ADA in our Schools.

Contents

1-When did ADA become a law?

The Americans with Disabilities Act (ADA) was signed into law on July 26, 1990. Some parts of the ADA didn't go into effect until after that date to give entities time to comply with the law, but those compliance deadlines have passed.

The ADA does not have a provision to "grandfather" a facility but it does have a provision called "safe harbor" in the revised ADA regulations for businesses and state and local governments. A "safe harbor" means that you do not have to make modifications to elements in an existing building that comply with the 1991 Standards, even if the new 2010 Standards have different requirements for them. This provision is applied on an element-by-element basis. However, if you choose to alter elements that were in compliance with the 1991 Standards, the safe harbor no longer applies so the altered elements must comply with the 2010 ADA Standards.

A "safe harbor" does not apply to elements that were NOT addressed in the original 1991 Standards but ARE addressed in the 2010 ADA Standards. These elements include recreation facilities such as *swimming pools, play areas,* exercise machines, miniature golf facilities, and bowling alleys. On or after March 15, 2012, public accommodations must remove architectural barriers to these elements listed above are subject to the new requirements in the 2010 Standards when it is readily achievable to do so.

Public schools are covered under Title II of the ADA which covers "public entities." The two key provisions of Title II are that public entities must provide (1) program access (2) in an integrated setting unless separate programs are necessary to ensure equal benefits or services. Program access under Title II means that school districts are required to operate their programs so that when viewed in their entirety they are accessible to and usable by individuals with disabilities. This applies to all existing facilities.
Making structural improvements to an existing building such as installing ramps or elevators is one way of achieving program accessibility. However, structural accessibility is not required if there are alternative means of achieving program access such as providing the service at an accessible site, relocating a class or activity to a different room in the building, or having library staff retrieve books for students or teachers who use wheelchairs. Auxiliary aids and services such as interpreters would have to be provided if necessary for effective communication at school programs, conferences and other activities.
School districts are not required to take any action that would result in a fundamental alteration of the nature of the program or activity or in undue financial and administrative burdens. However, public entities must take any other action that would not result in a fundamental alteration or undue burden but would ensure that individuals with disabilities receive the same benefits and services offered to others without disabilities.

2-ADA Application in Public Schools

Public schools are covered under Title II of the ADA which covers "public entities." The two key provisions of Title II are that public entities must provide (1) program access (2) in an integrated setting — unless separate programs are necessary to ensure equal benefits or services.

School districts are not required to take any action that would result in a fundamental alteration of the nature of the program or activity or in undue financial and administrative burdens. However, public entities must take any other action that would not result in a fundamental alteration or undue burden but would ensure that individuals with disabilities receive the same benefits and services offered to others without disabilities.

Structural accessibility is not required if there are alternative means of achieving program access such as providing the service at an accessible site, relocating a class or activity to a different room in the building.

The ADA is not limited in application to classroom activities. School districts cannot discriminate against people with disabilities in any of the services, programs or activities they provide including preschool, latch key or adult community education programs.

Applicants and employees who work for or apply to work for schools, who are qualified for the job and who can perform the essential job functions are entitled to reasonable accommodations so long as the accommodations are not an undue hardship for their employer.

If the facility was constructed after 1977 then it must comply with ANSI 77 standards. After 1991 it must comply with the ADA 1991 standards. After 1012 it must comply with ADA 2012 standards. There are some exceptions to this, There is a provision that designates that any significant modification is made to a building then a certain percent of the budget for the modification had to be set aside to use for ADA compliance items in the original transition plan. Also if the modification resulted in new usable space or program specific ei. *art room, room or auditorium*. Then those areas had to comply with the standards of the time it was built.

New schools and construction projects altering existing facilities must meet new ADA accessibility standards, unless the state code has stricter guidelines. Any program specific rooms or areas must at the least comply 1991 standards.

Transitional plans and self surveys:

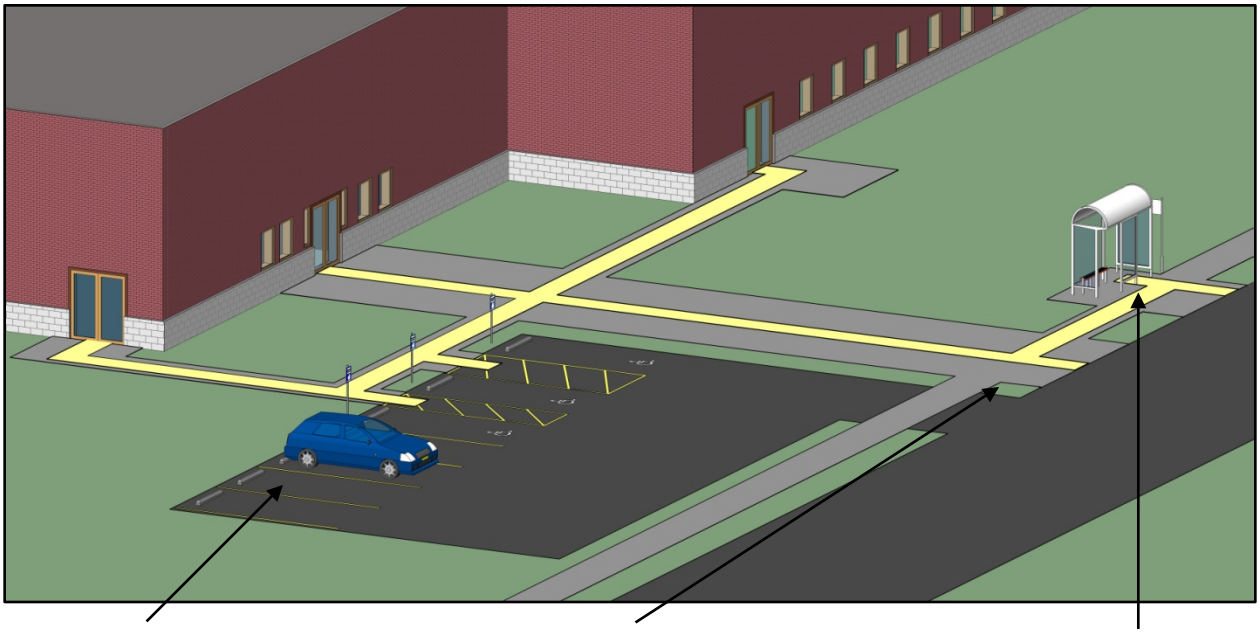
Transitional plans and self surveys were required to be performed in 1996 and again in 2012

3- Accessible Routes (§206)

There must be at least one accessible route to building entrances from site arrival points provided from parking or bus stop.

(Something to think about because it's not stated explicitly is, in a public school "all" routes must be accessible ie. every single door out of a classroom; so could that be a loophole. I think that when you think in terms of egress in an emergency then yes all doors must lead to an accessible route)

An accessible route must connect each point of egress ie. where all recess and lunch exits to the playgrounds as well as from the bus stop areas to the playgrounds.



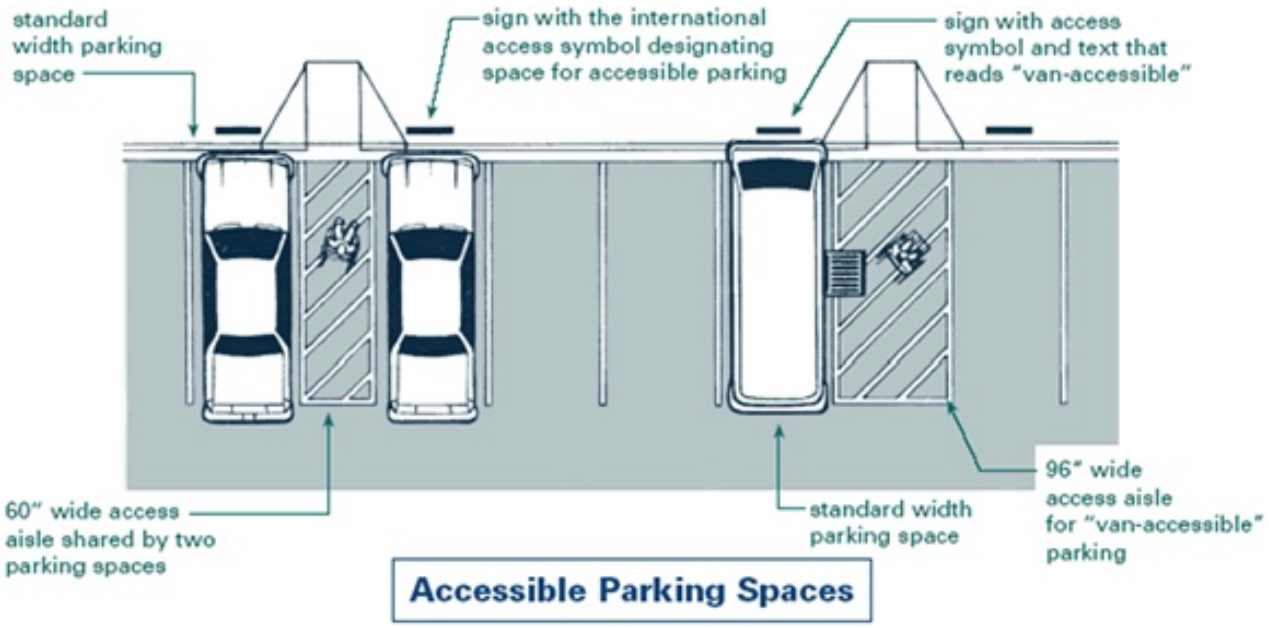
parking & passenger loading zones

streets& sidewalks

Bus or Public Transportation stops.

4- Parking (§208)

One of every six accessible parking spaces, or fraction thereof, must be “van-accessible.” For example: A parking lot with 400 total spaces needs eight accessible spaces, and two of those eight spaces must be van-accessible. Accessible spaces must connect to the shortest possible accessible route to the accessible building entrance or facility they serve.



