

**DEPARTAMENTO DE  
TRANSPORTACIÓN Y OBRAS PÚBLICAS  
AUTORIDAD DE CARRETERAS Y TRANSPORTACIÓN**

**HACIENDO NUESTRAS FACILIDADES ACCESIBLES**

**OFICINA DE DERECHOS CIVILES  
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## **HACIENDO NUESTRAS FACILIDADES ACCESIBLES**

En los últimos años tanto el Gobierno Federal como el Gobierno del Estado Libre Asociado de Puerto Rico, han adoptado leyes con miras a hacer accesibles nuestros edificios y facilidades a todas las personas. Imaginemos por un momento que no tenemos manos y debemos entrar a una oficina cuya puerta tiene una perilla que debemos hacer girar. Luego solicitamos utilizar el baño y éste tiene una puerta similar y el lavamanos tiene grifos que es necesario hacer girar. Imaginemos que nos movemos en silla de ruedas y al terminar de subir una rampa, la puerta está cerrada, o la pendiente en una acera está en tan mal estado, que no podemos hacer que la silla se deslice con facilidad.

Estos y otros inconvenientes son los que confrontan a diario las personas con impedimento. Como servidores públicos, tenemos la obligación de ofrecer servicios a todo el mundo por igual. Si una persona con impedimento no puede tan siquiera llegar a nuestras oficinas, para todos los efectos le estamos negando el servicio.

La Oficina de Derechos Civiles tiene entre sus responsabilidades asegurarse que no se discrimine contra ciudadano alguno por motivos de edad, raza, color, sexo, origen, condición social, creencia religiosa, ideas políticas, impedimentos irrelevantes, condición de veterano, ser miembro de algún cuerpo de las Fuerzas Armadas de los Estados Unidos o por hostigamiento sexual en el empleo. Asegurarnos que nuestras facilidades están accesibles a personas con impedimento es parte de esa obligación, por lo que ofrecemos orientaciones y material informativo, como el que aquí se incluye. No obstante, más allá de las leyes, reglamentos y material informativo, queremos crear conciencia de la importancia de hacer los servicios accesibles, aún bajo circunstancias para las cuales no hay guía alguna. En esos casos, es preciso acudir a nuestro sentido innato de justicia y por qué no, a nuestra imaginación para asegurarnos que en verdad, servimos a todos por igual.

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**MATERIAL SUMINISTRADO POR  
OFICINA DEL PROCURADOR DE LAS PERSONAS  
CON IMPEDIMENTO**

# **Formas correctas de expresión hacia las personas con impedimentos**

Las Leyes federales y estatales aseguran que las personas con impedimentos tienen los mismos derechos civiles que las personas “sin impedimentos”. La implantación de la “American with Disabilities ACT” (ADA), garantiza estos derechos.

Pero algunos detalles deben cambiar. Entre ellos nombres, actitudes y percepciones hacia las personas con impedimentos, para poder lograr esta igualdad. La ignorancia y el discrimen son limitaciones serias que no permiten la integración, productividad e independencia de las personas con impedimentos.

El tomar conciencia es el primer paso para corregir esta injusticia. Si la opinión pública sobre las personas con impedimentos quiere actualizarse, debe aprenderse a utilizar un vocabulario apropiado.

## VOCABULARIO ADECUADO

<b>Utilizar:</b>	<b>No utilizar jamás:</b>
Persona(s) con impedimento(s) / tiene una limitación / tienen limitaciones	Impedido; inválido; enfermo; víctima; tullido; deformado; defectuoso; minusválido, lisiado
Personas con impedimentos; típicos	Normal; saludable; bien formado
Persona que utiliza silla de ruedas	Confinado a una silla de ruedas
Impedimento congénito	Defecto al nacer
Tiene perlesía cerebral	Paciente con perlesía cerebral
Tuvo polio / experimentó polio; tiene un impedimento a consecuencia de que padeció de polio	Sufrió de polio; afectado con polio; post-polio (como un nombre al referirse a personas)
Personas que tienen retardación mental (RM); persona con retardación mental	Retardado mental; mentalmente deficiente; retardado; débil de mente
Niño con deficiencia en el desarrollo (DD); persona con problemas en el desarrollo	Bruto, morón, anormal
Persona con síndrome de Down; persona que sufrió de deficiencia en el cromosoma 21	Una persona Down, mongoloide
Persona con epilepsia; persona que sufre episodios de epilepsia	El epiléptico, los epilépticos
Persona que sufre de problemas mentales; persona con problemas mentales o con un desorden emocional	Enfermo mental; loco; caso mental
Persona con impedimentos visuales	El ciego
Persona con impedimento auditivo; problemas de audición / audio-impedido	El sordo; el sordo-mudo
Problemas del habla y lenguaje; problemas de comunicación	Tartamudo; gago

## LOS DIEZ MANDAMIENTOS DE LA COMUNICACIÓN CON LAS PERSONAS CON IMPEDIMENTOS

### 1. HÁBLALE DIRECTAMENTE A LA PERSONA, NO A SU ACOMPAÑANTE, UNA TERCERA PERSONA O INTERPRETE.

Para muchas personas esto resulta en una barrera, pues asumen que las personas con impedimentos o sordas son personas difíciles para acercárseles.

Manten contacto directo con la persona con problemas de audición, pues eso es parte de su cultura. Mírale a los ojos. El hablarle cara a cara es importante.

Ninguna persona debe ser privada del contacto directo por causa de su impedimento.

Cuando conozcas a una persona con impedimentos, acuérdate siempre que es un ser humano y no un objeto.

### 2. SIEMPRE QUE TE PRESENTEN A UNA PERSONA CON IMPEDIMENTOS DALE LA MANO AL CONOCERLO Y SALUDARLO.

En la cultura oriental es muy importante al conocer o saludar a una persona inclinar la cabeza y el torso. Para nosotros en occidente, nuestra parte del mundo, darnos la mano, conocernos o saludarnos es una cuestión de respeto. Para las personas con impedimentos es lo mismo que para todos, si no los saludas como debe ser se sienten excluidos e ignorados.

Las personas con impedimentos son gente y quieren ser reconocidos como tal, no importa su condición, con un apretón de manos.

### 3. SIEMPRE QUE HAYA UNA PERSONA CIEGA PRESENTE IDENTIFÍCATE TÚ Y A TUS ACOMPAÑANTES.

A las personas ciegas, aunque te conozcan, a veces se les hace difícil reconocer tu tono o metal de voz. Siempre que te encuentres con una persona ciega dile tu nombre y también cuando te vayas despídete.

Si sales a comer con una persona ciega ofrécele tu ayuda por medio de describirle lo que tiene en su plato de comida y cómo están situados los alimentos en el mismo y en el resto de la mesa.

Puedes usar la posición de las manecillas del reloj para indicarle en qué lugar o a qué hora se encuentra. Por mucho que quieras ayudar recuerda que a las personas ciegas les gusta tener su independencia así que permíteles que se sientan libres de actuar, tomar sus propias decisiones o pedir tu ayuda.

**4. SI OFRECES TU AYUDA ESPERA A QUE LA MISMA SEA ACEPTADA, ENTONCES ESCUCHA, ESPERA Y ACTÚA DE ACUERDO A LAS INSTRUCCIONES QUE TE DÉ LA PERSONA CON IMPEDIMENTOS.**

Todas las personas tienen buenas intenciones al querer ayudar, es cómo tú prestas tu ayuda lo que hace la diferencia. A las personas con impedimentos les gusta sentirse lo más independiente posible. Si le quitas o limitas esta independencia no los estás ayudando. Ellos están luchando por su independencia y por igualdad. Ponte en su lugar y entenderás mejor sus sentimientos.

**5. TRATA A LOS ADULTOS COMO ADULTOS**

Algunas veces las personas con impedimentos son tratadas como si fueran niños o como si fueran personas inmaduras.

Nunca le des palmaditas en la espalda a una persona en silla de ruedas ni trates de demostrar tu empatía por medio de conmiserte, no le toque la cabeza ni le pases la mano.

Recuerda, a la persona con impedimentos se le debe tratar como un adulto.

**6. NO TE RECUESTES DE LA SILLA DE RUEDAS NI TE APOYES EN EL CARRO MOTORIZADO DE UNA PERSONA CON IMPEDIMENTOS. RECUERDA QUE ESTAS PERSONAS CONSIDERAN ESTOS INSTRUMENTOS COMO EXTENSIONES DE SU CUERPO.**

Cuando golpeas o tropiezas con una silla de ruedas la persona que la ocupa siente el impacto como si fuera a ella misma. Debes ser considerada y si tropiezas con sillas de rueda o aditamentos que utilizan las personas para caminar debes disculparte. Mantén su distancia y no invadas el espacio físico.

Nunca descanses tus pies, brazos u otra parte de tu cuerpo sobre sillas de ruedas o sus llantas.

Todas estas reglas aplican a los animales guías (perros o simios) de las personas con impedimentos. Recuerda que éstos están trabajando. No los distraigas haciéndole caricias o invitándolos a jugar.

Recuerda que las personas con impedimentos merecen y exigen el respeto para ellos y para sus equipos o animales guías.

**7. ESCUCHA ATENTAMENTE CUANDO ESTÉS HABLANDO CON PERSONAS QUE TIENEN PROBLEMAS DEL HABLA O DE COMUNICACIÓN, SIEMPRE ESPERA A QUE ELLOS TERMINEN DE HABLAR.**

Es muy triste que en el caso de una persona que padezca de Perlesía Cerebral que esté ordenando una pizza por teléfono y le enganchen el teléfono sin tomarle la orden pensando que es una broma o pensaba que estaba borracho.

Sé paciente. Si no entiendes, no pretendas hacerle creer a esta persona que la entiendes. Repite lo que te digan o lo que tu entendiste y permite que la otra persona te responda.

Si es necesario pregunta en qué forma te pueden contestar con un movimiento de cabeza.

**8. SITUATE AL MISMO NIVEL DE LA PERSONA CON QUE ESTÁS HABLANDO SI ES QUE ELLA ESTÁ EN UNA SILLA DE RUEDAS PARA PODER ESTABLECER CONTACTO VISUAL.**

A veces no nos damos cuenta de cuanto tiempo tiene que estar la persona en silla de ruedas mirando hacia arriba para poder ver las caras de las personas. Esto les hace presión en el cuello y en la espalda y les resulta incómodo, doloroso o molesto. Bajo estas circunstancias la comunicación resulta difícil e incómoda, mientras que si hacemos contacto visual con ellos es más fácil.

También es importante mantenernos en el campo visual de las personas con impedimentos, para que ésta no tenga que estar moviéndose de lado a lado. Es difícil para ellos mover la silla de ruedas y mantener a su interlocutor en su campo visual.

**9. PARA HABLAR CON UNA PERSONA SORDA, TÓCALO LIGERAMENTE EN EL HOMBRO O LLAMA SU ATENCIÓN MOVIENDO TU MANO.**

Es muy importante que cuando te comuniques con una persona sorda o con problemas de audición, para llamar su atención le mires directamente a los ojos, hablar claro, despacio y expresivamente para establecer si la persona puede leer tus labios. De ser así manten tu cara hacia la luz, no pongas tus manos en la cara o la boca y no le hables con la boca llena de comida.

Nunca asumas que porque la persona puede oír tu voz o porque usa un aparato o audífono tiene la habilidad de reconocer tu voz. No le grites pues no ayuda a la comunicación. Es de buenos modales el aplaudir a una persona sorda por medio de mover las palmas de las manos en alto como abanicos en vez de dar

palmas. Recuerda que al no oír lo visual es lo más importante y esto denota respeto a las personas con problemas de audición.

## **10. RELÁJATE**

No te sientas avergonzado si al hablar con una persona con impedimentos usas expresiones comunes que se relacionan con el impedimento de las personas. Ejemplo: si estás con una persona ciega y usas la expresión “eso lo ve hasta un ciego”. Las personas con impedimentos están concientes de que esto es simplemente una forma de hablar.

Hay que tomar una actitud más liviana más relajada. Una actitud sana de aceptación aleja y elimina los temores infundados y hace que la productividad en el trabajo aumente. Si estás nervioso y conciente de todo lo que vas a decir nunca lograrás una buena comunicación.

Simplemente respeto, esto es todo lo que se necesita. Tratarlos como individuos con sus habilidades y diferencias como todos los seres humanos.

**OFICINA DEL PROCURADOR DE LAS PERSONAS CON IMPEDIMENTOS  
OFICINA DE EDUCACIÓN Y RELACIONES CON LA COMUNIDAD**

**RECOMENDACIONES PARA TRATAR A UNA PERSONA CIEGA**

1. Cuando te encuentres con un ciego, trátalo como al resto de las personas normales. Nunca le hables como si fuera sordo, y no pienses que el mero hecho de tú tener vista y él no, implica que tú sepas más que él. No consideres la ceguera como una aflicción, es sólo una limitación física. Nunca expreses pena por un ciego en su presencia, porque tu actitud compasiva lo hará sentirse mal. No vuelvas atrás en tu conversación para utilizar el término "oír" en vez de "ver". Es deprimente para un ciego el estarle recordando constantemente que no puede ver, y que tiene que limitarse a oír. Usa la palabra ciego sin vacilación si surge la necesidad de hablar sobre la ceguera delante de aquellos con este impedimento.
2. No trates de llevar a una persona ciega cuando entre a un carro o suba una escalera. Ella sólo necesita que se le coloque la mano en el tirador de la puerta o el pasamano de la escalera. Si quiere sentarse, simplemente colócale la mano en el espaldar de la silla para la posición del mueble, ella se encargará del resto.
3. Cuando vayas a caminar con un ciego ofrécele tu brazo. Es más fácil para él seguirte que ir delante de ti.
4. Anuncia tu presencia al entrar al lugar donde hay una persona ciega, aunque sea diciendo una palabra. Ello ayudará al ciego a identificarte. Si eres una persona extraña, dile quién eres y al retirarte despídete. En reuniones sociales, ten a tu amigo ciego bien orientado dirigiéndole la palabra de vez en cuando y dándole aquella información que consideres necesaria para tenerlo al tanto de lo que está sucediendo a su alrededor. Del mismo modo, cuando te encuentres con un amigo ciego, salúdalo diciéndole tu nombre. No pretendas que te conozca por la voz si solamente te ha oído hablar pocas veces.
5. Dirígete a una persona ciega directamente y no mediante un intermediario. Por ejemplo, no le preguntes a la esposa(o) o amiga(o) si su acompañante ciego le pone azúcar al café. Él tiene la capacidad para contestar esa pregunta.

