

**OUTBACK 600<sup>TM</sup>**

**SPECIFICATION FOR  
1" & 1-1/2"**

**FORESTRY HOSE SPECIFICATION  
POLYESTER FIRE HOSE  
IMPREGNATED JACKET THERMOPLASTIC LINED**

***NORTH AMERICAN FIRE HOSE***

**910 EAST NOBLE WAY SANTA MARIA, CA 93454  
PHONE 805-922-7076 FAX 805-922-0086**

# NORTH AMERICAN FIRE HOSE

## OUTBACK 600 FORESTRY HOSE SPECIFICATION

**Scope:** The specification applies to 1" (25 mm) and 1-1/2" (38mm) sizes of Outback 600 forestry hose suitable for a test pressure of 600 PSI.

**Material & Workmanship:** All materials used in the fabrication of the forestry hose shall be of a premium, superior quality grade as is consistent with good manufacturing practices. The workmanship shall also be of the highest quality.

**Jacket Construction:** The jacket shall be well, evenly and firmly woven with virgin spun polyester in the warp ends; and shall be free from unsightly defects, dirt, knots, lumps and irregularities of twist that might affect the serviceability of the finished product.

The jacket shall be seamless and shall have polyester filler yarns woven around the hose throughout the length, with warp ends interwoven with and covering the filler yarns. The polyester filler yarns shall be of a tensile strength adequate to meet the physical test requirements hereinafter detailed.

The warp ends in each size shall be spun polyester, with sufficient ends to completely cover the filler yarns. The filler yarns shall be filament polyester. The jacket shall be woven on the bias (1-2 twill weave) and shall have exceptionally fine weave so as to prevent snagging of yarns. A typical regular weave shall be considered unacceptable for hose meeting this specification. The warp yarn shall be 3 plies of 4.5 count spun polyester for each size. The filler yarn shall be 4 plies of 1,000 denier filament polyester for the 1" and 5 plies of 1,000 denier filament polyester for the 1-1/2" sizes. There shall be a minimum of 14.5 filler yarns per inch.

The jacket construction shall be as specified in table 1:

### Jacket Construction

Nominal Diameter	Warp Yarn Denier	Number of Warp Ends	Filler Yarn Denier	Filler Picks Per Inch
1"	4.5/3 spun	143	1000/4	15
1½"	4.5/3 spun	207	1000/5	14.5

The jacket shall have a minimum Coefficient of Warp Separation (C.O.W.S.) of 15.

**Lining:** The lining shall consist of a synthetic polyurethane compound. It shall be of the highest quality and shall resist ozone, oxidation and U.V. radiation. It shall be compounded to give long life under good maintenance practice.

The lining shall be extruded of uniform thickness throughout its length. The waterway shall be smooth and free from imperfections in order to keep friction loss to a minimum.

The thickness of the lining shall be .011" minimum.

The adhesion between lining and jacket shall be such that the rate of separation of a 1-1/2" wide strip of lining from the jacket shall not exceed 1" per minute under weight of 12 pounds.

## **Hydrostatic Pressure Tests:**

**Proof Pressure** - Each length of hose shall be hydrostatic tested to 600 PSIG and shall withstand this pressure for a minimum of 1 minute without breaking of any jacket yarns.

**Elongation** - The elongation of the hose while under a 600 PSIG hydrostatic pressure shall not exceed 8% of the length from an initial measurement taken at a pressure of 10 PSIG.

**Twist** - The hose, while under 600 PSIG hydrostatic pressure, shall not twist more than 12 turns per 100 feet for the 1" and not more than 8 turns per 100 feet for the 1-1/2". Direction shall be that which will tighten the couplings, except a maximum of 2 degrees per foot in the direction to loosen the couplings will be permitted while the pressure is being raised from 0 to 600 PSIG provided that the final twist is in the direction to tighten couplings.

**Warp & Rise** - The hose, under 600 PSIG hydrostatic pressure, shall not warp more than 20 inches from a straight line drawn from center to center of the fittings on the ends of the hose. No rise from the level of the test table shall be permitted.

**Kink** - A full length of hose while kinked shall withstand, without rupturing or breaking any threads in the jacket, a hydrostatic pressure of 600 PSIG.

**Straight Burst** - A 3 foot specimen of the hose while lying straight shall have the pressure increased until burst occurs. The pressure at which the burst occurs shall not be less than 900 PSIG.

**Curved Burst** - A 3 foot specimen of the hose while curved to a radius of 27 inches shall have the pressure increased until burst occurs. The pressure at which the burst occurs shall no be less than 900 PSIG.

**Dimensions:** The internal diameter of the hose shall not be less than 1-1/16" for the 1" size and 1-9/16" for the 1-1/2" size.

The outside diameter shall be such that it fits a coupling bowl size of 1-1/4" for the 1" size and 1-3/4" for the 1-1/2" size.

**Hose Length:** The hose shall be in lengths of up to and including 100 feet when measured from back to back of the couplings at a pressure of 10 PSI.

**Hose Weight:** A 100 foot length of hose, uncoupled, shall have a maximum weight of 8.0 pounds for 1" size and 12.5 pounds for 1-1/2" size.

A 100 foot length of hose, uncoupled, shall have a maximum coil diameter of 15.5".

**Jacket Treatment:** Before assembly of the jacket and lining, the jacket shall be treated with a Yellow Ultra-Shield Coating. The Ultra-Shield Coating shall be heat set into the fabric in a heated oven. Ambient drying is not acceptable. Each and every fiber in the yarns shall be encapsulated. Surface treatments such as Hypalon shall be considered unacceptable. The addition of this treatment will provide a measurable increase in abrasion resistance as well as resistance to acids, oils, chemicals and salt water while, at the same time, retaining the inherent characteristics of flexibility, ease of handling, folding and packaging.

**Markings:** Beginning at a point not less than 4 feet from each end, each length shall be stenciled in indelible letters at least 1" in height with the trade name, name of hose manufacturer and month and year of manufacture.

**Method of Testing:** All measurements and tests necessary to determine compliance of the fire hose with the specified requirements shall be made in accordance with Methods of Testing Rubber Hose (ASTM Designation D380), except as otherwise specified.

**Warranty:** This fire hose shall be delivered in first-class condition, and shall be free from defects in material and workmanship for a period of one year from the date of shipment. During the warranty period, any fire hose removed from service for the above referenced defects shall be repaired or replaced free of charge to the customer.

This warranty does not apply to normal wear or to damage resulting from accident, mistreatment, misuse, abuse or neglect that may render the fire hose unfit for service. The warranty expressly excludes all incidental or consequential damages.

**Exceptions to Specifications:** Any and all exceptions to these specifications must be noted in detail below. Failure to note these exceptions shall be cause for rejecting and returning any hose supplied at no cost or obligation to the Fire Department.

---

---

---

---

---

---

---

---

---

---