

Attack Hose Specification Sheet

1 3/4" and 2 1/2"

Hose Construction

This hose is designed specifically for aggressive interior fire attack operations. The outer jacket is woven from staple polyester yarns over an inner liner consisting of a one-piece extruded through-the-weave tube. Combat-Ready is manufactured in a high-visibility white with one red and one blue stripe running the length of the hose. This heat resistant, drag resistant and kink resistant hose shall have superior friction loss characteristics. Warranty: Hose shall carry a 10 year written warranty.

Inner Hose Properties

When the hose is tested in accordance with NFPA 1961, the liner or cover shall have the following properties:
Ultimate Tensile Strength – shall not be less than 1500 PSI
Ultimate Elongation – shall not be less than 400%
Permanent Set – shall not exceed 20%
Accelerated Aging Test – shall meet requirements of UL 19 for accelerated aging
Adhesion – between reinforcement and liner shall be a minimum of 20 pounds
Ozone Resistance – shall show no signs of visible cracking of the cover of liner when tested in accordance with ASTM D1149-91 and ASTM D518-86 (R91), Procedure B.
Chemical Resistance – Exposure to seawater and contamination by most chemicals will have no effect on the short or long term performance of the hose.

Abrasion Resistance

Hose shall withstand 30,000 cycles on the Taber Abrasion Machine (H-22 Wheel: 1 kg). Manufacturer must supply written warranties that this hose meets a minimum 30,000 cycles. Other abrasion test results (UL, DIN, etc.) can be supplied on request of purchaser.

Safety Factors

Abrasion Resistance – bears a direct relationship to the safe performance of the fire hose. The UL abrasion test most closely resembles the fire ground use of fire hose and as such, is considered of prime importance. Hose meeting all of the abrasion resistance safety factors below shall do so without exceeding average weights.

UL Abrasion – The hose shall pass a burst test after 5000 cycles on a reciprocating abrasion tester – as specified in UL Standard 19.

Factory Mutual Abrasion – A sample of coupled hose is submitted to the procedure listed in FM Standard 2111 or MIL-H-24606B, there shall be no signs of leakage after 20,000 cycles of abrasion.

Cold Resistance Safety Factor – Hose shall be capable of safe use down to -50 degrees F. The hose shall have no apparent damage to cover reinforcement or lining when subjected to the following cold bending test: A 50 ft. length of dry hose is coiled and placed in a cold box at -50 degrees for 24 hours. The hose shall not show any damage to the reinforcement when subjected to hydrostatic acceptance test pressure.

Flashover Resistance Safety Factor – Heat resistance is of the utmost importance when evaluating interior attack hose. This hose shall meet the safety factors for heat resistance without exceeding the normal fire hose weight. The hose shall be subjected to a static pressure of 100 PSI and be capable of withstanding a surface temperature of 1200 degrees F for a minimum of 45 seconds without bursting.

Water Pick-up Weight – The tendency for a hose to absorb water while in a wet environment can create significant handling difficulties. When tested against the procedure listed in MIL-H-24606B, the maximum weight gain shall not exceed 3 lbs. per 50 foot length.

Burst Resistance Safety Factor – Hose failure due to bursting is the single most important safety concern. Hose shall have the capability of passing a 500 PSI service test with a 1/4" diameter hole through both jacket and liner. Only a through-the-weave design liner will be acceptable. Hose shall have a minimum burst pressure of 1500 PSI.

Hydrostatic Pressure Tests – The hose shall comply with the National Fire Protection Association Standard NFPA 1961.

Physical Data

DIAMETER	SERVICE PRESSURE	ACCEPTANCE PRESSURE	KINK PROOF PRESSURE	SHORT LENGTH BURST	CURVED LENGTH BURST	AVERAGE WEIGHT 50- COUPLED	COIL SIZE 50- COUPLED
1 3/4"	500 PSI	1000 PSI	750 PSI	1500 PSI	1500 PSI	18 LBS	16.5"
2 1/2"	500 PSI	1000 PSI	750 PSI	1500 PSI	1500 PSI	26 LBS	18.5"