

# Minimum Equipment on Quint Fire Apparatus NFPA 1901 2009

NFPA 1901 Chapter 9 Quint Fire Apparatus

Fire Pump - minimum rated capacity of 1000 gpm

The fire pump shall be capable of supplying the flow requirements of 19.6.1 or 19.12.1 with a maximum intake gauge pressure of 20 psi.

Provisions shall be made to ensure that the pump operator is not in contact with the ground.

Signs shall be placed to warn the pump operator of electrocution hazards.

### **Aerial Device**

The apparatus shall be equipped with an aerial ladder or an elevating platform with a permanently installed waterway that meets the requirements of Chapter 19.

#### Water Tank

The apparatus shall be equipped with a water tank(s) that meets the requirements of Chapter 18 and that has a minimum certified capacity (combined, if applicable) of 300 gallon.

## **Equipment Storage**

A minimum of 40 cubic feet of enclosed weather-resistant compartmentation that meets the requirements of Section 15.1 shall be provided for the storage of equipment.

### **Hose Storage**

Hose bed area(s), compartments, or reels that comply with Section 15.10 shall be provided to accommodate the following:

- 1. A minimum hose storage area of 30 cubic feet for 2.5 in. or larger fire hose
- 2. Two areas, each a minimum of 3.5 cubic feet, to accommodate 1.5 in. or larger preconnected fire hose lines

## **Equipment Supplied by the Contractor**

The contractor shall supply the equipment listed in 9.7.1 and 9.7.2 and shall provide and install such brackets or compartments as are necessary to mount the equipment.

#### **Ground Ladders**

The quint shall carry a minimum of 85 ft of ground ladders to include at least one extension ladder, one straight ladder equipped with roof hooks, and one attic ladder.

All ground ladders carried on the apparatus shall meet the requirements of NFPA 1931, Standard on Design of and Design Verification Tests for Fire Department Ground Ladders.

Stepladders and other types of multipurpose ladders meeting ANSI A14.2, Ladders · Portable Metal · Safety Requirements, or ANSI A14.5, Ladders · Portable Reinforced Plastic · Safety Requirements, with duty ratings of Type 1A or 1AA shall be permitted to be substituted for the folding ladder required in 9.7.1.1.

Stepladders and other types of multipurpose ladders shall be permitted to be carried in addition to the minimum fire department ground ladders specified in 9.7.1.1 provided they meet either ANSI A14.2 or ANSI A14.5 with duty ratings of Type 1A or 1AA.

## **Suction Hose**

A minimum of 20 ft of suction hose or 15 ft of supply suction hose shall be carried.

Where suction hose is provided, a suction strainer shall be furnished.

Where suction hose is provided, the friction and entrance loss of the combination suction hose and strainer shall not exceed the losses listed in Table 16.2.4.1(b) or Table 16.2.4.1(c).

Where suction hose is provided, it shall have couplings compatible with the local hydrant outlet connection on one end and the pump intake connection on the other end.

Suction hose shall meet the requirements of NFPA 1961, Standard on Fire Hose.

The purchaser shall specify whether hard or soft suction hose is to be provided, the length and size of the hose, the type and size of the couplings, the manner in which the suction hose is to be carried on the apparatus, and the style of brackets desired.

## **Minor Equipment**

The equipment listed in 9.8.2 and 9.8.3 shall be available on the quint fire apparatus before the apparatus is placed in service.

Brackets or compartments shall be furnished so as to organize and mount the specified equipment.

A detailed list of who is to furnish the items and the method for organizing and mounting these items shall be supplied by the purchasing authority.

