



## **DUKE UNIVERSITY/DUKE UNIVERSITY HEALTH SYSTEM GUIDELINES FOR INSTALLING NEW PUBLIC TELEPHONES**

Decision makers within Duke University departments should review this document prior to replacing or adding new public telephones within their areas. The goal is to ensure compliance with the relevant statutory requirements and standards as specified in the *Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities* (ADAAG); the complete text of the guidelines is available at [www.access-board.gov/adaag/html/adaag.htm](http://www.access-board.gov/adaag/html/adaag.htm).

This document is provided as a summary to help you in the planning process. It is not intended to replace the ADA guidelines. URLs to specific ADAAG sections are provided and should be used as the authoritative source.

This document highlights the three major aspects of the ADAAG specifications for telephone installations :

- Installation and placement
- Signage
- Instruments

### **Installation and placement**

#### **Clear floor or ground space**

For each telephone, you must provide a clear floor or ground space of at least 30 inches by 48 inches to allow either a forward or parallel approach by a person using a wheelchair. To allow wheelchair access, you must not impede approaches by bases, enclosures, or fixed seats. See 4.31 at <http://www.access-board.gov/adaag/html/adaag.htm#4.31>.

#### **Mounting height**

The highest operable part of the telephone must be within the reach ranges specified.

#### **Forward reach**

If the clear floor space only allows forward approach to an object, the maximum high forward reach is 48 inches. The minimum low forward reach is 15 inches . If the high forward reach is over an obstruction, reach and clearances must be constructed as shown in [www.access-board.gov/adaag/html/fig6c.html](http://www.access-board.gov/adaag/html/fig6c.html).

### **Side Reach**

If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed is 54 inches and the low side reach must be no less than 9 inches above the floor. If the side reach is over an obstruction, the reach and clearances be constructed as shown in [www.access-board.gov/adaag/html/fig6c.html](http://www.access-board.gov/adaag/html/fig6c.html).

See [www.access-board.gov/adaag/html/adaag.htm#4.31.3](http://www.access-board.gov/adaag/html/adaag.htm#4.31.3).

### **Projecting objects**

**Leading edges between 27 and 80 inches above the floor:** Telephones or other objects projecting from walls with their leading edges between 27 inches and 80 inches above the finished floor shall protrude no more than 4 inches into walks, halls, corridors, passageways, or aisles.

**Leading edges at or below 27 inches above the floor:** Objects mounted with their leading edges at or below 27 inches above the finished floor may protrude any amount.

**Free-standing objects:** Free-standing objects mounted on posts or pylons may overhang 12 inches maximum from 27 inches to 80 inches above the ground or finished floor. Protruding objects must not reduce the clear width of an accessible route or maneuvering space.

**Head room:** Walks, halls, corridors, passageways, aisles, or other circulation spaces must have 80 inches minimum clear head room. If vertical clearance of an area adjoining an accessible route is reduced to less than 80 inches, a barrier to warn blind or visually-impaired persons must be provided.

See [www.access-board.gov/adaag/html/adaag.htm#4.4](http://www.access-board.gov/adaag/html/adaag.htm#4.4).

### **Shelf and outlet requirement**

If you have a bank of phones in the interior of a building that has 3 or more public pay phones, you must equip at least one public pay phone in each bank with a shelf and outlet.

Exception: This requirement does not apply to the secured areas of detention or correctional facilities where shelves and outlets are prohibited for purposes of security or safety

See [www.access-board.gov/adaag/html/adaag.htm#4.31.9](http://www.access-board.gov/adaag/html/adaag.htm#4.31.9).

## **Signage**

### **Accessibility symbol**

You must identify facilities and elements required to be identified as accessible with the international symbol of accessibility. The symbol must be displayed as shown as illustrated in the ADAAG. See [www.access-board.gov/adaag/html/adaag.htm#4.30.7](http://www.access-board.gov/adaag/html/adaag.htm#4.30.7).

### **Assistive listening systems**

Install signage to identify where permanently installed assistive listening systems are to be found. The signage must include the international symbol of access for hearing loss. See [www.access-board.gov/adaag/html/adaag.htm#4.1.3\(19\)\(b\)](http://www.access-board.gov/adaag/html/adaag.htm#4.1.3(19)(b)).

### **Text telephones (TTYs)**

If your facility has a public text telephone, install directional signage to indicate the location of the nearest TTY telephone. This signage must include the international TTY symbol.