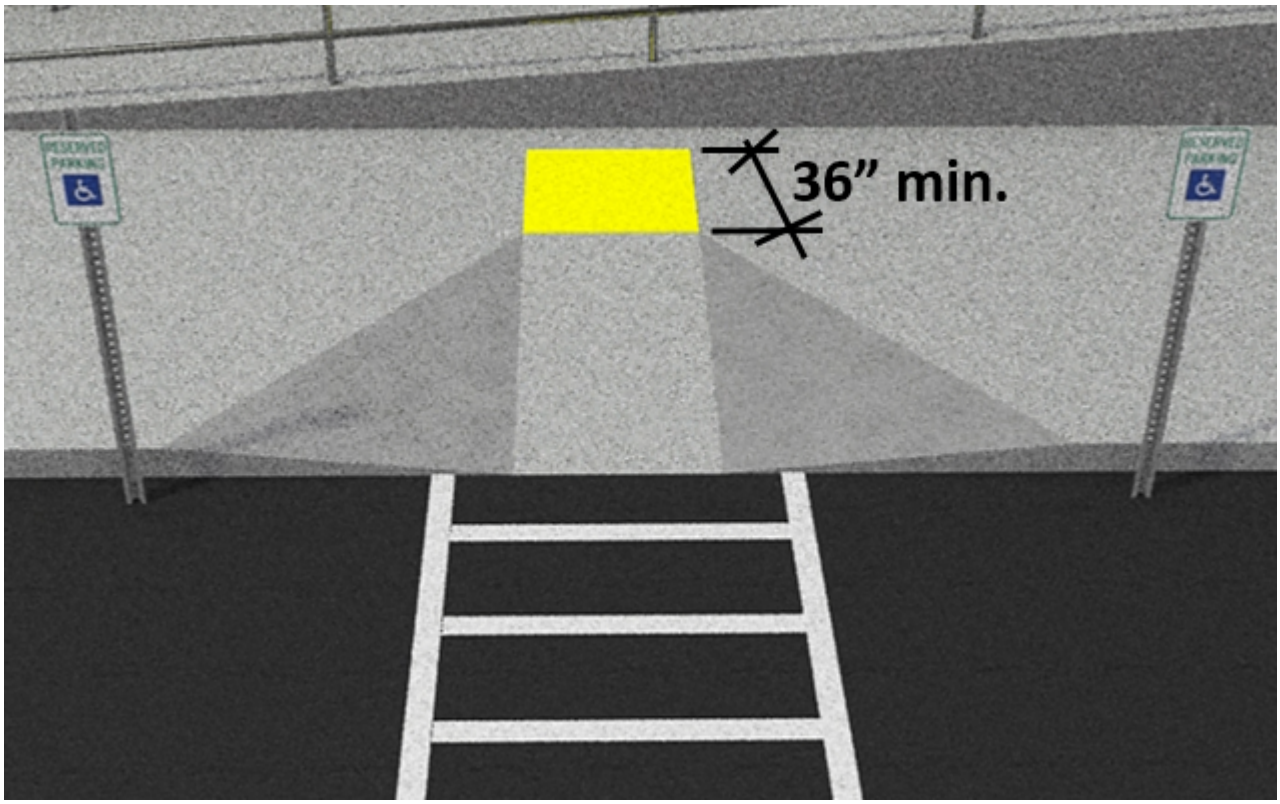
Accessible Parking Spaces

A= Total parking spaces per lot
B= Standard (Car) accessible parking spaces (60 inch wide access aisle)
C= Van accessible parking spaces (96” wide access aisle)
D= Total minimum number of accessible spaces (A+B)

A	B	C	D
1-25	0	1	1
26-50	1	1	2
51-75	2	1	3
76-100	3	1	4
101-150	4	1	5
151-200	5	1	6
201-300	6	1	7
301-400	7	1	8
401-500	7	2	9

5- Curb Ramps §406

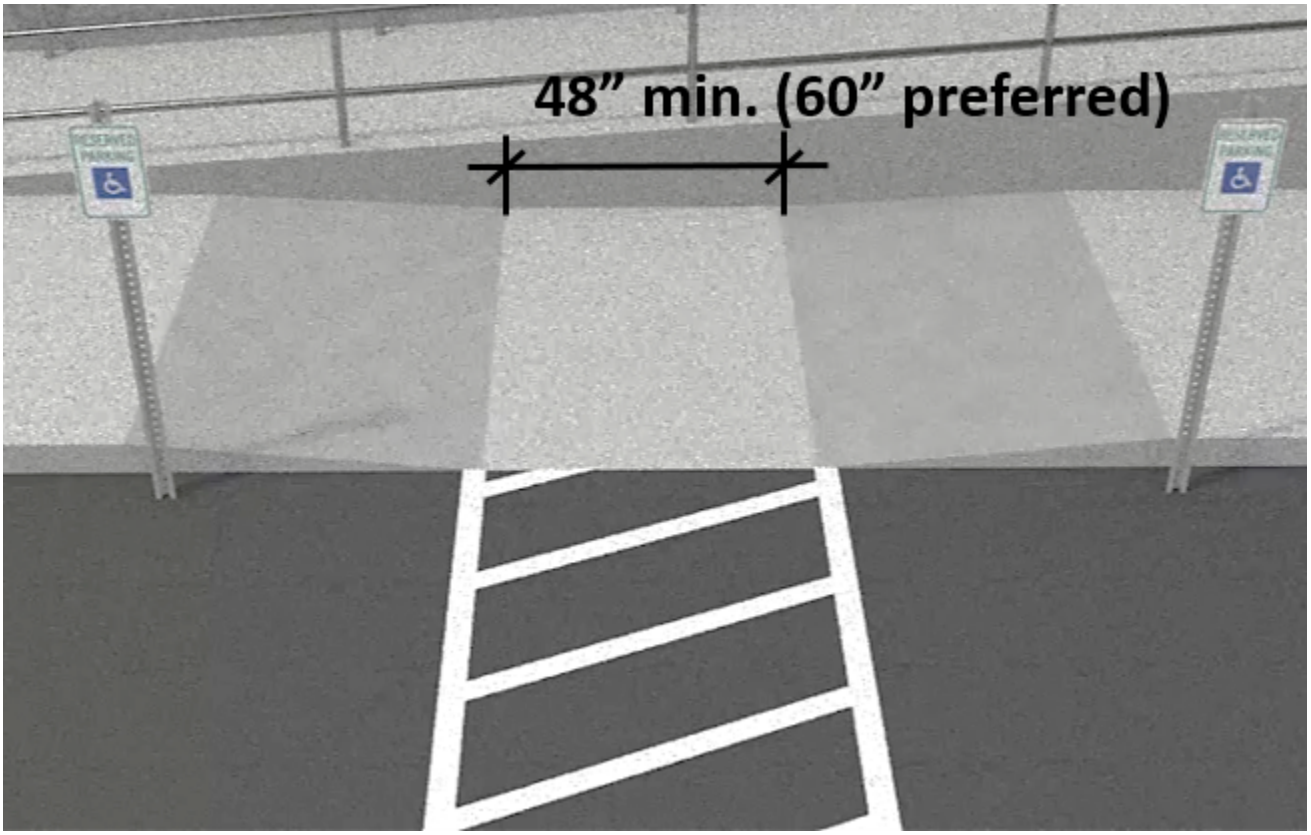
Landing 36” deep min. required at top of curb ramps in new construction



Curb ramps cannot protrude into access aisle

Side flares cannot exceed 1:10 slope

Curb Ramps: Parallel



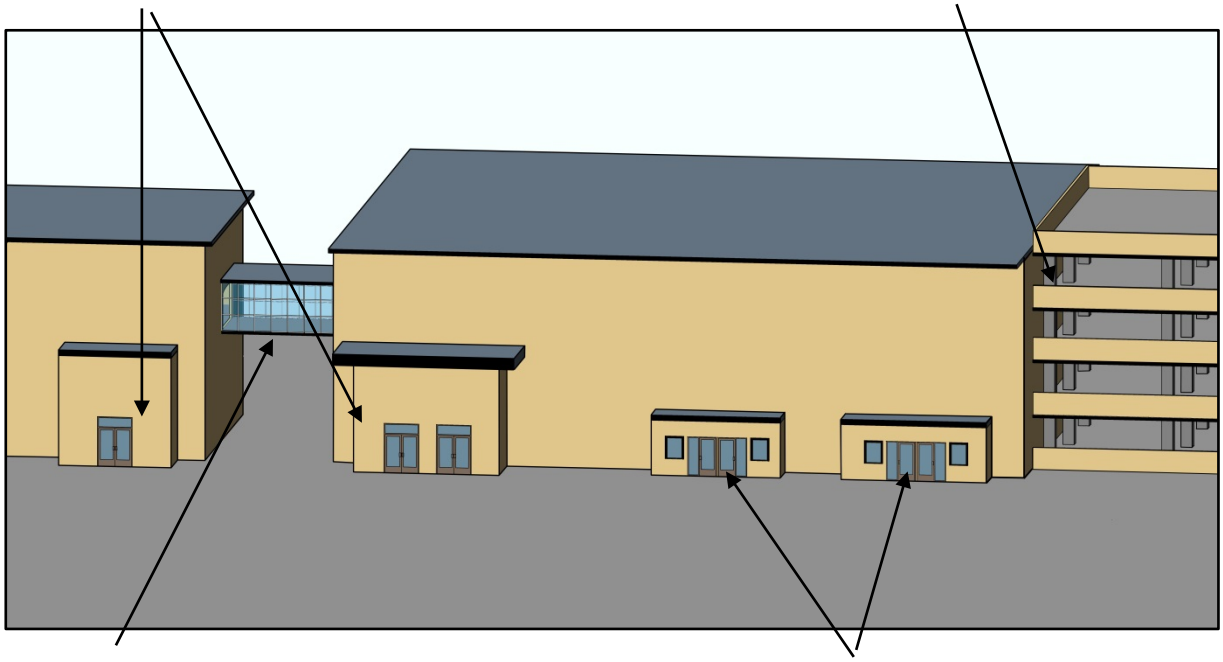
Parallel curb ramps can be used where top landing space is unavailable

