

Structural Materials Compared

Architecture

Concrete, steel, timber and masonry, on the points that drive a scheme choice.

Broad comparison for scheme choice.

Material	Strength	Weakness
Concrete	Mass, fire, acoustics	Heavy, wet trade, carbon
Steel	Long span, speed, light	Fire protection, cost swing
Timber	Low carbon, dry, fast	Span, fire, moisture
Masonry	Durable, familiar	Slow, poor in tension

Educational reference. Fire, acoustic and structural requirements are set by code; an engineer confirms any selection.