Subpart A - General

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§ 238.5 Definitions. As used in this part—

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Dual-function window means a window that is intended to serve as both an emergency window exit and a rescue access window and that meets the respective requirements set forth in **§§** 238.113(b)-(d) and 238.114(b)-(d) of this part.

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Intercom means the device through which voice communication is transmitted and received.

Intercom system (or intercommunication system) means a two-way, voice communication system.

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Main level means a level of a passenger car that contains a passenger compartment whose length is equal to or greater than half the length of the car.

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Passenger compartment means an area of a passenger car that consists of a seating area and any vestibule that is connected to the seating area by an open passageway.

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PA system (or public address system) means a one-way, voice communication system.

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Rescue access window means a side-facing exterior window intended for use by emergency responders to gain access to passengers in an emergency situation.

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Seating area means an area of a passenger car that normally contains passenger seating.

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Vestibule means an area of a passenger car that normally does not contain seating and is used in passing from the seating area to the side exit doors.

§ 238.17 Movement of passenger equipment with other than power brake defects.

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(b) Limitations on movement of passenger equipment containing defects found at time of calendar day inspection. Except as provided in §§ 238.303(e)(15), 238.303(e)(17) and (e)(18), 238.305(c) and (d), and 238.307(c)(1), passenger equipment containing a condition not in conformity with this part at the time of its calendar day mechanical inspection may be moved from that location for repair if all of the following conditions are satisfied:

* * * * *

(c) Limitations on movement of passenger equipment that develops defects en route. Except as provided in §§ 238.303(e)(15), 238.303(e)(17) and (e)(18), 238.305(c), 238.307(c)(1), and 238.503(f), passenger equipment that develops en route to its destination, after its calendar day mechanical inspection is performed and before its next calendar day mechanical inspection is performed and before with this part, other than a power brake defect, may be moved only if the railroad complies with all of the following requirements or, if applicable, the special requirements in paragraph (e) of this section:

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Subpart B - Safety Planning and General Requirements

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§ 238.113 Emergency window exits.

(a) *Number and location*. Except as provided in paragraph (a)(3) of this section, the following requirements apply on or after [EFFECTIVE DATE OF RULE].¹

(1) Single-level passenger cars. Each single-level passenger car shall have a minimum of four emergency window exits. At least one emergency window exit shall be located in each side of each end (half) of the car, in a staggered configuration where practical. (See Figure 1 to this subpart for an illustration of this requirement.)

(2) *Multi-level passenger cars - main levels*. Each main level in a multi-level passenger car is subject to the same requirements specified for single-level passenger cars in paragraph (a)(1) of this section.

(3) Multi-level passenger cars - other levels (auxiliary seating areas).²

(i) Except as provided below, on or after [15 MONTHS AFTER EFFECTIVE DATE OF RULE] any other level used for passenger seating in a multi-level passenger car shall have a minimum of two emergency window exits in each seating area. The emergency window exits shall be accessible to passengers in the seating area without requiring movement through an interior door or to another level of the car. At least one emergency window exit shall be located in each side of the seating area. An emergency window exit may be located within an exterior side door in the passenger compartment if it is not practical to place the window exit in the side of the seating area.³

(ii) Only one emergency window exit is required in a seating area in a passenger compartment if:

(A) It is not practical to place an emergency window exit in a side of the passenger compartment due to the need to provide accessible accommodations under the Americans with Disabilities Act;

(B) There are no more than 4 seats in the seating area; and

(C) A suitable, alternate arrangement for emergency egress is provided.⁴

2 These requirements are phased in over 15 months to address concerns of LIRR and other properties with windows but no pull handles.

3 There will be two accessible side windows; consequently, there is no limitation on the number of seats. This allows railroad/manufacturer to take into consideration electrical lockers and other areas unrelated to ADA compliance concerns.

4 Kawasaki presented a car design to the task force that contained an interior door with a removable window panel (with pull handles on both sides) that leads to a window exit in a side

¹ These requirements would apply to all equipment – new and existing. Exceptions are contained in \$ 238.113(a)(3)(ii)-(iii).

