

Emergency Preparedness Task Force



Railroad Safety Advisory Committee

May 18, 2005

WG Recommended Notice of Proposed Rulemaking



- Proposed Requirements
 - Emergency Window Exits
 - Rescue Access Windows
 - Emergency Roof Access
 - Emergency Communications
 - Inspection and Repair of Emergency Systems



Emergency Window Exits

Revised Definition



- 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.
- Intermediate / mezzanine levels on existing equipment are not main levels

Emergency Window Exits



- Non-main levels:
 - Two in each seating area accessible to passengers without having to pass through an interior door or go to another level
 - One in each side of the seating area
 - May be in an exterior side door in the passenger compartment if it is not ***practical*** to place in the side of the seating area

Emergency Window Exits



- Non-main level exception for *existing* equipment
 - Only one required in a seating area if not ***practicable*** to place 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

Emergency Window Exits



- Non-main level exception for *new* equipment (to address limited space)
 - Only one required in a seating area if:
 1. It is not ***practical*** to place in a side of the passenger compartment due to the need to provide accessible accommodations under ADA;
 2. There are no more than 4 seats in the seating area;
and
 3. A suitable, alternate arrangement for emergency egress is provided

Emergency Window Exits



- Dimensions – added flexibility
 - 26 inches horizontally by 24 inches vertically
 - If located within an exterior side door may be 24 inches horizontally by 26 inches vertically

Emergency Window Exits



- Potential hindrances to window removal (e.g. seatback, headrest, luggage rack)
 - Instructions shall state the method for allowing rapid and easy removal of the window, taking into account the fixture
 - This portion of the instructions may be in written or pictorial format



Rescue Access Windows

Rescue Access Windows



- Single-level passenger cars & main levels
 - Two, one in each side entirely within 15 feet of the centerline of the car (within 7.5 feet, if car \leq 45 feet long)
 - If the seating level is partitioned into separate seating areas, each separate seating area shall have one in each side, as near to the center of the car as practical

Rescue Access Windows



- Exceptions to location requirement for single-level passenger cars & main levels
 - If 4 emergency window exits also serve as rescue access windows
 - For existing equipment, if located within exterior side doors, and at least one is in each end and each side of the car

Rescue Access Windows



- Non-main levels
 - Same requirements and exceptions as for emergency window exits in non-main levels

Rescue Access Windows



- Ease of operability
 - “capable of being removed without undue delay by an emergency responder using tools or implements that are commonly available to an emergency responder at the scene, or a provided mechanism”
- Marking and instructions
 - Instructions posted at or near each rescue access window
 - Placement of instructions at car ends only is not sufficient



