

NFPA  
150

# **FIRE SAFETY IN RACETRACK STABLES 1979**



*Copyright © 1979*

*All Rights Reserved*

**NATIONAL FIRE PROTECTION ASSOCIATION, INC.**

**470 Atlantic Avenue, Boston, MA 02210**

## NOTICE

All questions or other communications relating to this document should be sent only to NFPA Headquarters, addressed to the attention of the Committee responsible for the document.

For information on obtaining Formal Interpretations of the document, proposing Tentative Interim Amendments, proposing amendments for Committee consideration, and appeals on matters relating to the content of the document, write to the Assistant Vice President—Standards, National Fire Protection Association, 470 Atlantic Avenue, Boston, MA 02210.

---

**Licensing Provision** — This document is copyrighted by the National Fire Protection Association (NFPA).

**1. Adoption by Reference** — Public authorities and others are urged to reference this document in laws, ordinances, regulations, administrative orders or similar instruments. Any deletions, additions and changes desired by the adopting authority must be noted separately. Those using this method are requested to notify the NFPA (Attention: Assistant Vice President — Standards) in writing of such use. The term “adoption by reference” means the citing of title and publishing information only.

**2. Adoption by Transcription** — **A.** Public authorities with law-making or rule-making powers only, upon written notice to the NFPA (Attention: Assistant Vice President — Standards), will be granted a royalty-free license to print and republish this document in whole or in part, with changes and additions, if any, noted separately, in laws, ordinances, regulations, administrative orders or similar instruments having the force of law, provided that: (1) due notice of NFPA's copyright is contained in each law and in each copy thereof; and, (2) that such printing and republication is limited to numbers sufficient to satisfy the jurisdiction's law-making or rule-making process. **B.** Public authorities with advisory functions and all others desiring permission to reproduce this document or its contents in whole or in part in any form shall consult the NFPA.

All other rights, including the right to vend, are retained by NFPA.

(For further explanation, see the Policy Concerning the Adoption, Printing and Publication of NFPA Documents which is available upon request from the NFPA.)

### Statement on NFPA Procedures

This material has been developed under the published procedures of the National Fire Protection Association, which are designed to assure the appointment of technically competent Committees having balanced representation. While these procedures assure the highest degree of care, neither the National Fire Protection Association, its members, nor those participating in its activities accepts any liability resulting from compliance or noncompliance with the provisions given herein, for any restrictions imposed on materials or processes, or for the completeness of the text.

NFPA has no power or authority to police or enforce compliance with the contents of this document and any certification of products stating compliance with requirements of this document is made at the peril of the certifier.

**See Official NFPA Definitions at the back of this pamphlet.**

Errata

# NFPA 150—1979

## Fire Safety in Racetrack Stables

### NFPA 150

#### Reference: Table 2-1.2

The following changes, adopted by the National Fire Protection Association, Inc. at the 1979 Annual Meeting in St. Louis, Missouri, were inadvertently omitted in the printing of this pamphlet.

1. *Revise Table 2-1.2 to read as follows:*

**Table 2-1.2 Stall and Area Limitations (See Note.)**

Construction Type	Stalls		Area Limitations	
	Sprinklered	Unsprinklered	Sprinklered	Unsprinklered
Type I (443-552) fire resistive	Unlimited	180	Unlimited	45,000 sq ft (4180.5 m <sup>2</sup> )
Type II (222) Protected non-combustible/limited combustible	Unlimited	180	Unlimited	45,000 sq ft (4180.5 m <sup>2</sup> )
Type II (111) Protected noncombustible/limited combustible	Unlimited	120	Unlimited	32,000 sq ft (2972.9 m <sup>2</sup> )
Type II (000) Noncombustible/limited combustible	Unlimited	Not Permitted	Unlimited	Not Permitted
Type III (211-200) Protected ordinary and ordinary construction	80	Not Permitted	20,000 sq ft (1858.0 m <sup>2</sup> )	Not Permitted
Type IV (2HH) Heavy timber	Unlimited	Not Permitted	Unlimited	Not Permitted
Type V (111-000) Protected wood frame and unprotected wood frame	60	Not Permitted	16,000 sq ft (1486.45 m <sup>2</sup> )	Not Permitted

**NOTE:** The number of stalls refers to stalls only, and does not include feed storage rooms, tack rooms, wash racks, drying rooms, toilets, etc.

