

How Materials Behave

Art & Design

The properties that decide whether a material will do what you ask.

The properties that matter at studio scale.

Property	Means	Seen in
Ductile	Deforms before breaking	Metal wire and sheet
Brittle	Breaks with no warning	Glass, fired clay, cast iron
Hygroscopic	Takes up moisture	Wood, paper, plaster
Anisotropic	Direction matters	Wood grain, card, 3D prints
Thermal movement	Expands when warmed	Metal, acrylic in sunlight
Creep	Sags slowly under load	Acrylic and timber shelves

Materials move with humidity and temperature. A joint that allows no movement will split the material instead.