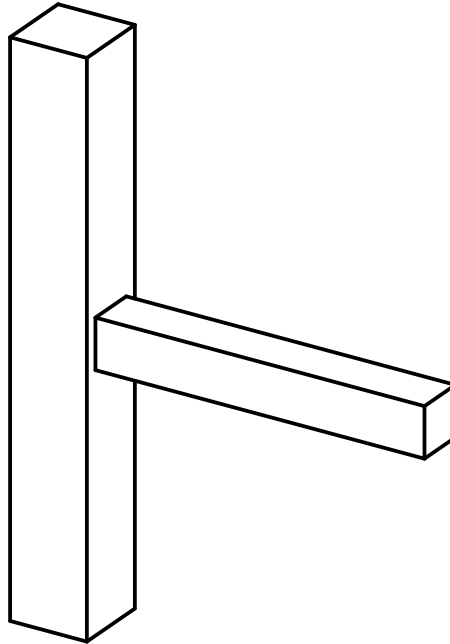


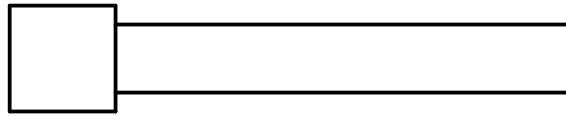
Square rail four tenons



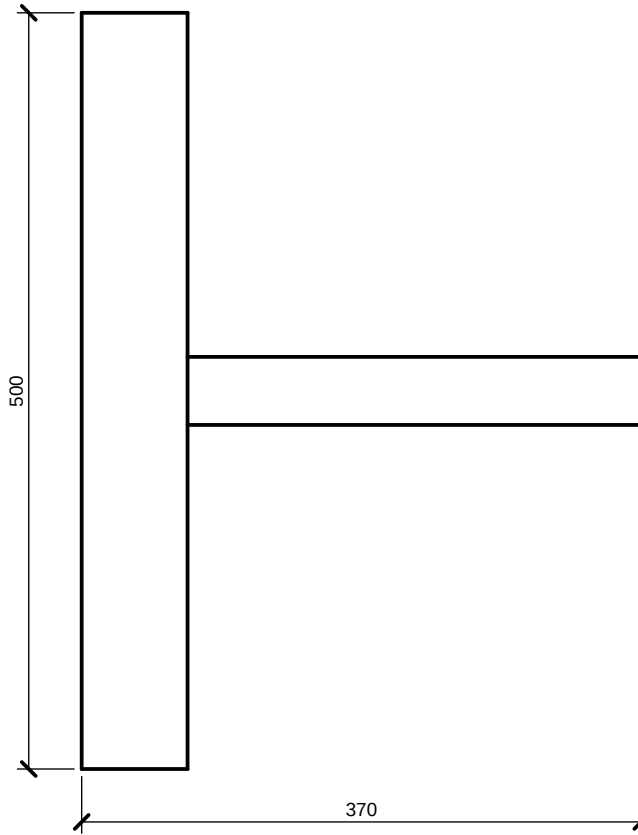
parts	2
overall	370 x 70 x 500 (W x D x H)
material	oak
date	2026-10-25
made with	woodwright 0.9.0

Contents

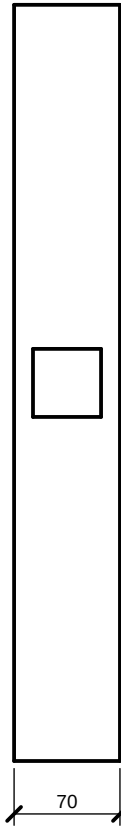
Drawings	3
Assembly	3
Parts	4
1 post	5
2 rail	6
Cut list	7
Appendix: source	8