**MATERIAL OBTENIDO DE LAS NUEVAS GUÍAS  
DE ACCESIBILIDAD DE LA AMERICANS  
WITH DISABILITIES ACT Y ARCHITECTURAL  
BARRIERS ACT**

**Para más información acceda a:  
[www-access-board.gov](http://www-access-board.gov) y presione  
"New ADA and ABA guidelines"**

**Table F208.2 Parking Spaces**

Total Number of Parking Spaces Provided in Parking Facility	Minimum Number of Required Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

**Advisory F208.2 Minimum Number.** The term "parking facility" is used Section F208.2 instead of the term "parking lot" so that it is clear that both parking lots and parking structures are required to comply with this section. The number of parking spaces required to be accessible is to be calculated separately for each parking facility; the required number is not to be based on the total number of parking spaces provided in all of the parking facilities provided on the site.

**F208.2.1 Hospital Outpatient Facilities.** Ten percent of patient and visitor parking spaces provided to serve hospital outpatient facilities shall comply with 502.

**Advisory F208.2.1 Hospital Outpatient Facilities.** The term "outpatient facility" is not defined in this document but is intended to cover facilities or units that are located in hospitals and that provide regular and continuing medical treatment without an overnight stay. Doctors' offices, independent clinics, or other facilities not located in hospitals are not considered hospital outpatient facilities for purposes of this document.

**F208.2.2 Rehabilitation Facilities and Outpatient Physical Therapy Facilities.** Twenty percent of patient and visitor parking spaces provided to serve rehabilitation facilities specializing in treating conditions that affect mobility and outpatient physical therapy facilities shall comply with 502.

**F208.2.4 Van Parking Spaces.** For every six or fraction of six parking spaces required by F208.2 to comply with 502, at least one shall be a van parking space complying with 502.

**F208.3 Location.** Parking facilities shall comply with F208.3

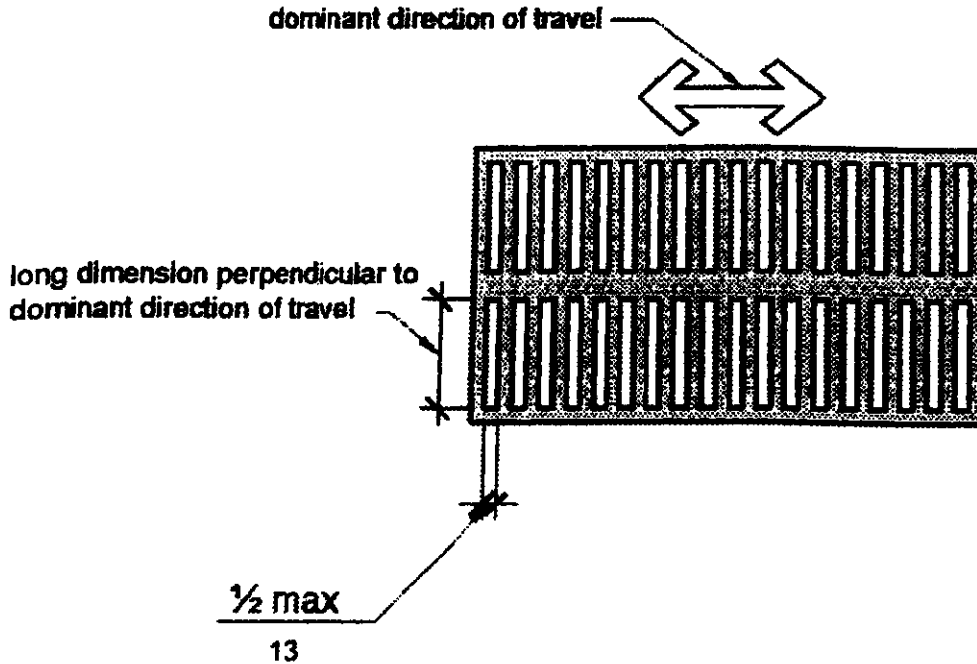
**F208.3.1 General.** Parking spaces complying with 502 that serve a particular *building* or *facility* shall be located on the shortest *accessible* route from parking to an *entrance* complying with F206.4. Where parking serves more than one *accessible entrance*, parking spaces complying with 502 shall be dispersed and located on the shortest *accessible* route to the *accessible entrances*. In parking facilities that do not serve a particular *building* or *facility*, parking spaces complying with 502 shall be located on the shortest *accessible* route to an *accessible pedestrian entrance* of the parking facility.

**EXCEPTIONS:** 1. All van parking spaces shall be permitted to be grouped on one level within a multi-story parking facility.

2. Parking spaces shall be permitted to be located in different parking facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, parking fee, and user convenience.

**Advisory F208.3.1 General Exception 2.** Factors that could affect "user convenience" include, but are not limited to, protection from the weather, security, lighting, and comparative maintenance of the alternative parking site.

**302.3 Openings.** Openings in floor or ground surfaces shall not allow passage of a sphere more than ½ inch (13 mm) diameter except as allowed in 407.4.3, 409.4.3, 410.4, 810.5.3 and 810.10. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.



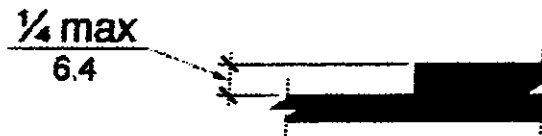
**Figure 302.3**  
**Elongated Openings in Floor or Ground Surfaces**

**303 Changes in Level**

**303.1 General.** Where changes in level are permitted in floor or ground surfaces, they shall comply with 303.

- EXCEPTIONS:** 1. Animal containment areas shall not be required to comply with 303.  
 2. Areas of sport activity shall not be required to comply with 303.

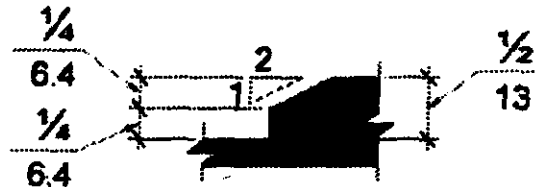
**303.2 Vertical.** Changes in level of ¼ inch (6.4 mm) high maximum shall be permitted to be vertical.



**Figure 303.2**  
**Vertical Change in Level**

**303.3 Beveled.** Changes in level between ¼ inch (6.4 mm) high minimum and ½ inch (13 mm) high maximum shall be beveled with a slope not steeper than 1:2.

**Advisory 303.3 Beveled.** A change in level of ½ inch (13 mm) is permitted to be ¼ inch (6.4 mm) vertical plus ¼ inch (6.4 mm) beveled. However, in no case may the combined change in level exceed ½ inch (13 mm). Changes in level exceeding ½ inch (13 mm) must comply with 405 (Ramps) or 406 (Curb Ramps).



**Figure 303.3**  
**Beveled Change in Level**

**303.4 Ramps.** Changes in level greater than ½ inch (13 mm) high shall be *ramped*, and shall comply with 405 or 406.

**304 Turning Space**

**304.1 General.** *Turning space* shall comply with 304.

**304.2 Floor or Ground Surfaces.** Floor or ground surfaces of a *turning space* shall comply with 302. Changes in level are not permitted.

**EXCEPTION:** Slopes not steeper than 1:48 shall be permitted.

**Advisory 304.2 Floor or Ground Surface Exception.** As used in this section, the phrase "changes in level" refers to surfaces with slopes and to surfaces with abrupt rise exceeding that permitted in Section 303.3. Such changes in level are prohibited in required clear floor and ground spaces, turning spaces, and in similar spaces where people using wheelchairs and other mobility devices must park their mobility aids such as in wheelchair spaces, or maneuver to use elements such as at doors, fixtures, and telephones. The exception permits slopes not steeper than 1:48.

**304.3 Size.** *Turning space* shall comply with 304.3.1 or 304.3.2.

**304.3.1 Circular Space.** The *turning space* shall be a space of 60 inches (1525 mm) diameter minimum. The space shall be permitted to include knee and toe clearance complying with 306.

**304.3.2 T-Shaped Space.** The *turning space* shall be a T-shaped space within a 60 inch (1525 mm) square minimum with arms and base 36 inches (915 mm) wide minimum. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction and the base shall be clear of

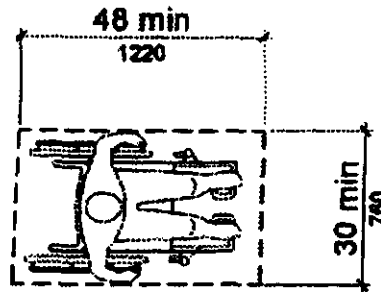
**305 Clear Floor or Ground Space**

**305.1 General.** Clear floor or ground space shall comply with 305.

**305.2 Floor or Ground Surfaces.** Floor or ground surfaces of a clear floor or ground space shall comply with 302. Changes in level are not permitted.

**EXCEPTION:** Slopes not steeper than 1:48 shall be permitted.

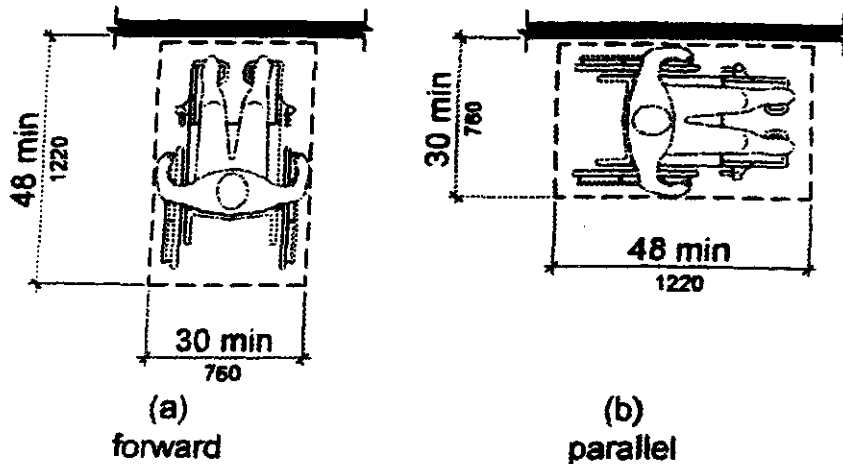
**305.3 Size.** The clear floor or ground space shall be 30 inches (760 mm) minimum by 48 inches (1220 mm) minimum.



**Figure 305.3**  
Clear Floor or Ground Space

**305.4 Knee and Toe Clearance.** Unless otherwise specified, clear floor or ground space shall be permitted to include knee and toe clearance complying with 306.

**305.5 Position.** Unless otherwise specified, clear floor or ground space shall be positioned for either forward or parallel approach to an *element*.

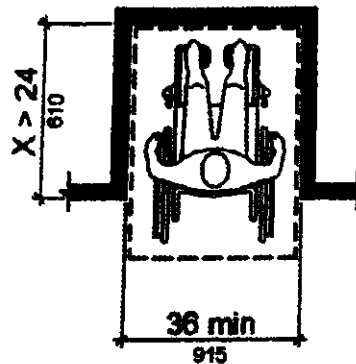


**Figure 305.5**  
Position of Clear Floor or Ground Space

**305.6 Approach.** One full unobstructed side of the clear floor or ground space shall adjoin an *accessible route* or adjoin another clear floor or ground space.

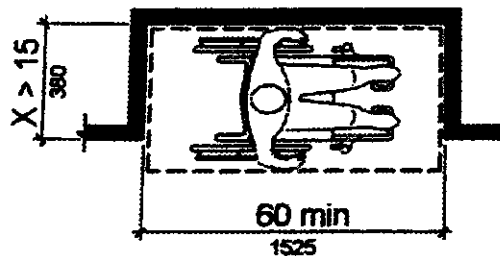
**305.7 Maneuvering Clearance.** Where a clear floor or ground space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearance shall be provided in accordance with 305.7.1 and 305.7.2.

**305.7.1 Forward Approach.** Alcoves shall be 36 inches (915 mm) wide minimum where the depth exceeds 24 inches (610 mm).



**Figure 305.7.1**  
Maneuvering Clearance in an Alcove, Forward Approach

**305.7.2 Parallel Approach.** Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).



**Figure 305.7.2**  
Maneuvering Clearance in an Alcove, Parallel Approach

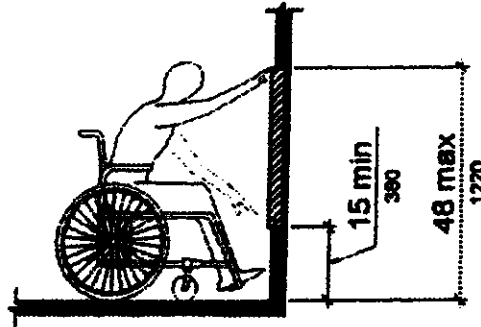
### 306 Knee and Toe Clearance

**306.1 General.** Where space beneath an *element* is included as part of clear floor or ground space or turning space, the space shall comply with 306. Additional space shall not be prohibited beneath an *element* but shall not be considered as part of the clear floor or ground space or turning space.

**Advisory 306.1 General.** Clearances are measured in relation to the usable clear floor space, not necessarily to the vertical support for an *element*. When determining clearance under an object for required turning or maneuvering space, care should be taken to ensure the space is clear of any obstructions.

