



NFPA 58 Requirements for Dispensers

2001 edition

3.9 Vehicle Fuel Dispenser and Dispensing Stations.

3.9.1 Application. This section shall include location, installation, and operation of vehicle fuel dispensers and dispensing stations. The provisions of Section 3.2, as modified by this section, shall apply.

3.9.2 Location.

3.9.2.1 Location shall be in accordance with Table 3.2.3.3.

Table 3.2.3.3 Distance Between Point of Transfer and Exposures

Part	Exposure	Minimum Horizontal Distance Feet
A	Buildings, mobile homes, recreational vehicles, and modular homes with fire-resistive walls	10
B	Buildings with other than fire resistive walls	25
C	Building wall openings or pits at or below the level of the point of transfer	25
D	Line of adjoining property that can be built upon	25
E	Outdoor places of public assembly including schoolyards, athletic fields, and playgrounds	50
F	Public ways including public streets, highways, thoroughfares, and sidewalks	
	(a) From points of transfer in LP-Gas dispensing stations and at vehicle fuel dispensers	10
	(b) From other points of transfer	25
G	Driveways	5
H	Mainline railroad track centerlines	25
I	Containers other than those being filled	10
J	Flammable and Class II combustible liquid dispensers and the fill connections of containers	10
K	Flammable and Class II combustible liquid containers, aboveground containers, and containers underground	20

3.9.2.2 Vehicle fuel dispensers and dispensing stations shall be located away from pits in accordance with Table 3.2.3.3 with no drains or blow-offs from the unit directed toward or within 15ft of a sewer systems opening.

3.9.3 General Installation Provisions

3.9.3.1 Vehicle fuel dispensers and dispensing stations shall be installed in accordance with the manufacturer's installation instructions.

3.9.3.2 Vehicle fuel dispensers shall not be located within a building. Where installed under a weather shelter or canopy, the area shall be ventilated and shall not be enclosed for than 50 percent of its perimeter.

3.9.3.3 Control for the pump used to transfer LP-Gas through the unit into containers shall be provided at the device in order to minimize the possibility of leakage or accidental discharge.

3.9.3.4 An excess-flow check valve or a differential backpressure valve shall be installed in or on the dispenser at the point at which the dispenser hose is connected to the liquid piping.

3.9.3.5 Piping and the dispensing hose shall be provided with hydrostatic relief valves in accordance with 3.2.21.

3.2.21 Hydrostatic Relief Valve Installation. A hydrostatic relief valve that complies with 2.4.7 or a device providing pressure relieving protection shall be installed in each section of piping (including hose) in which liquid LP-Gas can be isolated between shutoff valves so as to relieve the pressure that could develop from the trapped liquid to a safe atmosphere or product-retaining section.

2.4.7 Hydrostatic Relief Valves. Hydrostatic relief valves designed to relieve the hydrostatic pressure that might develop in sections of piping between closed shutoff valves shall have pressure settings not less than 400psig or more than 500psig unless installed in systems designed to operate above 350psig. Hydrostatic relief valves for use in systems designed to operate above 350psig shall have settings not less than 110 percent or more than 125 percent of the system design pressure.

3.9.3.6 Protection against trespassing and tampering shall be in accordance with 3.3.6.

3.3.6 Protection Against Tampering for Section 3.3 and Section 3.9 Systems. The area that includes container appurtenances, pumping equipment, loading and unloading facilities, and container filling facilities shall be protected by one the methods in the following subsections.

3.3.6.1 Enclosures with at least a 6-ft high industrial type fence, chain link fence, or equivalent protection. There shall be at least two means of emergency access from the enclosure. Clearance of at least 3ft shall be provided to allow emergency access to the required means of egress. If guard service is provided, it shall be extended to the LP-Gas installation. The requirements of Section 1.5 shall apply to guard personnel.

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Exception No. 1: A second gate shall not be required where:

(a) The fenced or otherwise enclosed area is not over 100 ft²

(b) The point of transfer is within 3ft of the gate

(c) Containers are not filled within the enclosure

Exception No. 2: Fencing shall not be required where devices that prevent unauthorized operation of valves, equipment, and appurtenances that can be locked in place are provided.

3.3.6.2 As an alternate to fencing the operating area, suitable devices that can be locked in place shall be provided. Such devices, when in place, shall effectively prevent unauthorized operation of any of the container appurtenances, system valves, or equipment.

3.9.3.7 A manual shutoff valve and an excess-flow check valve shall be located in the liquid line between the pump and dispenser inlet where the dispensing device is installed at a remote location and is not part of a complete storage and dispensing unit mounted on a common base.

3.9.3.8 All dispensers either shall be installed on a concrete foundation or shall be part of a complete storage and dispensing unit mounted on a common base and installed in accordance with 3.2.6.1(e). Protection against physical damage shall be provided.

3.2.6.1(e) Containers or container-pump assemblies mounted on a common base complying with Table 2.2.5.1 shall be placed either on paved surfaces or on concrete pads at ground level within 4in. of ground level.

Table 2.2.5.1 Installation of Permanently Installed Horizontal ASME Containers with Attached Supports

Container Size gal	Attached Support	Height of Bottom of the Container
> 2000	Nonfireproofed steel on flat topped concrete foundations	6in maximum above concrete foundations
≤ 2000	Nonfireproofed steel on firm foundations or concrete foundations more than 12in above the ground	2in - 12in above concrete foundation
≤ 2000	Nonfireproofed steel on paved surfaces or concrete pads within 4in of the ground	24in maximum above paved surface or top of concrete pads.

3.9.3.9 A listed quick-acting shutoff valve shall be installed at the discharge end of the transfer hose.

3.9.3.10 An identified and accessible switch or circuit breaker shall be installed at a location not less than 20ft or more than 100ft from the dispensing device (s) to shut off the power in the event of a fire, accident, or other emergency. The marking for the switch(es) or breaker(s) shall be visible at the point of liquid transfer.

3.9.4 Installation of Vehicle Fuel Dispensers.

3.9.4.1 Hose length shall not exceed 18ft. All hose shall be listed. When not in use, hose shall be secured to protect it from damage.

Exception: Hoses longer than 18ft shall be permitted where approved by the authority having jurisdiction.

3.9.4.2 A listed emergency breakaway device complying with UL 567, *Standard Pipe Connectors for Flammable and Combustible Liquids and LP-Gas*, and designed to retain liquid on both sides of the breakaway point, or other devices affording equivalent protection approved by the authority having jurisdiction, shall be installed.

3.9.4.3 Dispensing devices for liquefied petroleum gas shall be located as follows:

(a) Conventional systems shall be at least 10ft from any dispensing device for Class I liquids.

(b) Low-emission transfer systems in accordance with Section, 3.11 shall be at least 5ft from any dispensing device for Class I liquids.