2. *In Appendix A-2-1.1, delete the words "and for stall dividers in barns."*

3. *Add new Appendix A-3-6.10 to read "One duplex receptacle located between two stalls will adequately meet this requirement." Place an asterisk after 3-6.10 on page 150-12.*

© 1979 NFPA, All Rights Reserved

**Standard on**  
**Fire Safety in Racetrack Stables**  
**NFPA 150—1979**

**1979 Edition of NFPA 150**

This 1979 edition of NFPA 150, *Standard on Fire Safety in Racetrack Stables*, was prepared by the Committee on Fire Safety in Racetrack Stables and was adopted by the National Fire Protection Association, Inc., on May 16, 1979, at its Annual Meeting in St. Louis, MO. It was released by the Standards Council for publication on *June 11, 1979*.

**Origin and Development of NFPA 150**

After a series of disastrous fires in racetrack stables in 1975, NFPA established the Committee on Fire Safety in Racetrack Stables. This Committee began its work in 1976 with the establishment of three working subcommittees covering construction, occupancy requirements and fire protection. The reports of the subcommittees were the bases for the present standard.

## Committee on Fire Safety in Racetrack Stables

**Lucy Reum, Chairwoman**

(Rep. The National Association of State Racing Commissioners)

**Sid E. Anton**, Maywood Park Trotting Association (Rep. Harness Tracks of America, Inc.)

**Frank R. Brown**, Brown Sprinkler Corp. (Rep. National Automatic Sprinkler & Fire Control Association)

**Richard F. Catchpole**, American Wood Preservers Institution

**R. Anthony Chamblin**, Horsemen's Benevolent & Protective Association, Inc.

**Peter Chiesa**, National Foam System, Inc.

**George W. Dawson**, Crystal Lake, IL

**Dave Gorman**, National Association of Canadian Racetracks

**Jerome L. Hauck**, Harness Horsemen International

**Chief John K. Hayden**, Arlington Heights, Illinois Fire Department

**Alfred J. Longhitano**, Gage-Babcock & Associates, Inc.

**Robert J. Madden**, Fire Equipment Mfrs. Association, Inc.

**Stanley W. Morten**, Illinois Dept. of Law Enforcement, Fire Prevention Division

**Kenneth L. Moses**, Protection Mutual Insurance Co.

**Stanley Panco**, Garden State Thoroughbred Breeders & Owners Association

**Peter L. Rhulen**, Rhulen Agency, Inc.

**Robert B. Rogoff**, Horsemen's Insurance Services, Inc.

**Jack C. Sanders**, Fire Marshal, State of Oklahoma (Rep. Fire Marshals Association of North America)

**Joseph A. Steinoff**, Stickney, Illinois Fire Department

**Randolph W. Tucker**, Rolf Jensen & Associates, Inc.

**John W. Van Brunt**, Shipyard Inspection Services, American Hull Insurance Syndicate (Rep. New Jersey Racing Commission)

**John W. Vaughan**, Reed Shaw Stenhouse, Ltd.

**J. D. Verhaaren**, Odgen Corp.

**R. G. Weigand**, Schirmer Engineering Corp.

**Clifford W. Wickman**, Thoroughbred Racing Protective Bureau

**Angelo J. Zito**, Melrose Park, IL

### Alternates

**Jack DeFee, Sr.**, Horsemen's Benevolent & Protective Association, Inc. (Alternate to R. A. Chamblin)

**Warren D. Schweder**, National Association of State Racing Commissioners (Alternate to Lucy Reum)

*This list represents the membership at the time the Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred.*

## Contents

<b>Chapter 1 General</b> .....	150-5
1-1 Scope .....	150-5
1-2 Purpose .....	150-5
1-3 Definitions .....	150-5
<b>Chapter 2 Construction</b> .....	150-7
2-1 New Construction .....	150-7
2-2 Existing Construction .....	150-9
<b>Chapter 3 Occupancy Requirements</b> .....	150-10
3-1 Management Responsibilities .....	150-10
3-2 Kitchens .....	150-11
3-3 Open Burning .....	150-11
3-4 Smoking .....	150-11
3-5 Waste Removal and Housekeeping .....	150-11
3-6 Use of Electrical Appliances .....	150-11
3-7 Hot Water .....	150-12
3-8 Flammable Liquids .....	150-12
3-9 Control of Vehicular Traffic .....	150-12
3-10 Animal Evacuation .....	150-12
<b>Chapter 4 Fire Protection</b> .....	150-13
4-1 Sprinkler Protection .....	150-13
4-2 Water Supplies .....	150-13
4-3 Fire Hydrants .....	150-13
4-4 Fire Extinguishers .....	150-13
4-5 Alarm Systems .....	150-13
4-6 Lightning Protection .....	150-13
<b>Appendix A</b> .....	150-14
<b>Appendix B</b> .....	150-15



