

HI-FLOW

HI-FLOW 400™

SPECIFICATION FOR

4" & 5"

NITRILE COVERED LDH

NORTH AMERICAN FIRE HOSE

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

**NITRILE COVERED 4" & 5"
LARGE DIAMETER FIRE HOSE SPECIFICATIONS**

SIZES: 4" & 5"

SCOPE: The fire hose to be supplied under this specification shall be a premium quality, abrasion resistant, chemical resistant, heavy duty large diameter hose designed for prolonged storage and extended service life. The covered hose construction shall be manufactured with a 100% synthetic reinforcement encompassed in synthetic nitrile rubber, using a through the weave extrusion process, resulting in a one piece construction.

COMPLY _____ EXCEPTION _____

HOSE CONSTRUCTION:

Reinforcement: The hose shall consist of 100% synthetic high tensile yarn, circular woven so as to eliminate left hand twist.

COMPLY _____ EXCEPTION _____

Lining and Cover:The lining and cover shall consist of a synthetic nitrile rubber compound of identical material with special bonding agents to prevent the possibility of delamination.

COMPLY _____ EXCEPTION _____

Finished Hose: The finished hose shall combine the 100% synthetic circular woven reinforcement with a special synthetic nitrile rubber compound using a through the weave extrusion process resulting in a one piece construction. The rubber shall be both chemically and mechanically bonded to the woven reinforcement. Glued hose or hose not having chemical adhesion will not be acceptable.

COMPLY _____ EXCEPTION _____

LINING AND COVER PROPERTIES:

Ultimate Tensile Strength: Tensile strength of lining and cover compound shall not be less than 1750 PSI.

Ultimate Elongation: The elongation of the cover and lining material shall be minimum 500%.

Accelerated Aging Test: The tensile strength and ultimate elongation of the vulcanized rubber compound which has been subjected to the action of oxygen at a pressure of 300 +/- 10 PSI at a temperature of 158 degrees +/- 18 degrees F. for a

period of 96 hours shall not be less than 65% of the original values.

COMPLY _____ EXCEPTION _____

FRICITION LOSS: The friction loss characteristics of the hose at 100 PSI residual pressure shall conform to the following.

		FLOW IN U.S. GALLONS PER MINUTE FOR							
		500	600	700	800	900	1000	1500	2000
PSI LOSS PER 100'	4"	3.0	4.4	66.0	7.8	10.0	12.2	27.5	48.8
	5"	1.1	1.5	2.0	2.6	3.5	4.0	9.6	17.0

NOTE: Since there are no official NFPA guidelines for minimum friction loss, the numbers will be the minimum acceptable.

COMPLY _____ EXCEPTION _____

OZONE RESISTANCE:

The hose shall show no visible of cracking of the liner or cover when tested in accordance with ASTM D-1149, and ASTM D 518 Procedure B at 100 pphm/118F/70 hours.

CHALKING:

Hose furnished to this specification shall not react adversely to environmental changes (chalking caused by exposure to sunlight).

CHEMICAL RESISTANCE:

Exposure to sea water and contamination by most chemical substances, hydrocarbons, oils, acids and grease must have no effect on the short or long term performance of the hose.

COMPLY _____ EXCEPTION _____

HEAT RESISTANCE:

The hose, when subjected to a static pressure of 100 PSI shall be capable of withstanding a surface temperature of 1200 degrees F for a minimum of two minutes without bursting.

COMPLY _____ EXCEPTION _____

HYDROSTATIC TESTS:

All hydrostatic tests conducted to determine twist, warp, rise and including acceptance tests, burst tests and kink tests, shall be in accordance with NFPA 1961 Standard For Fire Hose, (Latest Edition), for 400 PSI Acceptance Pressure Fire Hose.

COUPLINGS:

The couplings provided on this hose, shall be expansion ring attached threaded, or field attachable Storz type and shall be in full conformance with NFPA 1963 Standard For Fire Hose Connections, (Latest Edition).

HOSE COLOR:

Color to be Yellow.

HOSE DATA CHART

HOSE SIZE	100' COIL DIAMETER	WEIGHT 100' CPLD.	WEIGHT 100' CPLD.	CUBIC FT. OF SPACE PER FOOT OF HOSE	FLAT WIDTH UNCHARGED
4"	24"	45 LBS	80 LBS	.023	6"
5"	27"	60 LBS	110 LBS	.032	7-3/4"

MARKINGS:

Each length of hose shall be indelibly marked in letters and figures at least 1" high. Markings shall be in accordance with NFPA 1961 Standard For Fire Hose (Latest Edition). In addition,

WARRANTY:

The manufacturer shall assure, the fire hose proposed shall meet the requirements and specifications as herein set forth. The manufacturer shall also, as part of their proposal, warranty such fire hose for a period of (1) year from date of shipment, against failure due to defects in material or workmanship. During the warranty period, any fire hose removed from service for the above mentioned defects shall be repaired or replaced free of charge to the customer.

Complete detailed specifications, along with a 12 inch sample of the hose proposed to meet this specification, shall be submitted with the hose bid.