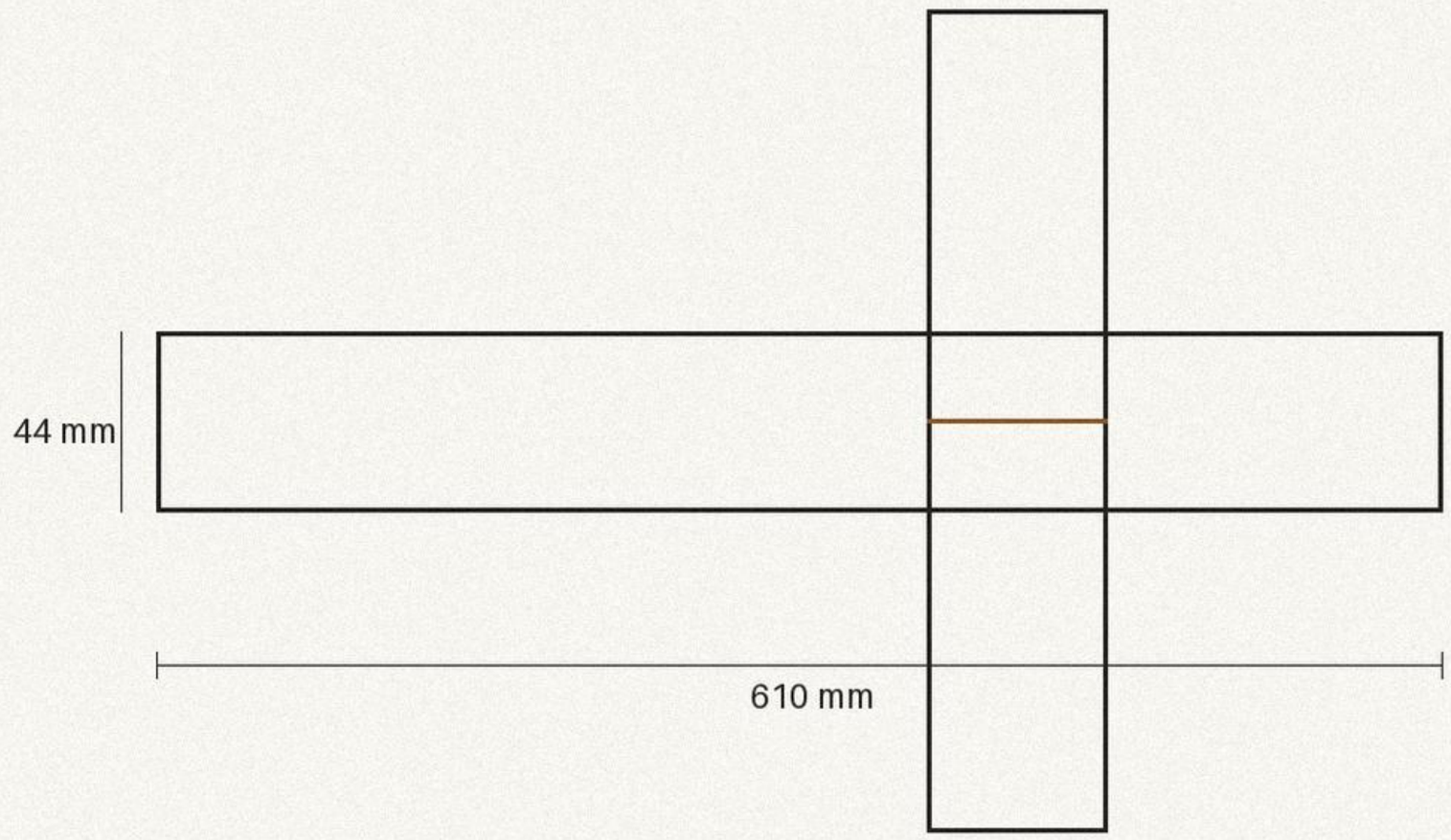
Joinery Drawings

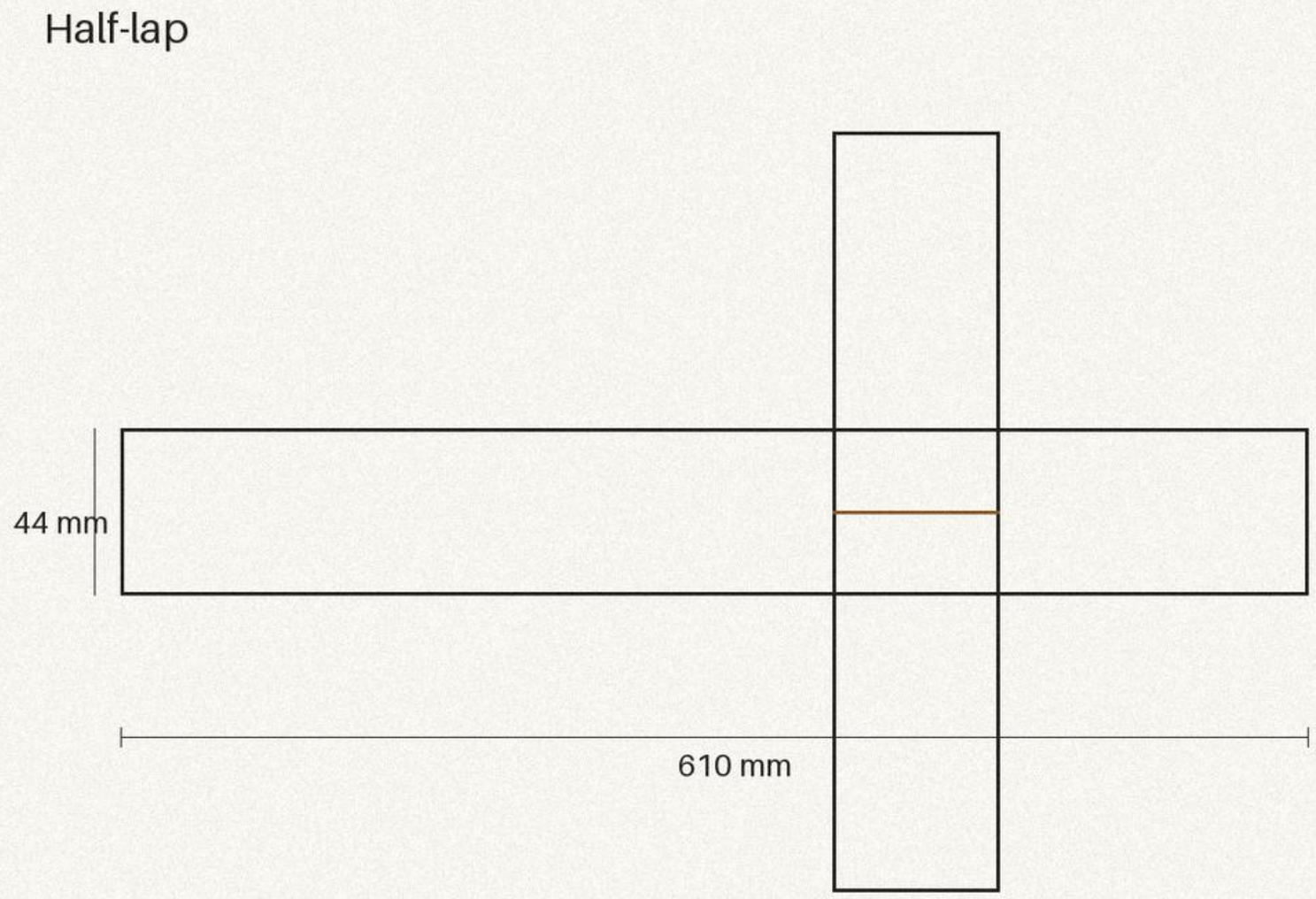
Half-lap



Measured sketches of traditional woodworking joints.

