

Joining & Fixing

Art & Design

Mechanical, adhesive and thermal joints, and the loads each of them can carry.

Grouped by how the joint carries its load.

Method	Good at	Poor at
Screws and bolts	Demountable, strong	Thin material, end grain
Rivets	Permanent shear	Tension, thick stacks
Wood joinery	Large glue area	Speed; needs accuracy
Adhesive	Spreading load	Peel and impact
Welding, brazing	Full-strength metal	Thin sheet, mixed metals
Interference fit	Clean appearance	Repeated assembly

Adhesives are strong in shear and weak in peel. Design the joint so the glue line is loaded across its face, not at an edge.