

## Description:

The purpose of the section is to highlight the current applicable UMD Design Standards and design criteria toward developing an accessible barrier free environment at the campus.

## Related Sections:

- 08 71 00 Door Hardware
- 10 14 02 Interior Graphics/Signage
- 10 21 00 Restroom Requirements
- 14 20 00 Elevators
- 27 00 00 Information and Telecommunications Systems
- 28 31 00 Fire Alarm Systems

## Effective Date:

January 1, 2023

## Applicable Standards:

- 2010 ADA Standards for Accessible Design
- ASME A17.1CSA B44-2019 Safety Code for Elevators

## General Requirements:

The University of Maryland, College Park continues its pursuit toward a campus-wide barrier free environment. The campus has selected as a “basis-of-design” guideline, the federal ADA Design Guideline standard for all of its public, academic, sport and support buildings and site improvement work on the campus.

Working within established codes, designers are expected to continually search for opportunities and apply innovative design solutions that forward universal design throughout the campus over & above established norms.

## Specific Design Requirements:

For all new construction and major renovation projects, designers are directed thru program and site verification to identify any critical issues and explore innovative approaches to mitigate accessibility barriers including, but not limited to the following:

- Any specific accessibility issues related to the project and its written program (as contracted), including existing barriers within the facility and how the new associated project may incorporate those barriers.
- Connections to the established existing accessible campus travel pathways associated with the siting the new project.
- Review opportunities for innovative solutions that may further facilitate accessibility on the immediate campus neighborhoods.

## General Design Requirements:

### New Construction Projects:

Unless directed otherwise, all design professionals, consultants and contract providers are required to utilize the 2010 ADA Standards for Accessible Design (latest state adopted edition). Design professionals are charged with providing the highest level of coordinated design documentation that demonstrates accessible principles along within established program parameters for any project assigned.

### Renovation Projects:

All of the accessibility construction standards contained herein shall apply to existing buildings undergoing alterations.

- Renovation/Alteration projects include, but are not limited to, building additions, remodeling, renovation, rehabilitation, reconstruction, historic preservation restorations, changes or arrangement in structural portions or elements, building entrances and plan revisions of walls and full height partitions.
- Any technical infeasible (per code/guidelines) design issues should be reported in writing to UMD Project Management before being dismissed.
- All design alterations must demonstrate connection to existing established accessible pathways for all functional areas of the building to nearby accessible parking and pedestrian routes.

## General Design Criteria:

### Building Exterior:

- **Floor and Ground Surfaces:**
  - Recessed walk-off mats should be designed to be flush with the adjoining floor surfaces at entrances to buildings.
  - Pavers or stamped concrete are not preferred hardscape finishes for accessible paths of travel.
- **Paths of Travel:**
  - All project designs are required to demonstrate connection from the building through the site to existing established UMD accessible pathway routes. Designs should include at least one approved viable code accessible connection.
  - All project designs should consider connections from the project site to accessible parking in addition to accessible routes of travel that connect the building to main elements of pedestrian paths.
  - Design teams is required to:
    - Identify at least one accessible detour pathway due the initial start-up related construction event. The designer of record shall be prepared to direct/consult with any associated contractor(s) by providing direction for approved ADA accessible routing options along with required signage documentation that indicates an approved public pathway to the nearby UMD accessible route.
  - Where an accessible route intersects with multiple routes, where one or more routes are not accessible, provide signage directing people to the accessible route.
  - Design accessible exterior routes without ramps whenever possible, locating items such as cleanouts, vault covers, grates, and similar items outside of the direct path of travel. When these items are located within the path of travel, they shall be made flush with the surrounding walk.
  - Placement of bicycle parking is prohibited within accessible paths of travel.
  - Any determinations (by measurement) made due to as-built “installed” of non-compliant slopes will be at the discretion of UMD ADA coordinator via the UMD Project Manager/Construction Manager may require full correction before final acceptance of work.
- **Stairways:**
  - Design stairs to ensure that the leading edge of treads contrasts (in color) with the rest of the treads to increase visibility and safety. Provide a contrasting strip on the leading edge of the tread that extends a total of 2-inches back from the leading edge of each tread. Where conditions allow, provide integral colored, cast-in-place stair nosings are preferred. (federal standard yellow or white).
- **Accessible Parking:**
  - Accessible routes from parking access aisles should not cross behind vehicles or go into vehicular traffic.
  - Accessible parking signage should not be located within a pedestrian pathway unless location elsewhere would place the sign too far from the accessible parking space.
  - **Parking Meters: (as directed by UMD DOT)** Coin slots and credit card swipes for accessible parking spaces or pay stations that serve accessible parking spaces shall be located at a height between 24-inches and 43-inches. The height of any visual display shall be no greater than 38-inches.
  - **Electric Vehicle Charging Stations: (as directed by UMD DOT)** accessible electric vehicle charging station should have all controls at a height between 24-inches and 43-inches. The height of any visual display shall be no greater than 38-inches. At least one, but no less than one in each five electric vehicle-charging stations in a grouping, shall be accessible.
- **Accessible Parallel Parking Spaces (passenger loading zones, similar)** Accessible parallel parking spaces are not preferred types of accessible parking spaces and their design incorporation into any new projects is prohibited without written approval by UMD Project Management.

