

What Is Thermally Modified Wood?

Thermally modified wood is natural wood that has been carefully heated with steam in a controlled environment. This process changes the wood from the inside out, improving stability and durability without relying on traditional chemical preservatives.

The result is a natural wood product well suited for exterior and interior applications where appearance, stability, and long-term performance matter.

Key Benefits



Moisture Resistance

Absorbs less moisture than standard kiln-dried wood, helping reduce swelling, shrinking, and movement.



Dimensional Stability

Improved stability helps reduce warping, twisting, and cupping when properly installed and maintained.



Durability

Heat and steam change the wood’s internal structure, helping improve rot resistance in above-ground applications.



Strength & Weight

Slightly lighter than untreated wood; some strength properties may be reduced, requiring professional review.



Weathering & Finishes

Naturally weathers toward a silvery gray outdoors; protective finishes can help preserve the original tone.



Workability & Sustainability

Machines cleanly with standard tools and uses renewable wood modified with heat and steam.

Compared to Chemically Treated Wood

Aspect	Chemically Treated Wood	Thermally Modified Wood
Preservatives	Uses preservative chemicals to improve resistance.	Uses heat and steam rather than traditional chemical preservatives.
Fasteners	Some treatments may increase corrosion risk.	Corrosion-resistant fasteners are recommended for exterior use.
Handling	May require treatment-specific precautions.	Worked using normal woodworking precautions.

Where to Use Thermally Modified Wood

Ideal for above-ground applications where stability, appearance, and durability are priorities. Common uses include cladding, soffit, fascia, decking, trim, porch flooring, exterior millwork, and interior walls or ceilings.

▲ Avoid direct ground contact, continuous water exposure, and poorly ventilated assemblies.

Important Note

Thermally modified wood offers improved moisture behavior and dimensional stability, but it is still real wood. Proper detailing, installation, ventilation, fasteners, finishing, and maintenance remain essential for long-term performance.