Aslan 500 Carbon Fiber Reinforced Polymer (CFRP) Tape

Product Data Sheet

Physical / Mechanical Properties – Tensile, Modulus & Strain

Size Designation			Nominal Area		f^*_{fu} - Guaranteed Tensile Strength		Ultimate Tensile Load		E_f - Tensile Modulus of Elasticity		Ultimate Strain
Size	mm	Dimension	mm^2	in^2	MPa	ksi	kN	kips	GPa	psi 10^6	%
2	6	0.079" X 0.63" 2mm X 16mm	31.67	0.049	2241	325	70.8	15.92	124	18	1.81%
3	10	0.177" X 0.63" 4.5mm X 16mm	71.26	0.110	2172	315	154.1	34.65	124	18	1.75%

Hughes Brothers reserves the right to make improvements in the product and/or process which may result in benefits or changes to some physical-mechanical characteristics. The data contained herein is considered representative of current production and is believed to be reliable and to represent the best available characterization of the product as of July 2011. Tensile tests per ASTM D3039.

#2 (6mm) equivalent area Tape is available in coils in continuous lengths up to 250ft (76.2m).

#3 (10mm) equivalent area Tape is available in coils in continuous lengths up to 100ft (30.48m).

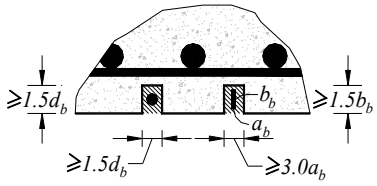
Design Tensile & Modulus Properties **.....** per ASTM D3039. The area used in calculating the tensile strength is the nominal cross sectional area. The "Guaranteed Tensile Strength", f^*_{fu} is as defined by ACI 440.1R as the mean tensile strength of a given production lot, minus three times the standard deviation or $\mathbf{f^*_{fu} = f_{u,ave} - 3\sigma}$. The Design or "Guaranteed Modulus of Elasticity" is as defined by ACI 440.1R as the mean modulus of a production lot or $\mathbf{E_f = E_{f,ave}}$.

Material Certs & Traceability **.....** Available for any production lot of Aslan 200 bar traceable by stock order and production date.

Density

Size Designation		Unit Weight / length	
Size	mm	kg / m	lbs / ft
2	6	0.0521	0.035
3	10	0.1116	0.075

NSM Groove Dimensions ≥ 1.5 b_b for depth
≥ 3.0 a_b for width



Aslan 500 NSM "System" ~ Approved Adhesives

The following high strength structural adhesives are recommended for use.

- Hilti RE 500
- Pilgrim Magmaflow CF
- BASF Concresive 1420 & Concresive LPL
- DeNeef Enforce CFL Gel
- Unitex Pro-poxy 400

Transition Temperature of Resin - *T_g .... > 230°F (110°C)* per DSC method

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November 10, 2011

Aslan FRP