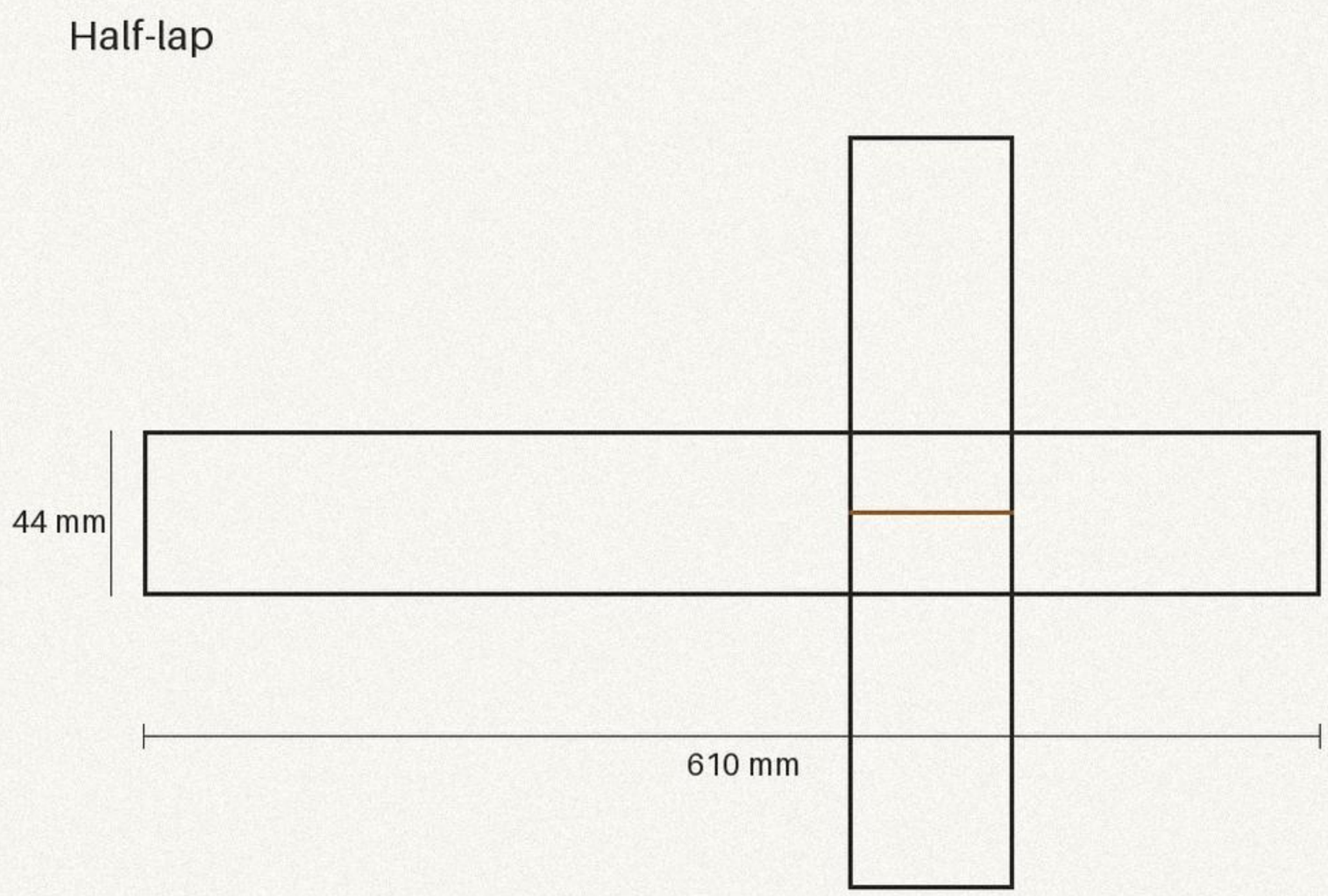
Printed from spruce.sanriodevgroup.org

Half-lap joints



Half the thickness from each piece.