(iii) For passenger cars ordered prior to [ONE YEAR AFTER EFFECTIVE DATE OF FINAL RULE], or placed in service prior to [THREE YEARS AFTER EFFECTIVE DATE OF FINAL RULE], only one emergency window exit is required in a seating area in a passenger compartment if it is not practicable to place a window exit in a side of the passenger compartment (due to the presence of such structures as a bathroom, electrical locker, or kitchen) and there are no more than 8 seats in the seating area.

(4) *Cars with sleeping compartments or similar private compartments*. Each level of a passenger car with a sleeping compartment or a similar private compartment intended to be occupied by passengers or train crewmembers shall have at least one emergency window exit in each such compartment. For purposes of this paragraph, a bathroom, kitchen, and locomotive cab are not considered "compartments."⁵

(b) *Ease of operability.* On or after November 8, 1999, each emergency window exit shall be designed to permit rapid and easy removal from the inside of the car during an emergency situation without requiring the use of a tool or other implement.

(c) *Dimensions*. Each emergency window exit in a passenger car, including a sleeping car, ordered on or after September 8, 2000, or placed in service for the first time on or after September 9, 2002, shall have an unobstructed opening with minimum dimensions of 26 inches horizontally by 24 inches vertically. An emergency window exit located within an exterior side door, in accordance with the requirements of paragraph (a)(3)(i) of this section, may have an unobstructed opening with minimum dimensions of 24 inches horizontally by 26 inches vertically. A seat back is not an obstruction if it can be moved away from the window opening without requiring the use of a tool or other implement.

(d) *Marking and instructions*. Each emergency window exit shall be conspicuously and legibly marked with luminescent material on the inside of each car to facilitate passenger egress. Legible and understandable operating instructions, including instructions for removing the window, shall be posted at or near each such window exit.⁶ If window removal may be hindered by the presence of a seatback, headrest, luggage rack, or other fixture, the instructions shall state the method for allowing rapid and easy removal of the window, taking into account the fixture, and this portion of the instructions may be in written or pictorial format.

door.

5 In the preamble, FRA would note that a private seating area (such as those found on certain European trains or on some old-fashioned American trains) is a private compartment.

6 The requirements of 223.9(d)(1), which concern emergency window exit marking and instructions, have been moved here.

§ 238.114 Rescue access windows.

(a) *Number and location*. Except as provided in paragraphs (a)(1) and (a)(3) of this section, the following requirements apply on or after [EFFECTIVE DATE OF RULE]—

(1) Single-level passenger cars. Except as provided below and in paragraph (a)(5), each single-level passenger car shall have a minimum of two rescue access windows. At least one rescue access window shall be located in each side of the car entirely within fifteen feet of the centerline of the car, or entirely within seven and one-half feet of the centerline if the car does not exceed 45 feet in length. If the seating level is obstructed by an interior door or otherwise partitioned into separate or auxiliary seating areas, each separate seating area shall have a minimum of one rescue access window in each side of the seating area, located as near to the center of the car as practical. For passenger cars ordered prior to [INSERT DATE ONE YEAR AFTER EFFECTIVE DATE OF FINAL RULE], or placed in service prior to [INSERT DATE THREE YEARS AFTER EFFECTIVE DATE OF FINAL RULE], rescue access windows may be located within exterior side doors if at least one rescue access window is located within each end (half) and each side of the same passenger compartment.

(2) *Multi-level passenger cars - main levels*. Each main level in a multi-level passenger car is subject to the same requirements specified for single-level passenger cars in paragraph (a)(1) of this section.

(3) *Multi-level passenger cars - other levels (auxiliary seating areas).*

(i) Except as provided below, any other level used for passenger seating in a multilevel passenger car shall have a minimum of two rescue access windows in each seating area. The rescue access windows shall permit emergency responders to gain access to passengers in the seating area without requiring movement through an interior door or to another level of the car. At least one rescue access window shall be located in each side of the seating area. A rescue access window may be located within an exterior side door in the passenger compartment if it is not practical to place the access window in the side of the seating area.