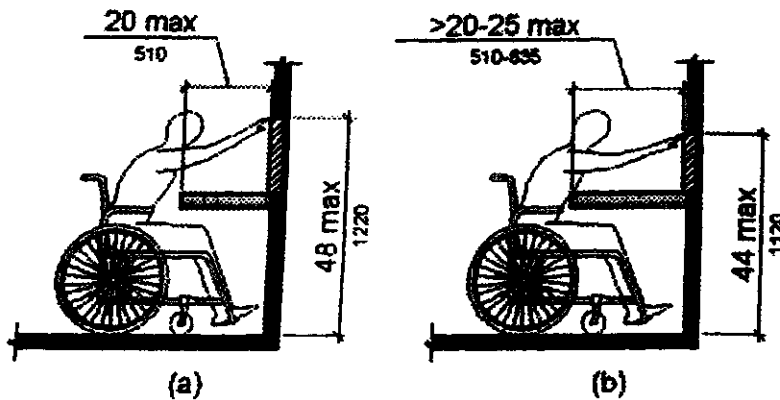
**308.2 Forward Reach.**

**308.2.1 Unobstructed.** Where a forward reach is unobstructed, the high forward reach shall be 48 inches (1220 mm) maximum and the low forward reach shall be 15 inches (380 mm) minimum above the finish floor or ground.



**Figure 308.2.1**  
**Unobstructed Forward Reach**

**308.2.2 Obstructed High Reach.** Where a high forward reach is over an obstruction, the clear floor space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches (1220 mm) maximum where the reach depth is 20 inches (510 mm) maximum. Where the reach depth exceeds 20 inches (510 mm), the high forward reach shall be 44 inches (1120 mm) maximum and the reach depth shall be 25 inches (635 mm) maximum.



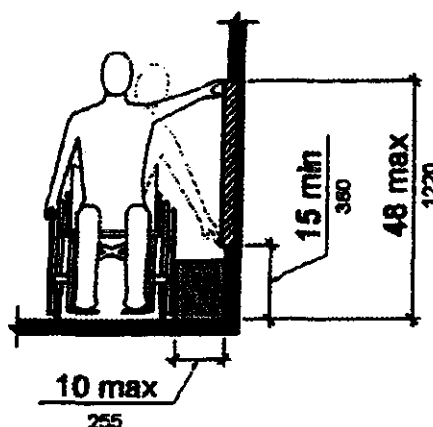
**Figure 308.2.2**  
**Obstructed High Forward Reach**

**308.3 Side Reach.**

**308.3.1 Unobstructed.** Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches (1220 mm)

maximum and the low side reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

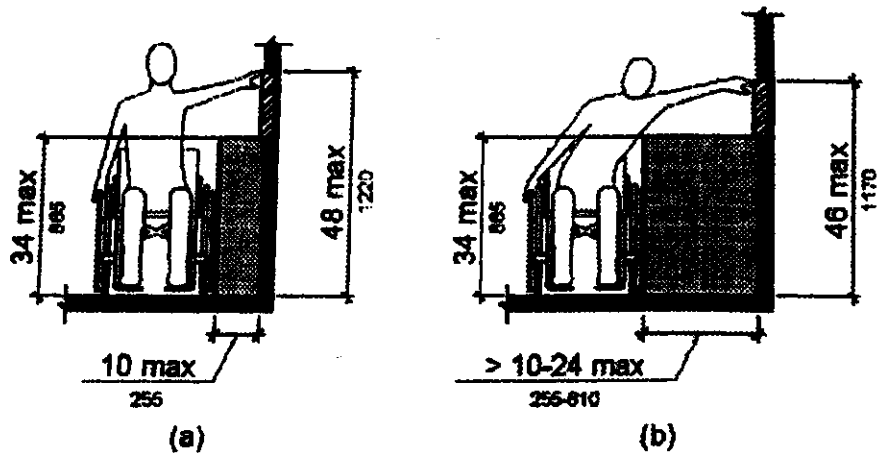
- EXCEPTIONS:** 1. An obstruction shall be permitted between the clear floor or ground space and the *element* where the depth of the obstruction is 10 inches (255 mm) maximum.
2. *Operable parts* of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the *vehicular way* where fuel dispensers are installed on existing curbs.



**Figure 308.3.1**  
**Unobstructed Side Reach**

**308.3.2 Obstructed High Reach.** Where a clear floor or ground space allows a parallel approach to an *element* and the high side reach is over an obstruction, the height of the obstruction shall be 34 inches (865 mm) maximum and the depth of the obstruction shall be 24 inches (610 mm) maximum. The high side reach shall be 48 inches (1220 mm) maximum for a reach depth of 10 inches (255 mm) maximum. Where the reach depth exceeds 10 inches (255 mm), the high side reach shall be 46 inches (1170 mm) maximum for a reach depth of 24 inches (610 mm) maximum.

- EXCEPTIONS:** 1. The top of washing machines and clothes dryers shall be permitted to be 36 inches (915 mm) maximum above the finish floor.
2. *Operable parts* of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the *vehicular way* where fuel dispensers are installed on existing curbs.



**Figure 308.3.2**  
**Obstructed High Side Reach**

### 309 Operable Parts

**309.1 General.** *Operable parts* shall comply with 309.

**309.2 Clear Floor Space.** A clear floor or ground space complying with 305 shall be provided.

**309.3 Height.** *Operable parts* shall be placed within one or more of the reach ranges specified in 308.

**309.4 Operation.** *Operable parts* shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate *operable parts* shall be 5 pounds (22.2 N) maximum.

**EXCEPTION:** Gas pump nozzles shall not be required to provide *operable parts* that have an activating force of 5 pounds (22.2 N) maximum.

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## CHAPTER 4: ACCESSIBLE ROUTES

### 401 General

**401.1 Scope.** The provisions of Chapter 4 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

### 402 Accessible Routes

**402.1 General.** Accessible routes shall comply with 402.

**402.2 Components.** Accessible routes shall consist of one or more of the following components: walking surfaces with a *running slope* not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable requirements of Chapter 4.

**Advisory 402.2 Components.** Walking surfaces must have running slopes not steeper than 1:20, see 403.3. Other components of accessible routes, such as ramps (405) and curb ramps (406), are permitted to be more steeply sloped.

### 403 Walking Surfaces

**403.1 General.** Walking surfaces that are a part of an accessible route shall comply with 403.

**403.2 Floor or Ground Surface.** Floor or ground surfaces shall comply with 302.

**403.3 Slope.** The *running slope* of walking surfaces shall not be steeper than 1:20. The *cross slope* of walking surfaces shall not be steeper than 1:48.

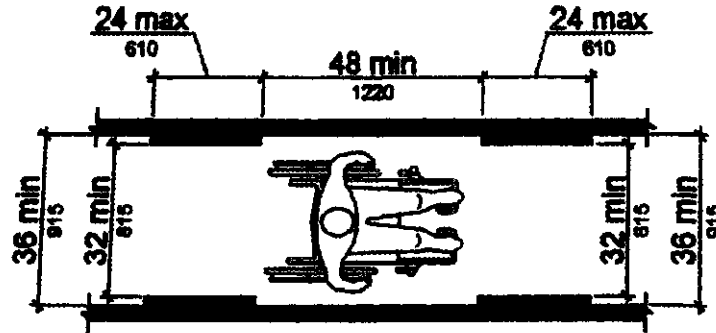
**403.4 Changes in Level.** Changes in level shall comply with 303.

**403.5 Clearances.** Walking surfaces shall provide clearances complying with 403.5.

**EXCEPTION:** Within *employee work areas*, clearances on *common use circulation paths* shall be permitted to be decreased by *work area equipment* provided that the decrease is essential to the function of the work being performed.

**403.5.1 Clear Width.** Except as provided in 403.5.2 and 403.5.3, the clear width of walking surfaces shall be 36 inches (915 mm) minimum.

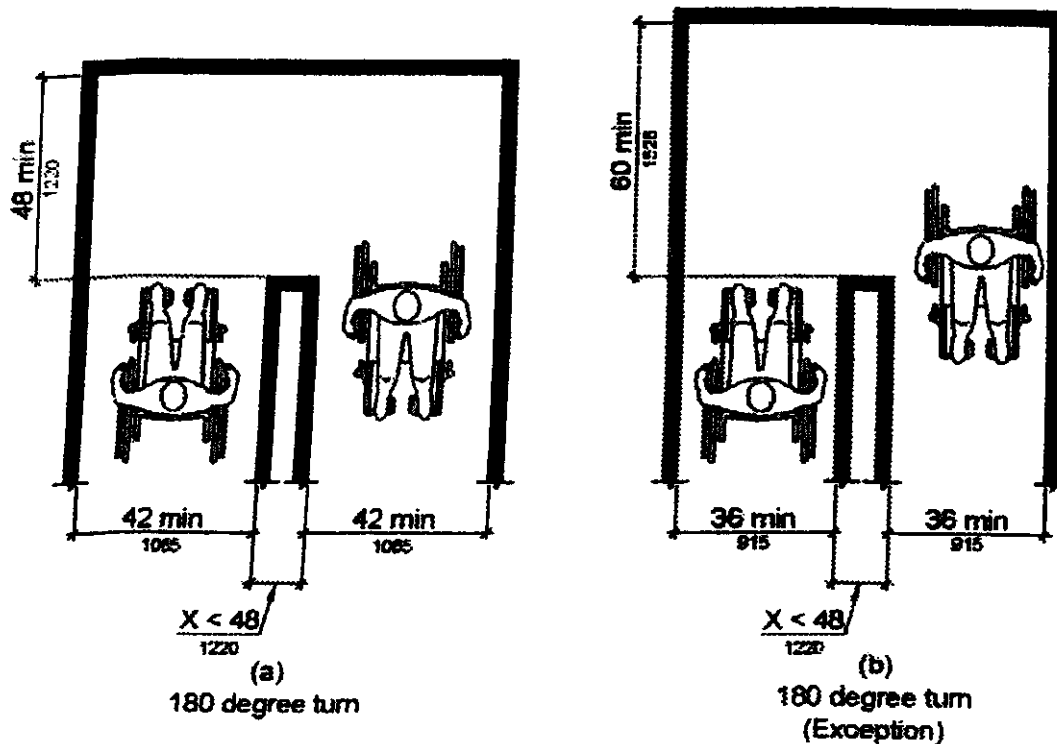
**EXCEPTION:** The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1220 mm) long minimum and 36 inches (915 mm) wide minimum.



**Figure 403.5.1**  
Clear Width of an Accessible Route

**403.5.2 Clear Width at Turn.** Where the *accessible* route makes a 180 degree turn around an *element* which is less than 48 inches (1220 mm) wide, clear width shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum at the turn and 42 inches (1065 mm) minimum leaving the turn.

**EXCEPTION:** Where the clear width at the turn is 60 inches (1525 mm) minimum compliance with 403.5.2 shall not be required.



**Figure 403.5.2**  
Clear Width at Turn

**403.5.3 Passing Spaces.** An accessible route with a clear width less than 60 inches (1525 mm) shall provide passing spaces at intervals of 200 feet (61 m) maximum. Passing spaces shall be either: a space 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum; or, an intersection of two walking surfaces providing a T-shaped space complying with 304.3.2 where the base and arms of the T-shaped space extend 48 inches (1220 mm) minimum beyond the intersection.

**403.6 Handrails.** Where handrails are provided along walking surfaces with *running slopes* not steeper than 1:20 they shall comply with 505.

**Advisory 403.6 Handrails.** Handrails provided in elevator cabs and platform lifts are not required to comply with the requirements for handrails on walking surfaces.

#### 404 Doors, Doorways, and Gates

**404.1 General.** Doors, doorways, and gates that are part of an accessible route shall comply with 404. **EXCEPTION:** Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with 404.2.7, 404.2.8, 404.2.9, 404.3.2 and 404.3.4 through 404.3.7.

**Advisory 404.1 General Exception.** Security personnel must have sole control of doors that are eligible for the Exception at 404.1. It would not be acceptable for security personnel to operate the doors for people with disabilities while allowing others to have independent access.

**404.2 Manual Doors, Doorways, and Manual Gates.** Manual doors and doorways and manual gates intended for user passage shall comply with 404.2.

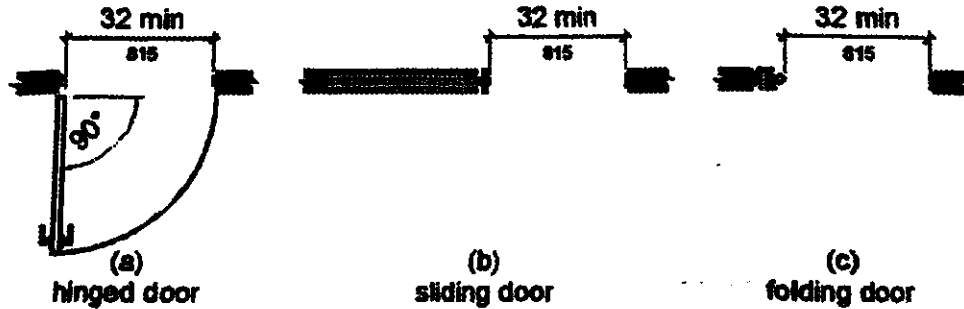
**404.2.1 Revolving Doors, Gates, and Turnstiles.** Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

**404.2.2 Double-Leaf Doors and Gates.** At least one of the active leaves of doorways with two leaves shall comply with 404.2.3 and 404.2.4.

**404.2.3 Clear Width.** Door openings shall provide a clear width of 32 inches (815 mm) minimum. Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Openings more than 24 inches (610 mm) deep shall provide a clear opening of 36 inches (915 mm) minimum. There shall be no projections into the required clear opening width lower than 34 inches (865 mm) above the finish floor or ground. Projections into the clear opening width between 34 inches (865 mm) and 80 inches (2030 mm) above the finish floor or ground shall not exceed 4 inches (100 mm).