# Fire Safety in Racetrack Stables

NFPA 150-1979

NOTICE: An asterisk (\*) following the number or letter designating a paragraph indicates explanatory material on that paragraph in Appendix A.

## Chapter 1 General

**1-1 Scope.** This standard contains minimum requirements for the construction, fire protection and occupancy of racetrack stable areas, including those at state, county, and local fairgrounds. Dormitories and grandstand areas are the responsibilities of the Committees on Safety to Life and Tents, Grandstands, and Air Supported Structures, respectively (*Code for Safety to Life from Fire in Buildings and Structures, NFPA 101®*; *Standard for Tents, Grandstands, and Air-Supported Structures Used for Places of Assembly, NFPA 102*).

**1-2 Purpose.** It is the intent of these requirements to prevent the loss of life (including animal life) and property from fire in racetrack stables.

### 1-3 Definitions.

**Approved.** Acceptable to the authority having jurisdiction.

**Assigned Barn.** The barn area where a trainer has been allocated stalls and space for his horses and equipment.

**Assistant Trainer.** The person next to the listed trainer of record, and the one who frequently handles the day-to-day affairs in training a horse or horses.

**Concessionaires.** The holders of a concession, such as the track kitchen, granted by the racetrack management.

**Fire Door Assembly.** A combination of a fire door, frame, hardware, and other accessories which together provide a specific degree of fire protection to the opening (*see Standard for Fire Doors and Windows, NFPA 80*).

**Fire Resistance Rating.** The time, in minutes or hours, that materials or assemblies have withstood a fire exposure as established in accordance with the test procedures of *Standard Methods of Fire Tests of Building Construction and Materials, NFPA 251*.



**Flame Spread Rating.** The flame spread rating of a material refers to a numerical classification obtained according to the *Method of Test of Surface Burning Characteristics of Building Materials*, NFPA 255.

**Halter.** Piece of equipment which fits around a horse's head, like a bridle, but lacking a bit. It is used in handling horses around the stable. In the event of a fire, horses can be led from stalls by halter.

**Listed.** Equipment or materials included in a list published by an organization acceptable to the "authority having jurisdiction" and concerned with product evaluation, that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

NOTE: The means for identifying listed equipment may vary for each organization concerned with product evaluation, some of which do not recognize equipment as listed unless it is also labeled. The "authority having jurisdiction" should utilize the system employed by the listing organization to identify a listed product.

**Mechanical Hotwalker.** An electrical device which automatically walks a horse or several horses in a circle with an approximate radius of 10 to 15 ft (3.05 to 4.58 m).

**Mixed Occupancy.** A building or stable area where both horses and humans reside.

**Racetrack Management.** The persons who control or execute the affairs of the track itself.

**Smoke Developed Rating.** The smoke developed rating of a material refers to a numerical classification obtained according to the *Method of Test of Surface Burning Characteristics of Building Materials*, NFPA 255.

**Tack.** Stable gear; also riders' racing equipment.

**Tack Room.** A storage area for tack and stable equipment.

**Track Security.** Persons employed to protect racetrack property and to insure the proper passage of licensed personnel; track security may be internal or external.

**Trainer.** The person responsible for the care and training of a horse or horses.

## Chapter 2 Construction

### 2-1 New Construction.

**2-1.1\* Types of Construction.** The types of construction listed in *Standard on Types of Building Construction*, NFPA 220, shall be deemed suitable for the construction of buildings included in the scope of this standard.

**2-1.2 Stall and Area Limitations.** Stall and area limitations for various types of construction shall be in conformance with those designated in Table 2-1.2.

