

Western Hemlock

{*Tsuga heterophylla*}



Western Hemlock is the most plentiful tree species on British Columbia (B.C.)'s coast, comprising of more than half of B.C.'s coastal volume for growing stock. It can be found growing between sea level and mid elevations on both the east and west sides of the Coastal Mountains, as well as in the province's interior. It reaches 30-50 metres in height and 1-1.5 metres in diameter, and seldom is found in pure stands—rather it grows next to Douglas Fir, Amabilis Fir, Sitka Spruce, and Western Red Cedar.

COMMON USES

Western Hemlock is firmly established as an outstanding wood for furniture moldings and interior woodworking, as well as for doors, windows, floors, suspended ceilings, and other high-grade uses. Western Hemlock is also used for general construction, roof decking, plywood, laminating stock, and the production of glue-laminated beams.

WORKING PROPERTIES

Western Hemlock is known for its even density, which provides excellent machining properties, and has a relatively good strength-to-weight ratio. The wood requires special care when drying but yields quality product. The lumber is seasoned uniformly in dry kilns to inhibit the wood's natural staining, improve its strength and stiffness, enhance its appearance, and increase its resistance to decay and insect attack. It turns, planes and shapes well and can be sanded to a smooth finish. The wood glues satisfactorily, has moderate nail and screw holding ability, and polishes beautifully.



PHYSICAL PROPERTIES

STIFFNESS/ MOE (MPa)	Air Dry	12300
STRENGTH/MOR (MPa)	Air Dry	81
DENSITY (kg/m ³)	Air Dry	429
COMPRESSION PARALLEL (MPa)	Air Dry	46.7
SHEAR (MPa)	Air Dry	6.48
SHRINKAGE (air dried - 12%)	Tangential / Radial ratio	1.6



WORKING PROPERTIES

	PROCESS	PERFORMANCE	COMMENTS
MACHINING	Planing	Good to average	Silky smooth finish easy to achieve
	Shaping	Average	Easy, with good surface quality
	Sanding	Good	Good sanding finish
FASTENING	Screwing	Good	
	Nail Retention	Good	
	Gluing	Average	
FINISHING	Staining	Good	Best finish is with light stain or clear finish followed by nitrocellulose alkyd clear sealer and finish.
	Painting	Good	
DRYING	Ease of Drying	Fair	Due to the high moisture content of this wood, longer kiln drying times are required. When dried at high temperatures the exterior 2-3mm can turn a brownish colour.
DURABILITY	Natural Decay Resistance	Poor	Not appropriate for prolonged outdoor exposure
	Treatability	Good	Can be improved by incising



For more information on the availability of Western Hemlock, please contact info@canadianwood.in +91 22 4922 1600



www.canadianwood.in