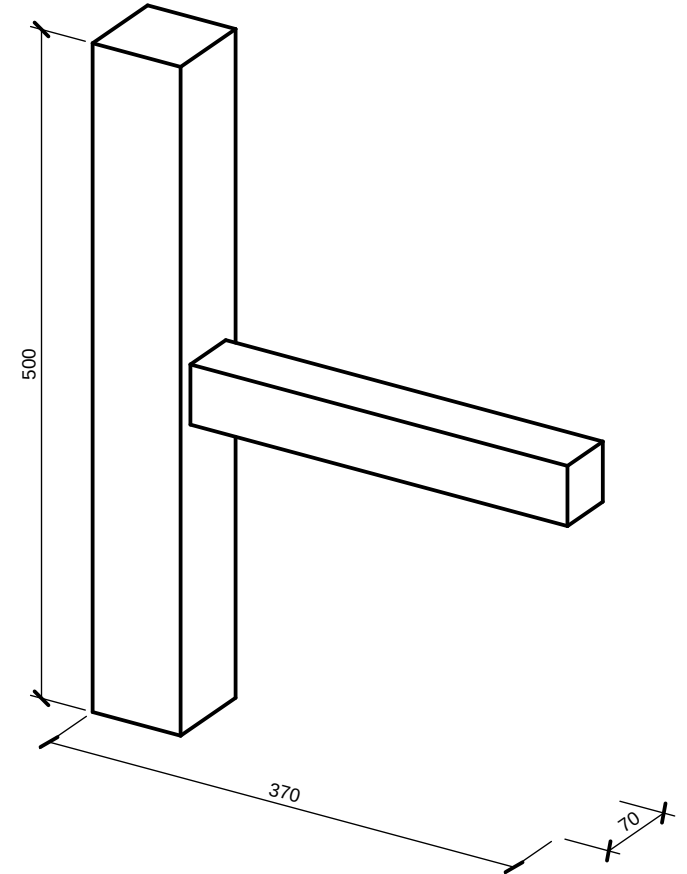
TOP



FRONT

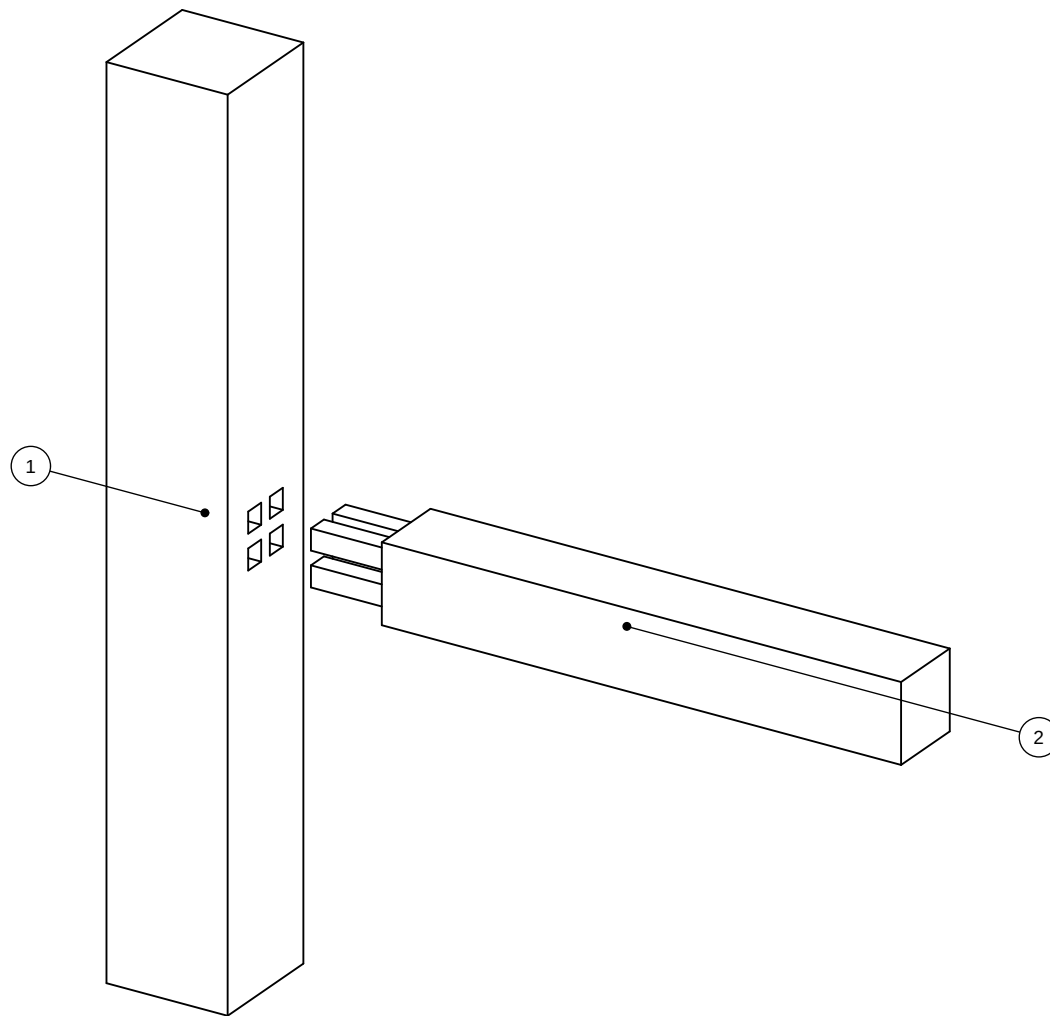


RIGHT SIDE



ISOMETRIC

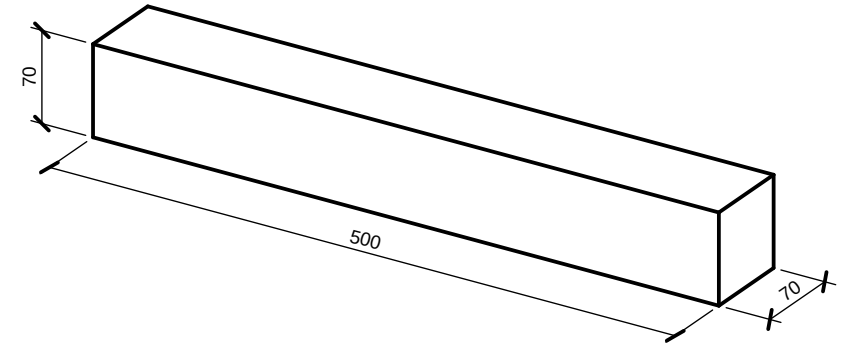
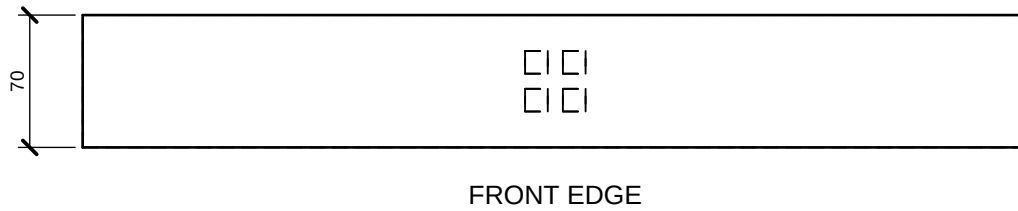
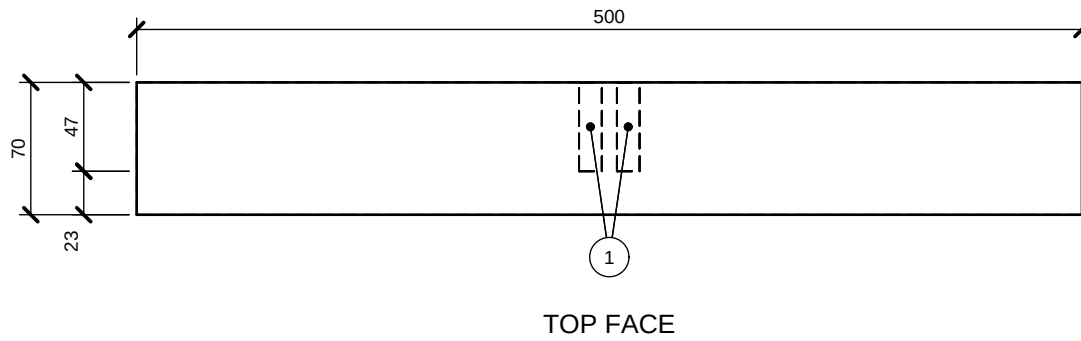
