



FLD Forestry Hose

Hose Construction

The hose shall be constructed of top quality synthetic yarns woven into an optimized web and embedded in a matrix of nitrile rubber, to produce high strength and low friction loss. To ensure complete conformance, the resultant hose must meet the following minimum requirements or it will be unacceptable.

Hose Physical Properties

Hose shall be evaluated in accordance with the principles and practices listed in the National Fire Protection Association Standard 1961 (latest edition) and related standards.

When tested as such it shall have the following properties:

Ultimate Tensile Strength

Tensile strength of the vulcanized rubber compound used in the hose shall not be less than 1750 psig.

Ultimate Elongation

Ultimate elongation of the vulcanized rubber compound shall be not less than 500%.

Permanent Elongation

Permanent elongation of the vulcanized rubber compound shall be less than 22%.

Adhesion

The adhesion between samples of the reinforcement web and either the liner or the cover shall exceed NFPA 1961 requirements. The sample width shall be 1 1/2" as called out in the standard.

Accelerated Aging Properties

When subjected to hot air oven aging at 158°F for 96 hours, the tensile strength and ultimate elongation shall be at least 75% of the original values.

Heat Resistance

When subjected to an internal static water pressure of 100 psi, the hose shall withstand a surface temperature of 1200°F for at least 50 seconds without bursting.

Hose Specification

April 2009

Cold Resistance.

Hose shall be capable of practical use down to -35°F

Ozone Resistance.

When evaluated in accordance with standards ASTM D 1149 and ASTM D518, procedure B, 70 hours at 118°F, 100pphm of ozone, the cover or liner shall show no visible signs of cracking.

Chemical Resistance.

Contamination by most chemical substances, Oils, greases, hydrocarbons, and exposure to sea-water shall have no effect on the short or long-term performance of the hose. A copy of the products chemical resistance chart shall be provided by the manufacturer, if requested.

Water Absorption.

When tested against the procedure listed in MIL STD 24606 the maximum water absorbance shall be less than 0.1 lbs in a 100-foot length.

Maintenance.

Hose shall not require washing or drying.

Hose shall not support mold or mildew growth.

Color.

Hose shall be supplied in high visibility yellow color.

Couplings.

The hose shall be fitted with either (A): Forged aluminum quarter-turn forestry couplings in accordance with Canadian Patent 2,152,661 ; Or (B): Lightweight, extruded aluminum alloy, hard coated forestry couplings. (These shall be expansion ring type, NH threads in accordance with NFPA 1963, Latest edition). Or (C) as specified.

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Burst, Hydrostatic and Physical Data.

Hose shall comply with the requirements listed in the tables below and the requirements of The National Fire Protection Association Standard 1961, latest edition

Sizes and Pressures				
Size	Bowl Size	Service Pressure	Proof Pressure	Minimum Burst
3/4"	1"	300 PSI	600 PSI	900 PSI
1"	1- 3/16"	300 PSI	600 PSI	900 PSI
1 1/2"	1-3/4"	300 PSI	600 PSI	900 PSI

Average Coupled Weights			
Size	50'	100'	50' Coil Diameter
3/4"	5.5 lbs	11.0 lbs	12.0 ins
1"	7.0 lbs	13.5 lbs	12.5 ins
1 1/2"	11.0 lbs	21.0 lbs	12.5 ins