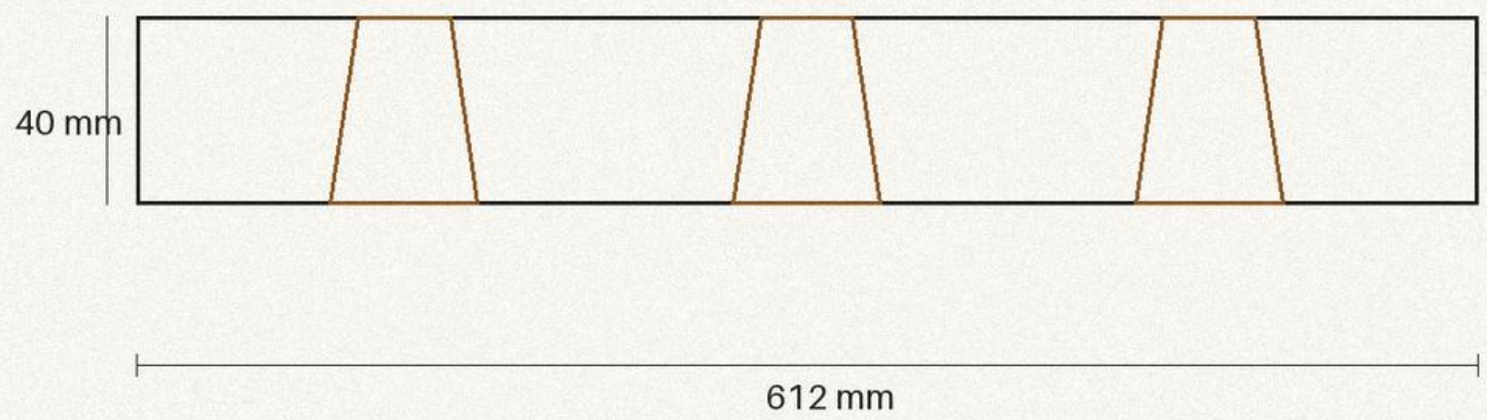
Half-lap joints



A half-lap removes half the thickness from both pieces where they cross. Saw the shoulders, chop out the waste in steps, and pare the floor flat with a wide chisel.

Dovetail ratios

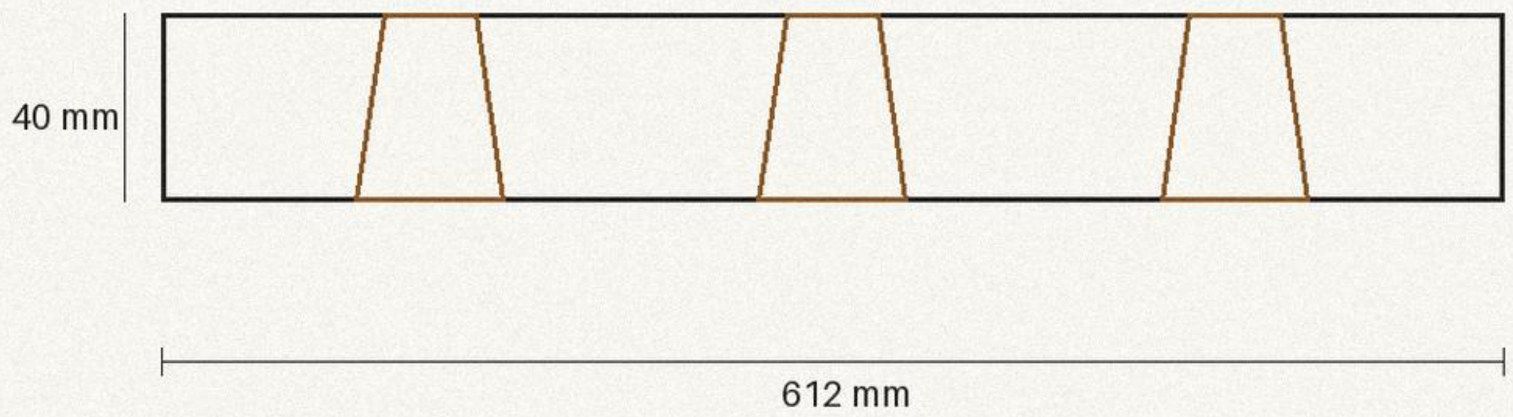
Through dovetails, 3 tails



1:6 for softwood, 1:8 for hardwood, by convention.