**EXCEPTIONS:** 1. In alterations, a projection of 5/8 inch (16 mm) maximum into the required clear width shall be permitted for the latch side stop.

2. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.



**Figure 404.2.3**  
**Clear Width of Doorways**

**404.2.4 Maneuvering Clearances.** Minimum maneuvering clearances at doors and gates shall comply with 404.2.4. Maneuvering clearances shall extend the full width of the doorway and the required latch side or hinge side clearance.

**EXCEPTION:** Entry doors to hospital patient rooms shall not be required to provide the clearance beyond the latch side of the door.

**404.2.4.1 Swinging Doors and Gates.** Swinging doors and gates shall have maneuvering clearances complying with Table 404.2.4.1.

**Table 404.2.4.1 Maneuvering Clearances at Manual Swinging Doors and Gates**

Type of Use		Minimum Maneuvering Clearance	
Approach Direction	Door or Gate Side	Perpendicular to Doorway	Parallel to Doorway (beyond latch side unless noted)
From front	Pull	60 inches (1525 mm)	18 inches (455 mm)
From front	Push	48 inches (1220 mm)	0 inches (0 mm) <sup>1</sup>
From hinge side	Pull	60 inches (1525 mm)	36 inches (915 mm)
From hinge side	Pull	54 inches (1370 mm)	42 inches (1065 mm)
From hinge side	Push	42 inches (1065 mm) <sup>2</sup>	22 inches (560 mm) <sup>3</sup>
From latch side	Pull	48 inches (1220 mm) <sup>4</sup>	24 inches (610 mm)
From latch side	Push	42 inches (1065 mm) <sup>4</sup>	24 inches (610 mm)

1. Add 12 inches (305 mm) if closer and latch are provided.
2. Add 6 inches (150 mm) if closer and latch are provided.
3. Beyond hinge side.
4. Add 6 inches (150 mm) if closer is provided.

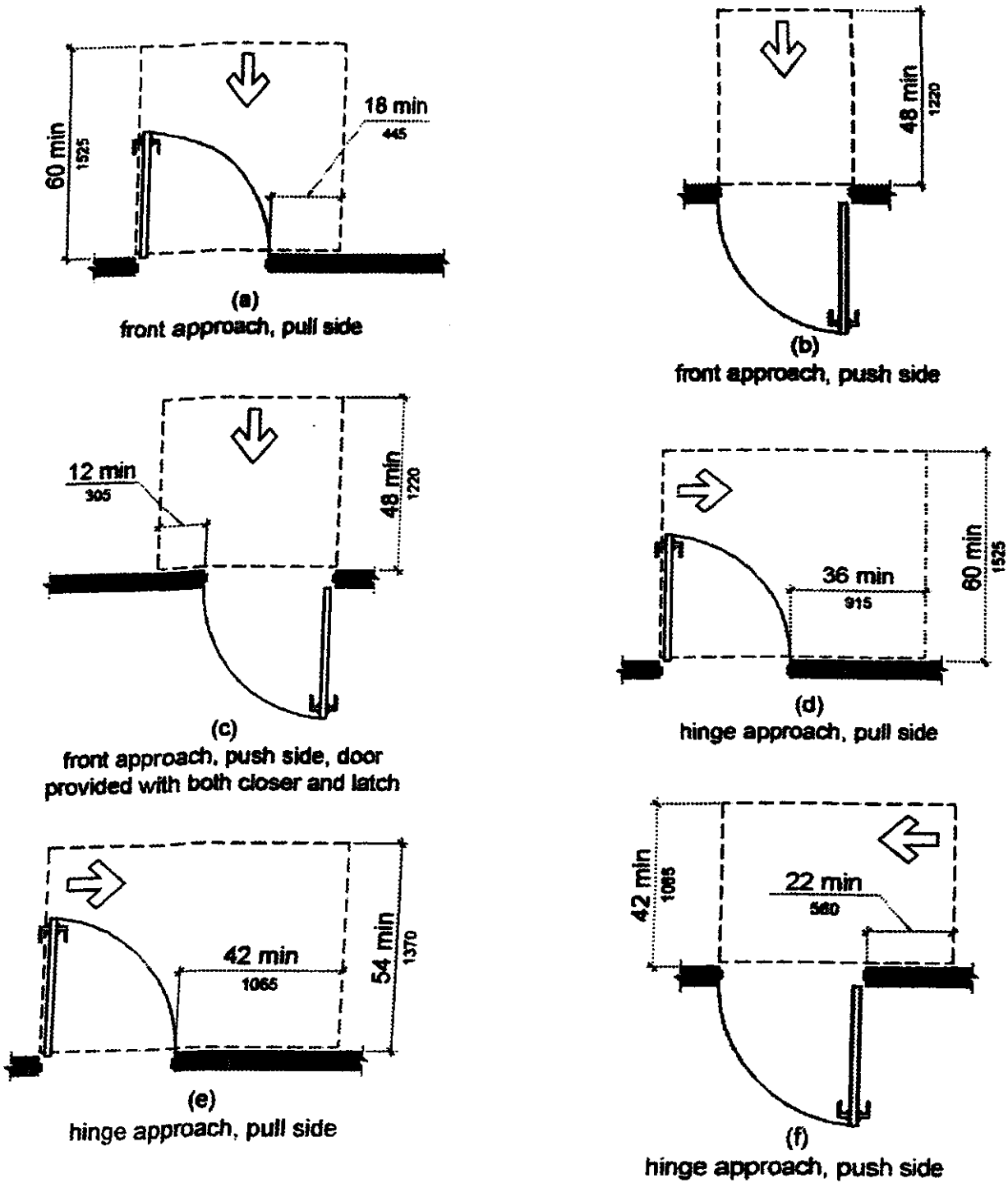
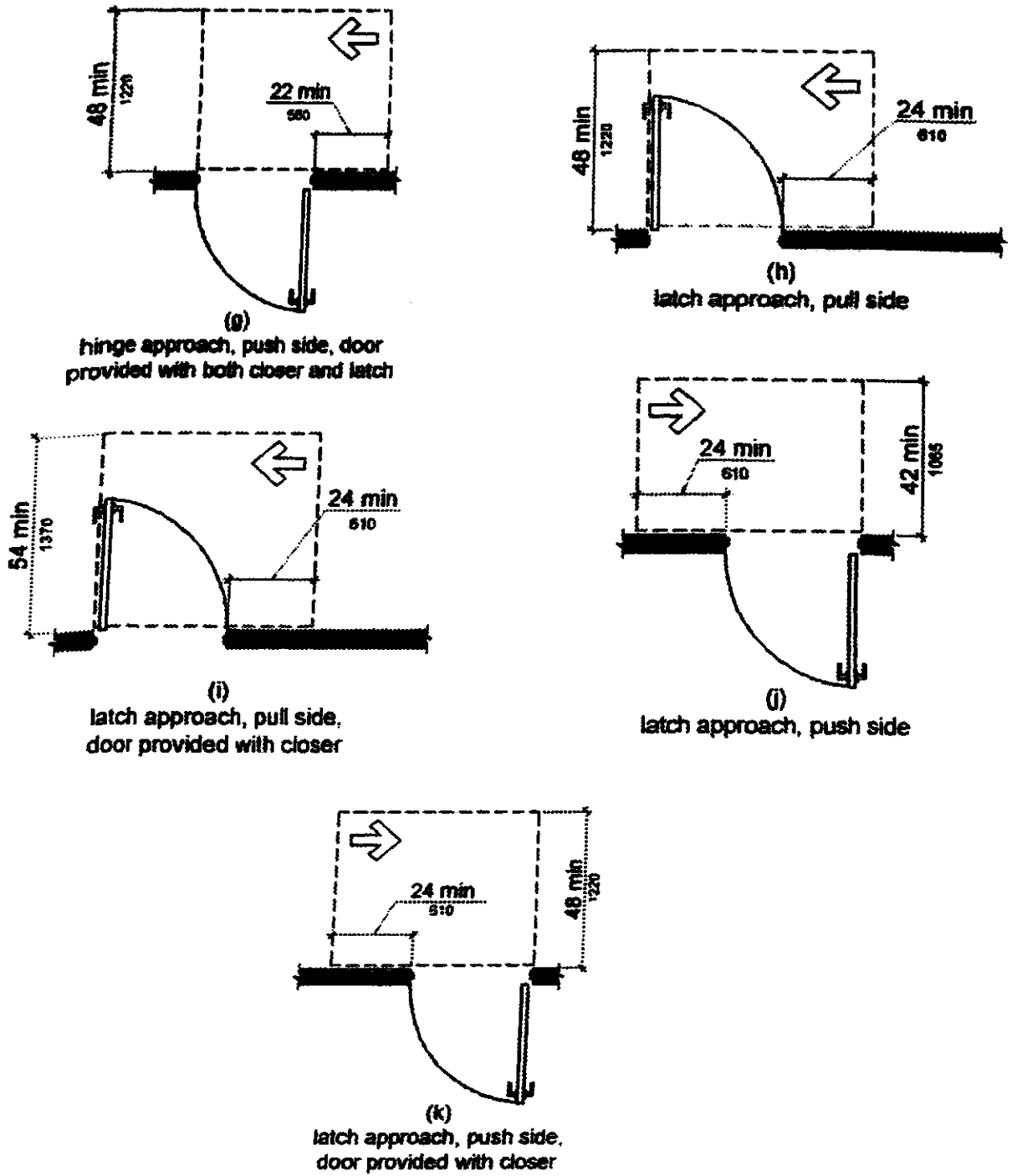


Figure 404.2.4.1  
 Maneuvering Clearances at Manual Swinging Doors and Gates



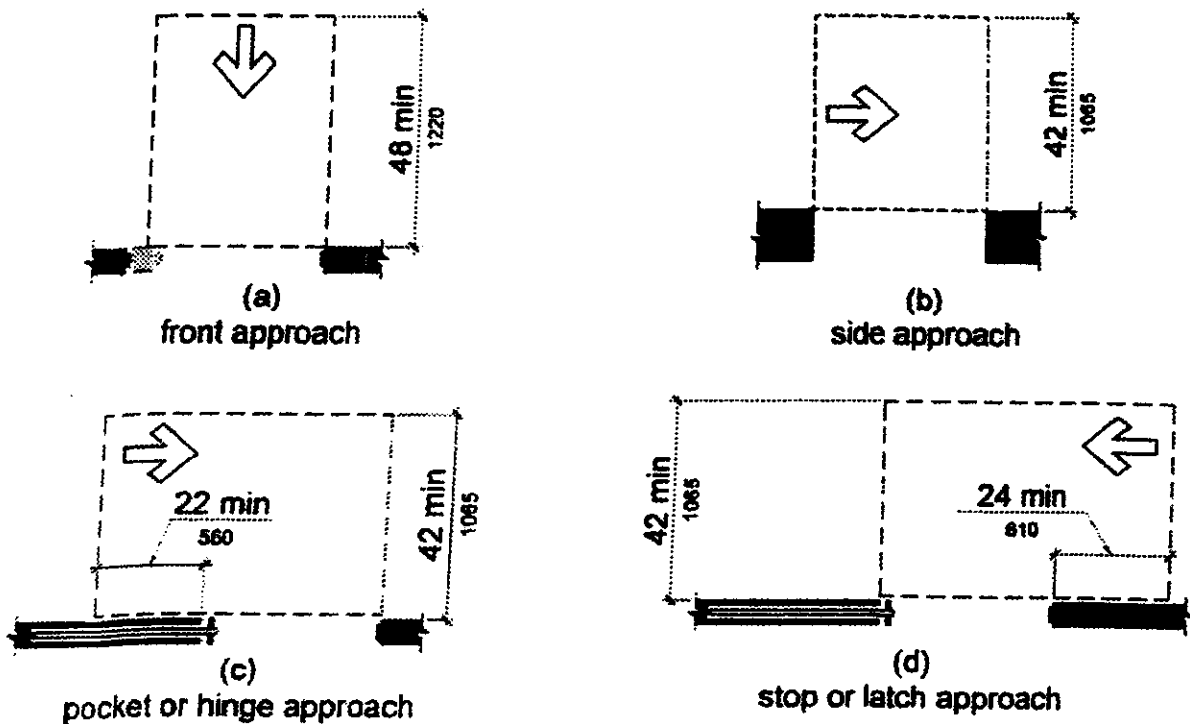
**Figure 404.2.4.1**  
**Maneuvering Clearances at Manual Swinging Doors and Gates**

**404.2.4.2 Doorways without Doors or Gates, Sliding Doors, and Folding Doors.** Doorways less than 36 inches (915 mm) wide without doors or gates, sliding doors, or folding doors shall have maneuvering clearances complying with Table 404.2.4.2.

