



Mercedes Textiles Limited

"Flowing with Technology"

Forestguard II®

All Synthetic Forestry Hose
300 PSIG / 2070 kPa Service Pressure
Superior Performance & Durability

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

ALL SYNTHETIC, TOUGH ULC APPROVED NON-PERCOLATING FORESTRY HOSE



Applications

- ▶ Forestry Agency Attack Hose
- ▶ Urban Interface, Grass Fire Kits, and Mop Up Hose
- ▶ Wildland Brush Fire Truck Attack Hose
- ▶ Range Control Attack Hose
- ▶ Cottage & Forestry Home Values Protection Hose

Features and Benefits

- ▶ 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.
- ▶ Will remain flexible to -65° F (-55° C).
- ▶ **Meets ULC requirements and can be labeled upon request in the sizes specified*.**
- ▶ Meets or exceeds all performance requirements of NFPA 1961, Underwriters' Laboratories of Canada Spec S518.1, Factory Mutual and USDA Spec 5100-187 for 1" (25mm) and 1 1/2" (38mm).

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.

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.



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Bid Specifications

How to Specify Forestguard II®

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Scope:

- ▶ Hose manufactured to this specification shall be of superior quality in both workmanship and raw materials. Within the scope of a single jacket construction the hose shall be resistant to wear and tear. The hose shall not deteriorate from the effects of aging.

Construction and Features:

- ▶ The hose shall be of single jacket construction.
- ▶ The jacket shall be woven in a tight twill weave to yield maximum abrasion resistance.
- ▶ The hose outer jacket shall have a minimum filler yarns of 10.8 per inch (425 per Meter)
- ▶ The hose shall be available in any of eight colors listed with our Permatek treatment, upon request.
- ▶ 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 1" (25 mm) hose shall be capable of flowing 40 US GPM (150 LPM) with a maximum pressure loss of 24 PSIG (166 kPa) per 100' (30.48M). A hose with a friction loss greater than this shall not be considered as meeting this specification.
- ▶ The 1 1/2" (38 mm) hose shall be capable of flowing 70 US GPM (264 LPM) with a maximum pressure loss of 10 PSIG (69 kPa) per 100' (30.48M). A hose with a friction loss greater than this shall not be considered as meeting this specification.
- ▶ 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 must resist kinking and remain flexible to -65°F (-55°C).

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.

Treatment:

- ▶ When requested, the 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.
- ▶ The hose shall be ULC approved and can be labeled upon request in the sizes specified*
- ▶ Fire hoses manufactured to this specification shall meet or exceed all performance requirements of NFPA 1961, Underwriters' Laboratories of Canada Spec S518.1, Factory Mutual and USDA Spec 5100-187 for 1" (25mm) and 1 1/2" (38mm).

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		
704	1.00	25	1 5/32	29	8.0	3.6	14.0	35.6	300	2,070	600	4,140	900	6,200
705	1.5*	38*	1 11/16	43	11.8	5.4	14.0	35.6	300	2,070	600	4,140	900	6,200
706	1.75	44	1 7/8	48	13.5	6.1	15.0	38.1	300	2,070	600	4,140	900	6,200
701	2.50	64	2 3/4	70	22.0	10.0	16.5	41.9	300	2,070	600	4,140	750	5,175