### **Fire Hose and Nozzles**

The following fire hose and nozzles shall be carried on the apparatus:

- 1. 800 ft of 2.5 in. or larger fire hose, in any combination
- 2. 400 ft of 1.5 in., 1.75 in., or 2 in. fire hose, in any combination
- 3. One handline nozzle, 200 gpm minimum
- 4. Two handline nozzles, 95 gpm minimum
- 5. One playpipe with shutoff and 1 in., 1 1/8 in., and 1 1/4 in. tips

# **Miscellaneous Equipment**

The following additional equipment shall be carried on the apparatus:

- 1. One 6 lb flathead axe mounted in a bracket fastened to the apparatus
- 2. One 6 lb pickhead axe mounted in a bracket fastened to the apparatus
- 3. One 6 ft pike pole or plaster hook mounted in a bracket fastened to the apparatus
- 4. One 8 ft or longer pike pole mounted in a bracket fastened to the apparatus
- 5. Two portable hand lights mounted in brackets fastened to the apparatus
- 6. One approved dry chemical portable fire extinguisher with a minimum 80-B:C rating mounted in a bracket fastened to the apparatus
- 7. One 2.5 gallon or larger water extinguisher mounted in a bracket fastened to the apparatus
- 8. One SCBA complying with NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services, for each assigned seating position, but not fewer than four, mounted in brackets fastened to the apparatus or stored in containers supplied by the SCBA manufacturer
- One spare SCBA cylinder for each SCBA carried, each mounted in a bracket fastened to the apparatus or stored in a specially designed storage space(s)
- 10. One spare SCBA cylinder for each SCBA carried
- 11. One first aid kit
- 12. Four combination spanner wrenches mounted in brackets fastened to the apparatus
- 13. Two hydrant wrenches mounted in brackets fastened to the apparatus

- 14. One double female 2.5 in. adapter with National Hose threads, mounted in a bracket fastened to the apparatus
- 15. One double male 2.5 in. adapter with National Hose threads, mounted in a bracket fastened to the apparatus
- 16. One rubber mallet, for use on suction hose connections, mounted in a bracket fastened to the apparatus
- 17. Four salvage covers, each a minimum size of 12 ft x 14 ft
- 18. Four ladder belts meeting the requirements of NFPA 1983, Standard on Fire Service Life Safety Rope and System Components
- 19. One 150 ft light-use life safety rope meeting the requirements of NFPA 1983, Standard on Fire Service Life Safety Rope and System Components
- 20. One 150 ft general-use life safety rope meeting the requirements of NFPA 1983, Standard on Fire Service Life Safety Rope and System Components
- 21. Two wheel chocks, mounted in readily accessible locations, each designed to hold the apparatus, when loaded to its maximum in-service weight, on a 10 percent grade with the transmission in neutral and the parking brake released
- 22. One traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, Standard for High-Visibility Public Safety Vests, and have a five-point breakaway feature that includes two at the shoulders, two at the sides, and one at the front
- 23. Five fluorescent orange traffic cones not less than 28 in. in height, each equipped with a 6 in. retroreflective white band no more than 4 in. from the top of the cone, and an additional 4 in. retroreflective white band 2 in. below the 6 in. band
- 24. Five illuminated warning devices such as highway flares, unless the five fluorescent orange traffic cones have illuminating capabilities
- 25. One automatic external defibrillator (AED)

If the supply hose carried does not use sexless couplings, an additional double female adapter and double male adapter, sized to fit 2.5 in. or larger fire hose, shall be carried mounted in brackets fastened to the apparatus.

If none of the pump intakes required by 16.6.1 are valved, a hose appliance that is equipped with one or more gated intakes with female swivel connection(s) compatible with the supply hose used on one side and a swivel connection with pump intake threads on the other side shall be carried. Any intake connection 3.5 in. or larger shall include a pressure relief device that meets the requirements of 16.6.6.

If the apparatus does not have a 2.5 in. intake with NH threads, an adapter from 2.5 in. NH female to a pump intake shall be carried, mounted in a bracket fastened to the apparatus if not already mounted directly to the intake.

If the supply hose carried has other than 2.5 in. NH threads, adapters shall be carried to allow feeding the supply hose from a 2.5 in. NH thread male discharge and to allow the hose to connect to a 2.5 in. NH female intake, mounted in brackets fastened to the apparatus if not already mounted directly to the discharge or intake.