



# Mercedes Textiles Limited

"Flowing with Technology"

**Polyflex®**

## Rack and Reel Hose

Premium all Synthetic, Single Jacket Fire Hose  
250 PSIG / 1725 kPa Service Pressure

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

**OUR INTERIOR ALL SYNTHETIC RACK & REEL FIRE HOSE IS LIGHT WEIGHT, AND AVAILABLE WITH FM AND / OR U/L APPROVALS**

### Applications

- ▶ Cabinet / Reel Fire Hose

### Features and Benefits

- ▶ Tough and ready for action but light in weight.
- ▶ Strong, compact and practical, and will fit on most hose storage devices.
- ▶ Our Patented Mertex® lining process produces an amazingly thin but smooth inner waterway, yielding an extremely low friction loss for maximum flow.
- ▶ Resistant to most chemicals, petrol products, ozone & U.V. exposure, hydrolysis, and rot & mildew.
- ▶ Will remain flexible to -65° F (-55° C).
- ▶ Meets or exceeds all performance requirements of NFPA 1961, Underwriter's Laboratories & Factory Mutual.

### 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 safer hose to work with.
- ▶ Permits manufacturing to special lengths. Consult factory for details.



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### Bid Specifications

#### How to Specify Polyflex®

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#### Scope:

- ▶ Hose manufactured to this specification shall be of superior quality and workmanship. Lined fire hose for interior fire protection shall be light in weight and designed for emergency use only.

#### Construction and Features:

- ▶ The hose shall be of single jacket construction.
- ▶ The jacket shall be made with high tenacity filament polyester yarn in both the warp and weft directions, to provide maximum strength to weight ratio.
- ▶ The hose outer jacket shall have a minimum filler yarns of 10.0 per inch (394 per Meter)
- ▶ The hose shall be resistant to most chemicals and petrol products, rot & mildew, hydrolysis, and resist deterioration due to exposure to UV-rays and ozone.

#### 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.
- ▶ There shall, be no defects, dirt, knots, lumps or other irregularities affecting the performance of the hose.
- ▶ The hose must resist kinking and remain flexible to -65°F (-55°C).
- ▶ Twisting and warping shall be at least 100% better than required, by the applicable NFPA standards.
- ▶ 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.
- ▶ The hose jacket 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.

#### Standards:

- ▶ Fire hose manufactured to this specification shall meet & exceed all performance requirements of NFPA 1961, Underwriter's Laboratories & Factory Mutual.
- ▶ The hose shall be UL approved and can be labeled upon request in the sizes specified\*\*

#### Technical Chart

Hose Spec	Trade Size		Bowl Size		Wt. 100' (30.5M) Un-coupled		Coil Diameter 100' (30.5M)		Service Pressure		Proof Pressure		Burst PSI	Pressure kPa
	In.	mm	In.	mm	Lbs	Kg	In.	Cm.	PSI	kPa	PSI	kPa		
503	1.5**	38**	1 11/16	43	10.4	4.7	11.5	29.2	250	1,725	500	3,450	750	5,175
507	2.50	64	2 3/4	70	24.0	10.9	14.5	36.8	250	1,725	500	3,450	750	5,175