Dovetail ratios

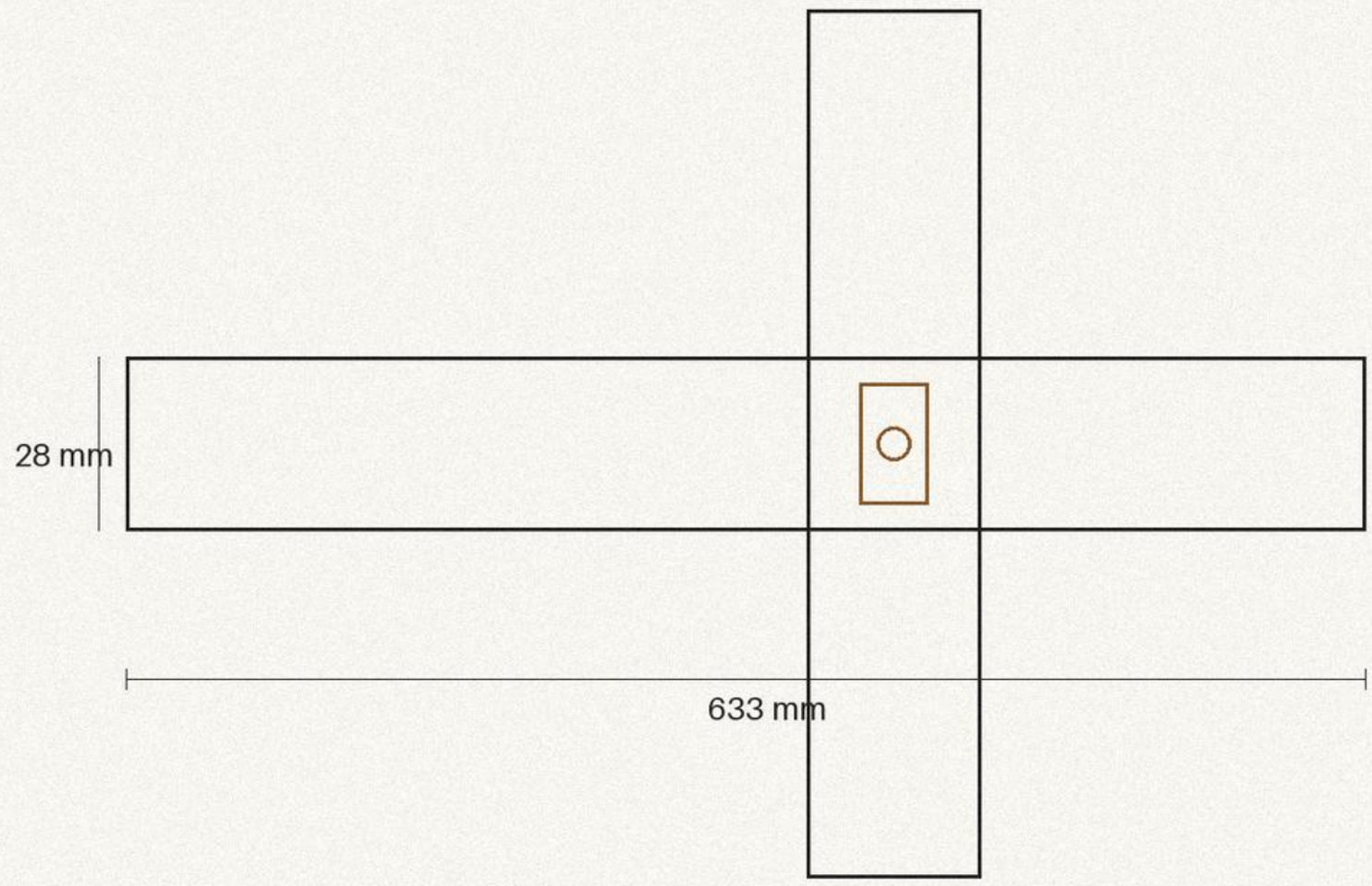
Through dovetails, 3 tails



The slope is a convention more than a rule: steeper angles in softwood for more grip, shallower in hardwood to avoid short grain at the tips.

