

(c) If portions of the car are modified in a way that affects or could affect accessibility, each such portion shall comply, to the extent practicable, with the applicable provisions of this subpart. This provision does not require that inaccessible cars be retrofitted with lifts, ramps or other boarding devices.

(d) Passenger coaches or food service cars shall have the number of spaces complying with §1192.125(d)(2) and the number of spaces complying with §1192.125(d)(3), as required by 49 CFR 37.91.

(e) Existing cars retrofitted to meet the seating requirements of 49 CFR 37.91 shall comply with §§1192.113(e), 1192.123, 1192.125(d) and shall have at least one door on each side from which passengers board complying with §1192.113(d). Existing cars designed and manufactured to be accessible in accordance with Department of Transportation regulations implementing section 504 of the Rehabilitation Act of 1973 that were in effect before October 7, 1991, shall comply with §1192.125(a).

#### § 1192.113 Doorways.

(a) *Clear width.* (1) At least one doorway, on each side of the car from which passengers board, of each car required to be accessible by §1192.111(a) and where the spaces required by §1192.111(d) are located, and at least one adjacent doorway into coach passenger compartments shall have a minimum clear opening width of 32 inches.

(2) Doorways at ends of cars connecting two adjacent cars, to the maximum extent practicable in accordance with regulations issued under the Federal Railroad Safety Act of 1970 (49 CFR parts 229 and 231), shall have a clear opening width of 32 inches to permit wheelchair and mobility aid users to enter into a single-level dining car, if available.

(b) *Passaway.* Doorways required to be accessible by paragraph (a) of this section shall permit access by persons using mobility aids and shall have an unobstructed passageway at least 32 inches wide leading to an accessible sleeping compartment complying with §1192.127 or seating locations complying with §1192.125(d). In cars where such doorways require passage through

a vestibule, such vestibule shall have a minimum width of 42 inches. (see Fig. 4)

(c) *Signals.* If doors to the platform close automatically or from a remote location, auditory and visual warning signals shall be provided to alert passengers of closing doors.

(d) *Coordination with boarding platforms—(1) Requirements.* Cars which provide level-boarding in stations with high platforms shall be coordinated with the boarding platform or mini-high platform design such that the horizontal gap between a car at rest and the platform shall be no greater than 3 inches and the height of the car floor shall be within plus or minus  $\frac{5}{8}$  inch of the platform height. Vertical alignment may be accomplished by car air suspension, platform lifts or other devices, or any combination.

(2) *Exception.* New cars operating in existing stations may have a floor height within plus or minus  $1\frac{1}{2}$  inches of the platform height.

(3) *Exception.* Where platform setbacks do not allow the horizontal gap or vertical alignment specified in paragraph (d) (1) or (2) of this section, platform or portable lifts complying with §1192.125(b), or car or platform bridge plates, complying with §1192.125(c), may be provided.

(4) *Exception.* Retrofitted vehicles shall be coordinated with the platform in existing stations such that the horizontal gap shall be no greater than 4 inches and the height of the vehicle floor, under 50% passenger load, shall be within plus or minus 2 inches of the platform height.

(e) *Signage.* The International Symbol of Accessibility shall be displayed on the exterior of all doors complying with this section unless all cars and doors are accessible and are not marked by the access symbol (see Fig. 6). Appropriate signage shall also indicate which accessible doors are adjacent to an accessible restroom, if applicable.

#### § 1192.115 Interior circulation, handrails and stanchions.

(a) Where provided, handrails or stanchions within the passenger compartment shall be placed to permit sufficient turning and maneuvering space

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for wheelchairs and other mobility aids to reach a seating location, complying with § 1192.125(d), from an accessible entrance. The diameter or width of the gripping surface of interior handrails and stanchions shall be 1¼ inches to 1½ inches or shall provide an equivalent gripping surface. Handrails shall be placed to provide a minimum 1½ inches knuckle clearance from the nearest adjacent surface.

(b) Where provided, handrails and stanchions shall be sufficient to permit safe boarding, on-board circulation, seating and standing assistance, and alighting by persons with disabilities.

(c) At entrances equipped with steps, handrails or stanchions shall be provided in the entrance to the car in a configuration which allows passengers to grasp such assists from outside the car while starting to board, and to continue using such assists throughout the boarding process, to the extent permitted by 49 CFR part 231.

### § 1192.117 Floors, steps and thresholds.

(a) Floor surfaces on aisles, step treads and areas where wheelchair and mobility aid users are to be accommodated shall be slip-resistant.

(b) All step edges and thresholds shall have a band of color(s) running the full width of the step or threshold which contrasts from the step tread and riser or adjacent floor, either light-on-dark or dark-on-light.

### § 1192.119 Lighting.

(a) Any stepwell, or doorway with a lift, ramp or bridge plate, shall have, when the door is open, at least 2 foot-candles of illumination measured on the step tread, ramp, bridge plate or lift platform.

(b) The doorways of cars not operating at lighted station platforms shall have outside lights which, when the door is open, provide at least 1 foot-candle of illumination on the station platform surface for a distance of 3 feet perpendicular to all points on the bottom step tread edge. Such lights shall be shielded to protect the eyes of entering and exiting passengers.

### § 1192.121 Public information system.

(a) Each car shall be equipped with a public address system permitting

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transportation system personnel, or recorded or digitized human speech messages, to announce stations and provide other passenger information. Alternative systems or devices which provide equivalent access are also permitted.

(b) [Reserved]

### § 1192.123 Restrooms.

(a) If a restroom is provided for the general public, and an accessible restroom is required by § 1192.111 (a) and (e), it shall be designed so as to allow a person using a wheelchair or mobility aid to enter and use such restroom as specified in paragraphs (a) (1) through (5) of this section.

(1) The minimum clear floor area shall be 35 inches by 60 inches. Permanently installed fixtures may overlap this area a maximum of 6 inches, if the lowest portion of the fixture is a minimum of 9 inches above the floor, and may overlap a maximum of 19 inches, if the lowest portion of the fixture is a minimum of 29 inches above the floor. Fixtures shall not interfere with access to and use of the water closet. Fold-down or retractable seats or shelves may overlap the clear floor space at a lower height provided they can be easily folded up or moved out of the way.

(2) The height of the water closet shall be 17 inches to 19 inches measured to the top of the toilet seat. Seats shall not be sprung to return to a lifted position.

(3) A grab bar at least 24 inches long shall be mounted behind the water closet, and a horizontal grab bar at least 40 inches long shall be mounted on at least one side wall, with one end not more than 12 inches from the back wall, at a height between 33 inches and 36 inches above the floor.

(4) Faucets and flush controls shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf (22.2 N). Controls for flush valves shall be mounted no more than 44 inches above the floor.

(5) Doorways on the end of the enclosure, opposite the water closet, shall have a minimum clear opening width of 32 inches. Doorways on the side wall shall have a minimum clear opening