



Lauan Veneer Skinned Panels



MATERIAL	Total Thickness of sandwich inches	Modulus (MSI)	Max Ply Stress (PSI)	% of each ply's ultimate strength	Bending Stiffness Lb/sq.inch	Total weight Lb/ft2	Flatwise compression Fmax/Area (PSI)
Nida-Core H8PP 10 mm + 2.7mm Lauan both sides	0.602	1.6 0 1.6	1000 0 1000	100 0 100	21180	0.763	188
Nida-Core H8PP 13 mm + 2.7mm Lauan both sides	0.722	1.6 0 1.6	1000 0 1000	100 0 100	32495	0.813	188
Nida-Core H8PP 20 mm + 2.7mm Lauan both sides	1.002	1.6 0 1.6	1000 0 1000	100 0 100	68396	0.930	188
Nida-Core H8PP 25 mm +2.7mm Lauan both sides	1.196	1.6 0 1.6	1000 0 1000	100 0 100	104048	1.017	188

Due to anisotropic properties of honeycombs, MIL handbook 17B does not recommend ASTM C393, or 3 point bend test as a valid indicator of honeycomb cored panel behavior. It is viewed as a possible quality control test but not indicative of the real attributes of the structure. It is generally felt that a better indicator would be the ASTM D 6146-99) (Standard Test Method for Two-dimensional Flexural Properties of Simply Supported Sandwich Composite Plates Subjected to a Distributed Load) or also known as "The Hydramat test". These tests have produced results that validate the accompanying Strength of Materials Data. The viscoelastic behavior of Nida-Core Polypropylene Honeycomb will typically permit far greater deflections without structural failures so the Deflection at Load is supplied for comparison but this does not imply a Load to fail .Deflection values based on 200lb point load centrally with support on 4 edges. **(test specimen 1"wide X6" long.)**

DEFLECTION VALUES for lauan panels	SPAN	SPAN	SPAN
Core thickness MM	24"	36"	48"
10	0.073"	0.166"	0.295"
13	0.048"	0.108"	0.192"
20	0.022"	0.051"	0.091"
25	0.015"	0.034"	0.060"
38	0.007"	0.016"	0.028"
50	0.004"	0.010"	0.017"

Panel Weights per sq. foot and per 4X8 panel Core Thickness									
Panel	5mm	7mm	10mm	13mm	16mm	20mm	25mm	30mm	38mm
H8PP + 2.7 mm	.676 psf	.713 psf	.763 psf	.813psf	.863 psf	.93 psf	1.017 psf	1.104psf	1.241psf
	21.63 lb	22.82 lb	24.42 lb	26.02 lb	27.62 lb	29.76 lb	32.5 lb	35.33 lb	39.71 lb

All tests carried out by independent laboratory. This information is provided in good faith and is subject to modifications without prior notification. It does not constitute a commitment, neither a contractual document. Nida-Core Corp will not assume any liability form use or misuse of data presented herein. Assessment of suitability is the responsibility of end user only. Disclaimer: The plywood skinned panels are flat when they come out of the press and every effort is made to provide panels that will remain so. We carefully inspect the plywood before use, however it is an organic product and changes in humidity may cause slight temporary out-of-flatness of the panel.

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