**Table 404.2.4.2 Maneuvering Clearances at Doorways without Doors or Gates, Manual Sliding Doors, and Manual Folding Doors**

Approach Direction	Minimum Maneuvering Clearance	
	Perpendicular to Doorway	Parallel to Doorway (beyond stop/latch side unless noted)
From Front	48 inches (1220 mm)	0 inches (0 mm)
From side <sup>1</sup>	42 inches (1065 mm)	0 inches (0 mm)
From pocket/hinge side	42 inches (1065 mm)	22 inches (560 mm) <sup>2</sup>
From stop/latch side	42 inches (1065 mm)	24 inches (610 mm)

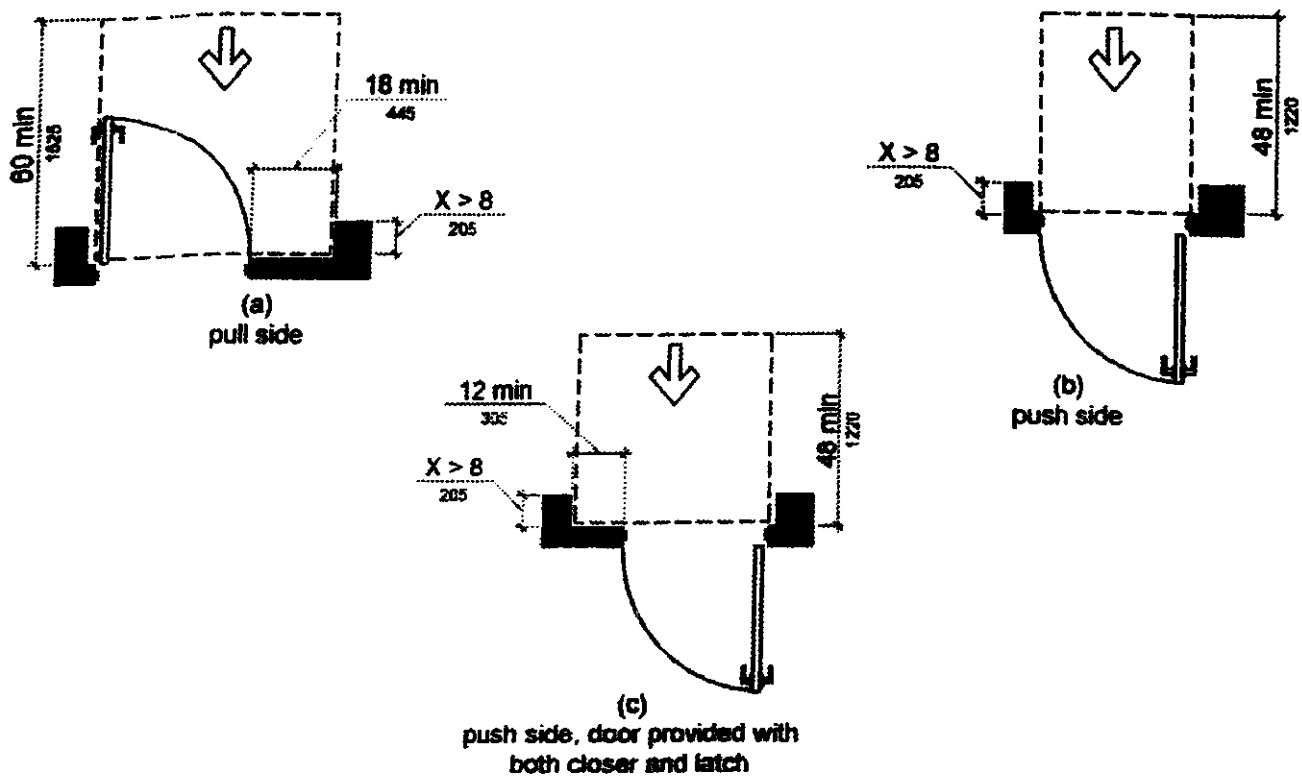
1. Doorway with no door only.
2. Beyond pocket/hinge side.



**Figure 404.2.4.2**  
**Maneuvering Clearances at Doorways without Doors, Sliding Doors, Gates, and Folding Doors**

**404.2.4.3 Recessed Doors and Gates.** Maneuvering clearances for forward approach shall be provided when any obstruction within 18 inches (455 mm) of the latch side of a doorway projects more than 8 inches (205 mm) beyond the face of the door, measured perpendicular to the face of the door or gate.

**Advisory 404.2.4.3 Recessed Doors and Gates.** A door can be recessed due to wall thickness or because of the placement of casework and other fixed elements adjacent to the doorway. This provision must be applied wherever doors are recessed.



**Figure 404.2.4.3**  
**Maneuvering Clearances at Recessed Doors and Gates**

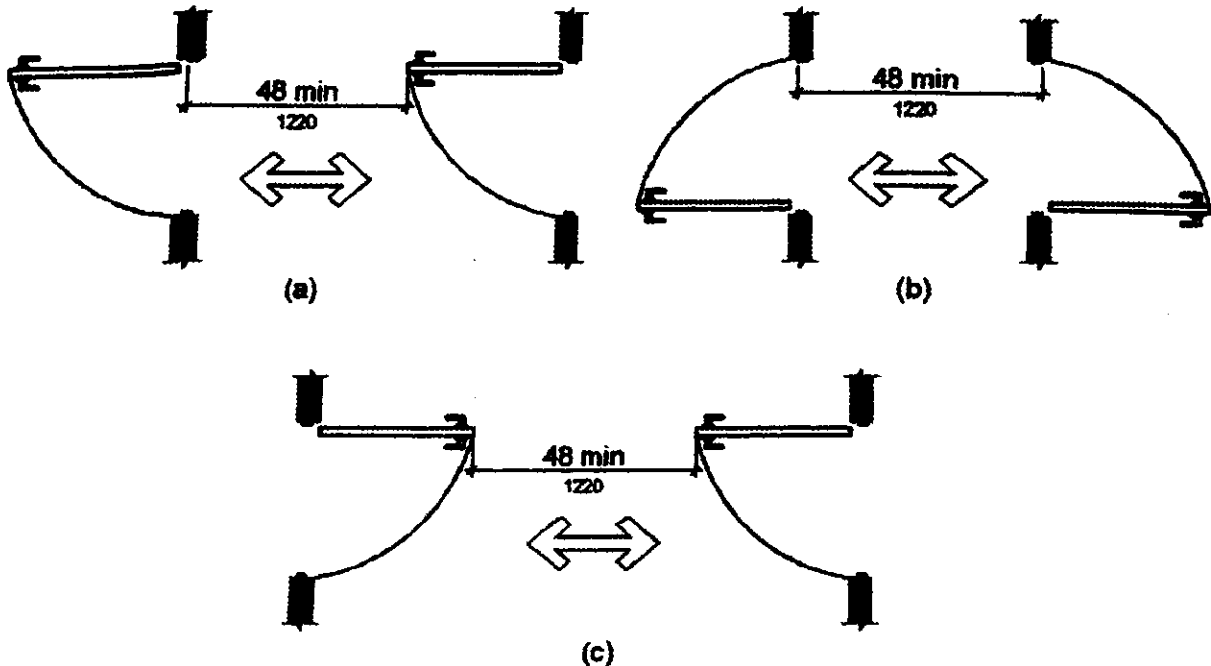
**404.2.4.4 Floor or Ground Surface.** Floor or ground surface within required maneuvering clearances shall comply with 302. Changes in level are not permitted.

- EXCEPTIONS:**
1. Slopes not steeper than 1:48 shall be permitted.
  2. Changes in level at thresholds complying with 404.2.5 shall be permitted.

**404.2.5 Thresholds.** Thresholds, if provided at doorways, shall be ½ inch (13 mm) high maximum. Raised thresholds and changes in level at doorways shall comply with 302 and 303.

**EXCEPTION:** Existing or altered thresholds ¾ inch (19 mm) high maximum that have a beveled edge on each side with a slope not steeper than 1:2 shall not be required to comply with 404.2.5.

**404.2.6 Doors in Series and Gates in Series.** The distance between two hinged or pivoted doors in series and gates in series shall be 48 inches (1220 mm) minimum plus the width of doors or gates swinging into the space.



**Figure 404.2.6**  
**Doors in Series and Gates in Series**

**404.2.7 Door and Gate Hardware.** Handles, pulls, latches, locks, and other *operable parts* on doors and gates shall comply with 309.4. *Operable parts* of such hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

**EXCEPTIONS:** 1. Existing locks shall be permitted in any location at existing glazed doors without stiles, existing overhead rolling doors or grilles, and similar existing doors or grilles that are designed with locks that are activated only at the top or bottom rail.

2. Access gates in barrier walls and fences protecting pools, spas, and hot tubs shall be permitted to have *operable parts* of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finish floor or ground provided the self-latching devices are not also self-locking devices and operated by means of a key, electronic opener, or integral combination lock.

**Advisory 404.2.7 Door and Gate Hardware.** Door hardware that can be operated with a closed fist or a loose grip accommodates the greatest range of users. Hardware that requires simultaneous hand and finger movements require greater dexterity and coordination, and is not recommended.

**404.2.8 Closing Speed.** Door and gate closing speed shall comply with 404.2.8.

**404.2.8.1 Door Closers and Gate Closers.** Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.

**404.2.8.2 Spring Hinges.** Door and gate spring hinges shall be adjusted so that from the open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum.

**404.2.9 Door and Gate Opening Force.** Fire doors shall have a minimum opening force allowable by the appropriate *administrative authority*. The force for pushing or pulling open a door or gate other than fire doors shall be as follows:

1. Interior hinged doors and gates: 5 pounds (22.2 N) maximum.
2. Sliding or folding doors: 5 pounds (22.2 N) maximum.

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door or gate in a closed position.

**Advisory 404.2.9 Door and Gate Opening Force.** The maximum force pertains to the continuous application of force necessary to fully open a door, not the initial force needed to overcome the inertia of the door. It does not apply to the force required to retract bolts or to disengage other devices used to keep the door in a closed position.

**404.2.10 Door and Gate Surfaces.** Swinging door and gate surfaces within 10 inches (255 mm) of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate. Parts creating horizontal or vertical joints in these surfaces shall be within 1/16 inch (1.6 mm) of the same plane as the other. Cavities created by added kick plates shall be capped.

**EXCEPTIONS:** 1. Sliding doors shall not be required to comply with 404.2.10.

2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at 60 degrees minimum from the horizontal shall not be required to meet the 10 inch (255 mm) bottom smooth surface height requirement.

3. Doors and gates that do not extend to within 10 inches (255 mm) of the finish floor or ground shall not be required to comply with 404.2.10.

4. Existing doors and gates without smooth surfaces within 10 inches (255 mm) of the finish floor or ground shall not be required to provide smooth surfaces complying with 404.2.10 provided that if added kick plates are installed, cavities created by such kick plates are capped.

**404.2.11 Vision Lights.** Doors, gates, and side lights adjacent to doors or gates, containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one glazed panel located 43 inches (1090 mm) maximum above the finish floor.

**EXCEPTIONS:** Vision lights with the lowest part more than 66 inches (1675 mm) from the finish floor or ground shall not be required to comply with 404.2.11.

**404.3 Automatic and Power-Assisted Doors and Gates.** Automatic doors and automatic gates shall comply with 404.3. Full-powered automatic doors shall comply with ANSI/BHMA A156.10 (incorporated

by reference, see "Referenced Standards" in Chapter 1). Low-energy and power-assisted doors shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

**404.3.1 Clear Width.** Doorways shall provide a clear opening of 32 inches (815 mm) minimum in power-on and power-off mode. The minimum clear width for automatic door systems in a doorway shall be based on the clear opening provided by all leaves in the open position.

**404.3.2 Maneuvering Clearance.** Clearances at power-assisted doors and gates shall comply with 404.2.4. Clearances at automatic doors and gates without standby power and serving an *accessible means of egress* shall comply with 404.2.4.

**EXCEPTION:** Where automatic doors and gates remain open in the power-off condition, compliance with 404.2.4 shall not be required.

**404.3.3 Thresholds.** Thresholds and changes in level at doorways shall comply with 404.2.5.

**404.3.4 Doors in Series and Gates in Series.** Doors in series and gates in series shall comply with 404.2.6.

**404.3.5 Controls.** Manually operated controls shall comply with 309. The clear floor space adjacent to the control shall be located beyond the arc of the door swing.

**404.3.6 Break Out Opening.** Where doors and gates without standby power are a part of a means of egress, the clear break out opening at swinging or sliding doors and gates shall be 32 inches (815 mm) minimum when operated in emergency mode.

**EXCEPTION:** Where manual swinging doors and gates comply with 404.2 and serve the same means of egress compliance with 404.3.6 shall not be required.

**404.3.7 Revolving Doors, Revolving Gates, and Turnstiles.** Revolving doors, revolving gates, and turnstiles shall not be part of an *accessible* route.

## 405 Ramps

**405.1 General.** Ramps on *accessible* routes shall comply with 405.

**EXCEPTION:** In *assembly areas*, aisle ramps adjacent to seating and not serving *elements* required to be on an *accessible* route shall not be required to comply with 405.

**405.2 Slope.** Ramp runs shall have a *running slope* not steeper than 1:12.

**EXCEPTION:** In existing *sites, buildings, and facilities*, ramps shall be permitted to have *running slopes* steeper than 1:12 complying with Table 405.2 where such slopes are necessary due to *space limitations*.

**Table 405.2 Maximum Ramp Slope and Rise for Existing Sites, Buildings, and Facilities**

Slope <sup>1</sup>	Maximum Rise
Steeper than 1:10 but not steeper than 1:8	3 inches (75 mm)
Steeper than 1:12 but not steeper than 1:10	6 inches (150 mm)

1. A slope steeper than 1:8 is prohibited.

**Advisory 405.2 Slope.** To accommodate the widest range of users, provide ramps with the least possible running slope and, wherever possible, accompany ramps with stairs for use by those individuals for whom distance presents a greater barrier than steps, e.g., people with heart disease or limited stamina.

**405.3 Cross Slope.** Cross slope of ramp runs shall not be steeper than 1:48.

**Advisory 405.3 Cross Slope.** Cross slope is the slope of the surface perpendicular to the direction of travel. Cross slope is measured the same way as slope is measured (i.e., the rise over the run).

**405.4 Floor or Ground Surfaces.** Floor or ground surfaces of ramp runs shall comply with 302. Changes in level other than the running slope and cross slope are not permitted on ramp runs.