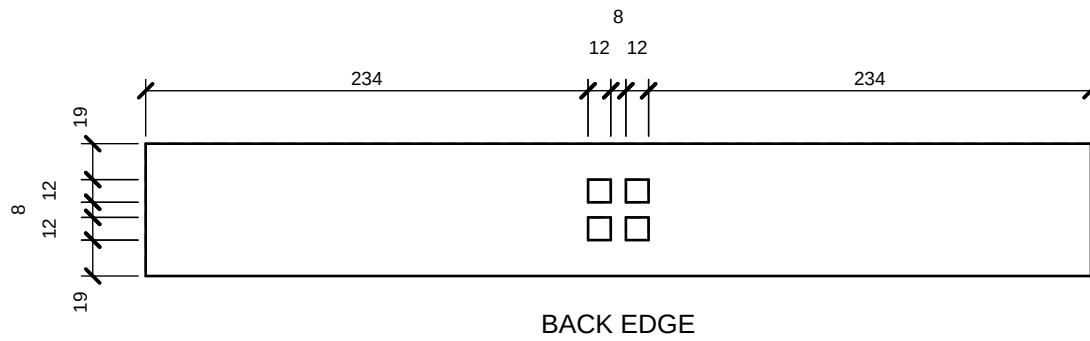
assembly	square_rail_four_tenons
parts	2
overall	370 x 70 x 500 (W x D x H)
material	oak
scale	1:5, mm



no.	part	qty	cut size (L x W x T)	material
1	post	1	500 x 70 x 70	oak
2	rail	1	345 x 45 x 45	oak

