



## (BS) EN 324 -1: 1993

### Wood-based Panels - Determination of thickness, width and length

Part 1 gives methods for measuring the thickness, width and length of wood-based panels. It applies to whole flat boards.

#### Thickness

A micrometer or similar measuring instrument having flat, parallel measuring surfaces of 16mm ( $\pm 1$ ) diameter and an operating force of 4N ( $\pm 1$ ) and graduated to allow readings to 0.05mm. Measurements are taken at approximately 50mm from the panel edges at points in each corner and in the middle of each side - 8 no. points in total per panel. Readings must be within 1% of the thickness but to be not less than 0.1mm. Average the 8 no. readings and express this figure to the nearest 0.1mm.

#### Length and width

Measure both the length and width of each panel along two lines parallel to and at a distance of 100mm from the edges to an accuracy of 0.1% but not less than 1mm. Average the two readings each for length and width and express the results to the nearest 1mm.

In comparison - APA's method for calculating the thickness, length and width:

#### Thickness

Measure using a micrometer having anvils of diameter 19.1mm (+1.3mm/ - 0) or 3/4" (+ 0.05"/ -0) and an anvil pressure of not less than 34 kPa (5 psi) and not more than 69 kPa (10psi).

Measure mid-width on one end of a panel. If the measurement is below minimum or above maximum requirements, then three additional measurements shall be taken - one at approximately mid-width on the opposite end and one at approximately mid-length on each side of the panel.

Calculate the average of these 4 readings. If the average lies between the minimum and maximum thickness for that specific performance category, then the panel is acceptable; if it is outside the minimum or maximum tolerance, then the panel is below/above thickness.



## The Engineered Wood Association

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### Performance Category thickness and tolerance for APA plywood panels

*This is in line with US PS 1-19 Structural Plywood and US PS 2-18 Performance Rated OSB.*

APA Plywood	Performance Category	Tolerance	
		inches	mm
<b>Sanded</b> <b>Unsanded</b>	$\leq 3/4$ $> 3/4$	$\pm 0.016$ (1/64) $\pm 3\%$	$\pm 0.4$ $\pm 3\%$
<b>Touch sanded</b> <b>Overlaid</b>	$\leq 13/16$ $> 13/16$	$\pm 0.031$ (1/32) $\pm 5\%$	$\pm 0.8$ $\pm 5\%$

### Length and width

- A tolerance of + 0mm, - 1.6mm (1/16") should be allowed on the specified length and width.