6- Entrances (§206.4)

Minimum Number Accessible

At least 60% of public entrances

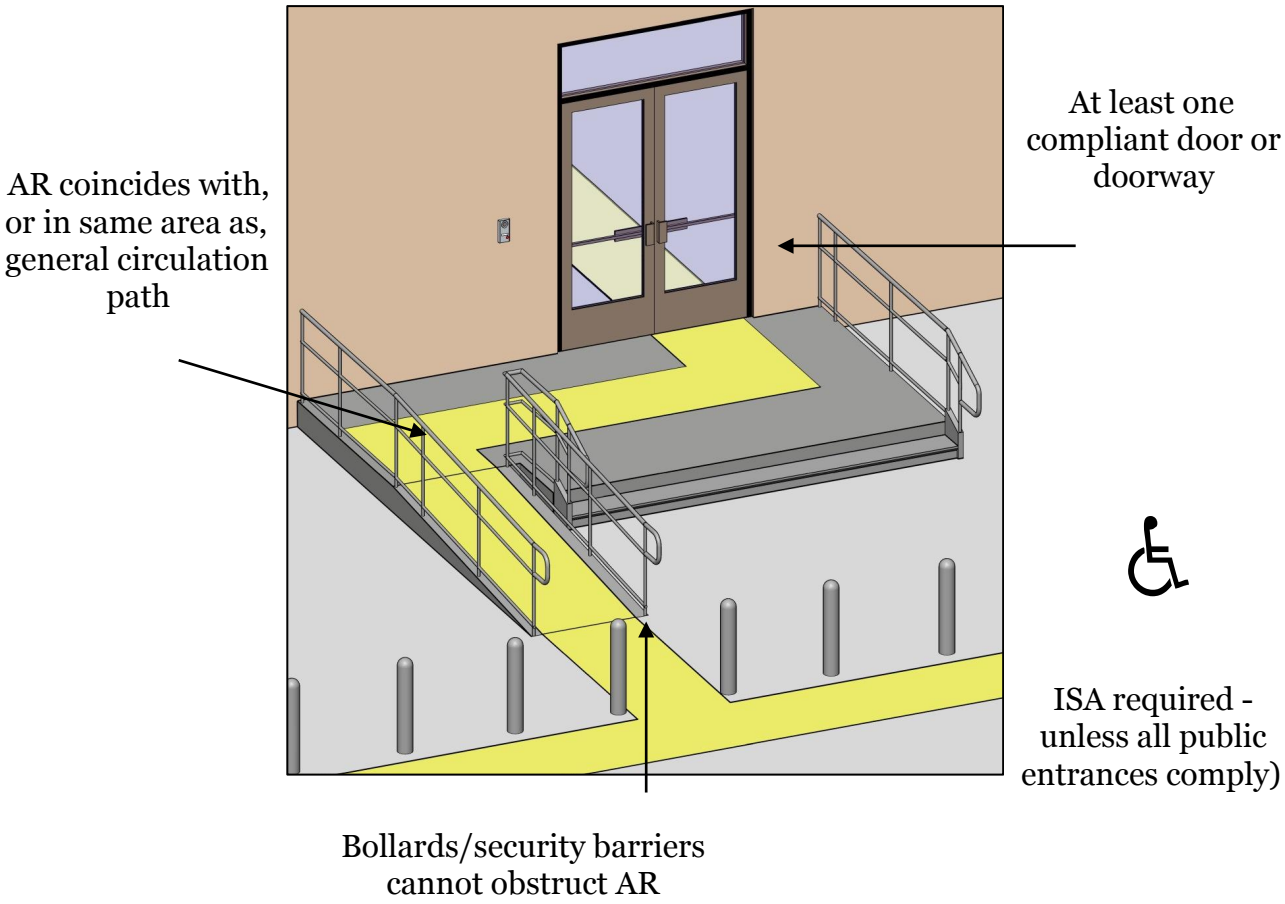
At least 1 entrance serving each direct access from parking structures



At least 1 entrance serving each direct access from parking structures

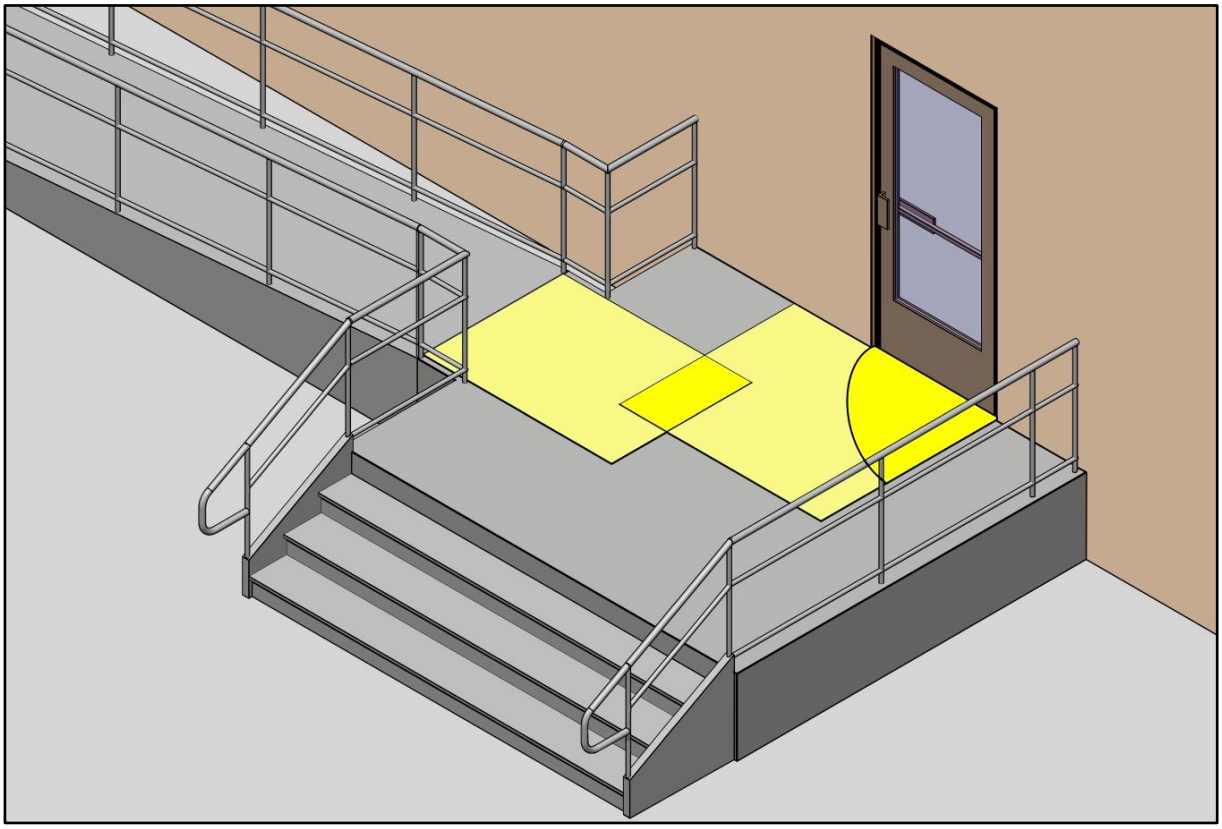
At least 1 entrance to each tenancy in a facility

Entrances Cont.



NOTE: *ADA Ramp Specifications* Require a 1:12 ramp slope ratio which equals 4.8 degrees slope or one foot of wheelchair ramp for each inch of rise. For instance, a 30 inch rise requires a 30 foot handicap wheelchair ramp. ADA Guidelines Require a Minimum 5' x 5' Flat, unobstructed area at the top and bottom of the ramp.

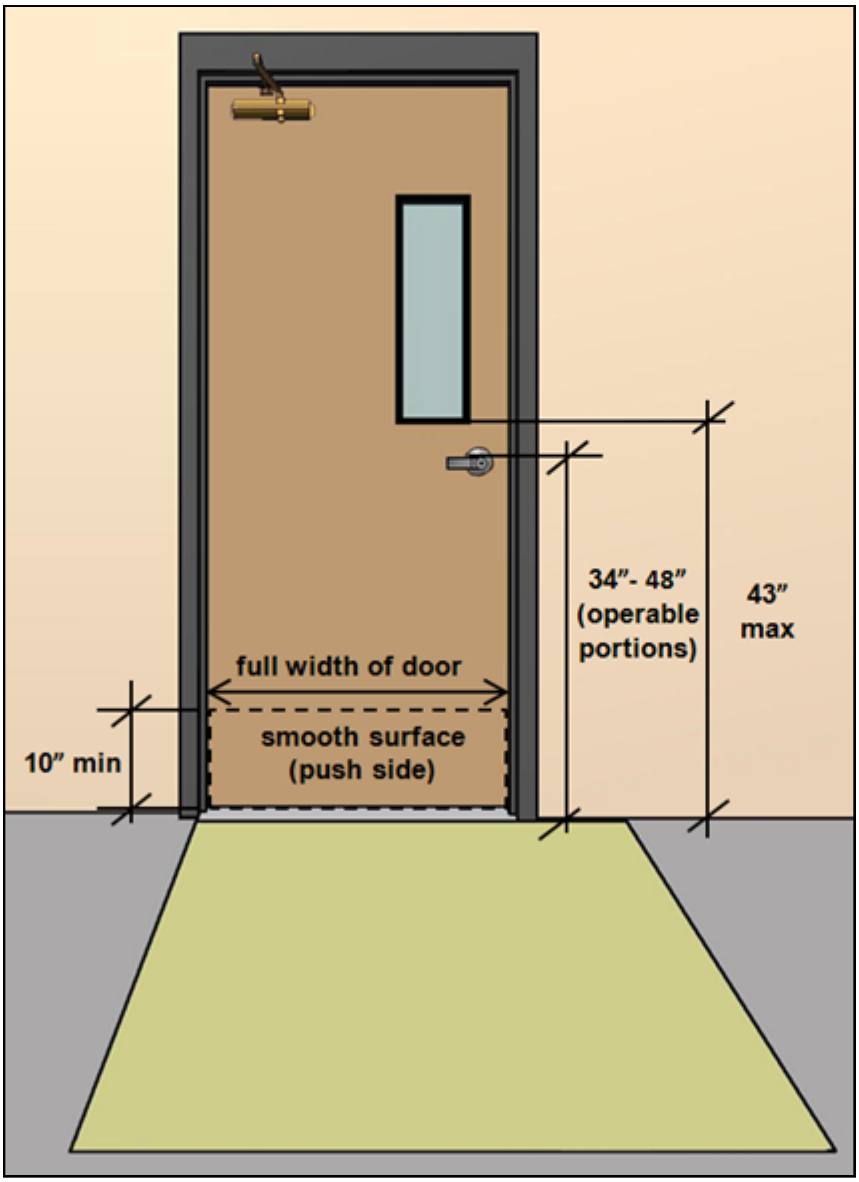
Entrances Cont.



