

Heat-treated pine is wood [[Shandong Heat-Treated Rubberwood Solid Timber Supply](#)] processed using a specialized high-temperature thermal treatment technique. By subjecting pine to continuous heating at controlled temperatures between 180-230°C (without adding chemicals), the internal fiber structure and moisture content of the wood are altered. This optimizes the pine's properties, enabling it to retain its natural grain and texture while offering enhanced practical characteristics suitable for diverse applications.

II. Core Process Advantages

Physical Modification, Safe and Eco-Friendly: Entirely chemical-free, achieving wood modification solely through high-temperature physical processes. Eliminates residual harmful substances like formaldehyde and preservatives, meeting stringent environmental standards for home furnishings and children's products. Safe for contact by the elderly and children.

Precise Temperature Control, Stable Performance: Utilizing CNC temperature control technology ensures uniform heating throughout the wood ([China Carbonised Solid Timber Board Wholesale Supplier](#)). This effectively reduces the natural shrinkage and expansion rates of pine wood (by over 50% compared to standard pine), minimizing the likelihood of warping or cracking during use. It is particularly suitable for environments with significant temperature fluctuations and frequent humidity changes.



([Shandong Carbonised Pine Factory](#))

III. Core Product Performance

Moisture-Resistant and Durable: High-temperature treatment breaks down moisture-absorbing and microbe-decomposable components (such as hemicellulose) within the pine wood. This stabilizes the wood's moisture content within the ideal range of 8%-12%, significantly enhancing moisture resistance. It also resists mold and insect infestation, extending its lifespan by 3-5 years compared to ordinary pine. It maintains excellent condition even in outdoor applications like garden decking and planters.

Hard Texture, Superior Load-Bearing: Heat treatment increases fiber density, boosting hardness by 20%-30%. Enhanced compression and load-bearing capacity prevent warping or breakage, making it ideal for furniture requiring structural support like bookshelves, wardrobes, and load-bearing

flooring. Long-term use minimizes loosening or sagging issues.

Clear grain, easy to process and maintain: Retains pine's natural fine grain and warm light brown hue, offering inherent natural texture. Achieves an attractive appearance without complex finishes. The smooth surface minimizes splintering during processing and simplifies upkeep—regular dusting with a dry cloth suffices. Minor stains wipe clean with a damp cloth and air-dry without leaving marks.



IV. Application Scenarios

Home Furnishings: Ideal for crafting wardrobes, desks, bed frames, storage cabinets, and other furniture. Its eco-friendly properties make it suitable for bedrooms, children's rooms, living rooms, and similar spaces. The warm, textured grain seamlessly integrates with Nordic, Japanese, and other interior styles, enhancing the natural ambiance of home decor.

Outdoor Applications: Ideal for crafting patio flooring, outdoor furniture, planters, and fencing. Its moisture-resistant and rot-proof properties withstand rain and intense sunlight exposure, ensuring long-term durability without decay or warping.

Commercial Applications: Suitable for decorative panels and display racks in cafes and guesthouses, or as countertops and exhibition stands in retail spaces. The combination of natural grain and robust durability elevates spatial aesthetics while withstanding daily wear and tear.



V. Selection and Maintenance Recommendations

Selection Tips:

Inspect Appearance: High-quality heat-treated pine features distinct grain patterns, uniform coloration, and no noticeable black spots, cracks, or insect holes. The surface should be smooth and even.

Check Certification: Select products with official inspection reports, confirming heat treatment temperature, moisture content, and other parameters meet standards (moisture content recommended between 8%-12%);

Smell the Odor: No pungent chemical smell—only the natural, subtle wood fragrance of pine. Avoid purchasing low-quality products with unusual odors.

Care Instructions:

Avoid prolonged immersion or direct sunlight: For outdoor use, periodically apply wood oil (1-2 times annually) to enhance water resistance.

Prevent impact from heavy objects: Though hardness is improved, avoid direct impact from sharp objects or heavy items to prevent surface damage.

For indoor use, maintain a well-ventilated, dry environment. Avoid prolonged exposure to humid conditions to prevent localized moisture buildup.

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