is to be demonstrated through sled testing, the seat structure and seat attachment to the sled that are used in such testing must be representative of the actual seat structure in, and seat attachment to, the rail vehicle subject to the requirements of this section. If the attachment strength of any other interior fitting is to be demonstrated through sled testing, for purposes of showing compliance with the requirements of this section, such testing shall be conducted in a similar manner.

[64 FR 25660, May 12, 1999, as amended at 67 FR 19992, Apr. 23, 2002]

### § 238.437 Emergency communication.

A means of emergency communication throughout a train shall be provided and shall include the following:

(a) Except as further specified, transmission locations at each end of each passenger car, adjacent to the car's end doors, and accessible to both passengers and crewmembers without requiring the use of a tool or other implement. If the passenger car does not exceed 45 feet in length, or if the passenger car was ordered prior to May 12, 1999, only one transmission location is required;

(b) Transmission locations that are clearly marked with luminescent material;

(c) Clear and understandable operating instructions at or near each transmission location; and

(d) Back-up power for a minimum period of 90 minutes.

[64 FR 25660, May 12, 1999, as amended at 67 FR 19993, Apr. 23, 2002]

### § 238.439 Doors.

(a) Each passenger car shall have a minimum of two exterior side doors, each door providing a minimum clear opening with dimensions of 30 inches horizontally by 74 inches vertically.

NOTE: The Americans with Disabilities Act (ADA) Accessibility Specifications for Transportation Vehicles also contain requirements for doorway clearance (See 49 CFR part 38).

(b) Each passenger car shall be equipped with a manual override feature for each powered, exterior side door. Each manual override must be:

(1) Capable of releasing the door to permit it to be opened, without power, from both inside and outside the car;

(2) Located adjacent to the door which it controls; and

(3) Designed and maintained so that a person may readily access and operate the override device from both inside and outside the car without the use of any tool or other implement.

(c) The status of each powered, exterior side door in a passenger car shall be displayed to the crew in the operating cab. If door interlocks are used, the sensors used to detect train motion shall be nominally set to operate at 3 mph.

(d) Each powered, exterior side door in a passenger car shall be connected to an emergency back-up power system.

(e) A railroad may protect a manual override device used to open a powered, exterior door with a cover or a screen capable of removal without requiring the use of a tool or other implement.

(f) A passenger compartment end door (other than a door providing access to the exterior of the trainset) shall be equipped with a kick-out panel, pop-out window, or other similar means of egress in the event the door will not open, or shall be so designed as to pose a negligible probability of becoming inoperable in the event of car body distortion following a collision or derailment.

(g) Door exits shall be marked, and instructions provided for their use, as required by § 239.107(a) of this chapter.

[64 FR 25660, May 12, 1999, as amended at 67 FR 19993, Apr. 23, 2002]

### § 238.441 Emergency roof entrance location.

(a) Each passenger car and power car cab shall have a minimum of one roof hatch emergency entrance location with a minimum opening of 18 inches by 24 inches, or at least one clearly marked structural weak point in the roof having a minimum opening of the same dimensions to provide quick access for properly equipped emergency response personnel.

(b) *Marking and instructions.* [Reserved]