Landings must accommodate door man clearances.

Exterior doors: Automation-*Recommended*.

7- Doors, Doorways (§404)



Clear Width (32" min.)

Opening Force
(5 lbf max)

Vision/Side Lights

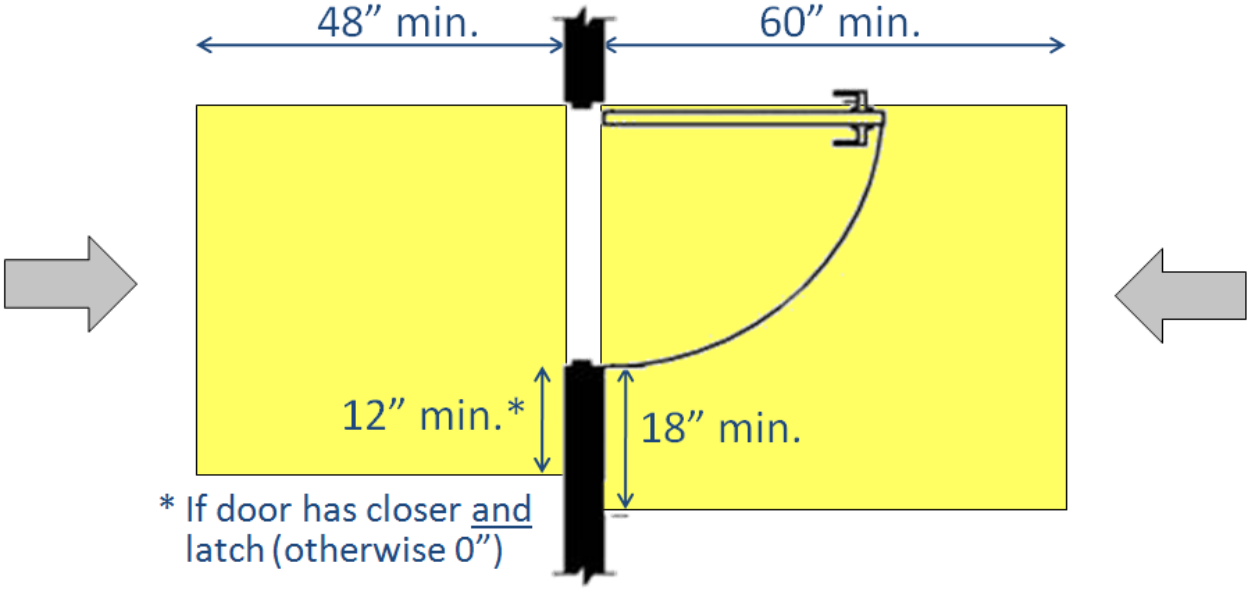
Compliant Hardware

Smooth Surface
(bottom, push side)

Thresholds (1/2" max)

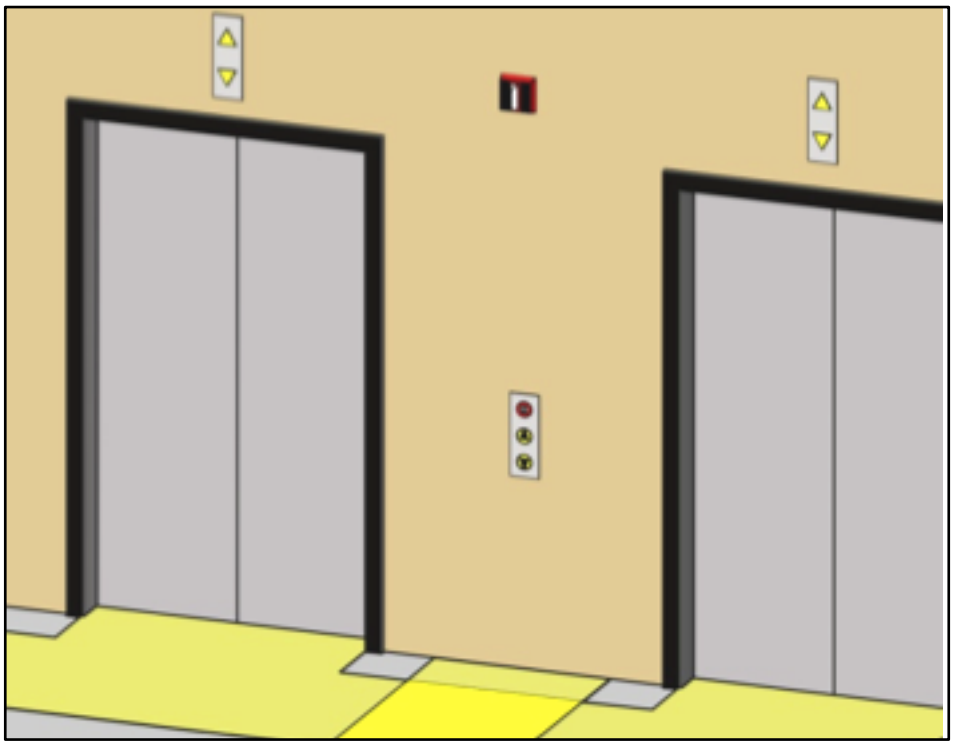
Maneuvering Clearance
(both sides unless usable
in 1 direction only)

8- Maneuvering Clearances Forward Approach



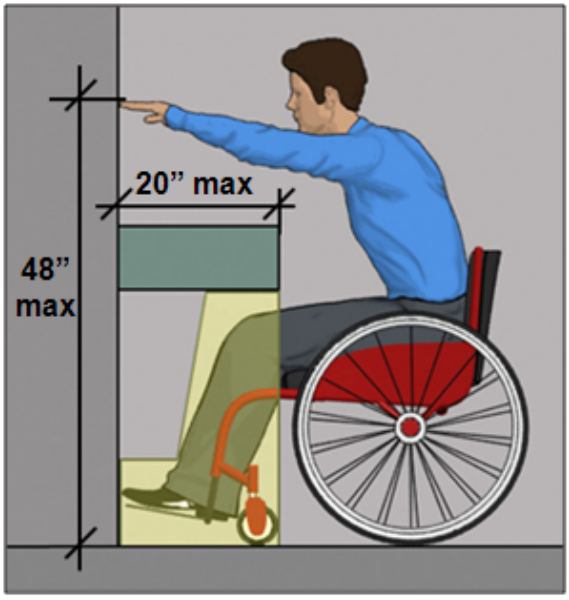
9- Multi-Story Facilities (§206.2.3)

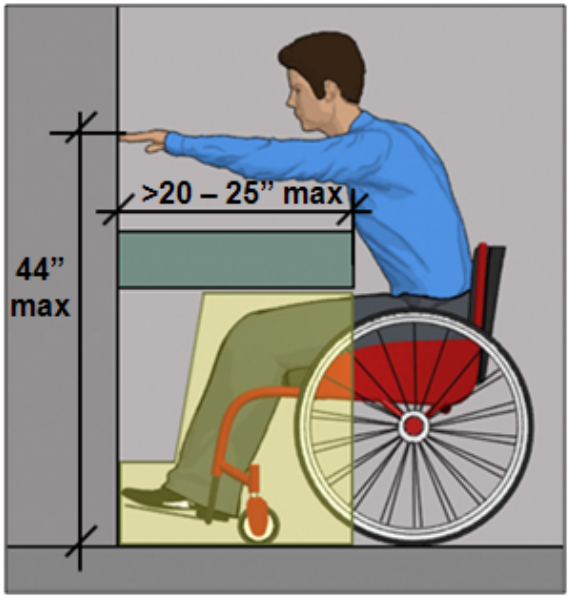
At least one accessible route must connect each story and mezzanine unless an exception applies