**Table 2-1.2 Stall and Area Limitations** (*See Note.*)

Construction Type	Stalls		Area Limitations	
	Sprinklered	Unsprinklered	Sprinklered	Unsprinklered
Type I (443-332) (Fire resistive)	Unlimited	240	Unlimited	60,000 sq ft (5574.18 m <sup>2</sup> )
Type II (222-111) Protected noncombustible/limited combustible	Unlimited	120	Unlimited	32,000 sq ft (2972.9 m <sup>2</sup> )
Type II (000) Noncombustible/limited combustible	Unlimited	60	Unlimited	16,000 sq ft (1486.45 m <sup>2</sup> )
Type III (211-200) Protected ordinary and ordinary construction	80	Not Permitted	20,000 sq ft (2229.67 m <sup>2</sup> )	Not Permitted
Type IV (2HH) Heavy timber	100	Not Permitted	24,000 sq ft (2229.67 m <sup>2</sup> )	Not Permitted
Type V (111-000) Protected wood frame and unprotected wood frame	60	Not Permitted	16,000 sq ft (1486.45 m <sup>2</sup> )	Not Permitted

NOTE: The number of stalls refers to stalls only, and does not include feed storage rooms, tack rooms, wash racks, drying rooms, toilets, etc.

### 2-1.3 Minimum Occupancy Separations.

2-1.3.1 For the purpose of this standard, occupancies in barns shall be grouped as follows:

Group A: Stalls for housing horses.

Group B: Human sleeping rooms/quarters.

Group C: Feed rooms, tack rooms, equipment storage rooms and other related rooms.

Group D: Blacksmith shops, kitchens and mechanical equipment rooms.

Group E: Toilet facilities.

2-1.3.2 Minimum occupancy separation shall be as depicted in Table 2-1.3.2.

**Table 2-1.3.2 Minimum Occupancy Separation in Hours**  
(See Note.)

Occupancy Group	A	B	C	D	E
A	—	—	—	—	—
B	1 hr	—	—	—	—
C	2 hrs	2 hrs	—	—	—
D	2 hrs	2 hrs	2 hrs	—	—
E	1 hr	0	1 hr	0	—

NOTE: A 50-percent reduction in the requirements shall be allowed in fully sprinklered buildings.

**2-1.4 Exposure Protection.** Adjacent buildings shall be separated in accordance with the *Recommended Practice for Protection of Buildings from Exterior Fire Exposures*, NFPA 80A.

**2-1.5 Height Restrictions.** Barns shall be limited to two stories in height.

*Exception: Fully sprinklered buildings.*

**2-1.6\* Exit Travel Distances.** All structures shall have exits within 100 ft (30.5 m) of travel distance from any point in the structure. This distance may be increased by 50 percent for fully sprinklered buildings.

**2-1.7** Electrical, mechanical and fuel burning equipment shall be installed in accordance with the following appropriate NFPA standards:

*Standard for the Installation of Oil Burning Equipment, NFPA 31*

*National Fuel Gas Code, NFPA 54*

*National Electrical Code®, NFPA 70*

*Standard for the Installation of Air Conditioning and Ventilating Systems, NFPA 90A*

*Standard for the Installation of Warm Air Heating and Air Conditioning Systems, NFPA 90B*

*Standard for Chimneys, Fireplaces, and Vents, NFPA 211*

*Standard for the Storage and Handling of Liquefied Petroleum Gases, NFPA 58*

## **2-1.8 Insulation.**

**2-1.8.1** In buildings of Type I and Type II construction, exposed combustible insulation shall be prohibited.

**2-1.8.2** In buildings of Type III, Type IV and Type V construction, exposed insulation shall have flamespread, smoke developed and fuel contribution ratings of 100 or less when tested in accordance with *Method of Test of Surface Burning Characteristics of Building Materials*, NFPA 255. In addition, insulation types which melt and drip, or which produce loose flaming brands when exposed to fire, shall be prohibited unless protected by an approved thermal barrier.

## **2-1.9 Stall Dividers.**

**2-1.9.1** In sprinklered buildings, stall dividers shall be constructed of materials which meet Class A, B, or C interior finish rating as defined in *Code for Safety to Life from Fire in Buildings and Structures*, NFPA 101.

**2-1.9.2\*** In unsprinklered buildings, noncombustible stall dividers shall be provided for a maximum of every four adjacent stalls. All stall dividers shall be at least  $7\frac{1}{2}$  ft (2.3 m) high and shall form a tight barrier between stalls. Interior faces of noncombustible dividers shall be permitted to be surfaced with materials meeting Class A, B, or C interior finish ratings.

