Federal Railroad Administration, DOT

§ 214.103 Fall protection, generally.

(a) Except as provided in paragraphs (b) through (d) of this section, when bridge workers work twelve feet or more above the ground or water surface, they shall be provided and shall use a personal fall arrest system or safety net system. All fall protection systems required by this section shall conform to the standards set forth in § 214.105 of this subpart.

(b)(1) This section shall not apply if the installation of the fall arrest system exposes a greater risk than the work to be performed. In any action brought by FRA to enforce the fall protection requirements, the railroad or railroad contractor shall have the burden of proving that the installation of such device poses greater exposure to risk than performance of the work itself.

(2) This section shall not apply to bridge workers engaged in inspection of railroad bridges conducted in full compliance with the following conditions:

(i) The railroad or railroad contractor has a written program in place that requires training in, adherence to, and use of safe procedures associated with climbing techniques and procedures to be used;

(ii) The bridge worker to whom this exception applies has been trained and qualified according to that program to perform bridge inspections, has been previously and voluntarily designated to perform inspections under the provisions of that program, and has accepted the designation;
§ 214.105 Fall protection systems standards and practices.

(a) General requirements. All fall protection systems required by this subpart shall conform to the following:

(1) Fall protection systems shall be used only for personal fall protection.

(2) Any fall protection system subjected to impact loading shall be immediately and permanently removed from service unless fully inspected and determined by a competent person to be undamaged and suitable for reuse.

(3) All fall protection system components shall be protected from abrasions, corrosion, or any other form of deterioration.

(4) All fall protection system components shall be inspected prior to each use for wear, damage, corrosion, mildew, and other deterioration. Defective components shall be permanently removed from service.

(5) Prior to use and after any component or system is changed, bridge workers shall be trained in the application limits of the equipment, proper hook-up, anchoring and tie-off techniques, methods of use, and proper methods of equipment inspection and storage.

(6) The railroad or railroad contractor shall provide for prompt rescue of bridge workers in the event of a fall.

(7) Connectors shall have a corrosion-resistant finish, and all surfaces and edges shall be smooth to prevent damage to interfacing parts of the system.

(8) Connectors shall be drop forged, pressed or formed steel, or made of equivalent-strength materials.

(9) Anchorages, including single- and double-head anchors, shall be capable of supporting at least 5,000 pounds per bridge worker attached, or shall be designed, installed, and used under supervision of a qualified person as part of a complete personal fall protection system that maintains a safety factor of at least two.

(b) Personal fall arrest systems. All components of a personal fall arrest system shall conform to the following standards:

(1) Lanyards and vertical lifelines that tie off one bridge worker shall have a minimum breaking strength of 5,000 pounds.

(2) Self-retracting lifelines and lanyards that automatically limit free fall distance to two feet or less shall have components capable of sustaining a minimum static tensile load of 3,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.