APPENDIX

CAMPUS STANDARDS FOR UNIVERSAL AND BARRIER-FREE DESIGN

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AND BARRIER-FREE DESIGN

1.1   OVERVIEW

A.   Universal and barrier-free (accessibility) standards for UNC Charlotte are **equal to**, or in **addition to,** Federal and State standards for accessible Design. Some design components in campus standards exceed, but do not violate Federal or State standards.

B.   Federal and State accessibility standards provide the minimum requirements for people with disabilities, and may result in segregation. Universal design focuses on inclusion and design that works for the widest variety of users. This concept ties directly to the mission of UNC Charlotte.

C.   Designing inclusive and accessible spaces requires planning that considers the needs of users who may have low vision, blindness, a temporary or permanent mobility impairment, hearing loss, medical disorder, age related limitations, or several of these concerns.

D.   Utilizing the Universal Design Principles when pre- planning campus buildings and path- ways adds little cost in the planning stage but saves significant costs of retrofitting in the future.

1.2   GENERAL CAMPUS STANDARDS

A.   Common use features (such as automatic door activators, card swipes and proximity readers) shall be placed a maximum of 34 to 36 inches above finished floor.

B.   Do not place common use building features within 24 inches of an interior corner.

C.   Space common use features a minimum of 6 to 8 inches apart from other features.

D.   Common use features shall not be obstructed by trim or other building features.

E.   Classrooms and labs with fixed tables must have at least one adjustable height table, placed in a visually unobstructed location near the front of the classroom.

F.   Provide at least one ADA compliant, single user or "assisted use" restroom on an egress level in newly designed or significantly renovated buildings. The door shall swing freely, with no spring hinge or hydraulic closer. Single user restrooms shall not be installed in a location re- quiring the entry access door to include spring hinge or hydraulic closer.

G.   An accessible route to accessible seating must be provided to multiple levels of tiered class- rooms and lecture halls.

H.   Doors for classrooms, labs, offices, meeting rooms, restrooms and other commonly used spaces should be designed so that users of varying abilities and strength can operate a door independently. All non-fire rated doors must have a pull pressure of 5 pounds or less per fed- eral accessibility standards. If a chosen door design results in a heavy or difficult to open door, an automatic door opener is needed and shall be included in the project.

I.   Choose door hardware for the widest range of dexterity. Locking "tabs" that must be turned to engage or disengage a lock are discouraged.

1.3 ACCESSIBLE ROUTES AND PATHWAYS

A. The hilly topography of the UNC Charlotte campus can be difficult to mediate and creates significant challenges for people with mobility disabilities. Universally designed pathways benefit the whole campus body since people read text messages, roll equipment from or to classrooms, and ride bicycles while traversing the campus.

B. Designing pathways for all types of users requires:
   1. Accessible common campus pathways, whenever possible.
   2. Parallel accessible pathways when separate pathways are necessary.
   3. Sloped, rather than stepped common campus pathways.
   4. Pathways that provide excellent sight lines in all directions.
   5. Smooth, wide pathways with moderate slopes less than 5 percent when feasible.

C. Include in Design:
   1. Multiple, direct, accessible pathways that connect buildings and parking areas. Accessible routes that connect parts of campus should be included in new construction project scope.
   2. Accessible parking on the shortest, direct accessible pathway to an accessible entrance (North Carolina Building Code);
   3. Accessible pathways to transport modes from multiple building entrances.
      a. transport modes include:
         1) accessible parking areas.
         2) shuttle stops.
         3) bicycle and walking paths from other areas of campus.
   4. Direct accessible paths to nearby specialty areas, such as outdoor picnic seating or cafeteria.

1.4 BUILDING FEATURES

A. Entrances
   1. Door closers shall not be installed on non-fire rated classroom entry doors.
   2. Door closers shall not be installed on any non-fire rated door without review and approval by the Campus ADA Project Coordinator and University Project Manager (UPM).
   3. Doors accessed via a separate card swipe and separate automatic door actuator shall have both mounted on the same side of the door and a minimum of 6 to 8 inches apart.
   4. Devices shall not be placed beneath thick, overhanging building trim.

B. Elevator buttons
   1. Avoid placing elevator buttons near the inside corners of a wall or within 24 inches of another feature, such as a water fountain, as this blocks access to both features.

C. Interior Signage
   1. Each door providing access to an Areas of Refuge from an adjacent floor area shall be identified by signage on both the access and interior sides stating AREA OF REFUGE and include the International Symbol of Accessibility.
   2. Each door providing access to an Exterior Area for Assisted Rescue shall be identified by signage on both the interior and exterior stating EXTERIOR AREA FOR ASSISTED RESCUE and include the International Symbol of Accessibility.

D. Classrooms, Laboratories, and Internal Spaces:
   1. Avoid desk/chair combination furniture for classrooms, as this design does not work for several different types of users. Tables/desks with removable chairs are more universally designed.

    2.   Classrooms and labs with fixed tables should have at least one adjustable table, placed in a visually unobstructed location near the front of the classroom.

    3.   Podiums and active learning classrooms features shall be located at least 36 inches from the wall and should be fully accessible for faculty or guests with disabilities.

    4.   Classroom monitors that protrude more than 4 inches from the wall must include protruding object remediation per federal standards.

    5.   The minimum aisle width in classrooms is 36 inches.

    6.   The preferred minimum width for lecture hall aisles is 48 inches.

E.   Restrooms
1.   Place towel dispensers on the wall away from the sink to allow wheelchair access.
2.   Avoid corner entrances to restrooms that are difficult for wheelchair users to maneuver.

F.   Stairs
1.   Provide visual contrast with 2 inches stripe on the tread of all interior and exterior stair locations on the stair tread beside the nosing. Confirm campus location to follow based on design material being provided (brick, concrete, rubber treads, etc.).

UNIVERSAL DESIGN PRINCIPLES

1.5   EQUITABLE USE:

The design does not disadvantage or stigmatize any group of users.

1.6   FLEXIBILITY IN USE:

The design accommodates a wide range of individual preferences and abilities.

1.7   SIMPLE, INTUITIVE USE:

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

1.8   PERCEPTIBLE INFORMATION:

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

1.9   TOLERANCE FOR ERROR:

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

1.10   LOW PHYSICAL EFFORT:

The design can be used efficiently and comfortably, and with a minimum of fatigue.

1.11   SIZE AND SPACE FOR APPROACH & USE:

Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of the user's body size, posture, or mobility.

1.12   WEBSITES:

http://www.ada.gov/2010ADAstandards_index.htm

https://universaldesign.ie/what-is-universal-design/the-7-principles/

https://up.codes/viewer/north_carolina/ibc-2015/chapter/11/accessibility#11