## • **Curb Ramps:**

- Provide curb ramps where accessible routes cross curbs and where blended transitions are not provided.
- The use of diagonal curb ramps are prohibited.
- Painted curb ramp surfaces are not permitted.
- When new curb ramps are installed as part of a project, any associated existing “non-compliant” curb conditions shall be similarly replaced on the opposite side of the street, as applicable.

## **Building Interiors:**

### **Interior Accessible Routes:**

- Design building programed spaces that integrate/transition into UMD approved accessible routes without ramps whenever possible.

### **Interior Stairs:**

- Ensure that the leading edge of treads contrasts with the rest of the treads to increase visibility and safety where appropriate. Provide a contrasting strip (reviewed and approved by UMD) on the leading edge of the tread that extends a total of 1” to 2” back from the leading edge of each tread.

### **Elevators**

- Designers are directed to incorporate ADA guideline requirements related to overall size, door openings, depth and width (dependent on door opening type selected) to accommodate ambulatory usage.

## **General Building Elements**

### **General Design:**

All rooms, pathways and secondary areas should allow for the incorporation of required room accessories including, furnishings, trash receptacles, and other moveable objects in the design layout documentation thus insuring that these items do not encroach upon identified accessible routes, turning spaces and required clear floor spaces.

### **Building Ingress and Egress:**

- Where feasible, all public access points to a new building or major remodel/renovation projects should be made accessible.

### **Access to Public Areas:**

- In all public areas of new construction and major renovation projects correct accessible should be included in multi-leveled classrooms, sunken areas, loggias, raised platforms, and mezzanines.

### **Doors and Door Openers:**

- Provide level clear floor space at automatic door control devices that is located outside the swing of the door.
- Avoid doors that swing out into corridors or accessible routes of travel. Exceptions include classrooms and other spaces that are required (by code) to open outward for emergency egress and electrical, telecom, mechanical rooms that are used infrequently.
- Doors that are required to open out into corridors or public spaces should be designed within alcoves when feasible.

### **Windows**

- Provide adequate clear floor space at any operable window so that a person can approach and open the windows.

### **Furnishings**

- Designers are required to confirm with applicable codes/guidelines by documenting required minimum number of accessible planned furniture units.

## **Plumbing Elements and Facilities:**

### **Restrooms and Toilet Rooms**

- In new construction and major renovation projects (as programmed) , all restrooms shall be designed to be fully accessible.
- Designers are requested to review DCFS Section – Plumbing, for additional requirements related to ADA guidelines.

### **Toilet Accessories**

- Designers are requested to refer to DCFS Section – Restroom Requirements, for additional requirements related to guidelines for accessories.

## **Communication Elements and Features**

### **Exterior Signage**

- When all entrances are not accessible, provide signage that directs people to the accessible entrances.
- Accessible entrances shall have the International Symbol of Accessibility (ISA) signage installed.

### **Interior Signage**

- Visual and tactile signage indicating the floor level should be provided at all stairwells.

### **Assistive Listening Systems**

- Where sound systems are provided, assistive listening devices shall be incorporated as part of the system.