

A2: Moisture In Wood And Laminate Floors

The National Wood Flooring Association and the North American Laminate Flooring Association reference the following relative humidity readings for their products.

This information is intended as a guide only.

Wood and Laminate Flooring Comfort Levels

Wood and laminate flooring will perform best when the interior environment is controlled to stay within a relative humidity range of 30 to 50 per cent and a temperature range between 15°C and 27°C. Fortunately, that's about the same comfort range most humans enjoy.

The chart below indicates the moisture content at any given combination of temperature and humidity. Note that equilibrium moisture contents in the recommended temperature/humidity range (shaded area) coincide with the 6 to 9 per cent range within which most hardwood/laminate flooring is manufactured. Although some movement can be expected even between 6 and 9 per cent, wood/laminate can expand and shrink dramatically outside that range.

Table 1

MOISTURE CONTENT OF WOOD																				
<i>At various temperatures and relative humidity readings</i>																				
Temperature (Celsius)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	98
-2	1.4	2.6	3.7	4.6	5.5	6.3	7.1	7.9	8.7	9.5	10.4	11.3	12.4	13.5	14.9	16.5	18.5	21.0	24.3	26.9
4	1.4	2.6	3.7	4.6	5.5	6.3	7.1	7.9	8.7	9.5	10.4	11.3	12.4	13.5	14.9	16.5	18.5	21.0	24.3	26.9
10	1.4	2.6	3.7	4.6	5.5	6.3	7.1	7.9	8.7	9.5	10.4	11.3	12.4	13.5	14.9	16.5	18.5	21.0	24.3	26.9
15	1.3	2.5	3.6	4.6	5.4	6.2	7.0	7.8	8.6	9.4	10.2	11.1	12.1	13.3	14.6	16.2	18.2	20.7	24.1	26.8
21	1.3	2.5	3.5	4.5	5.4	6.2	6.9	7.7	8.5	9.2	10.1	11.0	12.0	13.1	14.4	16.0	17.9	20.5	23.9	26.6
27	1.3	2.4	3.5	4.4	5.3	6.1	6.8	7.6	8.3	9.1	9.9	10.6	11.7	12.9	14.2	15.7	17.7	20.2	23.6	26.3
32	1.2	2.3	3.4	4.3	5.1	5.9	6.7	7.4	8.1	8.9	9.7	10.5	11.5	12.6	13.9	15.4	17.3	19.8	23.3	26.0
38	1.2	2.3	3.3	4.2	5.0	5.8	6.5	7.2	7.9	8.7	9.5	10.3	11.2	12.3	13.6	15.1	17.0	19.5	22.9	25.6
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	98
	Relative Humidity (per cent)																			

Information taken from NWFA's Technical Publication No. A100 & as per NALFA's recommendation.

Click image to view full size.