

Comparing Wood Properties measure by Mpa (Megapascal = 1,000,000 newton per square meter)

* Megapascal = 1,000,000 newton per square meter

* Megapascal = 10.19716213 kilogram-force/square centimeter

Wood Properties from Material Testing Article by Dr. Sittichai Saagatith Department of Engineering from Suranaree University of Technology

Species	Type	Specific gravity of wood	Bending Strength Modulus of rupture Mpa	Stiffness Modulus of elasticity Mpa	Compression stress parallel to grain Mpa	Compression stress perpendicular to grain Mpa	Shearing stress parallel to grain Mpa
กระทอน	Very Soft	0.57	48	7,348	19	7	6
จำปาป่า		0.51	54	7,463	27	7	15
ยางขาว		0.70	60	8,819	31	6	16
สัก	Soft	0.62	63	7,996	32	8	13
อินทนิล		0.65	68	9,093	33	8	15
ยางแดง		0.76	72	11,145	36	6	16
กระบาก		0.74	76	10,299	21	6	8
ยูง	Medium	0.75	79	11,825	36	7	17
ตะแบก		0.72	79	11,038	37	10	17
ตะเคียนทอง		0.77	80	10,291	35	11	12
มะค่าเต้		0.99	94	12,337	35	23	20
เต็ง	Hard	1.07	91	11,323	43	18	14
มะค่าโมง		0.85	98	9,975	45	12	16
สักขี้คลาย		0.88	104	12,942	46	18	14
รัง		1.15	109	15,064	49	18	17
ประดู่		0.82	114	12,596	49	20	16
แดง		1.05	117	15,017	53	21	12
เขลิง	Very Hard	1.10	118	19,397	71	26	23
ตีนนก		0.99	126	17,752	47	22	20
บุนนาค		1.12	149	22,623	51	21	13

Scandinavian Red Pine Properties testing from structure design article by Dr. Suradache Juntranurak

Species	Type	Specific gravity of wood	Bending Strength Modulus of rupture Mpa	Stiffness Modulus of elasticity Mpa	Compression stress parallel to grain Mpa	Compression stress perpendicular to grain Mpa	Shearing stress parallel to grain Mpa
Scandinavian Red Pine	Soft	0.44	68	6,900	40	10	10

American Southern Yellow Pine Properties testing from Department of Forestry in Kasetsart University

Species	Type	Specific gravity of wood	Bending Strength Modulus of rupture Mpa	Stiffness Modulus of elasticity Mpa	Compression stress parallel to grain Mpa	Compression stress perpendicular to grain Mpa	Shearing stress parallel to grain Mpa
American Southern Yellow Pine	Hard	0.71	107	8,992	55	24	13



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