## **2-2 Existing Construction.**

**2-2.1\* Combustible Barns.** Existing barns of Types III, IV, and V construction shall be equipped throughout with an approved automatic extinguishing system.

**2-2.2\* Minimum Occupancy Separations.** Existing barns shall comply with the minimum occupancy separation as specified in 2-1.3.

## **Chapter 3   Occupancy Requirements**

### **3-1   Management Responsibilities.**

**3-1.1** All trainers or their assistants and all concessionaires or their assistants shall serve as liaison with the track security and fire protection supervisors.

**3-1.2** All trainers or their assistants and all concessionaires or their assistants shall acquaint themselves and brief their employees as to the following:

- (a) Smoking regulations.
- (b) Location of fire alarm notification system in immediate area of assigned barn.
- (c) Location of all fire extinguishers and extinguishing equipment in assigned barn area.
- (d) Regulations regarding occupancy, use of extension cords for extending electrical circuits and use of electrical appliances.
- (e) Regulations regarding storage and use of feed, straw, tack and supplies.
- (f) Track regulations with regard to fire and security, copies of which shall be provided to all trainers or their assistants and concessionaires or their assistants. These regulations shall be used in instructing members of the trainers' and concessionaires' staffs assigned to the barn area.

**3-1.3** All security personnel, trainers and concessionaires or their assistants shall be available for instruction in basic fire protection practice.

**3-1.4** Signs shall be posted in every barn, and associated buildings dealing with the following information:

- (a) Location of alarm pull boxes, emergency telephones or other method of fire alert.
- (b) Location of fire protection first-aid appliances.
- (c) Emergency procedures specific to the particular track facilities.

**3-2 Kitchens.** Track kitchens shall be protected in accordance with the *Standard for the Installation of Equipment for the Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment*, NFPA 96.

**3-3\* Open Burning.** No open burning shall be permitted.

**3-4 Smoking.** Smoking shall be prohibited except in designated safe areas. Proper warning signs shall be posted.

### **3-5 Waste Removal and Housekeeping.**

**3-5.1** An adequate and systematic procedure for general housekeeping, cleanliness, waste removal and orderliness shall be maintained.

**3-5.2** Adequate detached noncombustible trash containers, for other than stall waste, shall be provided and a frequent removal program established.

**3-5.3** Hay or straw shall not be stored in aisles.

### **3-6 Use of Electrical Appliances.**

**3-6.1** Use of any portable electrical appliance shall be restricted to the following conditions:

- (a) Multiple outlet adaptors shall be prohibited.
- (b) Not more than one continuous extension cord shall be used to connect one appliance to the fixed receptacle and such cord shall be listed for hard service and properly sized for the intended application.
- (c) Extension cords shall be used only on a temporary basis.

**3-6.2** Extension cords shall not be supported by any metal object such as nails, screws, hooks and pipes.

**3-6.3** Plug caps and receptacles used in extension cords shall be heavy duty type equipped with a reliable grounding pole and attached to the cord in a manner to provide strain relief.

**3-6.4** All electrical appliances used in the stable area shall be listed.

**3-6.5** Electrical appliances shall be installed in accordance with the requirements of the *National Electrical Code*, NFPA 70.

**3-6.6** Outdoor electrical appliances (e.g., mechanical hotwalkers) served by the barn electrical system shall be installed in accordance with the *National Electrical Code*, NFPA 70, and shall be permitted to be equipped with ground-fault circuit-interrupters.

**3-6.7** Portable cooking and heating appliances shall be used only in spaces designated for such use provided they are separated from the stabling and storage areas of the barn by construction as set forth in 2-1.3.2.

**3-6.8** Portable electrical heating and cooking appliances shall be of a type which automatically interrupts electrical current to the heating element when the appliance is not in its normal operating position (tip-over disconnect).

**3-6.9** Use of exposed element heating appliances such as immersion heaters shall be prohibited.

**3-6.10** The electrical distribution system, in barns to be constructed, shall be so installed that at least one receptacle is provided immediately outside each stall. Receptacles and wiring shall be installed in positions which minimize the possibility of damage by horses.

**3-6.11** Permanently installed lighting facilities shall be provided throughout the barn.

**3-7\* Hot Water.** Permanently installed facilities for the production and distribution of hot water shall be provided in each barn.

**3-8 Flammable Liquids.** The storage of flammable and combustible liquids, except those used for medicinal purposes, shall be prohibited.