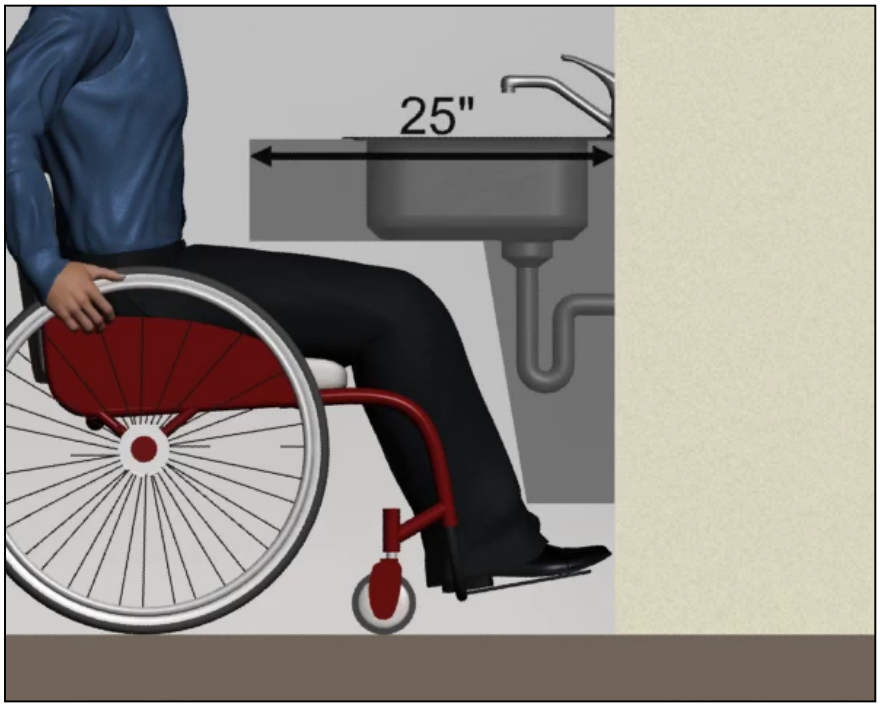


10- Reach Range (§308)

Forward reach depth over obstruction limited to 25”
(max. height reduced to 44” when depth exceeds 20”)

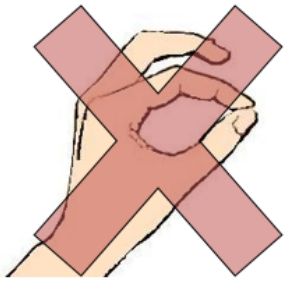




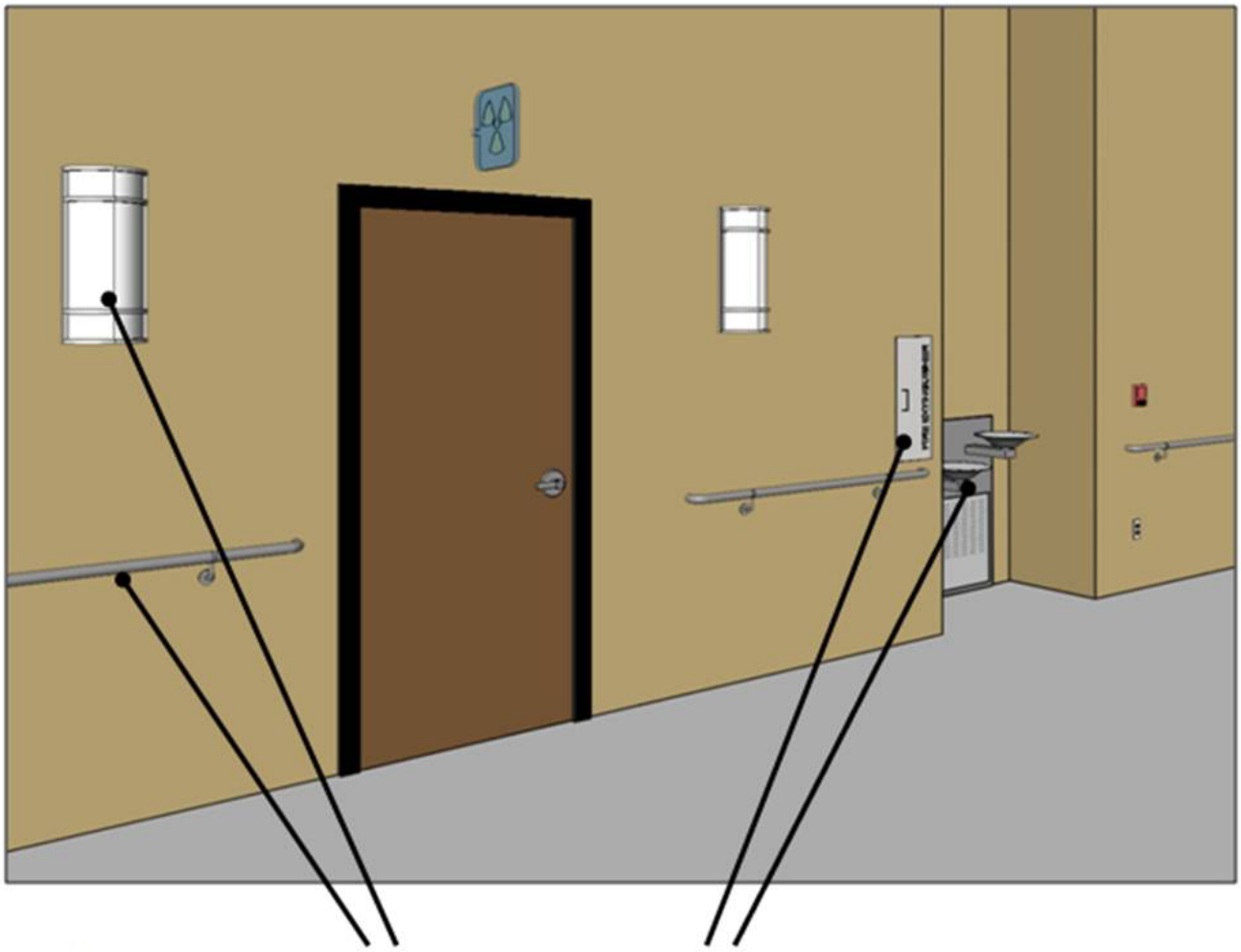


11- Operability

- 1 hand operation
- no tight grasping, pinching, twisting of wrist
- 5 lbf max.

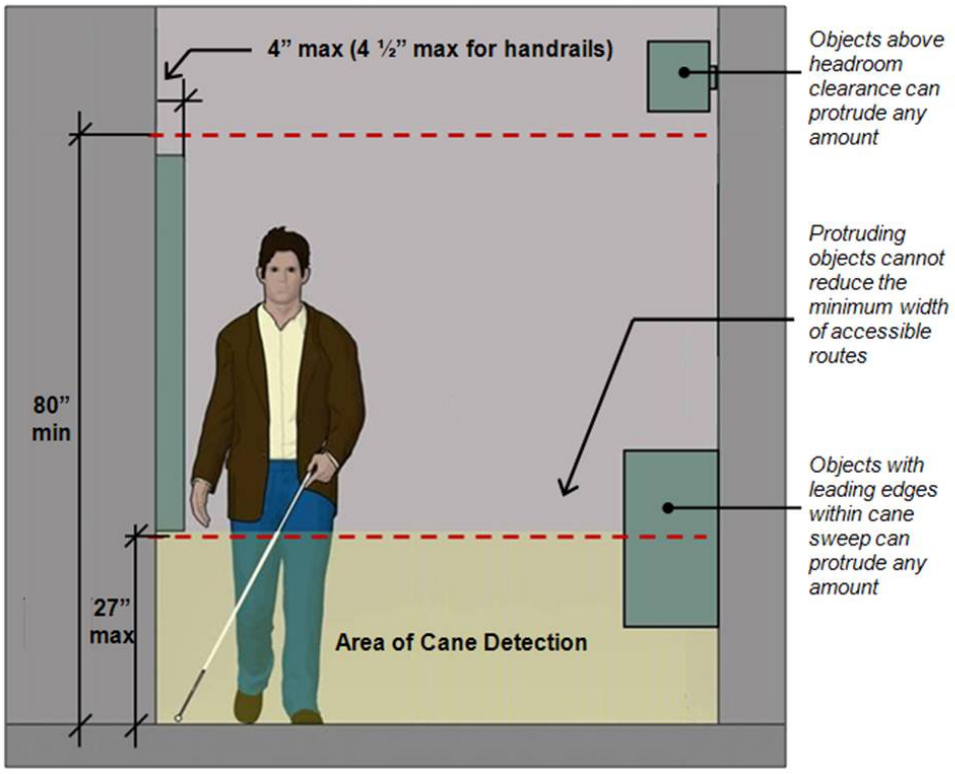


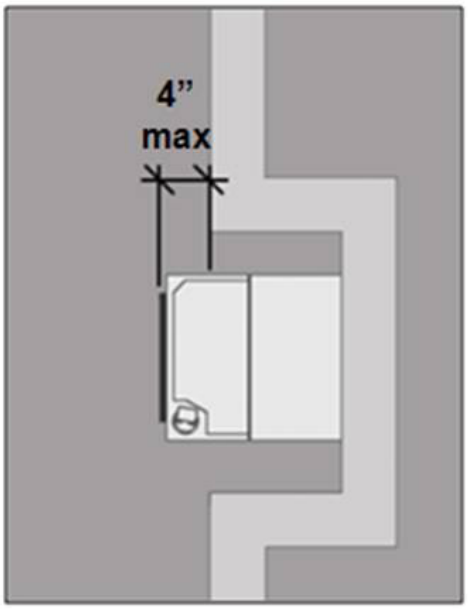
12- Protruding Objects (§204)



Sconces, handrails, cabinets, drinking fountains and other elements that project into circulation paths must comply with provisions for protruding objects (unless they are located within cane sweep or above headroom clearance). Requirements for protruding objects apply to all interior and exterior circulation paths of sites. They are not limited to hallways and corridors and apply equally to circulation paths in rooms and spaces.

Protruding Objects Cont.