Emergency Roof Access

Roof Hatches / Structural Weak Points

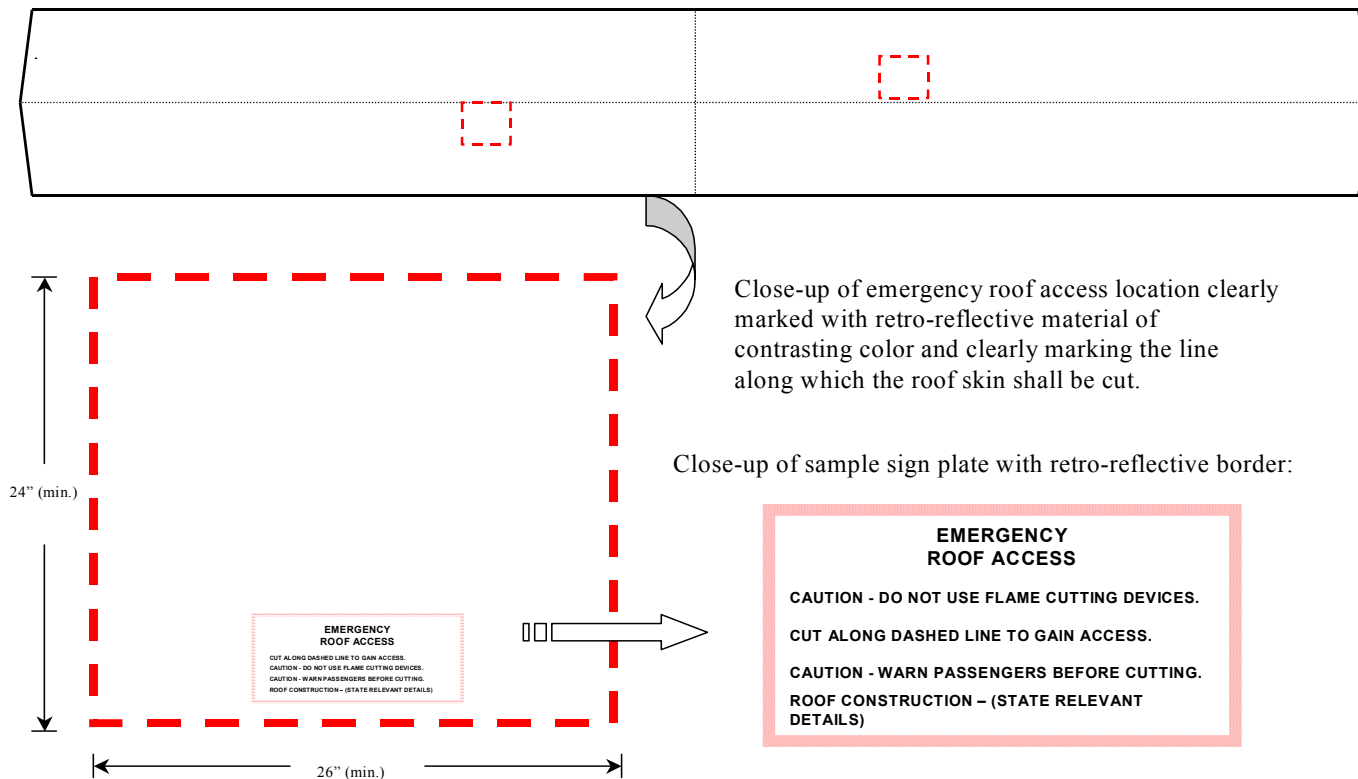


- Currently
 - Only Tier II power cars & passenger cars
 - One with minimum dimensions of 18" x 24"
- Recommendation
 - *New* passenger cars
 - Two, **as practical**, in diagonally opposite quadrants of the roof (figure provided)
 - Minimum size: 24" laterally x 26" longitudinally
 - Instructions & retro-reflective marking

Roof Hatches / Structural Weak Points

Emergency Roof Access – § 238.118

Figure 1 to Subpart B of Part 238 - Example of Location and Marking of Structural Weak Points on Roof of Passenger Car





Emergency Communications

Emergency Communications



- Public Address Systems
 - *New* passenger cars
 - *Existing* passenger cars by 2012
- Intercom Systems
 - *New* passenger cars
 - One transmission point *in each end (half)*, unless car is ≤ 45 feet in length
- Recommendations Augment Current PA and Intercom Requirements for Tier II Equipment



Inspection & Repair Requirements For Emergency Systems

Inspection and Repair



- Rescue access markings & instructions
 - Check for presence daily
 - Repair by 4th Calendar Day Inspection
 - Greater repair flexibility for sleeping cars and cars with significantly more rescue access windows than required

Inspection and Repair



- PA and intercom systems
 - Operative & function as intended daily
 - Defects:
 - Provide train crew written notification of the non-complying condition
 - Repair by 4th Calendar Day Inspection
 - Long distance intercity trains: Repair by 8th Calendar Day Inspection

Inspection and Repair



- Doors
 - New Requirement: Provide train crew written notification of non-complying condition
- Roof Access Markings
 - Determine presence at Periodic Mechanical Inspection

Notice of Proposed Rulemaking



- In March 2005, passenger Safety Working Group unanimously accepted these recommendations as well as draft rule text for inclusion in a Notice of Proposed Rulemaking

Other Progress



- Promoting Use of Doors for Emergency Egress
- Enhancing Emergency Lighting
- Incorporating APTA Standards
- Addressing TSA Security Directive to Lock Cabs

Use of Door Exits



- Consensus:
 - Removable windows / panels in vestibule doors to provide access to side and end frame door exits
- Under Consideration:
 - Removable windows / panels in end frame doors that are potentially the preferred exit route from cars that have rolled onto their sides
 - Four side doors in new coach cars to enhance the safest & most expedient means of emergency egress

Emergency Lighting



- **Goal:** Provide a well protected emergency power supply
- **Status:** Agreement in principle for self-contained power source, pending review of cost and determination of feasibility
- **Challenge:** Meeting required levels of illumination and duration



Incorporation by Reference of APTA PRESS Standards

APTA Standards



- Emergency Lighting
 - Existing equipment compliant by 2015 or when conveyed / transferred / leased
- Emergency Signage for Egress/Access
 - Non-HPPL signs no longer grandfathered
- Low-Location Exit Path Markings
 - Need implementation schedule (some larger railroads need more time)



TSA Directive to Lock Operator Cab Doors

TSA Security Directive



- May 20, 2004 to Passenger Railroads:
 - “If equipped with locking mechanisms, lock all doors which allow access to the engineer’s cab or compartment.”
 - Recommend any “Alternative Measures” mitigating effect of directives to address any safety concerns

TSA Security Directive



- TSA Clarification
 - Directive limited to controlling cabs
 - If the equipment that is necessary to operate from that cab is removed, the cab is not a controlling cab
- Affected commuter railroads to submit request for alternative measures
 - Exempt cab doors with no quick release mechanism (e.g. panic bar, hotel lock)
 - Exempt freight locomotives borrowed for passenger service



Questions?