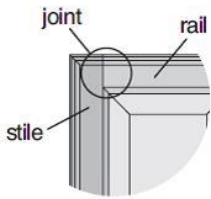


Effects of Humidity

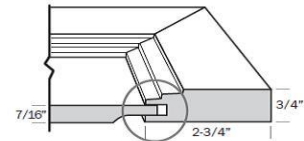
- Hardwood cabinet components like face frames and doors are made of natural wood, which has great character and personality. But natural wood also has some inherent limitations that should be understood. This is true of all wood in the home (furniture, millwork and cabinetry).
- Unlike man-made material, natural wood is not dimensionally stable, meaning it will expand and contract under certain conditions. Complicating matters further, wood does not expand and contract in a uniform way. It does so more across the grain rather than along the grain. It can warp in extreme cases.



Natural wood, in nature, naturally absorbs and releases moisture in its environment. These changes in moisture content may result in dimensional changes that can happen gradually over time or suddenly with seasonal changes or with changes within the home's humidity. When these natural dimensional changes occur, joinery lines can appear that were not visible before. For instance, as wood swells and contracts due to seasonal changes, a joint where a stile and rail meet can open up slightly, showing a line that was not previously visible. When exposed to drier air, center panels will contract, exposing a visible line next to the stile until moisture is restored. These are inherent characteristics of wood and are not considered flaws and

are not covered under warranty.

- Most cabinet doors are made of five parts. Four pieces that make up the outer frame, and the inner center panel. The notch that the center panel fits into is a bit oversized to allow some expansion and contraction of the large center panel. This helps prevent warping, but can still open visible joint lines.
- Paint grade doors use MDF for the center panel which minimizes expansion and contraction, but joint lines may still appear because paint grade doors have natural wood frames that will expand and contract more than the MDF center panel.
- The MDF door styles are our most dimensionally stable. They are the best choice for painted cabinetry.



What you can do:

- The most important thing you can do is stabilize the humidity in the home. Heating systems dry out the air in the winter, causing wood to contract. Taking steps to maintain proper relative humidity year-round will keep your cabinetry more stable. We recommend 35% to 55% relative humidity.
- Air conditioning helps as it removes some humidity from the air, but additional steps like a dehumidifier may still be needed in some locations and climates.
- Seasonal homes, especially those near water, should be heated and air conditioned even when not in use. Maintain a reasonable interior temperature of 60° to 75° Fahrenheit.
- If you want painted cabinetry and possible joint lines are a major issue to you, choose an MDF door style. They show no joints and are very stable.
- Our best recommendation is to accept wood for what it is and look on dimensional changes as another aspect of the unique personality of a lovely, variable, natural material.