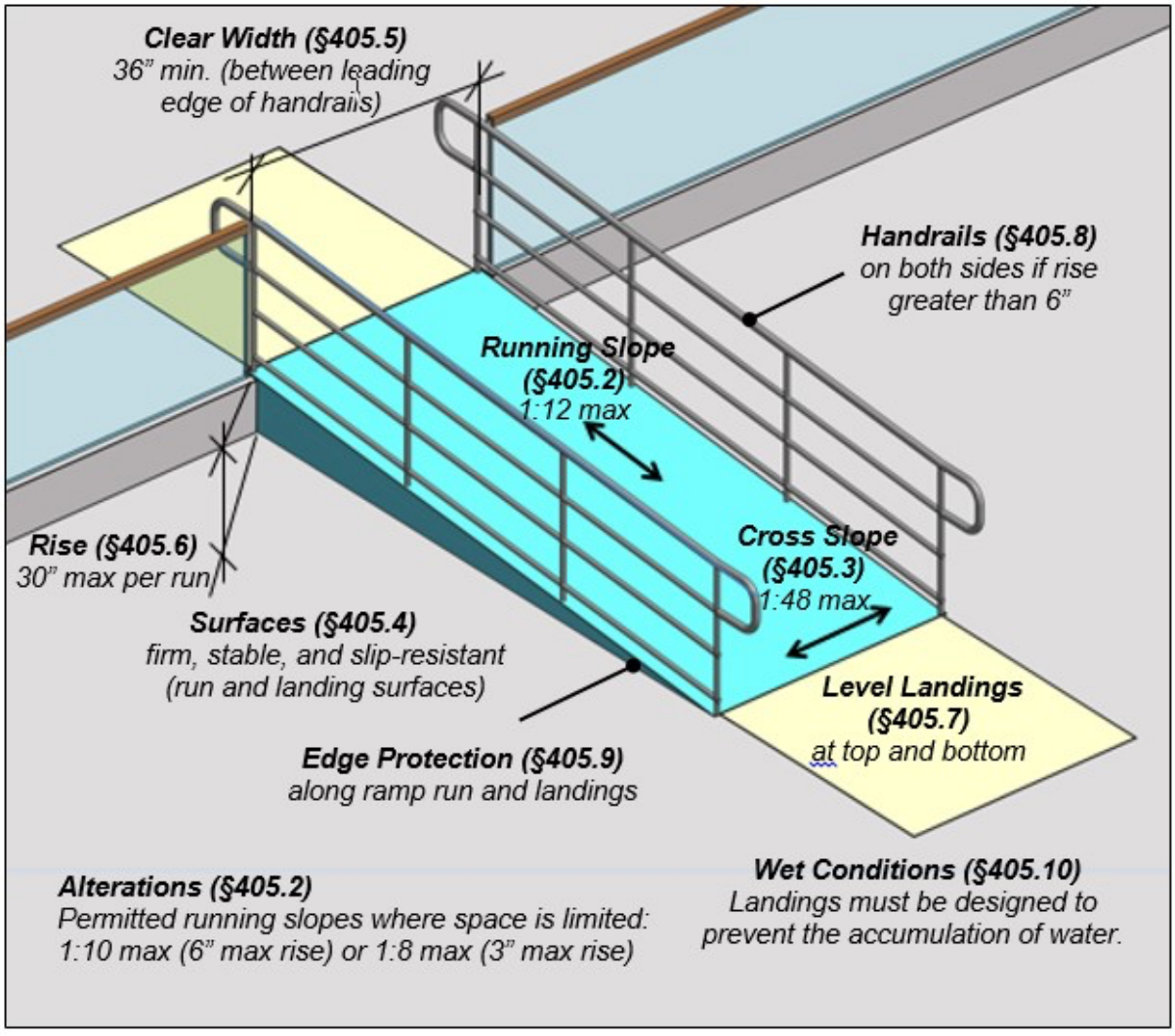




13- Ramps- (§405)

Where Ramps and Curb Ramps are Required (§303.4)

Ramps and curb ramps are required along accessible routes to span changes in level greater than ½". Elevators and, under certain specified conditions, platform lifts, can be used as an alternative. Portions of accessible routes with running slopes steeper than 5% also must be treated as ramps.

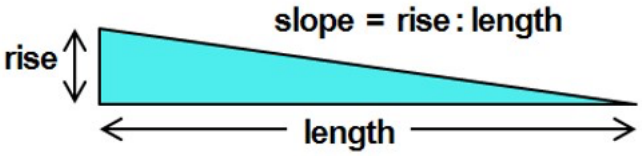


Ramps Cont.

405.2 Slope & 405.3 Cross Slope

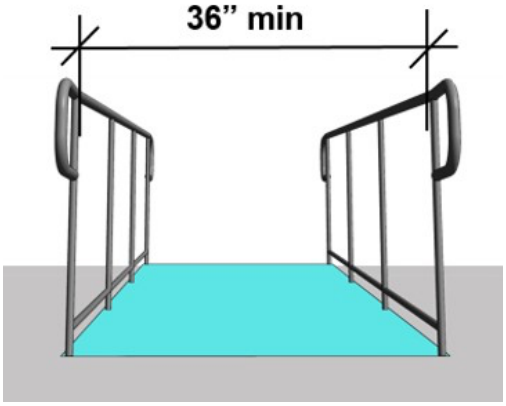
Slope represents the proportion of vertical rise to horizontal length and is specified in the Standards as a ratio (e.g., 1:12). It also can be expressed as a percentage, pitch, or in degrees. The running slope is to be uniform along a run, although slight variations may occur with certain materials such as concrete. No other changes in level other than the running slope (1:12 max.) and cross slope (1:48 max.) are permitted. Variations in slope, such as grade breaks within runs, can disrupt wheelchair travel.

Recommendations: Providing the least possible slope below the 1:12 (8.33%) maximum offers better usability for a wider range of users. Specifying a running slope of 7.5% maximum and a cross slope of 1.5% maximum for exterior ramps will accommodate most irregularities or variances due to construction methods or materials according to a study sponsored by the Board ("Dimensional Tolerances in Construction and for Surface Accessibility" by David Kent Ballast.)



405.5 Clear Width

Ramp runs must have a clear width of 36" minimum (measured between handrails where provided). The width of ramps that are part of a means of egress may further be determined by applicable life safety codes and requirements for minimum exit widths greater than 36"



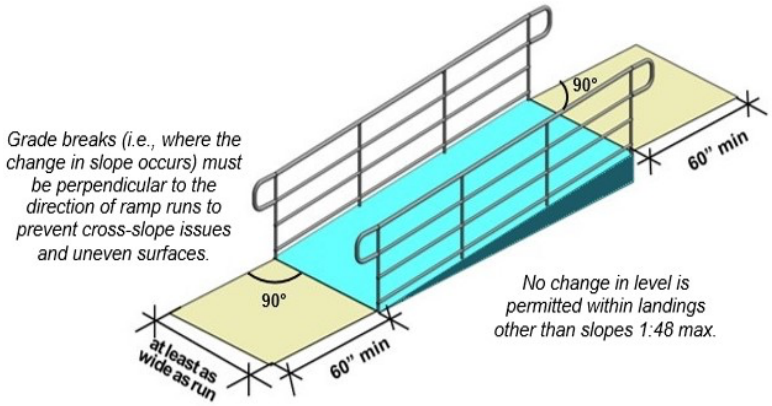
Ramps Cont.

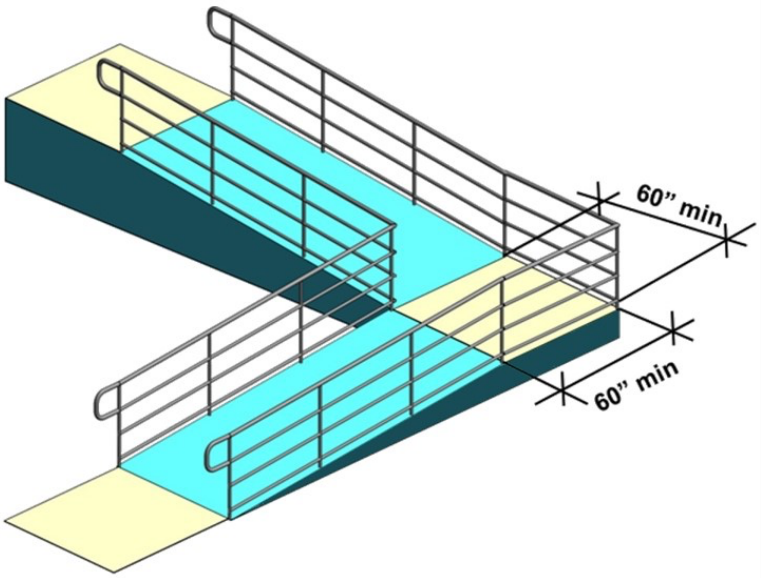
405.6 Rise

The height of runs is limited (30” max.), but there is no limit on the number of runs a ramp may have. Long ramps with many runs can be strenuous for people using manual wheelchairs. While intermediate landings offer resting points, they do not reduce the amount of effort that must be exerted to negotiate multiple runs.

405.7 Landings

Level landings are required at the top and bottom of each run. Changes in level greater than 1:48 are not permitted at landings. Landings must be designed to prevent the accumulation of water.