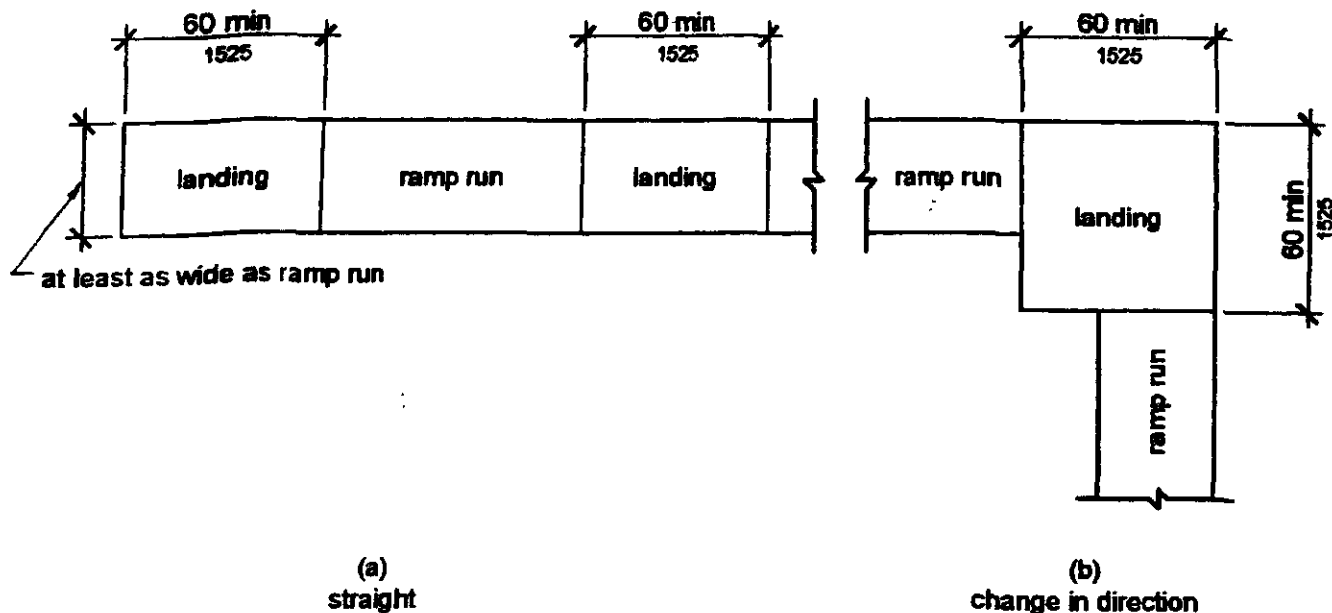
**405.5 Clear Width.** The clear width of a ramp run and, where handrails are provided, the clear width between handrails shall be 36 inches (915 mm) minimum.

**EXCEPTION:** Within employee work areas, the required clear width of ramps that are a part of common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

**405.6 Rise.** The rise for any ramp run shall be 30 inches (760 mm) maximum.

**405.7 Landings.** Ramps shall have landings at the top and the bottom of each ramp run. Landings shall comply with 405.7.

**Advisory 405.7 Landings.** Ramps that do not have level landings at changes in direction can create a compound slope that will not meet the requirements of this document. Circular or curved ramps continually change direction. Curvilinear ramps with small radii also can create compound cross slopes and cannot, by their nature, meet the requirements for accessible routes. A level landing is needed at the accessible door to permit maneuvering and simultaneously door operation.



**Figure 405.7**  
**Ramp Landings**

**405.7.1 Slope.** Landings shall comply with 302. Changes in level are not permitted.

**EXCEPTION:** Slopes not steeper than 1:48 shall be permitted.

**405.7.2 Width.** The landing clear width shall be at least as wide as the widest *ramp* run leading to the landing.

**405.7.3 Length.** The landing clear length shall be 60 inches (1525 mm) long minimum.

**405.7.4 Change in Direction.** *Ramps* that change direction between runs at landings shall have a clear landing 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum.

**405.7.5 Doorways.** Where doorways are located adjacent to a *ramp* landing, maneuvering clearances required by 404.2.4 and 404.3.2 shall be permitted to overlap the required landing area.

**405.8 Handrails.** *Ramp* runs with a rise greater than 6 inches (150 mm) shall have handrails complying with 505.

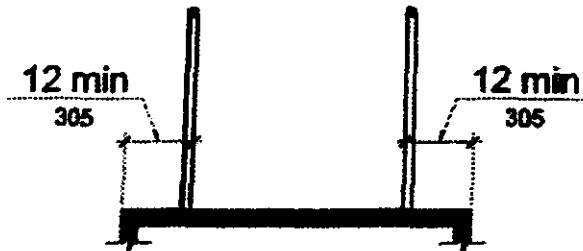
**EXCEPTION:** Within *employee work areas*, handrails shall not be required where *ramps* that are part of *common use circulation paths* are designed to permit the installation of handrails complying with 505. *Ramps* not subject to the exception to 405.5 shall be designed to maintain a 36 inch (915 mm) minimum clear width when handrails are installed.

**405.9 Edge Protection.** Edge protection complying with 405.9.1 or 405.9.2 shall be provided on each side of *ramp* runs and at each side of *ramp* landings.

- EXCEPTIONS:**
1. Edge protection shall not be required on *ramps* that are not required to have handrails and have sides complying with 406.3.
  2. Edge protection shall not be required on the sides of *ramp* landings serving an adjoining *ramp* run or stairway.
  3. Edge protection shall not be required on the sides of *ramp* landings having a vertical drop-off of  $\frac{1}{2}$  inch (13 mm) maximum within 10 inches (255 mm) horizontally of the minimum landing area specified in 405.7.

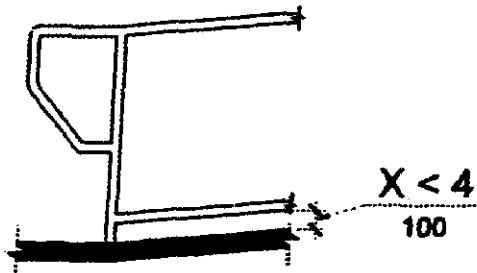
**405.9.1 Extended Floor or Ground Surface.** The floor or ground surface of the *ramp* run or landing shall extend 12 inches (305 mm) minimum beyond the inside face of a handrail complying with 505.

**Advisory 405.9.1 Extended Floor or Ground Surface.** The extended surface prevents wheelchair casters and crutch tips from slipping off the ramp surface.



**Figure 405.9.1**  
Extended Floor or Ground Surface Edge Protection

**405.9.2 Curb or Barrier.** A curb or barrier shall be provided that prevents the passage of a 4 inch (100 mm) diameter sphere, where any portion of the sphere is within 4 inches (100 mm) of the finish floor or ground surface.



**Figure 405.9.2**  
Curb or Barrier Edge Protection

**405.10 Wet Conditions.** Landings subject to wet conditions shall be designed to prevent the accumulation of water.

## 406 Curb Ramps

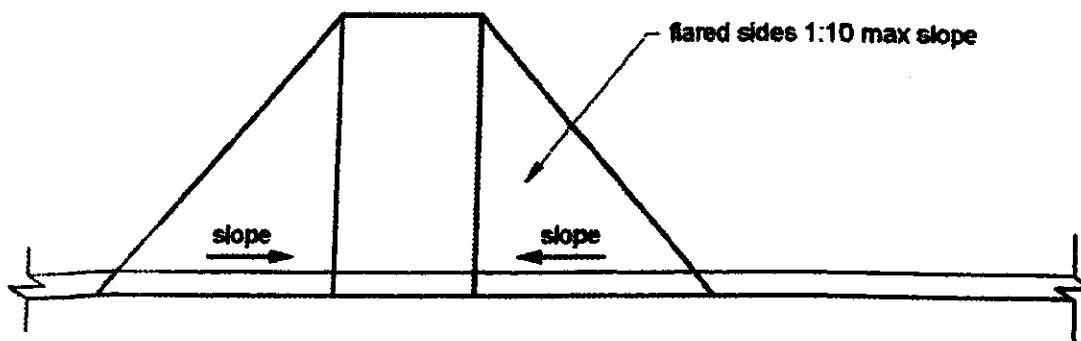
**406.1 General.** *Curb ramps* on accessible routes shall comply with 406, 405.2 through 405.5, and 405.10.

**406.2 Counter Slope.** Counter slopes of adjoining gutters and road surfaces immediately adjacent to the *curb ramp* shall not be steeper than 1:20. The adjacent surfaces at transitions at *curb ramps* to *walks*, *gutters*, and *streets* shall be at the same level.



**Figure 406.2**  
Counter Slope of Surfaces Adjacent to Curb Ramps

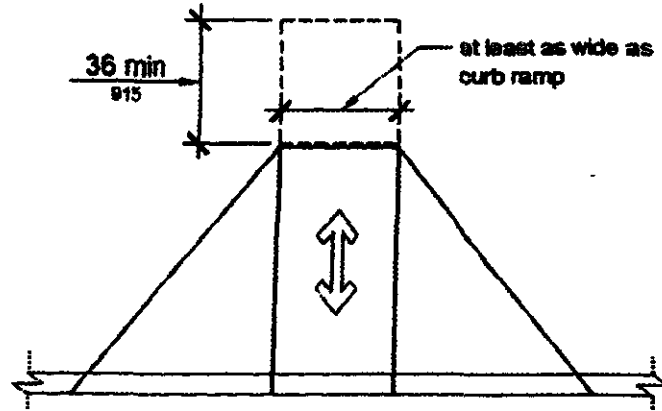
**406.3 Sides of Curb Ramps.** Where provided, *curb ramp flares* shall not be steeper than 1:10.



**Figure 406.3**  
Sides of Curb Ramps

**406.4 Landings.** Landings shall be provided at the tops of *curb ramps*. The landing clear length shall be 36 inches (915 mm) minimum. The landing clear width shall be at least as wide as the *curb ramp*, excluding flared sides, leading to the landing.

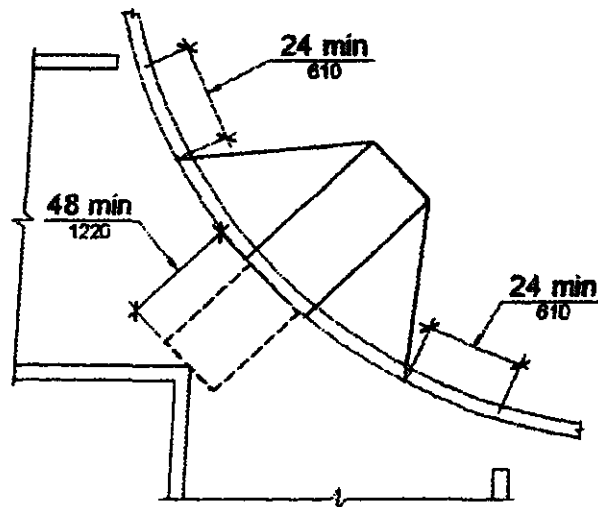
**EXCEPTION:** In *alterations*, where there is no landing at the top of *curb ramps*, *curb ramp flares* shall be provided and shall not be steeper than 1:12.



**Figure 406.4**  
**Landings at the Top of Curb Ramps**

**406.5 Location.** *Curb ramps* and the flared sides of *curb ramps* shall be located so that they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. *Curb ramps* at *marked crossings* shall be wholly contained within the markings, excluding any flared sides.

**406.6 Diagonal Curb Ramps.** Diagonal or corner type *curb ramps* with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow. The bottom of diagonal *curb ramps* shall have a clear space 48 inches (1220 mm) minimum outside active traffic lanes of the roadway. Diagonal *curb ramps* provided at *marked crossings* shall provide the 48 inches (1220 mm) minimum clear space within the markings. Diagonal *curb ramps* with flared sides shall have a segment of curb 24 inches (610 mm) long minimum located on each side of the *curb ramp* and within the *marked crossing*.



**Figure 406.6**  
**Diagonal or Corner Type Curb Ramps**

## CHAPTER 5: GENERAL SITE AND BUILDING ELEMENTS

### 501 General

**501.1 Scope.** The provisions of Chapter 5 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

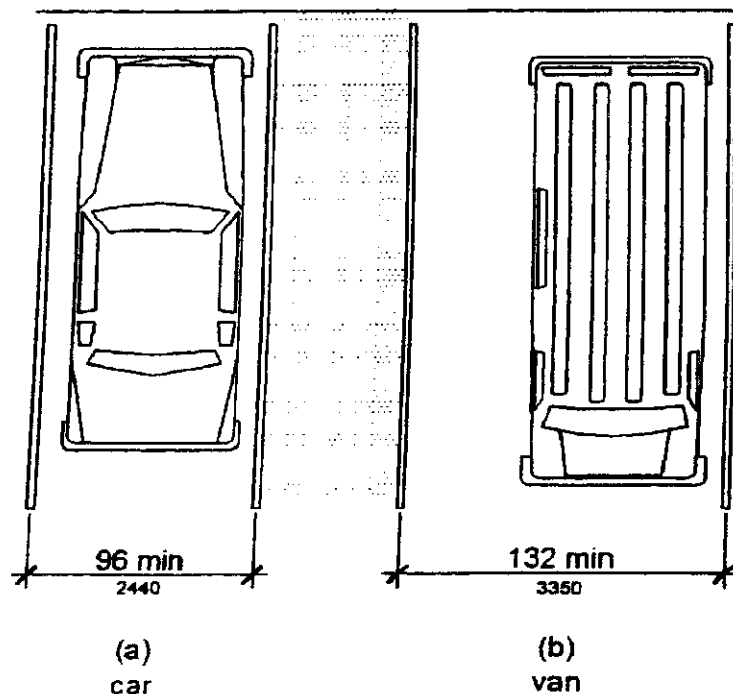
### 502 Parking Spaces

**502.1 General.** Car and van parking spaces shall comply with 502. Where parking spaces are marked with lines, width measurements of parking spaces and access aisles shall be made from the centerline of the markings.

**EXCEPTION:** Where parking spaces or access aisles are not adjacent to another parking space or access aisle, measurements shall be permitted to include the full width of the line defining the parking space or access aisle.

**502.2 Vehicle Spaces.** Car parking spaces shall be 96 inches (2440 mm) wide minimum and van parking spaces shall be 132 inches (3350 mm) wide minimum, shall be marked to define the width, and shall have an adjacent access aisle complying with 502.3.

