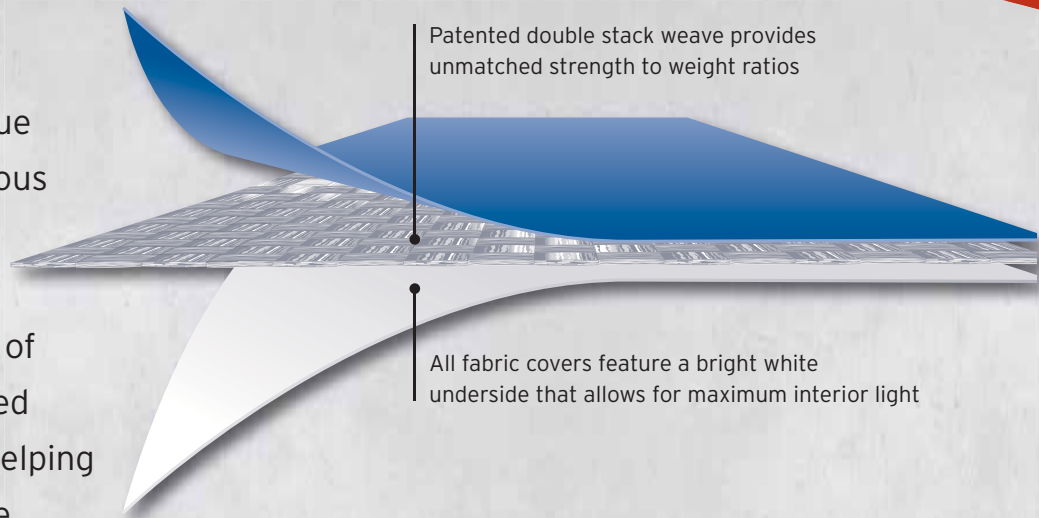


HIGH PERFORMANCE

STANDARD AND FIRE RETARDANT FABRIC COVERS



Norseman Structures' high performance fabric uses unique technology, giving it tremendous strength & durability. The heavy-duty, polyethylene fabric is created using a layer of woven tapes (scrim) and coated with a thick protective layer helping avoid scuffing and UV damage. Combining the scrim and the coatings provides tremendous rip, tear, and puncture resistance.



Patented double stack weave provides unmatched strength to weight ratios

All fabric covers feature a bright white underside that allows for maximum interior light

INTERIOR ATMOSPHERE

- Light colored covers provide an exceptionally bright and pleasant interior atmosphere
- The unique composition ensures the fabric remains pliable and resistant to ultraviolet damage
- Unique fabric properties ensure your building is warmer in the winter and cooler in the summer

COLOR SELECTION

- Available in a variety of attractive colors
- All colors feature a bright white underside that enhances the interior brightness
- Blackout fabric is also available

Fire Retardant Fabric Color Options



Standard Fabric Color Options



SAFE & ENVIRONMENTALLY FRIENDLY

- No toxic chemicals are used in the production of Norseman Structures' high performance fabric

SELF EXTINGUISHING

- Laboratory testing confirms Norseman Structures' high performance fabric is "self extinguishing"
- Fabric will not support combustion or continue to contribute fuel to a fire
- If the source of the fire is removed, the fabric combustion will cease

FIRE RETARDANT (FR) PROTECTION

Norseman Structures' high performance FR fabric:

- Increases protection for your valuable assets
- Adheres to stringent building codes required for many projects
- Has self-extinguishing properties, which protects your valuables
- Reduces flame spread to other buildings
- Increases building escape time in case of fire
- Increases opportunity for fire and protective services to extinguish the fire
- Allows Norseman Structure owners to often replace the fabric cover following a fire incident, whereas conventional buildings may be a total loss

WARRANTY

- Please contact your local sales professional for warranty information

Fiercely Reliable – Since 1921

HIGH PERFORMANCE FABRIC SPECIFICATIONS

COMMON TESTS & SPECIFICATIONS: STANDARD & FR FABRIC		
Coating Thickness:		4 mil (94-95g/m ²) average each side
Total Fabric Weight:		12 oz/yd ² (407 g/m ²) +/- 5%
Thickness:	ASTM D-5199	Standard: 20 mils (0.50mm)
		Fire Retardant: 23 mils (0.59mm)
Grab Tensile:	ASTM D-5034	Standard: Warp: 370 lb. (1664 N), Weft: 345 lb. (1532 N)
		Fire Retardant: Warp: 355 lb. (1576N), Weft: 350 lb. (1555N)
Tongue Tear:	ASTM D-2261	Standard: Warp: 115 lb. (510N), Weft: 110 lb. (489N)
		Fire Retardant: Warp: 115 lb. (510N), Weft: 115 lb. (510N)
Strip Tensile:	ASTM D-4851	Standard: Warp: 275 lb/in. (2444 N/5cm), Weft: 245 lb/in. (2178 N/5cm)
	CSA-5367	Fire Retardant: Warp: 270 lb/in. (2400 N/5cm), Weft: 250 lb/in. (2222 N/5cm)
Mullen Burst:	ASTM D-3786	675 psi (4657 kPa)
Low Temp. Bend:	ASTM D-2136	Pass: -60° C (-76° F)
Light Transmission %:	ASTM E-903	White/White: Standard: 20.9%, Fire Retardant: 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 2000hrs @ 0.77 W/m ² /nm
UV & Weathering:	ASTM G-154	>90% strength retention after 1200hrs @ 1.35 W/m ² /nm
UV & Weathering:	CSA-S367	>75% strength retention after 5000hrs @ 0.77 W/m ² /nm
Trapezoidal Tear:	ASTM D-4533	Standard: Warp: 90 lb (400N), Weft: 90 lb (400N)
		Fire Retardant: Warp: 95 lb (422N), Weft: 90 lb (401N)

FIRE TEST RESULTS: FIRE RETARDANT FABRIC (FR)			
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: 1.4in. Av.	Drip: No
NFPA 701 - 1989 (Small Scale Test)	04-02-725(A)	Char: 3.5in. Av.	Drip: No
ASTM E-84-08	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: 76mm (3in.) Av.	Drip: No
CAN/ULC S109-03 (Small Flame)	06-02-866	Char: 98mm Av.	Drip: No
CAN/ULC S109-03 (Large Flame)	06-02-866	Char: 104mm Av.	Drip: No
CAN/ULC S102-03	05-02-609	FSCI: 5	SD: 95
UBC 31-1	16421-108891	Char: 8.69in. Av.	Drip: No
UL	Listed - R15076		
ULC	Listed - R20040		
EN 13501-1	Fire Behavior: B	Smoke: s1	Droplets: d0

FIRE TEST RESULTS: STANDARD 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.