended for durability.

Owner-Furnished Toilet Accessories: The University shall furnish the following toilet accessories, which shall be installed by the Contractor. Other models are not acceptable. DCM shall coordinate with the FS Central Store and KU Purchasing to procure units; A/E shall confirm number of units of each that are required and advise DCM PM.

- Designers shall show and note these items as "Owner-furnished, Contractor-installed" on construction documents.

Paper Towel Dispensers:

- Standard Automated Touchless Units: Georgia-Pacific Model No. 59462, enMotion® Wall Mount Automated Touchless Towel Dispenser, hands-free operation, for 10" wide paper rolls; Translucent Smoke color; nominal dims: (WxDxH) 14.8" x 9.75" x 16.75".
  - New Buildings or Building Renovations: Project Designers shall include hard-wired power to automated units, with power provided and connected to units by Contractor.
  - Existing Buildings or Limited Remodels: Battery-operated units may be specified; Designers shall confirm proposed locations with DCM.

- Optional Manual Operation Units: Georgia-Pacific Model No. 54338, GP Push Paddle Roll Paper Towel Dispenser, push-lever operation, for 8" wide paper rolls; Translucent Smoke color; nominal dims: (WxDxH) 12.5" x 10.6" x 14.4"; image shown below center.

Soap Dispensers: GOJO FMX, Model 5150, 1250ml, push-lever operation, 1250mL capacity, liquid soap, Dove Gray color; nominal dims: 10.5"H x 6"W x 4"D; image above right.
FIRE PROTECTION CABINETS – 104413

Fire Extinguisher Cabinets: Provide recessed cabinets to house all fire extinguishers located in corridors and public spaces. Cabinets are not required in labs, mechanical & electrical rooms, commercial kitchens & food service locations, or in unfinished work areas.

- **Cabinets**: Solid clear glass doors, trim color as appropriate for adjacent wall surfaces. Provide units without locks on doors.
- **Size**: Interior dimensions adequate to receive up to a ten pound (10 lb.) ABC dry chemical extinguisher.

Fire Hose Cabinets: Provide units with similar trim and appearance to fire extinguisher cabinets, in location(s) required by code plans. Provide units without fire hoses.

Fire Standpipe Cabinets: Provide 18" x 18" units for 2 ½" fire department connection with similar trim and appearance to fire extinguisher cabinets, in location(s) required by code.

FIRE EXTINGUISHERS – 104416

**Fire Extinguishers - General Requirements**: Provide in all corridors per NFPA 110 and in all laboratory spaces, even if not required by code. In laboratories, provide not less than one fire extinguisher per lab, located near the main entry / exit door, surface-mounted on wall hooks; no cabinet is required. Provide the following types, for each indicated location:

- **Type for Standard Locations**: Ten pound (10 lb.) ABC dry chemical; acceptable manufacturers: Bager, Sentry, or Amerex.
- **Type for Laboratory Spaces**: Fifteen pound (15 lb.) 2A:10B:C dry chemical unit, unless special hazards require other or additional types; acceptable manufacturers: Amerex.
  - Project Designer shall review and verify the hazards that are anticipated within each lab space with EHS, the University Fire Marshal and the building occupant's lab supervisor(s). Project Designer shall show and note the locations of each type(s) and size(s) of fire extinguishers that are required for the fire hazard(s) that will be present in each laboratory space.
- **Type for Commercial Kitchens & Food Service Locations**: Twenty pound (20 lb.) Type “K”; acceptable manufacturers: Amerex, or Anzel.

**Locations/Spacing**: As required by NFPA-10. Project Designer shall graphically show location of each fire extinguisher and its radius of coverage on code compliance plans and construction documents, where wall-mounted units shall be noted as "Owner-furnished, Contractor installed".

- Project Designer shall show and note mounting locations for wall-mounted fire extinguishers that are near entry doors, but are also ADA-compliant, and don't compromise side clearances at doors, protruding object limitations, reach ranges or similar requirements.
- Wall-mounted fire extinguishers shall be mounted no more than 24" AFF, to bottom of extinguisher.

**Procurement & Installation**: All fire extinguishers shall be procured and installed by KU Facilities Services, and charged to the project as an FS support cost. The Project Designer
shall verify the quantities of each type of extinguisher that are required with the Contractor, and shall advise and coordinate with DCM and FS.

MAILROOMS & POSTAL SPECIALTIES – 105500

**General:** Designers shall confirm the mail and delivery handling needs with the departmental administrators for each project, and shall include appropriate provisions for those needs.

- Mail slots may **not** be located in any fire-rated walls or partitions, such as rated corridor walls.
- Central Mail Rooms: DCM's PM shall review design with KU Printing Services, who functions as campus mail coordinating department. Provide space within or near rooms for waste and recycling containers.

METAL LOCKERS – 105113

**General:** Metal storage lockers in locker rooms and similar athletic or recreational areas shall have a ventilated front, and shall have a closed plenum behind them with return air pulled through a ventilated back, to minimize odor and encourage rapid drying of wet articles stored within lockers.

BUS SHELTERS – 107343

**General:** When a project is proposed on property that includes current or proposed transit stop locations, Project Designers shall evaluate and review potential locations for bus shelters near proposed transit stops with KU during the early stages of design.

- Future possible locations for bus shelters at transit stops shall be shown dashed and noted as such on all site plans. Site utilities and other work shall be located to avoid and coordinate with future bus shelters, to accommodate their future installation.
- If a bus shelter is to be constructed as part of a project, KU's standard bus shelter shall be the basis of design, and shall be procured from KU's preferred vendor.

**KU Standard Bus Shelter:** Refer to Appendix A10.6 - Bus Shelters for specifications and standard details for KU bus shelters.

GROUND-SET FLAGPOLES – 107516

**General:** Flagpoles are typically **not** included in front of new buildings on the KU campus. If proposed by Designers or building occupants, they shall be discussed with DCM, the University Architect and Facilities Services administrators to confirm if acceptable to include, and who will be responsible for raising, lowering and replacement of flags.