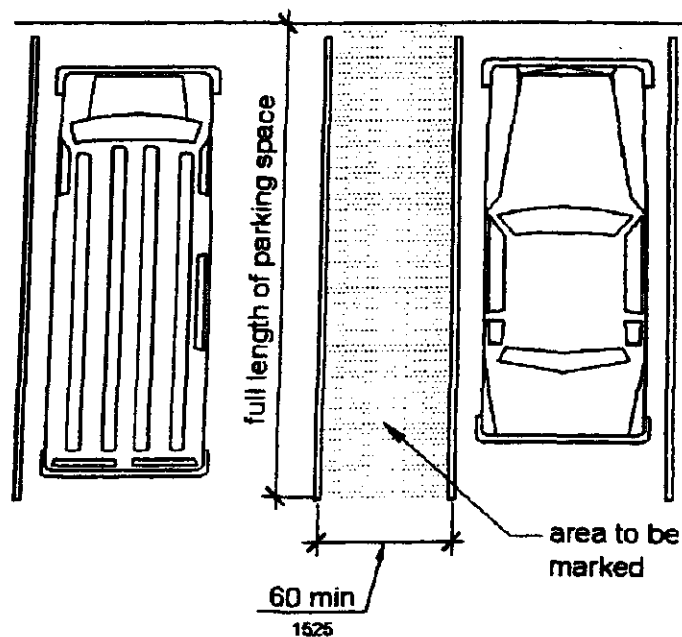
**EXCEPTION:** Van parking spaces shall be permitted to be 96 inches (2440 mm) wide minimum where the access aisle is 96 inches (2440 mm) wide minimum.



**Figure 502.2**  
**Vehicle Parking Spaces**

**502.3 Access Aisle.** Access aisles serving parking spaces shall comply with 502.3. Access aisles shall adjoin an *accessible* route. Two parking spaces shall be permitted to share a common access aisle.

**Advisory 502.3 Access Aisle.** Accessible routes must connect parking spaces to accessible entrances. In parking facilities where the accessible route must cross vehicular traffic lanes, marked crossings enhance pedestrian safety, particularly for people using wheelchairs and other mobility aids. Where possible, it is preferable that the accessible route not pass behind parked vehicles.



**Figure 502.3**  
**Parking Space Access Aisle**

**502.3.1 Width.** Access aisles serving car and van parking spaces shall be 60 inches (1525 mm) wide minimum.

**502.3.2 Length.** Access aisles shall extend the full length of the parking spaces they serve.

**502.3.3 Marking.** Access aisles shall be marked so as to discourage parking in them.

**Advisory 502.3.3 Marking.** The method and color of marking are not specified by these requirements but may be addressed by State or local laws or regulations. Because these requirements permit the van access aisle to be as wide as a parking space, it is important that the aisle be clearly marked.

## CHAPTER 6: PLUMBING ELEMENTS AND FACILITIES

### 601 General

**601.1 Scope.** The provisions of Chapter 6 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

### 602 Drinking Fountains

**602.1 General.** Drinking fountains shall comply with 307 and 602.

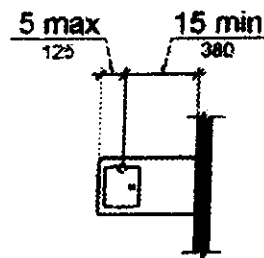
**602.2 Clear Floor Space.** Units shall have a clear floor or ground space complying with 305 positioned for a forward approach and centered on the unit. Knee and toe clearance complying with 306 shall be provided.

**EXCEPTION:** A parallel approach complying with 305 shall be permitted at units for *children's use* where the spout is 30 inches (760 mm) maximum above the finish floor or ground and is 3½ inches (90 mm) maximum from the front edge of the unit, including bumpers.

**602.3 Operable Parts.** Operable parts shall comply with 309.

**602.4 Spout Height.** Spout outlets shall be 36 inches (915 mm) maximum above the finish floor or ground.

**602.5 Spout Location.** The spout shall be located 15 inches (380 mm) minimum from the vertical support and 5 inches (125 mm) maximum from the front edge of the unit, including bumpers.



**Figure 602.5**  
**Drinking Fountain Spout Location**

**602.6 Water Flow.** The spout shall provide a flow of water 4 inches (100 mm) high minimum and shall be located 5 inches (125 mm) maximum from the front of the unit. The angle of the water stream shall be measured horizontally relative to the front face of the unit. Where spouts are located less than 3 inches (75 mm) of the front of the unit, the angle of the water stream shall be 30 degrees maximum. Where spouts are located between 3 inches (75 mm) and 5 inches (125 mm) maximum from the front of the unit, the angle of the water stream shall be 15 degrees maximum.

**Advisory 602.6 Water Flow.** The purpose of requiring the drinking fountain spout to produce a flow of water 4 inches (100 mm) high minimum is so that a cup can be inserted under the flow of water to provide a drink of water for an individual who, because of a disability, would otherwise be incapable of using the drinking fountain.

**602.7 Drinking Fountains for Standing Persons.** Spout outlets of drinking fountains for standing persons shall be 38 inches (965 mm) minimum and 43 inches (1090 mm) maximum above the finish floor or ground.

### **603 Toilet and Bathing Rooms**

**603.1 General.** Toilet and bathing rooms shall comply with 603.

**603.2 Clearances.** Clearances shall comply with 603.2.

**603.2.1 Turning Space.** Turning space complying with 304 shall be provided within the room.

**603.2.2 Overlap.** Required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap.

**603.2.3 Door Swing.** Doors shall not swing into the clear floor space or clearance required for any fixture. Doors shall be permitted to swing into the required turning space.

**EXCEPTIONS:** 1. Doors to a toilet room or bathing room for a single occupant accessed only through a private office and not for *common use* or *public use* shall be permitted to swing into the clear floor space or clearance provided the swing of the door can be reversed to comply with 603.2.3.

2. Where the toilet room or bathing room is for individual use and a clear floor space complying with 305.3 is provided within the room beyond the arc of the door swing, doors shall be permitted to swing into the clear floor space or clearance required for any fixture.

**Advisory 603.2.3 Door Swing Exception 1.** At the time the door is installed, and if the door swing is reversed in the future, the door must meet all the requirements specified in 404. Additionally, the door swing cannot reduce the required width of an accessible route. Also, avoid violating other building or life safety codes when the door swing is reversed.

**603.3 Mirrors.** Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the finish floor or ground. Mirrors not located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches (890 mm) maximum above the finish floor or ground.

**Advisory 603.3 Mirrors.** A single full-length mirror can accommodate a greater number of people, including children. In order for mirrors to be usable by people who are ambulatory and people who use wheelchairs, the top edge of mirrors should be 74 inches (1880 mm) minimum from the floor or ground.

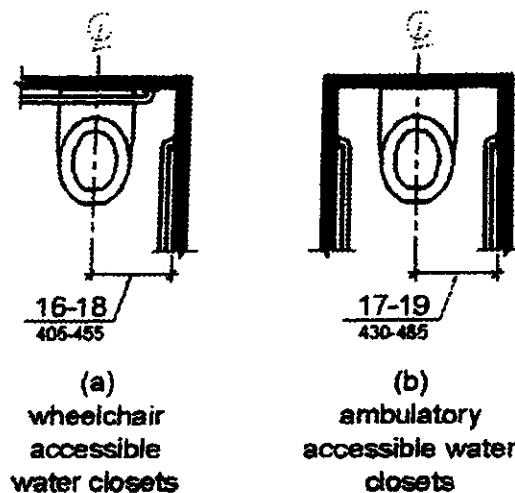
**603.4 Coat Hooks and Shelves.** Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor.

### 604 Water Closets and Toilet Compartments

**604.1 General.** Water closets and toilet compartments shall comply with 604.2 through 604.8.

**EXCEPTION:** Water closets and toilet compartments for *children's use* shall be permitted to comply with 604.9.

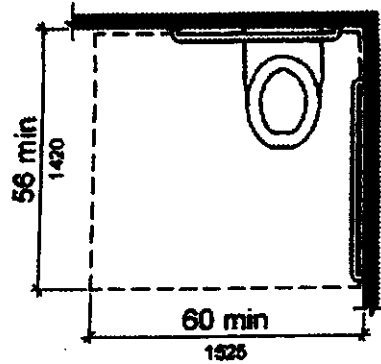
**604.2 Location.** The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches (405 mm) minimum to 18 inches (455 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Water closets shall be arranged for a left-hand or right-hand approach.



**Figure 604.2**  
**Water Closet Location**

**604.3 Clearance.** Clearances around water closets and in toilet compartments shall comply with 604.3.

**604.3.1 Size.** Clearance around a water closet shall be 60 inches (1525 mm) minimum measured perpendicular from the side wall and 56 inches (1420 mm) minimum measured perpendicular from the rear wall.

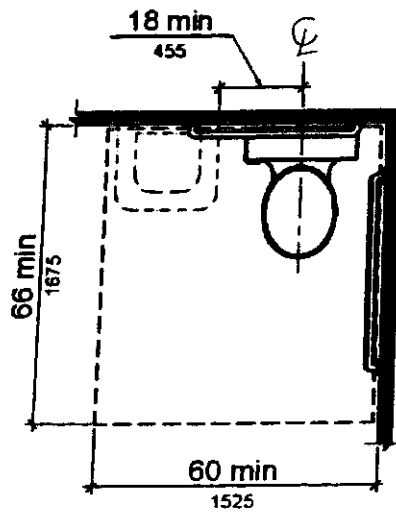


**Figure 604.3.1**  
**Size of Clearance at Water Closets**

**604.3.2 Overlap.** The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, dispensers, sanitary napkin disposal units, coat hooks, shelves, accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance.

**EXCEPTION:** In residential dwelling units, a lavatory complying with 606 shall be permitted on the rear wall 18 inches (455 mm) minimum from the water closet centerline where the clearance at the water closet is 66 inches (1675 mm) minimum measured perpendicular from the rear wall.

**Advisory 604.3.2 Overlap.** When the door to the toilet room is placed directly in front of the water closet, the water closet cannot overlap the required maneuvering clearance for the door inside the room.



**Figure 604.3.2 (Exception)**  
**Overlap of Water Closet Clearance in Residential Dwelling Units**

**604.4 Seats.** The seat height of a water closet above the finish floor shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

**EXCEPTIONS:** 1. A water closet in a toilet room for a single occupant accessed only through a private office and not for *common use* or *public use* shall not be required to comply with 604.4.

2. In *residential dwelling units*, the height of water closets shall be permitted to be 15 inches (380 mm) minimum and 19 inches (485 mm) maximum above the finish floor measured to the top of the seat.

**604.5 Grab Bars.** Grab bars for water closets shall comply with 609. Grab bars shall be provided on the side wall closest to the water closet and on the rear wall.

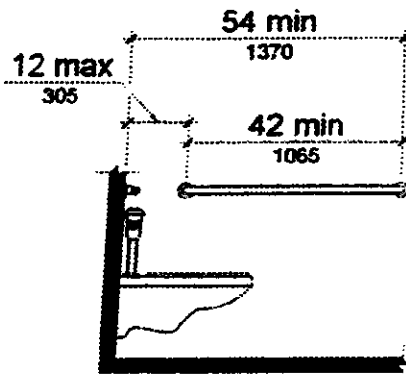
**EXCEPTIONS:** 1. Grab bars shall not be required to be installed in a toilet room for a single occupant accessed only through a private office and not for *common use* or *public use* provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 604.5.

2. In *residential dwelling units*, grab bars shall not be required to be installed in toilet or bathrooms provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 604.5.

3. In detention or correction *facilities*, grab bars shall not be required to be installed in housing or holding cells that are specially designed without protrusions for purposes of suicide prevention.

**Advisory 604.5 Grab Bars Exception 2.** Reinforcement must be sufficient to permit the installation of rear and side wall grab bars that fully meet all accessibility requirements including, but not limited to, required length, installation height, and structural strength.

**604.5.1 Side Wall.** The side wall grab bar shall be 42 inches (1065 mm) long minimum, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1370 mm) minimum from the rear wall.

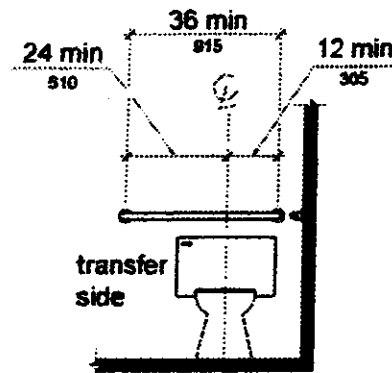


**Figure 604.5.1**  
Side Wall Grab Bar at Water Closets

**604.5.2 Rear Wall.** The rear wall grab bar shall be 36 inches (915 mm) long minimum and extend from the centerline of the water closet 12 inches (305 mm) minimum on one side and 24 inches (610 mm) minimum on the other side.

**EXCEPTIONS:** 1. The rear grab bar shall be permitted to be 24 inches (610 mm) long minimum, centered on the water closet, where wall space does not permit a length of 36 inches (915 mm) minimum due to the location of a recessed fixture adjacent to the water closet.

2. Where an *administrative authority* requires flush controls for flush valves to be located in a position that conflicts with the location of the rear grab bar, then the rear grab bar shall be permitted to be split or shifted to the open side of the toilet area.



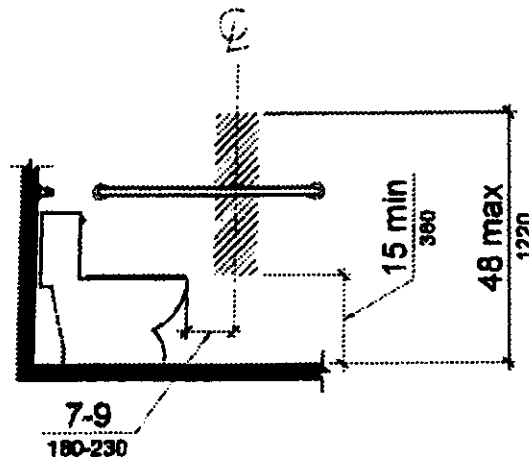
**Figure 604.5.2**  
**Rear Wall Grab Bar at Water Closets**

**604.6 Flush Controls.** Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309. Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with 604.8.2.