**3-9 Control of Vehicular Traffic.** All vehicular access shall be subject to local established rules. Aisles shall be maintained clear of obstruction at all times and access to fire equipment shall not be blocked.

### **3-10 Animal Evacuation.**

**3-10.1** A halter shall be worn by each horse at all times.

**3-10.2** Animals shall be restricted to ground floor occupancy in multi-story barns.

*Exception: Barns which are constructed so that each floor level exits at ground level for the length of the building on at least one building side.*

## Chapter 4 Fire Protection

### 4-1 Sprinkler Protection.

**4-1.1** Where automatic sprinklers are required, the system shall be installed in accordance with the *Standard for the Installation of Sprinkler Systems*, NFPA 13.

**4-1.2** Automatic sprinkler systems shall be designed in accordance with Ordinary Hazard Group 2 classification.

**4-2 Water Supplies.** The water supply shall be capable of providing pressure and discharge capacity required for automatically supplying sprinklers, hydrants, and hose lines.

**4-3\* Fire Hydrants.** Fire hydrants shall be provided as follows:

(a) All portions of major track structures such as barns, kitchens, and maintenance buildings shall be within 300 ft (91.44 m) of a fire hydrant.

(b) Fire hydrants shall be located so that a fire department pumper can approach to within 10 ft (3.05 m) of the hydrant. Fire hydrants shall be protected from vehicle damage.

**4-4 Fire Extinguishers.** Fire extinguishers shall be provided in accordance with *Standard for Portable Fire Extinguishers*, NFPA 10. Such extinguishers shall have a minimum 2A rating and shall be not more than 75-ft (22.86-m) travel distance from any point within a building.

### 4-5 Alarm Systems.

**4-5.1** All major unsprinklered track buildings such as barns, kitchens and maintenance buildings shall have a manual fire alarm system. The alarm system shall sound an audible alarm for purposes of initiating emergency action.

**4-5.1.1** Manual fire alarm stations shall be so located as to be readily available in all portions of the premises in accordance with the *Standard for the Installation, Maintenance and Use of Local Protective Signaling Systems*, NFPA 72A.

**4-6 Lightning Protection.** Lightning protection, where provided, shall be installed according to the *Lightning Protection Code*, NFPA 78.



## Appendix A

*This Appendix is not a part of the requirements (recommendations) of this NFPA document . . . but is included for information purposes only.*

**A-2-1.1** Since 1960 Fire Retardant Treated Wood (FRTW) has been recognized by Insurance Rating Bureaus and Model Building Codes as an alternate for noncombustible in some building areas. Such uses are applicable to nonbearing partitions of 1-hr fire resistance or less in Types I and II constructions, and for stall dividers in barns. (Every piece of fire retardant treated lumber and plywood should be identified by an approved seal or label of a nationally recognized testing laboratory.)

**A-2-1.6** Exit distances are more stringent than those specified in the *Code for Safety to Life from Fires in Buildings and Structures*, NFPA 101, because of the difficulty of evacuating panicked horses from the structure.

**A-2-1.9.2** This requirement is intended to reduce the speed with which a fire will spread by creating noncombustible dividers of solid construction between every four stalls.

**A-2-2.1** Installation of an automatic extinguishing system in existing barns of Types III, IV and V construction should be accomplished on an individual facility basis as negotiated with the local authority having jurisdiction.

**A-2-2.2** Compliance with minimum occupancy separations in existing barns should be accomplished on an individual facility basis as negotiated with the local authority having jurisdiction.

**A-3-3 Open Burning.** This restriction is intended primarily to prohibit open flame heaters in the stable area. It is not intended to limit properly installed and equipped devices such as gas water heaters and blacksmith forges as long as they are approved by the authority having jurisdiction.

**A-3-7 Hot Water.** Heated water is required by trainers and grooms for care of the horses. Without the provision of permanently piped hot water, sundry devices, even though prohibited, will be used to heat the water. When planning such installations it is desirable to provide at least 2 gal of water per hr ( $2.103 \times 10^{-6} \text{ m}^3/\text{sec}$ ) at 140°F (60°C) for each stabled horse.

**A-4-3** Hydrant spacing requirements are more stringent than those specified in the *Standard for Outside Protection*, NFPA 24, due to the difficulty of manipulating long lines in such congested areas.