

Recommended Temperature and Humidity Guidelines

From the US Dept. of Agriculture Wood Handbook, Wood as an Engineering Material

Humidity Recommendations range from 30% - 50% in a building.

Temperature recommendations range from 60 to 80 degrees in a building.

If you stay within the recommendations range, the amount of expansion and contraction is limited

Relative Humidity		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
Temp	30	1.4	2.6	3.7	4.6	5.5	6.3	7.1	7.8	8.7	9.5	10.4	11.3	12.4	13.5	14.9	17	18.5	21
	40	1.4	2.6	3.7	4.6	5.5	6.3	7.1	7.8	8.7	9.5	10.4	11.3	12.4	13.5	14.9	17	18.5	21
	50	1.4	2.6	3.6	4.6	5.5	6.3	7.1	7.9	8.7	9.5	10.3	<u>11.2</u>	12.3	13.4	14.8	16	18.4	20.9
	60	1.3	2.5	3.6	4.6	5.4	6.2	7	7.8	8.6	9.4	10.2	11.1	12.1	13.3	14.6	16	18.2	20.7
	70	1.3	2.5	3.5	4.5	5.4	6.2	6.9	7.7	8.5	9.2	10.1	11	12	13.1	14.4	16	17.9	20.5
	80	1.3	2.4	3.5	4.4	5.3	6.1	6.8	7.6	8.3	9.1	9.9	10.8	11.7	12.9	14.2	16	17.7	20.2
	90	1.2	2.3	3.4	4.3	5.1	5.9	6.7	7.4	8.1	8.9	9.7	10.5	11.85	12.6	13.9	15	17.3	19.8
	100	1.2	2.3	3.3	4.2	5	5.8	6.5	7.2	7.9	8.7	9.5	10.3	11.2	12.3	13.6	15	17	19.5

Example - If conditions in a warehouse are 60% relative humidity at 50 degrees Farenheit Dry wood will pick up moisture until 11.2% is reached, regardless of wood species and initial moisture content.

Your Butcher Block was kiln-dried to an initial moisture content of 7.6%. In order to maintain the beauty and integrity of your Butcher Block, it is recommended that special care be taken to keep the relative humidity and temperature within your home or warehouse in the highlighted range. This will limit the amount of expansion and contraction in your natural wood product and minimize the risk of environmental damage. Environmental damage does not constitute defective product. **Allowing your Butcher Block to acclimate to the environment for at least 72 hours prior to Installation, following recommended installation practices that allow your Butcher Block to move with the conditions and controlling the environment itself** are all key factors that determine the life of your product.

It is important to note that as winter temperatures drop, so does relative humidity in the air. The heaters come on which further dries the air. Keeping the area humidified to an acceptable level usually becomes necessary during the winter months. The opposite is true in spring and summer as humidity rises, dehumidifiers and air conditioners become the method of control.