



## Product Specifications

November 2009

Product	TuffPlank
Model	GS
<b>Material Specifications</b>	
Core Material Base	All Plastic
Core Color	Green
Facing	2 Sided Tuff Plastic
Surface Finishing	Smooth
Surface Color	Light grey
Metal Reinforcement	Yes
Metal Type	Treated Steel
Repairable	Yes
Color Selection	Primary Colors
<b>Technical Values</b>	
Density, Kg/m <sup>3</sup>	450 - 710
Bending Modulus, Mpa	11000 - 13000
Bending Strength, Yield, Mpa	20 - 26
Bending Strength, Ultimate, Mpa	26 - 35
Operating Temperature, °C	-20 to +75
Thermal Expansion, mm/m/10°C	0.6
Water Absorbtion, %	0.6
<b>Working Conditions</b>	
Sawing	Similar To Wood
Cutting	
Nailing / Screw	
UV Resistance	Yes
Impact & Abrasive Resistant	Yes
Chemical Resistant	Resistant to most acids, akali. Avoid petroleum
Flamability	Extremely Low
Envionrmentally Friendly	Yes
Termite Resistant	Yes
<b>Product Dimensions</b>	
Standard Width, mm	230, 240 & 250
Max. Length, mm	5000
Thickness, mm	25, 32, 38 & 45
Dimension Tolerance, mm	LW +/-1.5 Diagonal +/-5
Thickness Tolerance, mm	+/-0.4

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**TUFFPLANK TECHNICAL DATA**

GS model - For Scaffold Board Application

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**\*\*Notes**

Data are based on manufacturer's testing and will be subjected to changes from time.

Use of board should not exceed its permissible bending strength. Will cause permanent deformation in flatness.

<b>Metric</b>															
		<b>TECHNICAL DATA</b>													
Thk, mm	Kg/m <sup>2</sup>	Density, Kg/m <sup>3</sup>	MOE, Mpa	Ultimate Bending Strength, (Mpa)	Allowable Bending Strength, (Mpa)	Load @ 150kg/m <sup>2</sup>			Load @ 240kg/m <sup>2</sup>			Load @ 360kg/m <sup>2</sup>			
						Allowable Span (mm)	Deflection (mm)	Bending Stress (Mpa)	Allowable Span (mm)	Deflection (mm)	Bending Stress (Mpa)	Allowable Span (mm)	Deflection (mm)	Bending Stress (Mpa)	
25.0	17.75	710.00	13,200.00	35.00	26.00	2,400	36.00	10.30	2,100	34.00	12.70	1,800	27.00	14.00	
32.0	19.52	610.00	11,200.00	27.00	22.00	2,800	44.00	7.00	2,400	35.00	11.10	2,100	30.00	10.00	
38.0	23.56	620.00	12,400.00	30.00	24.00	3,200	35.00	9.60	3,100	47.00	13.40	2,800	45.00	15.70	
45.0	24.30	540.00	11,100.00	26.00	20.00	3,800	59.00	10.00	3,400	56.22	11.70	3,000	48.80	13.00	

  

<b>Imperial</b>															
		<b>TECHNICAL DATA</b>													
Thk, "	lb/ft <sup>2</sup>	Density, lb/ft <sup>3</sup>	MOE, psi	Ultimate Bending Strength, (psi)	Allowable Bending Strength, (psi)	Load @ 25lb/ft <sup>2</sup>			Load @ 50lb/ft <sup>2</sup>			Load @ 75lb/ft <sup>2</sup>			
						Allowable Span (feet)	Deflection (inch)	Bending Stress (psi)	Allowable Span (feet)	Deflection (inch)	Bending Stress (psi)	Allowable Span (feet)	Deflection (inch)	Bending Stress (psi)	
1	3.64	43.89	1,914,488.40	5,076.30	3,770.96	7.92	1.42	1,493.88	6.93	1.34	1,841.97	5.94	1.06	2,030.52	
1 <sup>1/4</sup>	4.00	37.27	1,624,414.40	3,916.00	3,190.81	9.24	1.73	1,015.26	7.92	1.38	1,609.91	6.93	1.18	1,450.37	
1 <sup>1/2</sup>	4.83	38.21	1,798,458.80	4,351.11	3,480.89	10.56	1.38	1,392.36	10.23	1.85	1,943.50	9.24	1.77	2,277.08	
1 <sup>3/4</sup>	4.98	33.65	1,609,910.70	3,770.96	2,900.74	12.54	2.32	1,450.37	11.22	2.21	1,696.93	9.90	1.92	1,885.48	

**Note:**

Deflection based on L/60

Factor of Safety 1:3 against bending strength.

TuffPlank is a product of Uber Engineering.

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