(ii) Only one rescue access window is required in a seating area in a passenger compartment if:

(A) It is not practical to place a rescue access window in a side of the passenger compartment due to the need to provide accessible accommodations under the Americans with Disabilities Act;

(B) There are no more than 4 seats in the seating area; and

(C) A suitable, alternate arrangement for rescue access is provided.⁷

(iii) For passenger cars ordered prior to [INSERT DATE ONE YEAR AFTER EFFECTIVE DATE OF FINAL RULE], or placed in service prior to [INSERT DATE THREE YEARS AFTER EFFECTIVE DATE OF FINAL RULE], only one rescue access window is required in a seating area in a passenger compartment if it is not practicable to place an access window in a side of the passenger compartment (due to the presence of such structures as a

⁷Kawasaki presented a car design to the task force that contained an emergency window exit in the vestibule side door and an interior door with a removable window panel (with pull handles on both sides) that leads to the seating area.

bathroom, electrical locker, or kitchen) and there are no more than 8 seats in the seating area.

(4) *Cars with sleeping compartments or similar private compartments.* Each level of a passenger car with a sleeping compartment or a similar private compartment intended to be occupied by passengers or train crewmembers shall have a minimum of one rescue access window in each such compartment. For purposes of this paragraph, a bathroom, kitchen, and locomotive cab are not considered "compartments."

(5) *Dual-function windows*. If on any level of a passenger car the emergency window exits installed to meet the minimum requirements of § 238.113 of this part are intended to function as rescue access windows, the rescue access window number and location requirements of paragraphs (a)(1) through (a)(4) of this section are met for that level.

(b) *Ease of operability*. On or after [EFFECTIVE DATE OF FINAL RULE], each rescue access window must be capable of being removed without undue delay by an emergency responder using either:

(1) a provided external mechanism; or

(2) tools or implements that are commonly available to the responder in a passenger train emergency.

(c) *Dimensions*. Each rescue access window in a passenger car, including a sleeping car, ordered on or after [ONE YEAR AFTER EFFECTIVE DATE OF FINAL RULE], or placed in service for the first time on or after [THREE YEARS AFTER EFFECTIVE DATE OF FINAL RULE], shall have an unobstructed opening with minimum dimensions of 26 inches horizontally by 24 inches vertically. A rescue access window located within an exterior side door, in accordance with the requirements of paragraph (a)(3)(i) of this section, may have an unobstructed opening with minimum dimensions of 24 inches horizontally by 26 inches vertically. A seat back is not an obstruction if it can be moved away from the window opening without requiring the use of a tool or other implement.

(d) *Marking and instructions*. Each rescue access window shall be marked with a retroreflective, unique, and easily recognizable symbol or other conspicuous marking. Legible and understandable window-access instructions, including instructions for removing the window, shall be posted at or near each rescue access window.⁸

⁸ The requirements of § 223.9(d)(2), which concern rescue access window marking and instructions, have been moved here. As a "rescue access window" is defined as a window intended for emergency access by emergency responders, the text of § 223.9(d)(2) fits logically here. The last sentence of the paragraph reflects the TF agreement to require the instructions "at or near" each such window.

§ 238.117 Emergency Communications.

(a) *PA system*.

(1) Existing Tier I passenger cars. On or after January 1, 2012, each Tier I passenger car shall be equipped with a PA system that provides a means for a crewmember to communicate to all train passengers in an emergency situation.

(2) New Tier I and all Tier II passenger cars. Each Tier I passenger car ordered on or after [INSERT EFFECTIVE DATE OF FINAL RULE], or placed in service [INSERT DATE TWO YEARS AFTER EFFECTIVE DATE OF FINAL RULE], and all Tier II passenger cars shall be equipped with a PA system that provides a means for a crewmember to communicate to all train passengers in an emergency situation. The PA system shall also provide a means for a crewmember to communicate in an emergency situation to persons in the immediate vicinity of the train (*e.g.*, on the station platform). The PA system may be part of the same system as the intercom system.

(b) *Intercom system*.

(1) New Tier I and all Tier II passenger cars. Each Tier I passenger car ordered on or after [INSERT EFFECTIVE DATE OF FINAL RULE], or placed in service [INSERT DATE TWO YEARS AFTER EFFECTIVE DATE OF FINAL RULE], and all Tier II passenger cars shall be equipped with an intercom system that provides a means for passengers and crewmembers to communicate with each other in an emergency situation. Except as further specified, at least one intercom that is accessible to passengers without requiring the use of a tool or other implement shall be located in each end (half) of each car. If any passenger car does not exceed 45 feet in length, or if a Tier II passenger car was ordered prior to May 12, 1999, only one such intercom is required. The intercom system may be part of the same system as the PA system.

