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WHAT IS THERMALLY MODIFIED WOOD?

Arbor Wood Co. produces Thermally Modified Wood for a variety of outdoor and indoor applications including siding, decking, and architectural millwork. Our process begins with a select grade of domestically grown and responsibly harvested timber which undergoes a thermal modification process using heat and steam. The result is a high-quality, performance-driven material that sustains the natural beauty and design element of wood all without the use of harsh chemicals.

High heat and steam replace chemicals to fundamentally modify Arbor Wood's hemicellulose, making it one of the most natural, chemical-free ways to extend the service life of a wood product. The wood is less absorbent resulting in increased material stability with less warping/cupping and

minimal expansion/contraction. Importantly, certain organic compounds are eliminated during modification thus removing the food source for rot and insects. The conversion of sugars to a nonfood source also turns the timber into a darker, richer through color, providing an appealing and refined aesthetic.

Arbor Wood Thermally Modified Wood is produced in a specialized, 3-phase kiln process using only heat and steam. In phase 1 an initial gradual increase in temperature reduces the equilibrium moisture content (EMC) of the wood. Phase 2 sees a rapid spike in temperature and is where the magic really happens. The cellular composition of the wood is altered in this high-heat, oxygen-deprived environment which breaks down the natural acids and sugars so as to no longer be a food source for mold, rot, or fungal decay. This change also renders the wood 'hydrophobic', meaning it loses much of the natural tendency to absorb water. As a natural byproduct of the process, Arbor Wood takes on a richer, darker tone throughout giving it a look similar to that of exotic species. The 3rd and final phase introduces steam to cool the wood down and bring the EMC back up to a suitable level. A benefit of this process is that Arbor Wood is dimensionally stable (meaning it won't warp, rot, or chip), making it longer lasting and resistant to heat and weather, with an expected lifespan of 25+ years.

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WHAT ARE THE BENEFITS OF THERMALLY MODIFIED WOOD? +

IS THERMALLY MODIFIED WOOD MAINTENANCE FREE? +

IS THERMALLY MODIFIED WOOD ECO-FRIENDLY? +

WHAT IS THERMALLY MODIFIED WOOD USED FOR? +

IS THERMALLY MODIFIED WOOD EXPENSIVE? +






Connect:

(855) 414-2727



1025 London
Road | Duluth, MN
55802



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