

FIREQUIP™



SPECIFICATION SHEET

FIRE ENGINE BOOSTER



FIREQUIP FIRE ENGINE BOOSTER HOSE

Pressure Contraction and Elongation – When pressurized, a poorly constructed hose may contract or elongate. This can endanger a firefighter in a high place or in a tight spot. It can also damage equipment such as hose reels which can actually be crushed. FireQuip Booster Hose is made with precision reinforcement angles to control length change under pressure to avoid these problems.

Durable, Bright Red Cover – It looks good and lasts longer for overall better cost effectiveness and reliability. The cover shall be EPDM rubber, which resists abrasion, gouging, ultra-violet, ozone aging and heat.

Long Lengths – Firequip Fire Engine Booster Hose is produced in continuous lengths up to 200 feet for 1 inch, 1.25 inch and 1.5 inch hose and 300 feet for ¾ inch. This reduces the number of coupling connectors required, reducing cost and increasing hose integrity.

Full 4:1 Safety Factor – You must require a 4:1 safety factor for your booster hose to insure safety and reliability. This means 800 Booster Hose must be rated for 3200 minimum burst pressure. A lesser grade hose cannot be relied upon to handle pressure surges, end pull, kinking and other abuse, coupling retention and aging.

Meets UL 92 Design and Performance Criteria – Firequip Fire Engine Booster Hose meets or exceeds the requirements listed in UL 92 specification for 800 PSI Booster Hose. The manufacturer shall be ISO 2001:2015 Quality Certified.

TECHNICAL INFORMATION

1. **APPLICABLE SPECIFICATIONS:**

Unless otherwise specifically designated in this specification, all measurements and test necessary to determine compliance of the hose with the specified requirements shall be made in accordance with Standard Specifications for Testing Rubber Hose, AZTM, D-380-81.

2. **TYPES AND SIZES:**

- a. The type of yarn shall be four spirals of continuous multiple textile braids.
- b. The hose size shall be 1 inch, 1.25 inch or ¾ inch nominal internal diameter.

3. **MATERIAL AND WORKMANSHIP:**

All materials used in the fabrication of the hose shall be of the best quality normally used for the purpose in good commercial practice for the type designated. The workmanship shall be of the highest quality.

4. **TUBE CONSTRUCTION DETAIL:**

- a. The liner tube shall be of smooth black synthetic EPDM rubber.
- b. The tube shall be extruded of uniform thickness throughout its length, the waterway of the tube shall be smooth and free from imperfections.
- c. The thickness of the tube shall be not less than .060 inches.
- d. The adhesion between the layer and reinforcement between tube and reinforcement, or between the cover and reinforcement shall be such that a weight of 10 pounds suspended from a ring specimen 1" wide will cause separation at a rate not greater than 1 inch per minute.

- e. When tested within 50 days from date shipment is received, a section of the liner tube shall comply with the following requirements. The test specimen shall be cut along the hose axis.
 - e.i.1. Tensile strength, minimum -----1000 PSI
 - e.i.2. Elongation, minimum -----250%
 - e.i.3. Accelerated Air-Oven Aging (70 hours at 212 degrees Fahrenheit)
 - Maximum Tensile Loss-----20%
 - Maximum Elongation Loss -----20%

5. **REINFORCEMENT DETAIL:**

- a. Reinforcement shall consist of multiple textile braids.
- b. The reinforcement shall be evenly applied, free from defects in material and workmanship that are unsightly or may affect the serviceability of the finished hose.

6. **FINISHED HOSE:**

- a. The internal diameter of 1" hose shall be 1 inch ± 3/64", 1.25 inch ± 3/64", and ¾" hose shall be ¾" ± 3/64".
- b. The outside diameter of 1" hose shall be 1.5 inches ± 1/16", 1.25 inch shall be 1.75 inch ± 1/16", and ¾" hose shall be 1-3/16" ± 1/16".
- c. Each piece of hose of nominal 50 foot length shall be supplied in such additional length as will permit the attachment of coupling fittings and still provide a minimum of 50 feet of hose, from back of couplings, when measured under 10 PSI water pressure.
- d. The weight of 50 feet of 1" hose, untreated, without couplings is approximately 30 pounds. The weight of a 100 foot hose without couplings is about 60 pounds. The weight of a 50 foot section of 1.25 inch hose uncoupled is 39.5 pounds and a 100 foot section is 98.75 pounds. A 50 foot of ¾" hose is 19 pounds, and 100 foot is 37 pounds.
- e. An 18 inch length, while lying flat and straight shall not burst under 3200 PSI.
- f. Each length of hose shall withstand hydraulic test pressure of not less than 1600 PSI for one minute.
- g. The elongation between 10 and 800 PSI shall not exceed 6%.
- h. Twist of the hose in direction to loosen couplings, between 10 and 800 PSI shall not exceed 7° per foot.

7. **COUPLINGS:**

- a. Barway couplings or permanent crimped swage couplings can be used.

8. **WARRANTY:**

The manufacturer warrants the hose to be free from defects in materials and workmanship for a period of five years. This warranty shall provide for the repair or replacement of hose and couplings proven to have failed due to faulty material or workmanship.

FIREQUIP FIRE ENGINE BOOSTER HOSE PERFORMANCE AND WEIGHT CHART

Hose Size	Working Pressure (psi)	Burst Test Pressure (psi)	Coupling Bowl Size (in.)	Weight per 50' Uncoupled	Weight per 100' Uncoupled
¾"	800	3200	1'-1/4"	21 lbs	42 lbs
1"	800	3200	1'1/2"	30 lbs	60 lbs
1.25"	300	1200	1-3/4"	125ft = 39.5 lbs	125ft = 98.75 lbs
1.5"	200	600	2 "	50 lbs	100 lbs

