§91.26

§ 91.26 Concrete flooring.

(a) Pens aboard an ocean vessel shall have a 3 inch concrete pavement, proportioned and mixed to give 2000 psi. compressive strength in 28 days. The pavement shall have a broom or rough finish. Steel angle bars may be used for footlocks if they are mounted into the flooring in such a way that, at the same time, the bars serve gutterways. The angle bars shall not be less than 2 inches by 2 inches and 5/16 inches in thickness, and spaced on 12 inch centers running for and aft on the vessel.

(b)(1) Horses and cattle. Flooring shall be laid athwartship and secured by placing ends beneath the under side of foot and rump boards or under a 2"×4" strip nailed along these boards. Floors may be either of two types, flush or raised. The flush type shall be constructed of not less than 1" thick lumber laid flat on the deck. The raised type shall be constructed of not less than 2" thick lumber nailed to scantlings of at least 2"×3" dimensions laid 2 feet 6 inches apart. If desired. flooring may be laid in portable sections. Flooring will not be required on ships with wooden decks provided footlocks are secured to the decks. Cement or composite material diagonally scored one-half inch deep may be used on iron decks instead of wooden flooring if the footlocks are molded in the same and bolted to the deck.

- (2) Sheep, goats, and swine. Flooring for sheep, goats, and swine shall be the same as prescribed in this section for horses and cattle, except that the raised flooring need not be greater than 12 inch in thickness.
- (3) *Drainage*. Provisions shall be made for drainage of urine and surface water from all parts of the vessel used for carriage of animals including sufficient scuppers. A walkway shall provide easy access to the scuppers.
- (c)(1) Horses and cattle. In pens for horses or cattle, there shall be four footlocks of 1"x4" lumber laid fore and aft with flat side down, and so placed as to provide in-between spaces of 12, 14, 26, and 14 inches, beginning at inside of the footboard. Additional footlocks shall be added at 14 inch intervals in pens having a depth of 9 feet or more. They shall be well secured

with nails of a length that will permit 1 inch clinch in 1 inch flooring and 2 inch penetration in 2 inch flooring.

(2) Sheep, goats, and swine. Footlocks in pens for sheep, goats, and swine shall be of not less than 1"×2" lumber, four to each pen, equally distributed and laid in the manner prescribed in paragraph (c)(1) of this section for horses and cattle.

 $[42\ {\rm FR}\ 28990,\ June\ 7,\ 1977.\ Redesignated\ at\ 45\ {\rm FR}\ 86413,\ {\rm Dec.}\ 31,\ 1980,\ {\rm and}\ {\rm amended}\ {\rm at}\ 57\ {\rm FR}\ 23047,\ {\rm June}\ 1,\ 1992]$

§91.27 Troughs and hayracks.

All stalls and pens aboard an ocean vessel shall be equipped with proper troughs for feeding and watering animals as provided in this section. Racks or nets furnished for feeding hay shall be of a type acceptable to the inspector. The feeding of hay to the animals on ocean vessels may be by means of dispensing the hay from racks or nets or by placing the hay on the floor of the pens in which the animals are confined

- (a) Horses and cattle. Troughs may be constructed of metal or wood and may be either removable or fixed. The space between the first footlock and footboard may be utilized for feeding cattle, provided a 2"×4" piece of lumber is affixed along the top surface of said footlock so that it, together with the footboard and the battens, will form an enclosure. If wooden troughs are used for feeding, an adequate supply of buckets or other metal containers shall be provided for the proper watering of the animals.
- (b) Sheep, goats, and swine. Pens for these animals shall have feed troughs not less than 8 inches wide and shall be equipped with proper receptacles for watering. Pens for sheep and goats shall also have ample hayracks suitable for these animals.

[42 FR 28990, June 7, 1977. Redesignated at 45 FR 86413, Dec. 31, 1980]

§91.28 Stanchions and rails.

(a)(1) Pipes used for stanchions and rails for pens aboard an ocean vessel shall be made of zinc coated, galvanized, extra strong, medium carbon steel. Steel pipes or other steel profiles shall consist of not less than 4 pipes or