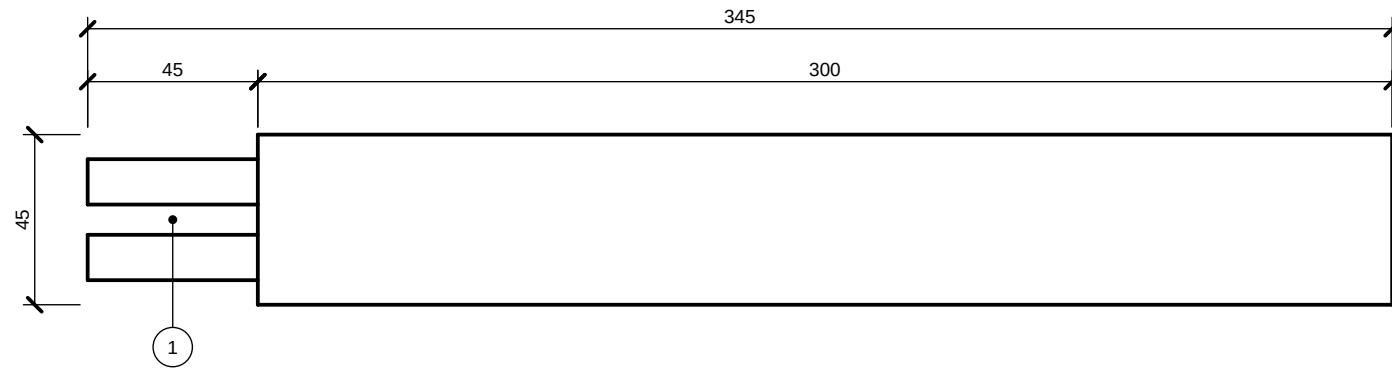
EXPLODED

assembly	square_rail_four_tenons
parts	2
overall	370 x 70 x 500 (W x D x H)
material	oak
scale	not to scale, mm



1 4 x mortise 12 x 12 mm, 47 deep, in back_edge

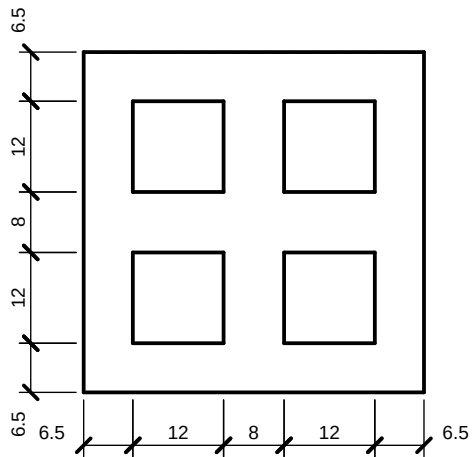
part	post
of	square_rail_four_tenons
make	1
cut size	500 x 70 x 70
material	oak
scale	1:4, mm



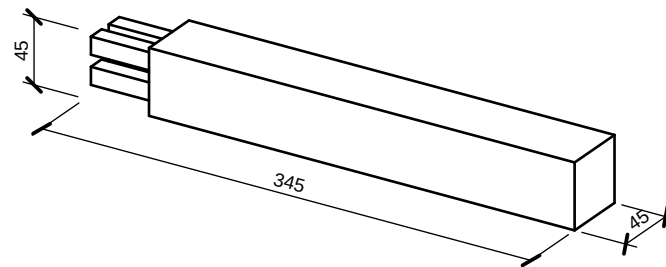
TOP FACE



FRONT EDGE



LEFT END 1:1



ISOMETRIC

part	rail
of	square_rail_four_tenons
make	1
cut size	345 x 45 x 45
material	oak
scale	1:2, mm

1 4 tenons 12 x 12 mm, 45 long, 2 across the width 8 apart, 2 across the thickness 8 apart, on left_end

Cut list

post 500 x 70 x 70 mm oak
- 4 x mortise 12 x 12 mm, 47 deep, in back_edge
rail 345 x 45 x 45 mm oak
- 4 tenons 12 x 12 mm, 45 long, 2 across the width 8 apart, 2 across the thickness 8 apart, on left_end

Appendix: source

Made with woodwright 0.9.0, build123d 0.13.0, Python 3.14.4.

To make these plans again:

```
uvx --python 3.14 woodwright==0.9.0 export joints.square_rail_four_tenons
```

joints.square_rail_four_tenons, in woodwright/examples/joints.py

```
def square_rail_four_tenons() -> Assembly:
    """A square rail tenoned into a post with four tenons in a 2 x 2 grid:
    two across the width as well as two across the thickness, each in its
    own mortise. The tenons are square, 12 mm, 8 mm apart both ways, with
    shoulders all round."""
    return _post_and_thick_rail(
        "square_rail_four_tenons",
        tenons=2,
        thickness_tenons=2,
        shoulder=6.5,
        tenon_thickness=12,
        gap=8,
    )
```