(2) *Marking and instructions*. The following requirements to apply to each Tier I passenger car on or after [ENTER DATE TWO YEARS AFTER EFFECTIVE DATE OF FINAL RULE] and to each Tier II passenger car:

(i) The location of each intercom intended for passenger use shall be clearly marked with luminescent material; and

(ii) Legible and understandable operating instructions shall be posted at or near each such intercom.

(c) *Back-up power*. PA and intercom systems on Tier II passenger trains shall have back-up power for a minimum period of 90 minutes.

§ 238.118 Emergency roof access

Except as provided in § 238.441–

(a) *Number and dimensions*. Each passenger car ordered on or after [ENTER DATE ONE YEAR AFTER EFFECTIVE DATE OF FINAL RULE] or placed in service for the first time [ENTER DATE THREE YEARS AFTER EFFECTIVE DATE OF FINAL RULE] shall have a minimum of two emergency roof access locations, each with a minimum opening of 26 inches longitudinally (*i.e.*, parallel to the longitudinal axis of the car) by 24 inches laterally.

(b) *Means of access*. Emergency roof access shall be provided by means of a hatch, or a clearly marked structural weak point in the roof for access by properly equipped emergency response personnel.

(c) *Location.* Emergency roof access locations shall be situated as practical so that when a car is on its side:

(1) One emergency access location is wholly within each half of the roof as divided top from bottom; and

(2) One emergency access location is wholly within each half of the roof as divided left from right.

(d) *Obstructions.* The ceiling space below each emergency roof access location shall be free from wire, cabling, conduit, and piping. This space shall also be free of rigid secondary structure(s) (*e.g.*, diffusers and diffuser support, lighting back fixtures, mounted PA equipment, luggage racks, etc.) where practicable. If emergency roof access is provided by means of a hatch, it shall be possible to push interior panels or liners out of their retention devices and into the interior of the vehicle after removing the hatch. If emergency roof access is provided by means of a structural weak point, it shall be permissible to cut through interior panels, liners, or other non-rigid secondary structures after making the cutout hole in the roof, provided any such additional cutting maintains a minimum opening of the dimensions specified in paragraph (a).

(e) *Marking and instructions*. Each emergency roof access location shall be clearly marked with retro-reflective material of contrasting color. As further specified, legible and understandable instructions shall be posted at or near each such location. If emergency roof access is provided by means of a structural weak point:

(1) The retro-reflective material shall clearly mark the line along which the roof skin shall be cut; and

(2) A sign plate with a retro-reflective border shall also state: CAUTION - DO NOT USE FLAME CUTTING DEVICES. CUT ALONG DASHED LINE TO GAIN ACCESS. CAUTION - WARN PASSENGERS BEFORE CUTTING. ROOF CONSTRUCTION – (STATE RELEVANT DETAILS)

Subpart D - Inspection, Testing, and Maintenance Requirements for Tier I Passenger Equipment

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238.303 Exterior calendar day mechanical inspection of passenger equipment.

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(e) As part of the exterior calendar day mechanical inspection, the railroad shall verify conformity with the following conditions, and nonconformity with any such condition renders the passenger car or unpowered vehicle used in a passenger train defective whenever discovered in service.

* * *

(18) All rescue-access related exterior markings, signage, and instructions required by § 238.114 (rescue access windows) and § 238.235 (doors) shall be in place and legible.
[Marking and instruction requirements of § 239.107(a) of this chapter will be moved to § 238.235(d) or the appropriate section if renumbered.]

(i) Except as provided in paragraphs (e)(18)(ii) and (iii) of this section, passenger equipment that has any required rescue-access related exterior markings, signage, or instructions that are missing, illegible, or inconspicuous may remain in passenger service until no later than the equipment's fourth exterior calendar day mechanical inspection or next periodic mechanical inspection required under § 238.307, whichever occurs first, after the non-complying condition is discovered, where it shall be repaired or removed from service.

(ii) A passenger car having more than 50 percent of the windows on a side of a level of the car designated and properly marked for rescue access that has any required rescue access-related exterior markings, signage, or instructions that are missing, illegible, or inconspicuous on any of the other windows on that side and level of the car may remain in passenger service until no later than the car's next periodic mechanical inspection required under § 238.307, where it shall be repaired or removed from service.

