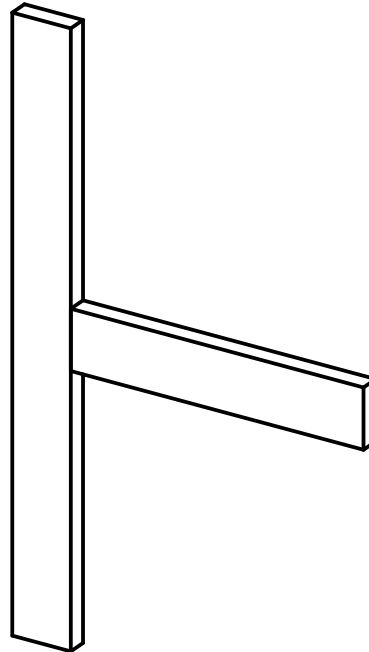


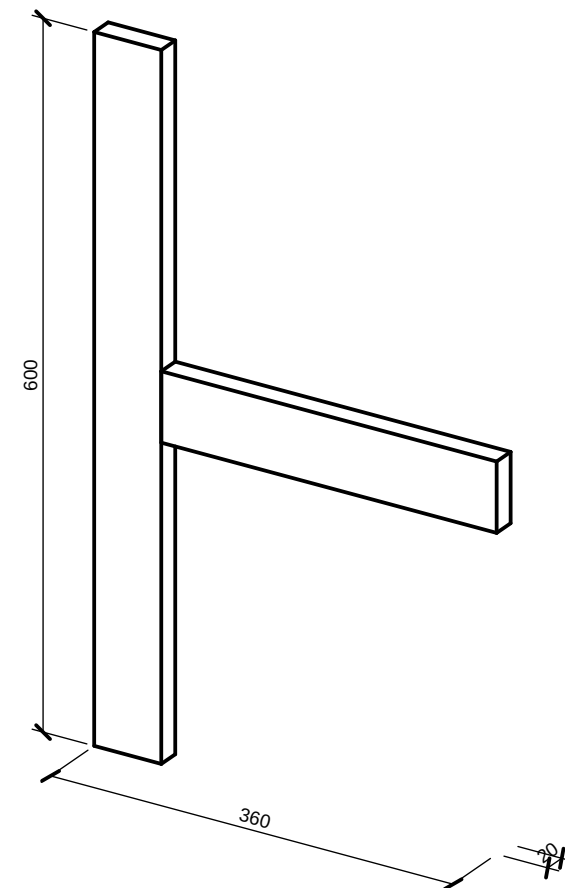
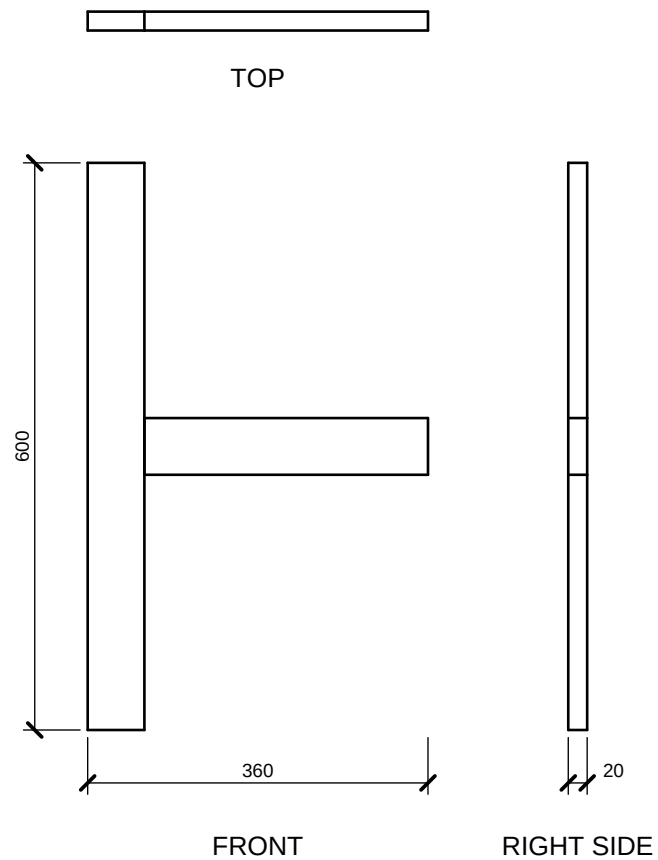
Loose tenon