Such signage must be placed adjacent to all banks of telephones that do not contain a text telephone. If you facility has no banks of telephones, the directional signage must be provided at the entrance (for example, on your building directory).

See at [www.access-board.gov/adaag/html/adaag.htm#4.1.3\(17\)\(c\)](http://www.access-board.gov/adaag/html/adaag.htm#4.1.3(17)(c)).

### **Volume control telephones**

Telephones required to have a volume control must be identified by a sign containing a depiction of a telephone handset with radiating sound waves. See [www.access-board.gov/adaag/html/adaag.htm#4.1.3\(17\)\(b\)](http://www.access-board.gov/adaag/html/adaag.htm#4.1.3(17)(b)).

## **Instruments**

### **Controls**

Telephones must have pushbutton controls where service for such equipment is available. See [www.access-board.gov/adaag/html/adaag.htm#4.31.6](http://www.access-board.gov/adaag/html/adaag.htm#4.31.6).

### **Cord length**

The telephone cord to the handset must be at least 29 inches in length. See [www.access-board.gov/adaag/html/adaag.htm#4.31.8](http://www.access-board.gov/adaag/html/adaag.htm#4.31.8).

### Hearing-aid compatibility and volume controls

Telephones in your facility must be hearing-aid compatible.

Volume controls must be provided in accordance the ADAAG. The minimum is 12 dbA and the maximum is 18 dbA. If an automatic reset is provided, then 18dbA may be exceeded.

See [www.access-board.gov/adaag/html/adaag.htm#4.31.5](http://www.access-board.gov/adaag/html/adaag.htm#4.31.5).

### Telephone books

Telephone books must be located in a position that complies with the reach range (see “Installation and placement” section above). See [www.access-board.gov/adaag/html/adaag.htm#4.31.7](http://www.access-board.gov/adaag/html/adaag.htm#4.31.7).

### Volume control

All telephones must be equipped with a volume control. In addition, 25 percent, but never fewer than one unit, of all other public telephones provided must be equipped with a volume control and must be dispersed among all types of public telephones, including closed-circuit telephones, throughout the building or facility. See [www.access-board.gov/adaag/html/adaag.htm#4.1.3\(17\)\(b\)](http://www.access-board.gov/adaag/html/adaag.htm#4.1.3(17)(b)).

### Calculating the number of phone units that must be in compliance

Telephones provided per floor	Telephones required to be in compliance
1 or more single units	1 per floor
1 bank (2 or more adjacent public phones, often installed as a unit)	1 per floor
2 or more banks	1 per bank. Install an accessible unit as a single unit near (either visible or with signage) to the bank. At least one public telephone per floor must meet the requirements for a forward reach telephone.

See [www.access-board.gov/adaag/html/adaag.htm#4.1.3\(17\)\(a\)](http://www.access-board.gov/adaag/html/adaag.htm#4.1.3(17)(a))

Additional public telephones may be installed at any height. Unless otherwise specified, accessible telephones may be either forward or side reach telephones.

**EXCEPTION:** For exterior installations only, if dial tone first service is available, then a side reach telephone may be installed instead of the required forward reach telephone (i.e. one telephone in proximity to each bank shall comply with 4.31).

**Calculating the number of public text telephones (TTYs) needed**

<p>If 4 or more public pay phones (including both interior and exterior phones) are provided at a site and at least one is in an interior location</p>	<p>Then at least 1 interior public TTY should be provided.</p>
<p>If an interior public pay phone is provided in a public use area in a public facility</p>	<p>Then at least one interior public TTY must be provided in the building in a public use area.</p>
<p>If an interior public pay phone is provided in a private facility that is a stadium or arena, convention center, hotel with a convenience center, or a covered mall</p>	<p>Then at least one interior public TTY must be provided in the facility.</p>
<p>In stadiums, arenas and convention centers which are public facilities</p>	<p>At least one public text telephone (TTY) shall be provided on each floor level having at least one interior public pay telephone.</p>
<p>If a public pay phone is located in or adjacent to a hospital emergency room, hospital recovery room, or hospital waiting room</p>	<p>Then one public TTY must be provided at each such location.</p>
<p>If an interior public pay phone is provided in the secured area of a detention or correctional facility,</p>	<p>Then at least one public TTY must also be provided in at least one secured area. Secured areas are those used only by detainees or inmates and security personnel.</p>

See [www.access-board.gov/adaag/html/adaag.htm#4.1.3\(17\)\(c\)](http://www.access-board.gov/adaag/html/adaag.htm#4.1.3(17)(c)).