(iii) A passenger car that is a sleeping car that has more than two consecutive windows with any required rescue access-related exterior markings, signage, or instructions at or near their locations that are missing, illegible, or inconspicuous may remain in passenger service until no later than the car's next periodic mechanical inspection required under § 238.307, where it shall be repaired or removed from service.

(iv) A record shall be maintained of any non-complying markings, signage, or instructions described in paragraphs (e)(18)(i) through (iii) of this section that contains the date and time that the defective condition was first discovered. This record shall be retained until all necessary repairs are completed.

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§ 238.305 Interior calendar day mechanical inspection of passenger cars.

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(c) As part of the interior calendar day interior mechanical inspection, the railroad shall verify conformity with the following conditions, and nonconformity with any such condition renders the car defective whenever discovered in service, except as provided in paragraphs (c)(5) through (c)(12), and paragraph (d) of this section.

* * * * *

(10) All end doors and side doors operate safely and as intended. A non-complying car may continue in passenger service pursuant to paragraph (d) of this section, if at least one operative and accessible door is available on each side of the car; the train crew is provided written notification of the non-complying condition; and a notice is prominently displayed directly on the defective door indicating that the door is defective.

(11) All low-location exit path markings are in place and conspicuous as required by § 238.116. A passenger car with low-location emergency exit path marking components not in place or conspicuous may remain in passenger service until no later than the car's fourth interior calendar day mechanical inspection or next periodic mechanical inspection required under § 238.307, whichever occurs first, or for a passenger car used in long distance intercity train service the eighth interior calendar day mechanical inspection or next periodic mechanical inspection required under § 238.307, whichever occurs first, after the non-complying condition is discovered, where it shall be repaired or removed from service; provided, all of the requirements contained in paragraph (d)(3) of this section are met.

(12) On passenger cars so equipped, public address and intercom systems shall be operative and function as intended. A passenger car with an inoperative or non-functioning public address or intercom system may remain in passenger service until no later than the car's fourth interior calendar day mechanical inspection or next periodic mechanical inspection required under § 238.307, whichever occurs first, or for a passenger car used in long distance intercity train service until the eighth interior calendar day mechanical inspection or next periodic mechanical inspection required under § 238.307, whichever occurs first, after the non-complying condition is discovered, where it shall be repaired or removed from service; provided, the train crew is given written notification of the non-complying condition, and all of the requirements contained in paragraph (d)(3) of this section are met.

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238.307 Periodic mechanical inspection of passenger cars and unpowered vehicles used in passenger trains.

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(c) The periodic mechanical inspection shall specifically include the following interior and exterior mechanical components, which shall be inspected not less frequently than every 184 days. At a minimum, this inspection shall determine that:

* * *

(5) With regard to emergency systems:

(i) Emergency lighting systems required under § 238.115 are in place and operational.

(ii) Electrical low-location emergency exit path marking systems required under § 238.116 are in place and operational.

(iii) Emergency roof access markings and instructions required under § 238.118 (e) are in place and conspicuous.

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Subpart E - Specific Requirements for Tier II Passenger Equipment

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238.437 Emergency communications.

This section would be removed in its entirety and effectively replaced with new section 238.117, which would contain the emergency communication requirements for Tier II equipment.

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§ 238.441 Emergency roof access

(a) Each passenger car ordered before [ENTER DATE ONE YEAR AFTER EFFECTIVE DATE OF FINAL RULE] or placed in service for the first time before [ENTER DATE THREE YEARS AFTER EFFECTIVE DATE OF FINAL RULE] and each power car shall have a minimum of one roof hatch emergency access location with a minimum opening of 26 inches by 24 inches or at least one structural weak point in the roof having a minimum opening of the same dimensions to provide access for properly equipped emergency response personnel. Each emergency roof access location shall be conspicuously marked, and legible and understandable operating instructions shall be posted at or near each such location.

(b) Each passenger car ordered on or after [ENTER DATE ONE YEAR AFTER EFFECTIVE DATE OF FINAL RULE] or placed in service for the first time on or after [ENTER DATE THREE YEARS AFTER EFFECTIVE DATE OF FINAL RULE] shall comply with the emergency roof access requirements specified in § 238.118 of this part.