



Mercedes Textiles Limited

"Flowing with Technology"

Aquatec 800™

Highly Snag Resistant

Municipal Attack Fire Hose

Premium all Synthetic Double Jacket

A superior heavy-duty fire hose

400 PSIG / 2750 kPa Service Pressure

Superior Performance & Durability

5838 Cypihot
Saint Laurent, Quebec
Canada, H4S 1Y5
Tel : 514-335-4337
Fax : 514-335-9633

DESIGNED FOR EASY ADVANCEMENT BECAUSE OF THE FILAMENT POLYESTER OUTER JACKET WHICH YIELDS A VERY LOW DRAG COEFFICIENT



Applications

- ▶ Pre-Connected Cross-Lay & Attack Hose
- ▶ High-Rise Hose Kits, Attack Hose
- ▶ Rapid Intervention Team (RIT) Hose
- ▶ De-Contamination & Wash Down Hose
- ▶ Potable Water Transfer Hose (Stenciled)

Features and Benefits

- ▶ Very easy to advance because of the filament polyester outer jacket, which yields a very low drag coefficient.
- ▶ Highly flexible and snag resistant because of our unique inner bonding process of the outer jacket, which locks the outer fibers in place.
- ▶ Tough and ready for action but light in weight.
- ▶ Our Patented Mertex® lining process produces an amazingly thin but smooth inner waterway, yielding an extremely low friction loss for maximum flow.
- ▶ Available with Permatek™ HP treatment in a variety of colors, for even greater visibility & abrasion resistance. This treatment also greatly reduces moisture absorption through the jacket.
- ▶ Resistant to most chemicals, petrol products, ozone & U.V. exposure, hydrolysis, and rot & mildew.

Patented Mertex® Lining Process

- ▶ Welds the lining directly to the textile while the hose is being woven.
- ▶ This allows the use of high strength Filament Polyester yarn to be used, due to the Mertex® process superior liner adhesion.
- ▶ Locks fibers together for greater strength while still allowing for a high flexibility.
- ▶ Creates a virtually inseparable bond without the use of adhesives. Huge advantage over competitors.
- ▶ Yields an extremely low friction (pressure) loss because the Mertex® process fills the corrugations of the weave, which creates an amazingly thin and smooth waterway.
- ▶ Mertex® lined hose produces lower elongation under pressure. This means less pull back when water is suddenly shut-off, resulting in a safe hose to work with.
- ▶ Permits manufacturing to special lengths. Consult factory for details.

Permatek™ Treatment

- ▶ Available in the following Colors : Yellow(Y), Blue(B), Green(G), Red(R), Orange(O), Black(K), Tan(T), and Clear C.
- ▶ Locks fibers together for greater strength, reduces water pickup and absorption.
- ▶ Provides protection against abrasion.
- ▶ Provides resistance to Petroleum products and Ozone.
- ▶ Provides for shorter drying times.



Mercedes Textiles Limited

"Flowing with Technology"

Bid Specifications

How to Specify Aquatec 800™

5838 Cypihot
Saint Laurent, Quebec
Canada, H4S 1Y5
Tel : 514-335-4337
Fax : 514-335-9633

Scope:

- ▶ Hose manufactured to this specification shall be of superior quality and workmanship. This heavy-duty double jacket fire hose shall be designed to withstand the rough usage of front line fire fighting.

Construction and Features:

- ▶ The hose shall be of double jacket construction.
- ▶ Both inner and outer jackets shall be made with high tenacity filament polyester yarn in both the warp and weft directions, to provide maximum strength and very snag resistant.
- ▶ The hose outer jacket shall have a minimum filler yarns of 10.7 per inch (420 per Meter)
- ▶ The hose shall be available in any of eight colors listed with our Permatek treatment, upon request.
- ▶ The hose shall have excellent resistance to most chemical substances, oils and greases. Exposure to salt water shall have no effect on the short or long term performance of the hose and copy of the chemical resistance shall be provided upon request.
- ▶ The hose must be of sufficient body and weight to meet the demands of heavy-duty fire fighting.

Performance:

- ▶ The hose, in all sizes, shall have minimum service, test, and burst pressures as specified in the Technical Chart. Hoses which do not meet these minimum pressures, shall not be considered as meeting this specification.
- ▶ The hose shall have a maximum flow with minimum friction loss.
- ▶ The hose jacket shall be highly abrasion resistant, highly flexible, and very snag resistant.
- ▶ There shall, be no defects, dirt, knots, lumps or other irregularities affecting the performance of the hose.
- ▶ The hose shall not rise up from the test surface.

Lining:

- ▶ The hose lining shall have excellent resistance to most chemicals, petrol products, ozone and U.V.
- ▶ The hose lining shall be capable of being approved for potable water, when so ordered.
- ▶ The thermoplastic lining material used for this specification shall have a flawless record in the fire hose industry.
- ▶ Both the inner and exterior jackets shall be lined by the patented Mertex® method without the use of adhesives or backing material, to lock the fibers in place. The lining material in its molten state shall fill the corrugations of the weave fusing to every warp and filler thread and provide a very smooth and low friction waterway. No adhesive or backing material shall be used to bond the lining and it shall yield maximum flow with minimum friction loss. An inner hose manufactured by inverting an exterior coated hose shall not be considered as meeting this specification. Hose manufactured with the use of adhesives or backing for bonding the liner, or hose made with rubber liners shall not be considered as meeting this specification.

Treatment:

- ▶ When requested, the exterior jacket shall be Permatek® treated for greater abrasion resistance, improved visibility & reduced moisture pick-up.

Standards:

- ▶ Fire hose manufactured to this specification shall meet & exceed all performance requirements of NFPA 1961, Underwriter's Laboratories & Factory Mutual.

Technical Chart

| Hose Spec | Trade Size | | Bowl Size | | Weight 50' (15.2M) Un-coupled | | Coil Diameter 50' (15.2M) | | Service Pressure | | Proof Pressure | | Burst PSI | Pressure kPa |
|-----------|------------|----|-----------|----|-------------------------------|-----|---------------------------|------|------------------|-------|----------------|-------|-----------|--------------|
| | In. | mm | In. | mm | Lbs | Kg | In. | Cm. | PSI | kPa | PSI | kPa | | |
| 407 | 1.50 | 38 | 1 13/16 | 46 | 11.0 | 5.0 | 14.0 | 35.6 | 400 | 2,750 | 800 | 5,500 | 1,200 | 8,275 |
| 408 | 1.75 | 44 | 2 | 51 | 14.0 | 6.4 | 16.0 | 40.6 | 400 | 2,750 | 800 | 5,500 | 1,200 | 8,275 |
| 410 | 2.50 | 64 | 2 7/8 | 73 | 20.5 | 9.3 | 16.0 | 40.6 | 400 | 2,750 | 800 | 5,500 | 1,200 | 8,275 |