parts	3
overall	360 x 20 x 600 (W x D x H)
material	oak
date	2026-10-25
made with	woodwright 0.9.0

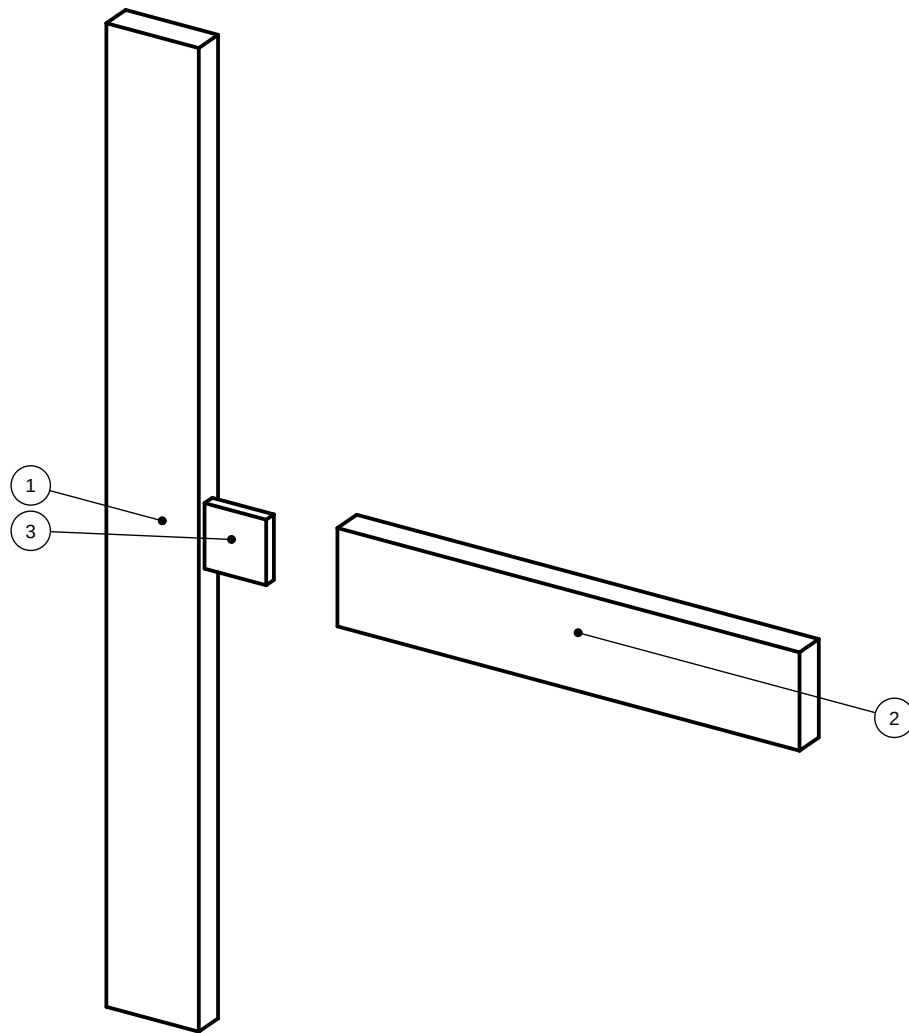
Contents

Drawings	3
Assembly	3
Parts	4
1 stile	5
2 rail	6
3 loose_tenon	7
Cut list	8
Appendix: source	9



