TERRAMAI

ACCLIMATING TERRAMAI SIDING/DECKING

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ACCLIMATING TERRAMAI SIDING AND DECKING

A FEW QUICK FACTS ABOUT WOOD

There are a few things you need to know about your newly purchased reclaimed wood siding or decking. Wood naturally has certain levels of moisture in it at all times. This is nothing to worry about so long as you treat the wood correctly. Wood is hygroscopic, which means it gains or loses moisture based upon changes in temperature and humidity of its immediate environment. As wood loses or gains moisture, it will shrink or swell. Wood shrinks and swells primarily in thickness and width, but very little in length. This results in wood arriving to your location potentially at a different moisture content than what is required for your installation. In order to make your siding or decking look and perform its best, you need to acclimate it. Acclimating is when you allow the wood time to reach equilibrium moisture content with the environment that it will be installed in. The only way to ensure wood has reached its equilibrium moisture content is testing. Failure to acclimate may result in cupping, warping, gaps and splits, either before, during, or after installation.

Siding and Decking Storage and Acclimation

- STORAGE OFF SITE
  Ensure your product is stored properly. Siding/decking should be stored in a clean and dry location with the product still properly wrapped. This includes storing for short periods of time. All siding/decking should be stored on a solid flat surface that is properly supported with blocking evenly spaced no further than one foot apart along the length of the units (preferably not directly on the floor) to prevent warping.

- ACCLIMATING
  The wood siding or decking must be allowed time to reach its equilibrium moisture content with the location where it will be installed. Upon receiving your material, remove the siding or decking from the packaging and visually inspect boards for defects, including boards from the top, bottom and middle. Cross-stack the material with stickers (spacers between each layer) to allow air circulation on all sides of all boards. Stickers must be a maximum of 12" apart to prevent the siding/decking from warping. Make sure to place in an area where there will be good air flow through the stack. The stack must be protected at all times from direct sunlight and liquid water, including irrigation systems, all forms of precipitation, and dew formation. Tarps or other coverings must not be in direct contact with the stack or it will not receive sufficient air flow to acclimate properly. If stacked over concrete, use 2x4s or 2x6s on edge to elevate the first course at least 3½ inches above the surface of the concrete. If the stack is over wet ground or wet concrete, lay down a vapor barrier first so the wood doesn't pick up moisture from beneath the stack. Acclimate to equilibrium moisture content for as long as it takes. Some species will take much longer to reach equilibrium moisture content than others. Tropical species have been known to take longer than domestic species so consideration should be taken when planning your installation. It is never a good idea to base acclimation on time alone, but rather on observing changes in actual moisture content. The chart below shows the equilibrium moisture content of wood at various temperatures and relative humidity levels. Based on the area of installation, this chart can be used to determine the target moisture content of the siding or decking at the time of installation.

MOISTURE CONTENT OF WOOD
AT VARIOUS TEMPERATURES AND RELATIVE HUMIDITY READINGS

Temperature (°Fahrenheit)																				
30	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
40	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
50	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
60	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
70	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
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	15.7	17.7	20.2	23.6	26.3
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	11.5	12.6	13.9	15.4	17.3	19.8	23.3	26.0
100	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 (percent)

Chart taken from *Wood Handbook: Wood as an Engineering Material*, (Agriculture Handbook 72), Forest Products Laboratory, U.S. Department of Agriculture.

- CHECKING MOISTURE

  Immediately after stacking, check the moisture content of the wood siding or decking with a moisture meter, randomly selecting throughout the stack. 40 boards should be measured up to the first 1,000 square feet, and an additional 4 boards per 100 square feet thereafter. Record, date, photograph, and average all results. Follow all of the manufacturer's recommendations to ensure proper use of the moisture meter. Make sure that the species selection on the moisture meter matches the species of the siding or decking being tested. There are two common types of moisture meters.

  - Pin style meters are more accurate, but require driving pins into the wood, so checking moisture content from the back of the boards is recommended to avoid damage to the surface finish.

  - Pinless meters typically have depth adjustment that can provide a more accurate reading. Never hold the board in hand or place on a damp substrate as the reading from the meter could be affected, as it detects moisture from behind the board.

  Once the average moisture content of the siding or decking reaches the target equilibrium moisture conte for the location of installation, and the environmental conditions are not rapidly changing, installation may begin.

These are guidelines only and are superseded by the expertise and guidance of your licensed professional and knowledgeable siding and decking installer. For more information, or if you have additional questions, please consult a licensed professional prior to installation.