

# COBRA COMBAT

DOUBLE JACKET 4-LAYER NFPA RATED ATTACK HOSE

- Double Jacket 4-layer NFPA rated attack hose
- Exclusive Anti-Whip technology
- Exclusive PU based color coating to aid abrasion resistance and color leaching
- PVC/Nitrile liner with Proprietary reinforcement to provide the following characteristics:
  - Superior kink resistance
  - Reduced friction loss
  - Superior heat resistance
  - Proprietary Puncture resistance
  - Increased flow capabilities
  - Specifically designed for low pressure high volume nozzle applications
  - Colors: red, yellow, blue, black, green, tan, orange, clear
  - Lengths available to 100'
  - Diameters: 1.77", 1.88", 2.02", 2.30", 2.52", 4.10", 5.10"

**Meets all the requirements of  
NFPA 1961 Standard on Fire Hose**



**Made in the U.S.A.**

**QUALITY:** The fire hose to be supplied under the specification is a premium quality double jacket municipal fire hose. All materials used in the fabrication of the hose shall be of the best quality commercially available.

**JACKET:** The jacket shall be evenly and firmly woven, free from Unsightly defects, dirt, knots, lumps, irregularities or twist that might affect the serviceability of the finished product. Each jacket shall be seamless and shall have polyester filler yarns woven around the hose throughout its length, with the warp ends interwoven with the warp yarn covering the filler yarns. Warp ends of the outer jacket shall be ring spun-polyester developed, designed and processed for the fire hose jacket warp yarns. The use of nylon, polyamide, or rayon yarns used in the warp or filler direction is not allowed. The use of any warp yarns of filament or entangled construction is expressly forbidden. Filler yarns of the outer jackets shall be of the highest denier filament polyester developed and allowed, designed and processed for the fire hose jacket filler yarns. These filament polyester yarns shall be free from defects that are unsightly or may affect the serviceability of the finished hose. The ring spun polyester warp ends must completely cover and protect the filament polyester filler yarns. The jacket shall be constructed with a high pick count "Anti-Whip" design technology exclusive to Matex Hose. Exclusive solution dyed black yarn creating proprietary stripes shall be woven into the jacket to correctly identify diameters.

**IMPREGNATION:** The emulplast polyseel color impregnations a proprietary process applied to the outer jacket by a mechanical process and cured into jacket by a thermal process, This includes a polyurethane coating which increases abrasion resistance by 6 times over standard impregnation. It greatly increases heat and flame resistance, reduces water pick up and adds superb resistance to petro chemicals and displays extreme resistance to bacterial and mildew growth.

**COLORS:** Yellow, blue, orange, red, green, tan, black or clear.

**LINING:** The proprietary circularly woven reinforcement shall be completely protected by a through the weave extruded PVC/Nitrile Rubber (30%/70%), forming a single homogeneous construction without the use of glues or adhesives of any type. Materials used in construction of the hose shall be new, unused and not less than the quality conforming to modern engineering and manufacturing practices. Materials shall be free of defects and suitable for the service intended.

**ADHESION:** The adhesion of the lining to the proprietary reinforcement shall be such that the rate of separation of a 11/2" strip of lining, transversely cut, shall not be greater than 1" per minute under a weight of 18 lbs. No exceptions, Must accompany a lifetime warranty against delamination.

**LOW TEMPERATURE FLEXIBILITY:** The hose shall be capable of performing in sub-zero conditions. A 3 foot section of hose shall be exposed to a temperature of -54°+ / - 2°C (-65°+ / -3° F) for a period of hrs. At the end of the exposure period, and white maintained at the -55°C exposure temperature, the hose shall be rapidly bent 180° double on itself, first one way and then the other. There shall be no cracking or breaking of the jacket or liner. Leakage shall be cause for rejection.

**HYDROSTATIC TEST:** Hydrostatic tests shall be conducted on hose equipped with the couplings to be delivered in accordance with NFPA 1961. Each length of hose is to be subjected to hydrostatic proof test pressure of 800 psi for at least 15 seconds and not more than 1 minute. Higher test pressures which may weaken the hose are expressly forbidden.

**WARP:** The hose shall not warp more than 20" from a straight line drawn from center to center of the fittings at the ends of the hose, and the hose shall not rise from the table.

**EXPANSION:** The expansion in circumference of the hose between 10 and 800 psi shall not exceed 8%.

**BURST TEST:** A 3 foot sample of hose chosen at random shall stand without failure a hydrostatic pressure of 1500 psi while lying straight or curved on a 27" radius for all diameters 2 1/2" or less. 4" and 5" shall have a minimum burst of 900 psi. Retention of the coupling to the hose shall equal or exceed the burst pressure.

**KINK TEST:** A full length shall withstand, while kinked, without failure, a hydrostatic pressure of 500 psi.

**WARRANTY:** The fire hose furnished under the terms of this proposal has a potential service life of 10 years, barring mistreatment or accidental damage that would render the hose unfit for service. Matex warrants the hose to be free from defects in materials and workmanship for a period of ten years. This warranty shall provide for the repair or replacement of hose and couplings proven to have failed due to faulty material or workmanship. Matex Cobra Combat also carries a lifetime warranty against delamination PLUS a 2 year bumper to bumper warranty if the hose fails NFPA testing for any reason.



INSIDE DIAMETER	THICKNESS	WEIGHT/ FT. UNCOUPLED	WORKING PRESSURE	TEST PRESSURE	BURST PRESSURE
1.77 "	2 1/8"	.38 lbs	400 psi	800 psi	1500 psi
1.88 "	2 1/4"	.41 lbs	400 psi	800 psi	1500 psi
2.02"	2 2/5"	.44 lbs	400 psi	800 psi	1500 psi
2.30"	2 19/32"	.48 lbs	400 psi	800 psi	1500 psi
2.52"	2 15/16 "	.52 lbs	400 psi	800 psi	1500 psi
4.10"	4 1/2"	.90 lbs	300 psi	600 psi	900 psi
5.10"	5 1/2"	1.10 lbs	300 psi	600 psi	900 psi