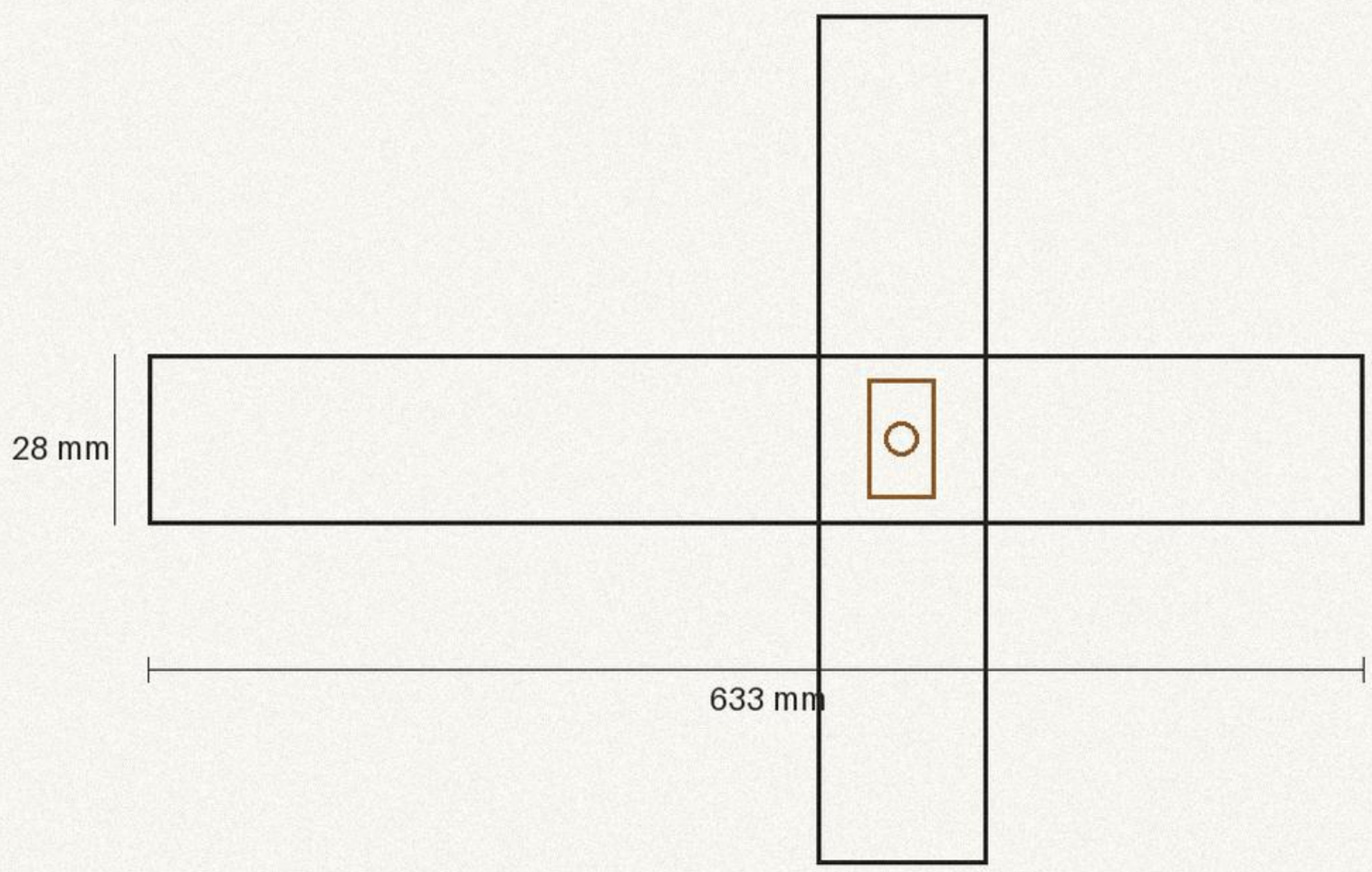
Drawbore pins

Drawbored mortise and tenon