ISOMETRIC

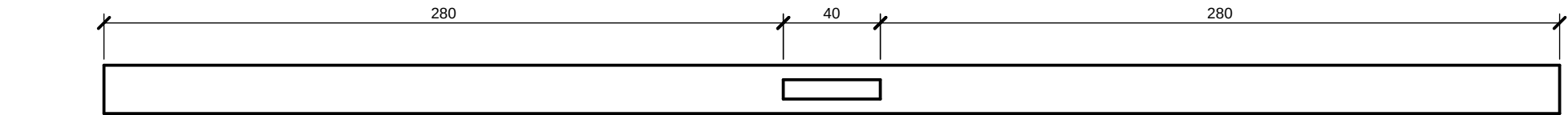
assembly	loose_tenon
parts	3
overall	360 x 20 x 600 (W x D x H)
material	oak
scale	1:8, mm



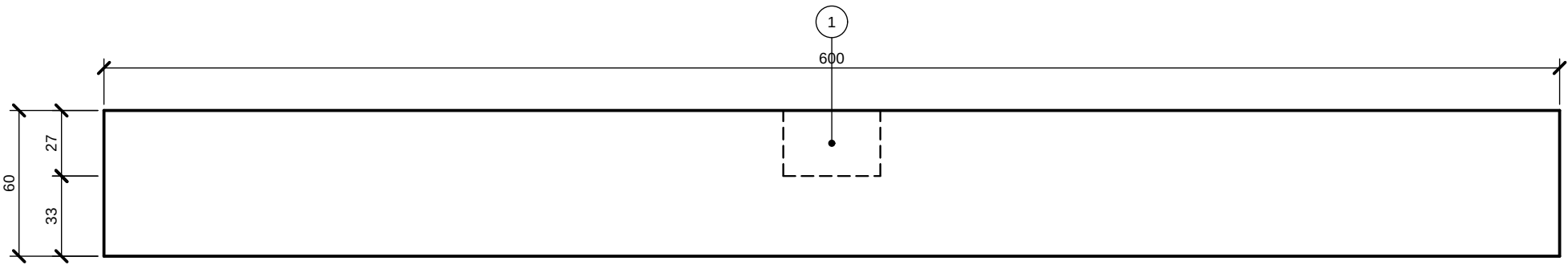
no.	part	qty	cut size (L x W x T)	material
1	stile	1	600 x 60 x 20	oak
2	rail	1	300 x 60 x 20	oak
3	loose_tenon	1	50 x 40 x 8	oak

EXPLODED

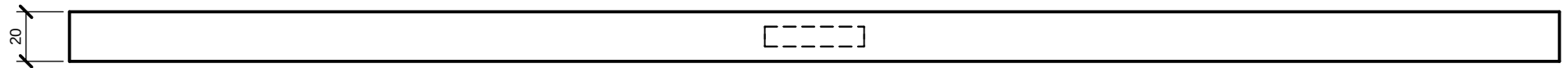
assembly	loose_tenon
parts	3
overall	360 x 20 x 600 (W x D x H)
material	oak
scale	not to scale, mm



