



## Green Board

Mechanical testing of the board (swansea uni and Liverpool uni).

The density 695kg/m<sup>3</sup>

Thermal Conductivity 0.259 w/ml

Thermal Expansion 128x10<sup>-6</sup>/centigrade

Bending Stiffness at 23c is 0.39gpa

Bending stiffness at 40c is 0.28gpa

Bending stiffness at 60c is 0.16gpa

Bending stiffness after 2 weeks in water immersion is 0.46gpa

Bending stiffness after 4 weeks UV exposure is 0.45gpa

Bending Strength at 23c is 12.9mpa

Bending Strength at 40c is 10.8mpa

Bending Strength at 60c is 7.7mpa

Bending Strength after 2 weeks in water immersion is 14.1mpa

Bending Strength after 4 weeks UV exposure is 13.3mpa

Comprehensive Stiffness at 23c is 0.42gpa

Force to Buckle a panel edgeways is 13.5kn

Force to Buckle a panel lengthways is 1.7kn

The test results completed by Kingspan was a sample size of 50x50mm x 5 At AV 3460kpa

600x600mm tested twice at 0.111w/mk and 0.109w/mk

Tensile is 50x50x5 at av 725kpa

Humidity 300x300mm spec is forward sampled 1.50% and sampled at 0.02% very much like xps.

Intense cold 200x200mmx3, near side centre far side no collapse. 0.06% and 0.10% minus 0.03%

Fire 250x19x19mm near side centre far side facer edge and side all passed and tested on 20 seconds and 60 seconds.

Water immersion nothing to declare.