**Advisory 604.6 Flush Controls.** If plumbing valves are located directly behind the toilet seat, flush valves and related plumbing can cause injury or imbalance when a person leans back against them. To prevent causing injury or imbalance, the plumbing can be located behind walls or to the side of the toilet; or if approved by the local authority having jurisdiction, provide a toilet seat lid.

**604.7 Dispensers.** Toilet paper dispensers shall comply with 309.4 and shall be 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 15 inches (380 mm) minimum and 48 inches (1220 mm) maximum above the finish floor and shall not be located behind grab bars. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

**Advisory 604.7 Dispensers.** If toilet paper dispensers are installed above the side wall grab bar, the outlet of the toilet paper dispenser must be 48 inches (1220 mm) maximum above the finish floor and the top of the gripping surface of the grab bar must be 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the finish floor.



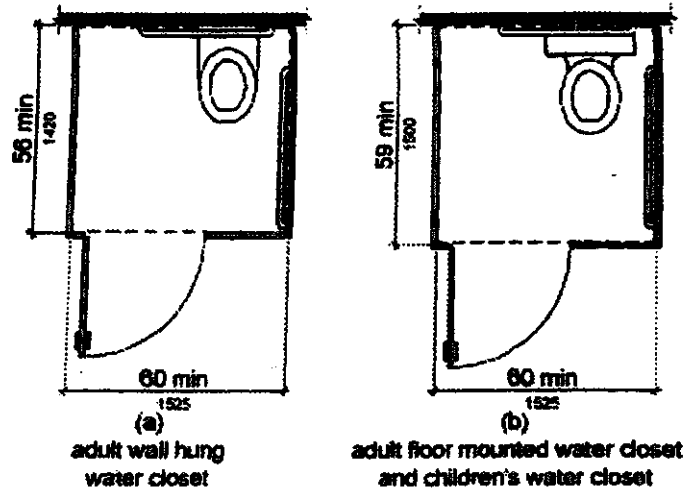
**Figure 604.7**  
**Dispenser Outlet Location**

**604.8 Toilet Compartments.** Wheelchair accessible toilet compartments shall meet the requirements of 604.8.1 and 604.8.3. Compartments containing more than one plumbing fixture shall comply with 603. Ambulatory accessible compartments shall comply with 604.8.2 and 604.8.3.

**604.8.1 Wheelchair Accessible Compartments.** Wheelchair accessible compartments shall comply with 604.8.1.

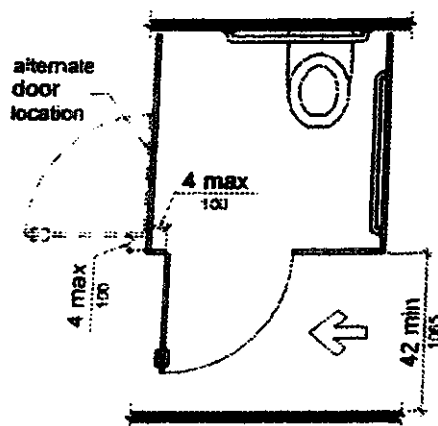
**604.8.1.1 Size.** Wheelchair accessible compartments shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 56 inches (1420 mm) deep minimum for wall hung water closets and 59 inches (1500 mm) deep minimum for floor mounted water closets measured perpendicular to the rear wall. Wheelchair accessible compartments for children's use shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 59 inches (1500 mm) deep minimum for wall hung and floor mounted water closets measured perpendicular to the rear wall.

**Advisory 604.8.1.1 Size.** The minimum space required in toilet compartments is provided so that a person using a wheelchair can maneuver into position at the water closet. This space cannot be obstructed by baby changing tables or other fixtures or conveniences, except as specified at 604.3.2 (Overlap). If toilet compartments are to be used to house fixtures other than those associated with the water closet, they must be designed to exceed the minimum space requirements. Convenience fixtures such as baby changing tables must also be accessible to people with disabilities as well as to other users. Toilet compartments that are designed to meet, and not exceed, the minimum space requirements may not provide adequate space for maneuvering into position at a baby changing table.



**Figure 604.8.1.1**  
**Size of Wheelchair Accessible Toilet Compartment**

**604.8.1.2 Doors.** Toilet compartment doors, including door hardware, shall comply with 404 except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum. Doors shall be located in the front partition or in the side wall or partition farthest from the water closet. Where located in the front partition, the door opening shall be 4 inches (100 mm) maximum from the side wall or partition farthest from the water closet. Where located in the side wall or partition, the door opening shall be 4 inches (100 mm) maximum from the front partition. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

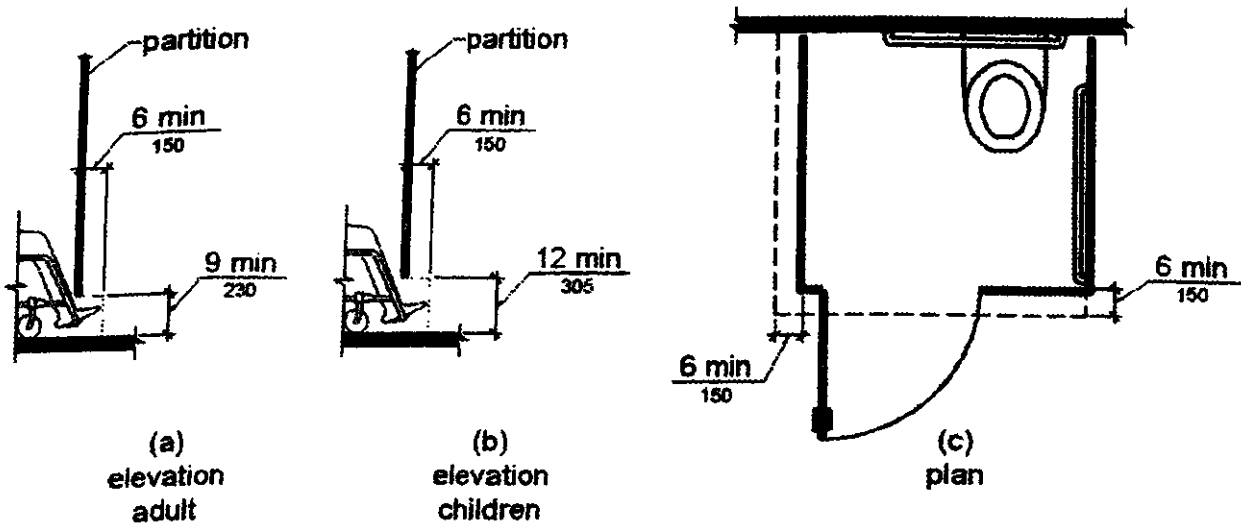


**Figure 604.8.1.2**  
**Wheelchair Accessible Toilet Compartment Doors**

**604.8.1.3 Approach.** Compartments shall be arranged for left-hand or right-hand approach to the water closet.

**604.8.1.4 Toe Clearance.** The front partition and at least one side partition shall provide a toe clearance of 9 inches (230 mm) minimum above the finish floor and 6 inches (150 mm) deep minimum beyond the compartment-side face of the partition, exclusive of partition support members. Compartments for *children's use* shall provide a toe clearance of 12 inches (305 mm) minimum above the finish floor.

**EXCEPTION:** Toe clearance at the front partition is not required in a compartment greater than 62 inches (1575 mm) deep with a wall-hung water closet or 65 inches (1650 mm) deep with a floor-mounted water closet. Toe clearance at the side partition is not required in a compartment greater than 66 inches (1675 mm) wide. Toe clearance at the front partition is not required in a compartment for *children's use* that is greater than 65 inches (1650 mm) deep.



**Figure 604.8.1.4**  
**Wheelchair Accessible Toilet Compartment Toe Clearance**

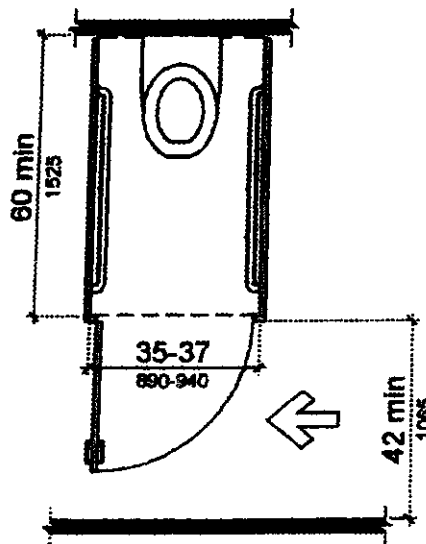
**604.8.1.5 Grab Bars.** Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 shall be provided and shall be located on the wall closest to the water closet. In addition, a rear-wall grab bar complying with 604.5.2 shall be provided.

**604.8.2 Ambulatory Accessible Compartments.** Ambulatory accessible compartments shall comply with 604.8.2.

**604.8.2.1 Size.** Ambulatory accessible compartments shall have a depth of 60 inches (1525 mm) minimum and a width of 35 inches (890 mm) minimum and 37 inches (940 mm) maximum.

**604.8.2.2 Doors.** Toilet compartment doors, including door hardware, shall comply with 404, except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

**604.8.2.3 Grab Bars.** Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 shall be provided on both sides of the compartment.



**Figure 604.8.2**  
**Ambulatory Accessible Toilet Compartment**

**604.8.3 Coat Hooks and Shelves.** Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor.

**604.9 Water Closets and Toilet Compartments for Children's Use.** Water closets and toilet compartments for *children's use* shall comply with 604.9.

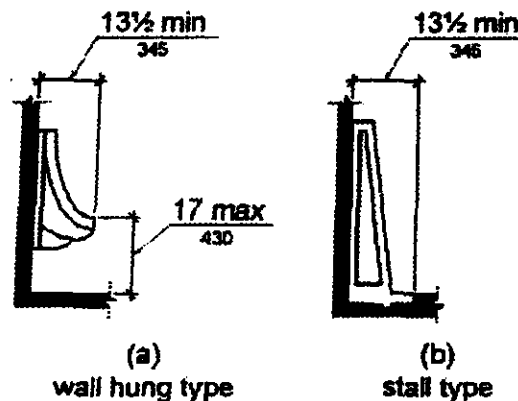
**Advisory 604.9 Water Closets and Toilet Compartments for Children's Use.** The requirements in 604.9 are to be followed where the exception for children's water closets in 604.1 is used. The following table provides additional guidance in applying the specifications for water closets for children according to the age group served and reflects the differences in the size, stature, and reach ranges of children ages 3 through 12. The specifications chosen should correspond to the age of the primary user group. The specifications of one age group should be applied consistently in the installation of a water closet and related elements.

## 605 Urinals

**605.1 General.** Urinals shall comply with 605.

**Advisory 605.1 General.** Stall-type urinals provide greater accessibility for a broader range of persons, including people of short stature.

**605.2 Height and Depth.** Urinals shall be the stall-type or the wall-hung type with the rim 17 inches (430 mm) maximum above the finish floor or ground. Urinals shall be 13½ inches (345 mm) deep minimum measured from the outer face of the urinal rim to the back of the fixture.



**Figure 605.2**  
Height and Depth of Urinals

**605.3 Clear Floor Space.** A clear floor or ground space complying with 305 positioned for forward approach shall be provided.

**605.4 Flush Controls.** Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309.

## 606 Lavatories and Sinks

**606.1 General.** Lavatories and sinks shall comply with 606.

**Advisory 606.1 General.** If soap and towel dispensers are provided, they must be located within the reach ranges specified in 308. Locate soap and towel dispensers so that they are conveniently usable by a person at the accessible lavatory.

**606.2 Clear Floor Space.** A clear floor space complying with 305, positioned for a forward approach, and knee and toe clearance complying with 306 shall be provided.

**EXCEPTIONS:** 1. A parallel approach complying with 305 shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided and to wet bars.

2. A lavatory in a toilet room or bathing facility for a single occupant accessed only through a private office and not for *common use* or *public use* shall not be required to provide knee and toe clearance complying with 306.
3. In *residential dwelling units*, cabinetry shall be permitted under lavatories and kitchen sinks provided that all of the following conditions are met:
  - (a) the cabinetry can be removed without removal or replacement of the fixture;
  - (b) the finish floor extends under the cabinetry; and
  - (c) the walls behind and surrounding the cabinetry are finished.
4. A knee clearance of 24 inches (610 mm) minimum above the finish floor or ground shall be permitted at lavatories and sinks used primarily by children 6 through 12 years where the rim or counter surface is 31 inches (785 mm) maximum above the finish floor or ground.
5. A parallel approach complying with 305 shall be permitted to lavatories and sinks used primarily by children 5 years and younger.
6. The dip of the overflow shall not be considered in determining knee and toe clearances.
7. No more than one bowl of a multi-bowl sink shall be required to provide knee and toe clearance complying with 306.

**606.3 Height.** Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches (865 mm) maximum above the finish floor or ground.

**EXCEPTIONS:** 1. A lavatory in a toilet or bathing facility for a single occupant accessed only through a private office and not for *common use* or *public use* shall not be required to comply with 606.3.

2. In *residential dwelling unit* kitchens, sinks that are adjustable to variable heights, 29 inches (735 mm) minimum and 36 inches (915 mm) maximum, shall be permitted where rough-in plumbing permits connections of supply and drain pipes for sinks mounted at the height of 29 inches (735 mm).

**606.4 Faucets.** Controls for faucets shall comply with 309. Hand-operated metering faucets shall remain open for 10 seconds minimum.