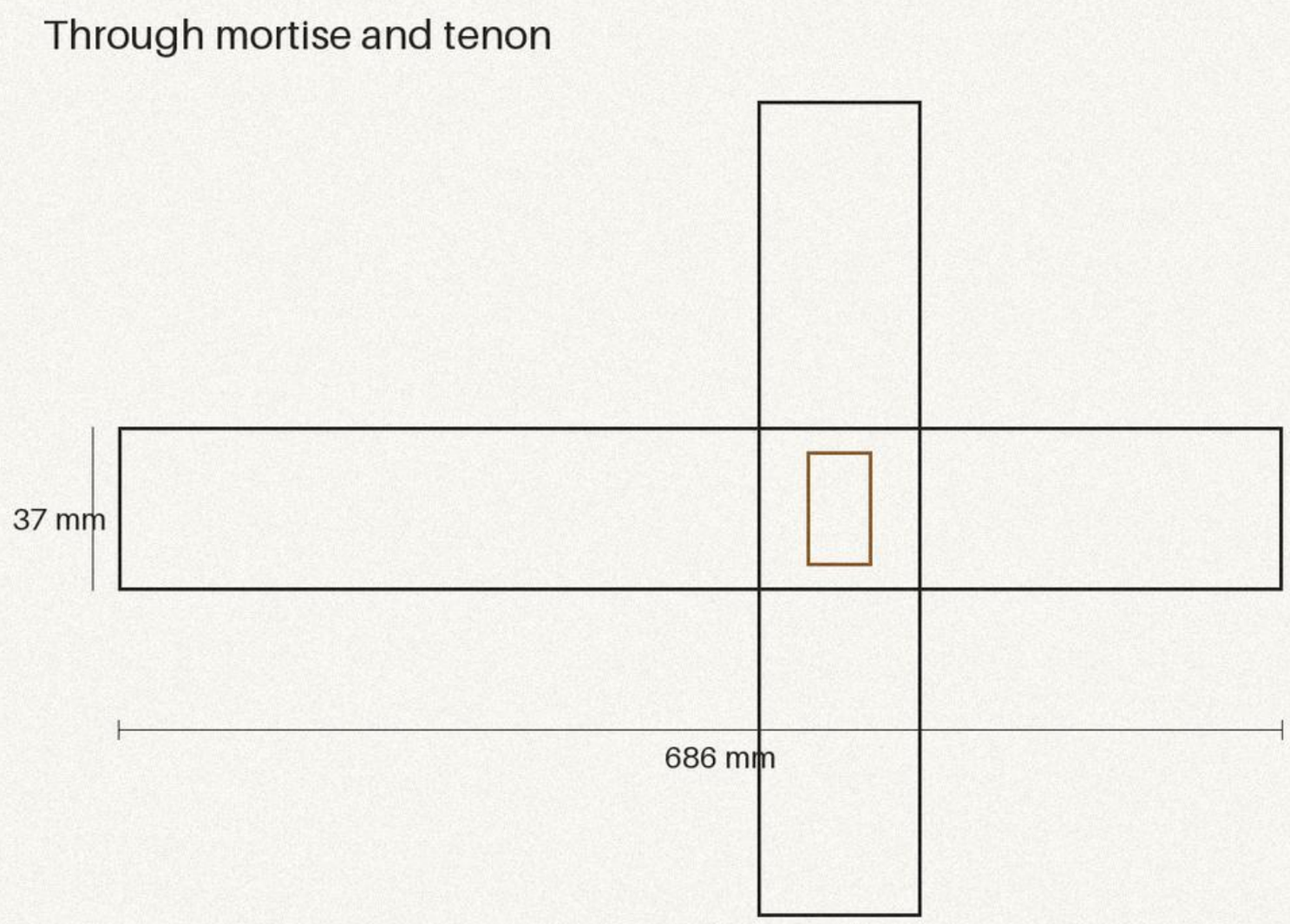
Offset holes pull the joint tight without clamps.

