

Datasheet – Materials for beams

Density

Material	ρ / kg m ⁻³
Pine	560
Oak	730
Perspex	1190
Steel	7850
Aluminium	2700

Melting Point

Material	T_m / °C
Pine	–
Oak	–
Perspex	130
Steel	1370
Aluminium	660

Strength

Material	σ_f / MPa
Pine	40
Oak	60
Perspex	75
Steel	2000
Aluminium	600

Cost

Material	Cost / £ kg ⁻¹
Pine	1.423
Oak	2.730
Perspex	4.520
Steel	0.614
Aluminium	0.931