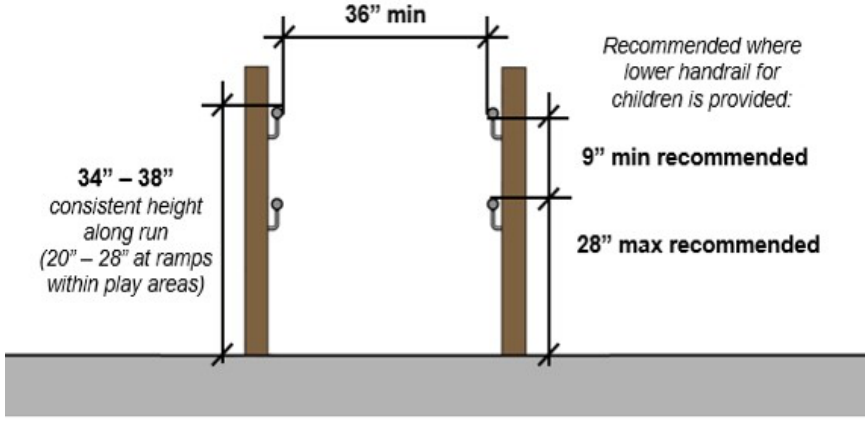


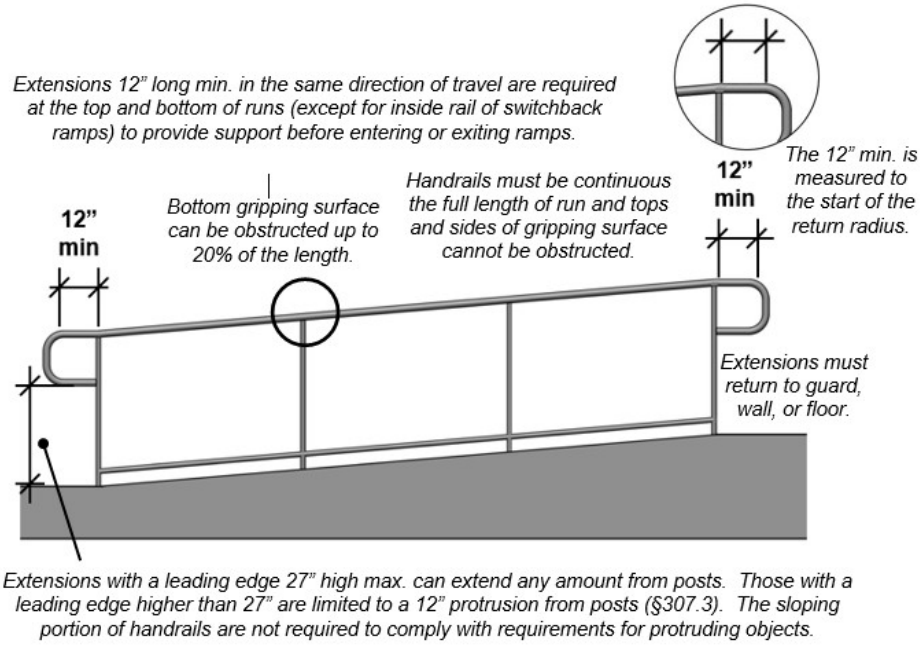


Ramps Cont.

405.8 Handrails

Handrails are required on both sides of ramps with a rise greater than 6”. The Standards do not require lower handrails serving children *except at ramps serving play areas,* but include a recommended height (28” max.) and separation (9” min.) from the required handrail to minimize entrapment hazards.

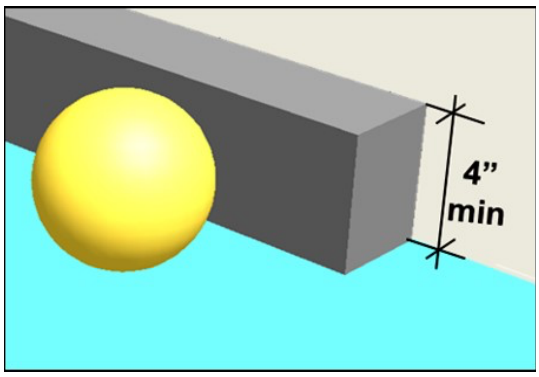




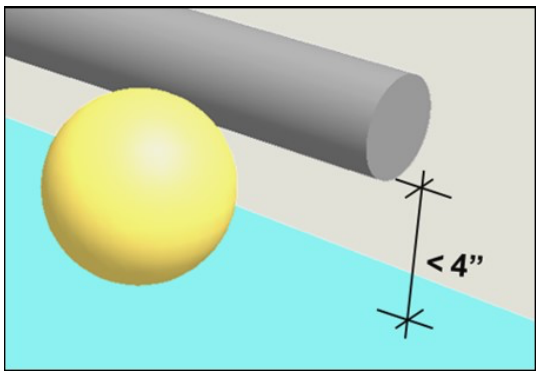
Ramps Cont.

405.9 Edge Protection

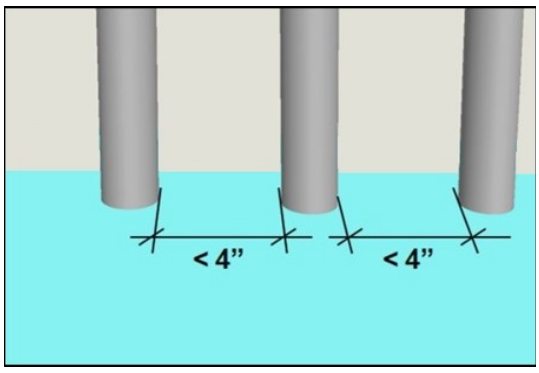
Edge protection along ramp runs and landings keep wheelchair casters and crutch tips on the surface and can be provided by curbs, barriers, or extended surfaces.



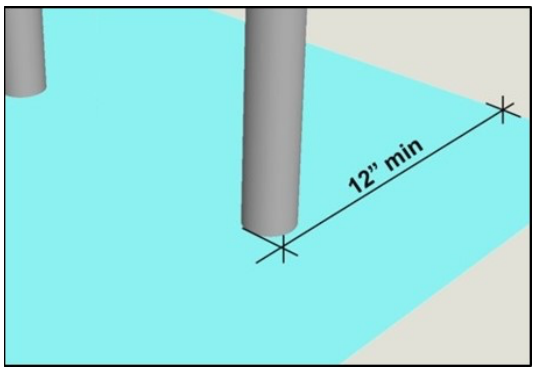
Curbs if used must be at least 4” high.



Rails or other barriers must prevent passage of a 4” diameter sphere.



Vertical pickets used for edge protection must prevent passage of a 4” diameter sphere.



Run and landing surfaces that extend at least 12” beyond the inside face of handrails will provide adequate edge protection by preventing wheelchair casters and crutch tips from slipping off the edge.

14- Playgrounds

2010 ADA Standards for Accessible Design

In 2000, the Architectural and Transportation Barriers Compliance Board issued a final rule in the form of accessibility guidelines to serve as the basis for standards adopted by the Department of Justice for new construction and alterations of play areas by the ADA. These guidelines were adopted into law in 2010. As of March 15, 2011, *all* play areas should be in compliance with these guidelines.

The same guidelines as in accessible routes must be applied to playgrounds, that is an accessible route must be provided from both bus drop off areas as well as egress doors to the playground *areas*.

Many playground areas are contained by a concrete border or other type of edging, the same type of cuts as used in sidewalk construction must be applied here. Help to lift a wheelchair into the play area is not acceptable.

There are two main types of play equipment; Ground-level and Elevated. Each have separate guidelines and will be covered in more detail.

15- Surfacing

Surfacing on playgrounds has to not only comply with ADA accessibility requirements but also meet fall injury requirements.

302.1 General. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302.

Advisory 302.1 General. A stable surface is one that remains unchanged by contaminants or applied force, so that when the contaminant or force is removed, the surface returns to its original condition. A firm surface resists deformation by either indentations or particles moving on its surface. A slip-resistant surface provides sufficient frictional counterforce to the forces exerted in walking to permit safe ambulation.

Engineered Wood Fiber (EWF)
Sites installed with EWF were found to have the highest number of accessibility deficiencies within the first year of installation. Because EWF is a loose fill surface, it is frequently observed with accessibility deficiencies related to running slope, cross slope and change in level. EWF has been observed with undulation across the horizon of the surface area. The undulating surface material creates changes in level, running and cross slopes exceeding the maximum allowable standards resulting in non-compliant accessible routes to play components. It is critical for the manufacturer/supplier and the playground owner to communicate the process for installation. In most instances it is necessary for the loose material to be installed in layers, watered and compacted in order to achieve an accessible route and level clear ground space at equipment. ~U.S. Access Board and the National Center on Accessibility

Sand, Pea gravel, and rubber mulch rarely meet ADA accessibility standards and as demonstrated above neither do wood chips.

Surfacing Cont.

Compliant surfaces and options.

Unitary surfaces such as, poured in place, rubber tiles and turf products.

Poured in place

Rubber tiles

Artificial turf

Surfacing Cont.

Compliant routes.

It is also possible to achieve accessibility by adding compliant pathways to the areas of the play equipment only.

