

High Performance Fabric Specifications – 4 mil

Norseman Structure's high performance fabric is manufactured by Engineered Coated Products™ (a division of Intertape Polymer Group™): regular fabric (RU88X-6 4 mil) and fire retardant (FRU88X 4 mil)

Common Specifications: NON FR and FR fabric

Coating Thickness		4 mil (94-95g/m ²) average each side
Total Fabric Weight		12.0 oz/yd ² (407 g/m ²) +/- 5%
Thickness 5199	ASTM D-	RU88X-6: 20 mils (0.50 mm) FRU88X-6: 23 mils (0.59 mm)
Grab Tensile 5034	ASTM D-	RU88X-6: Warp: 370 lb (1664N), Weft: 345 lb. (1532N) FRU88X-6: Warp: 355 lb (1576N), Weft: 350 lb (1555N)
Tongue Tear 2261	ASTM D-	RU88X-6: Warp: 115 lb (510N), Weft: 110 lb (489N) FRU88X-6: Warp: 115 lb (510N), Weft: 115 lb (510N)
Strip Tensile 4851	ASTM D- CSA-S367	RU88X-6: Warp: 275 lb/inch (2444 N/5cm) Weft: 245 lb/inch (2178 N/5cm) FRU88X-6: Warp: 270 lb/inch (2400 N/5cm) Weft: 250 lb/inch (2222 N/5cm)
Mullen Burst 3786	ASTM D-	675 psi (4657 kPa)
Low Temp. Bend 2136	ASTM D-	Pass: - 60° C (-76° F)
Light Transmission %	ASTM E-903	White/White: RU88X-6: 20.9% FRU88X-6: 11.4%
Water Vapor Transmission	ASTM E-96	0.038 grains/h/ft ² /inHg (perms) 2.16 ng/Pa/s/m ²
UV & Weathering	ASTM G-151	>90% strength retention after 2000 hrs @ 0.77 W/m ² /nm
UV & Weathering	ASTM G-154	>90% strength retention after 1200 hrs @ 1.35 W/m ² /nm
UV & Weathering	CSA-S367	>75% strength retention after 5000 hrs @ 0.77 W/m ² /nm
Trapezoidal Tear 4533	ASTM D-	RU88X-6: Warp: 90 lb (400N), Weft: 90 lb (400N) FRU88X-6: Warp: 95 lb (422N), Weft: 90 lb (401N)

Fire Test Results: FRU 88X-6 4 mil - FR Fabric (fire retardant)

Base Fabric	HDPE Scrim using FR inhibitors and UV protection		
Surface Type	Modified LDPE coating using FR inhibitors and UV protection		
California Fire Marshal	FA – 51405		
NFPA 701 - 1989 (Large Scale Test)	04-02-725(A)	Char: 1.4 in. Av.	Drip: No
NFPA 701 - 1989 (Small Scale Test)	04-02-725(A)	Char: 3.5 in. Av.	Drip: No
ASTM E84-08	08-002-695	FSI: 10	SD: 110
NFPA 701 - 2004 Test Method 1	05-02-885(A)	Mass Loss: 4.7% Av.	Drip: No
NFPA 701 - 2004 Test Method 2	05-02-885(B)	Char: 76 mm (3in.) Av.	Drip: No
CAN/ULC S109-03 (Small Flame)	06-02-866	Char: 98 mm Av.	Drip: No
CAN/ULC S109-03 (Large Flame)	06-02-866	Char: 104 mm Av.	Drip: No
CAN/ULC S102-03	05-02-609	FSCI: 5	SD: 95
UBC 31-1	16421-108891	Char: 8.69 in. Av.	Drip: No
UL	Listed – R15076		
ULC	Listed – R20040		
EN 13501-1	Fire Behavior: B	Smoke: s1	Droplets: d0

Fire Test Results: RU 88X-6 4 mil - NON FR Fabric

Base Fabric	HDPE Scrim with UV protection		
Surface Type	Modified LDPE coating with UV protection		
ASTM E84-01	03-02-586(A)	FSI: 10	SD: 65
CAN/ULC-S102-07	08-002-394	FSCI: 15	SD: 100

FIRE TESTING NOTE: Results of the RU / FRU fabric fire tests demonstrate that the fabrics will not support combustion nor contribute fuel to a fire. If the source of the fire is removed, the fabrics self extinguish and combustion ceases. Other characteristics and properties of the fabrics are as per the MSDS (Material Safety Data Sheet) and 'Resistance to Chemicals' documents.