Drawbore pins



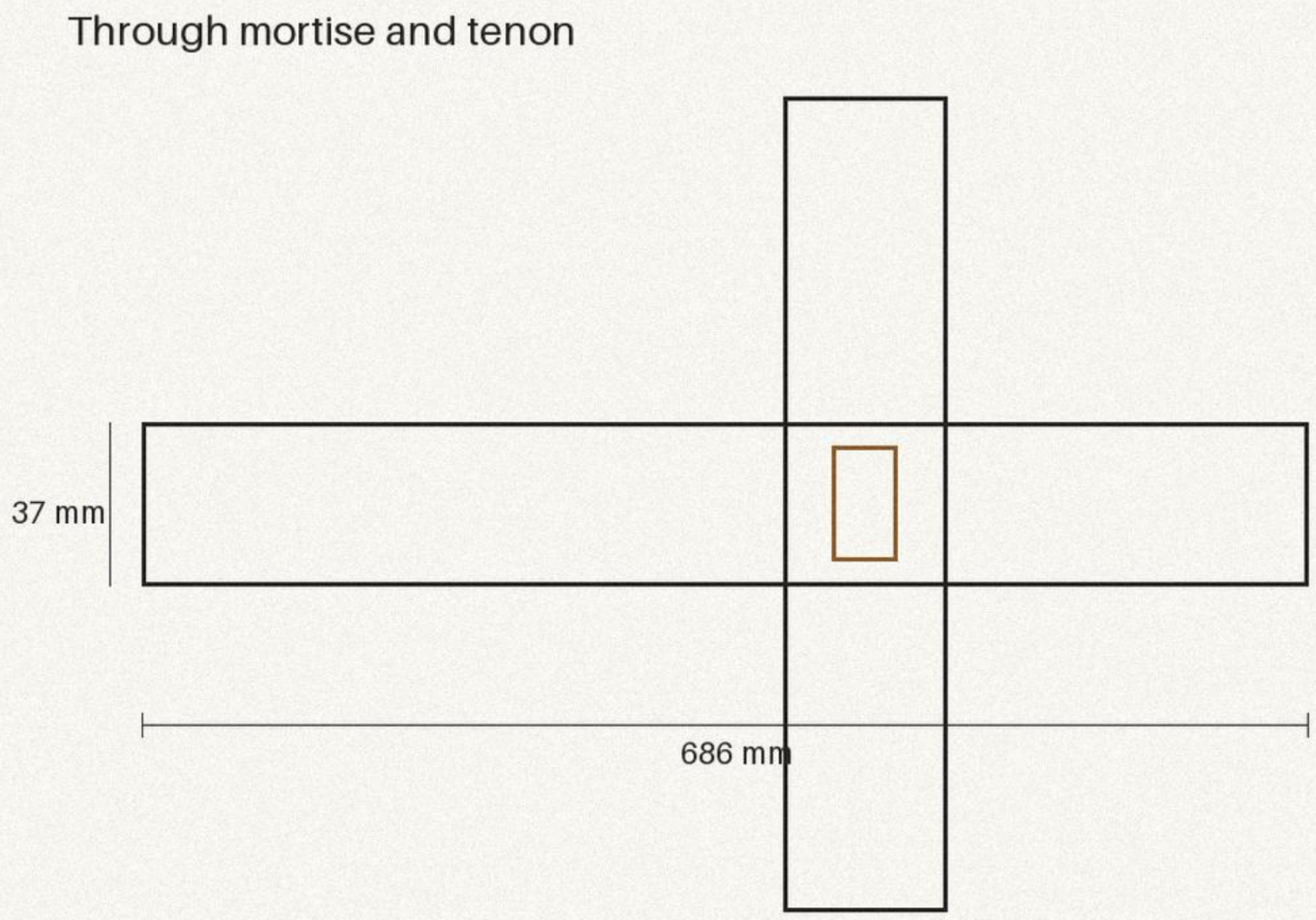
The hole in the tenon is drilled a millimetre or two closer to the shoulder than the hole in the mortise. Driving a tapered pin pulls the shoulders tight and locks the joint.

Through mortise and tenon



Tenon a third of the stock, shoulders on all sides.

Through mortise and tenon



The classic proportion is a tenon one third of the thickness of the rail. Cut the mortise first and fit the tenon to it; a tenon is easier to pare than a mortise is to widen.