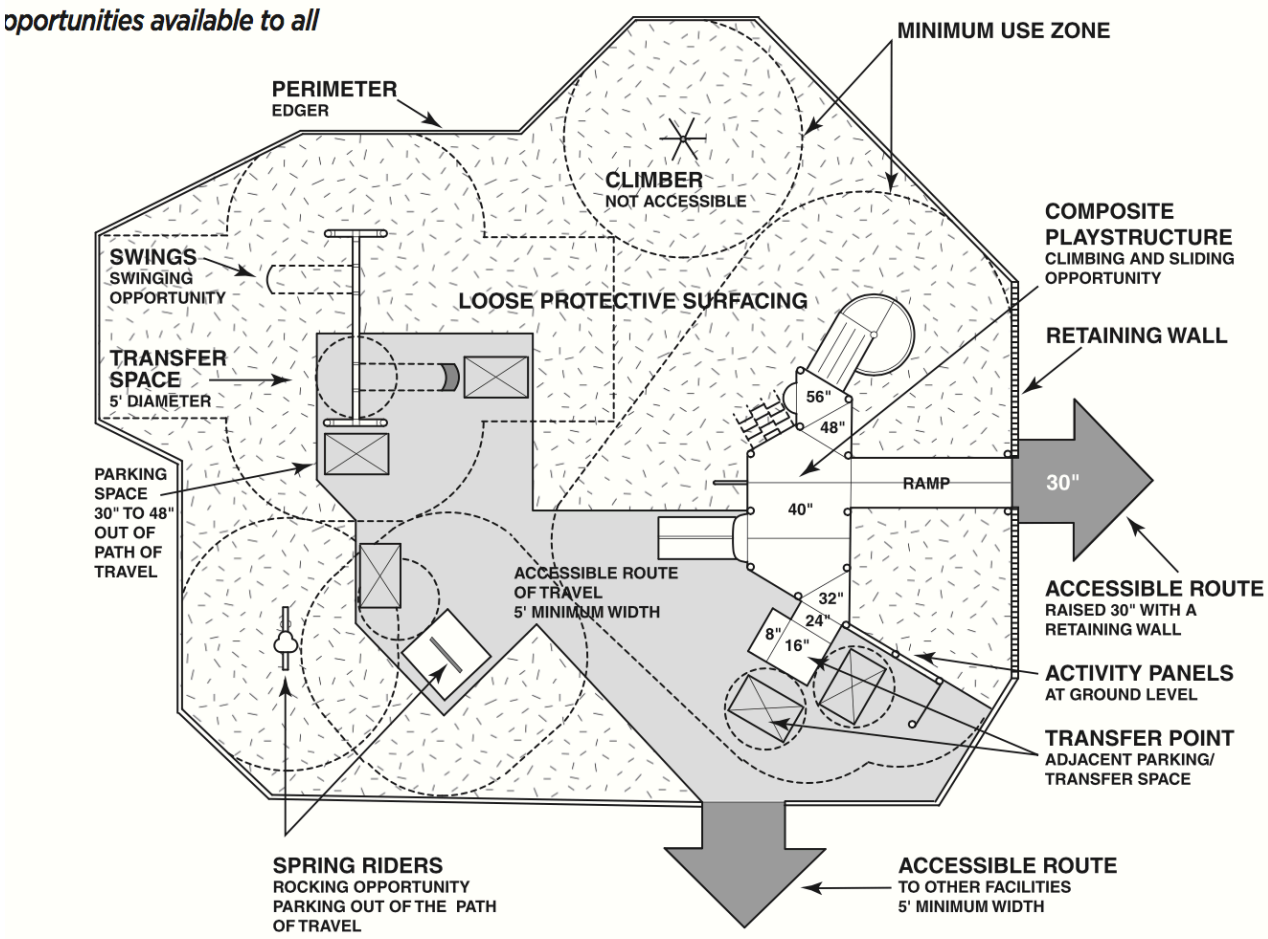
Some things that need to be considered however are:

There will be multiple areas of the playground that will need to be reached and these pathways have to meet the same requirement as described in the section of ramps and landings.

Compliant Pathways to ground level and transfer access locations.

16 - Accessible Routes

An accessible route is a pathway specifically designed to provide access for individuals with disabilities, including those using wheelchairs or mobility devices.



17- Ground-Level Play Components

At least *one* of each type of play component provided at ground level in a play area must be on an accessible route.

Ground-level play components are items that can be approached and exited at ground level.

For example, a child approaches a spring rider at ground level via the accessible route. The child may ride then exit directly back onto the accessible route. The activity is considered ground level because the child approaches and exits it from the ground-level route.

Ground-level play components may include items such as swings, spring riders, and panels.

Freestanding slides are considered ground-level components for the purpose of these guidelines. An accessible route must connect to the ladder or steps, and to the exit of the slide. While this solution does not provide access for all children, it gives many individuals the opportunity to access play components.

When more than one ground-level play component is required on an accessible route, the play components must be integrated. Designers should consider the optimal layout of ground-level play components to foster interaction and socialization among all children. *Grouping all ground-level play components accessed by children with disabilities in one location does not constitute integration.*

Ground-Level Play Components Cont.

The number and variety of ground-level play components required to be on an accessible route is also determined by the number of *elevated* components provided in the play area.

The intent of this requirement is to provide a variety of experiences for individuals who choose to remain with their mobility aids, or choose not to transfer to elevated play components.

Ground-Level Play Components Cont.

If ramps provide access to at least 50 percent of the elevated play components - which must include at least three different play types - then additional ground-level components are not required.

In the play area shown on previous page, the composite structure has four elevated play components (bubble panel, slide, steering wheel, and tic-tac-toe panel). According to the table, a minimum of one ground level play component must be provided, and a minimum of one different type. The spring rider or swing can be used to meet the “one of each type” requirement and can also be used to meet the minimum number determined by the following table.

Number of elevated play components provided	Minimum number of ground-level play components required to be on accessible route	Minimum number of different types of ground-level play components required to be on accessible route
1	Not applicable	Not applicable
2 to 4	1	1
5 to 7	2	2
8 to 10	3	3
11 to 13	4	3
14 to 16	5	3
17 to 19	6	3
20 to 22	7	4
23 to 25	8	4
More than 25	8 plus 1 for each additional 3 over 25	5

18- Elevated Play Components

An elevated play component is a play component that is approached above or below grade and is part of a composite play structure. Play components that are attached to a composite play structure and that can be approached from a platform or deck area are considered elevated play components.

This climber is considered an elevated component, since it can be approached or exited from the ground level or above grade from a platform or deck on a composite play structure

Elevated Play Components Cont.

At least 50 percent of the elevated play components must be on an accessible route.

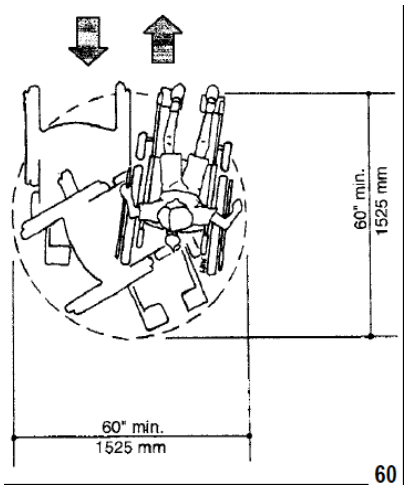
Play areas with 20 or more elevated components must use ramps to connect a minimum of 25 percent of those components. A transfer system or ramps may connect the other elevated play components required on an accessible route.

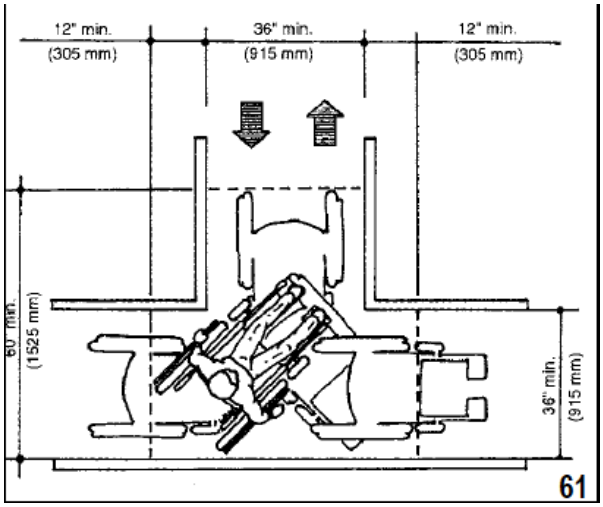
Play areas with less than 20 elevated play components may use a transfer system instead of ramps to connect at least 50 percent of the elevated components.

19- Playground Component Ramps

Ramps on playground components must comply with those in chapter 12 ADA §405 with a few playground specific differences.
Ramps must still maintain the maximum 1:12 slope and landing sizes, however at least one maneuvering space must be provided on the same level as the play component. The space must have a slope no steeper than 1:48 in all directions.

Maneuvering Space





A 60-inch (1525 mm) turning circle permits individuals
with mobility devices to turn around
• A 60-inch (1525 mm) T-Shaped turn allows an individual
to change directions by making a series of multi-point turns
• Slope not steeper than 1:48 in all directions

Playground Component Ramps Cont.

Handrails

Handrails are required on both sides of ramps connecting elevated play components. Handrails must comply with the following:

• Clearance between handrail gripping surfaces and adjacent surfaces shall be 1 1/2 inches (38mm) minimum.

• Handrail gripping surfaces shall be continuous along their length and shall not be obstructed along their tops or sides. The bottoms of handrail gripping surfaces shall not be obstructed for more than 20 percent of their length. Where provided, horizontal projections shall occur 1 1/2 inches (38mm) minimum below the bottom of the handrail gripping surface.

Handrails are required to comply with other ADA and ABA Accessibility Guidelines. However, extensions on handrails in the play area are not required. This is to prevent children running into protruding rails in the play area.

20- Transfer Systems

A transfer system provides access to elevated play components within a composite system by connecting different levels with transfer platforms and steps.

A transfer system provides access to elevated play components without the use of a wheelchair or mobility device. At least 50% of the elevated play components can be connected by a transfer system in play areas with less than 20 elevated components. In play areas with 20 or more elevated play components, transfer systems may be used to connect up to 25% of the elevated play components and the rest of the elevated play components required to be on an accessible route must be connected by a ramp.

A transfer system typically consists of a transfer platform, transfer steps, and transfer supports.

Where a transfer system is provided, a combination of transfer platforms and transfer steps provide a continuous accessible route to elevated play components. A transfer system provides individuals the space necessary to physically transfer up or down in a composite play structure. Where provided, a 24-inch (610 mm) minimum width is necessary for individuals moving around a structure.

Transfer Systems Cont.

Transfer Platforms

A transfer platform is a platform or landing that an individual who uses a wheelchair or mobility device can use to lift or transfer onto the play structure and leave the wheelchair or mobility device behind at ground-level.

- 11 inches (280 mm) to 18 inches (455 mm) height of top surface
- Minimum 24 inches (610 mm) wide
- Minimum 14 inches (355 mm) deep
- Unobstructed side

Transfer Systems Cont.

Transfer Steps

- Minimum 24 inches (610 mm) wide
- Minimum 14 inches (355 mm) deep
- 8 inches (205 mm) maximum height

Transfer Systems Cont.

Transfer Supports

A means of support is required when transferring into the entry or seat of a play component. Transfer supports assist individuals with transferring and general mobility. They include handrails, handgrips, or custom designed handholds.