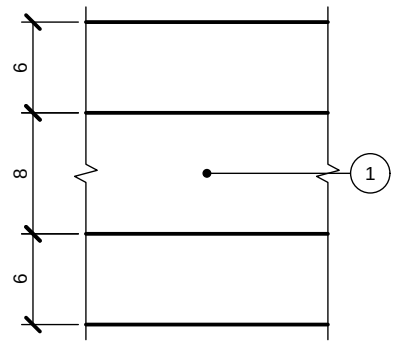
BACK EDGE



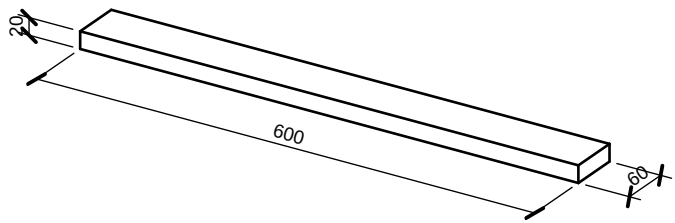
TOP FACE



FRONT EDGE



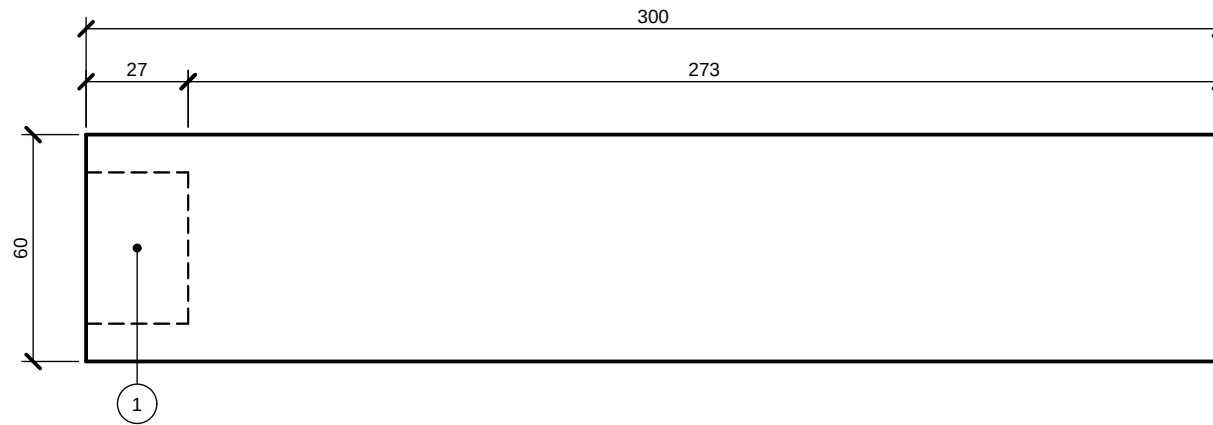
BACK EDGE: 1 2:1



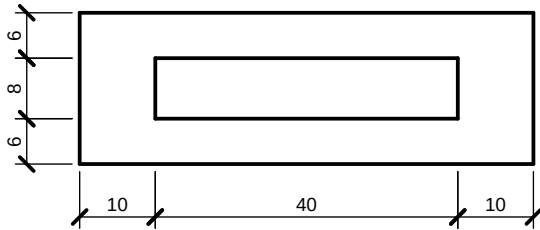
ISOMETRIC

1 mortise 40 x 8 mm, 27 deep, in back_edge

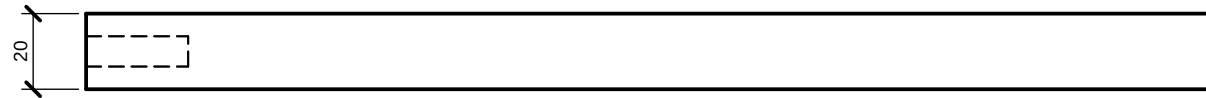
part	stile
of	loose_tenon
make	1
cut size	600 x 60 x 20
material	oak
scale	1:2.5, mm



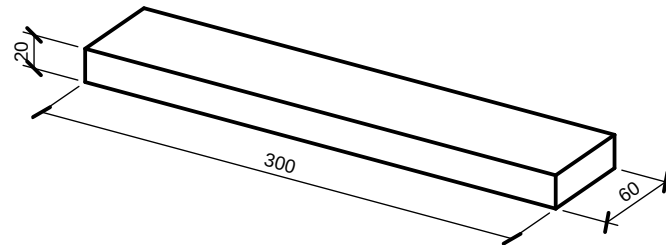
TOP FACE



LEFT END 1:1



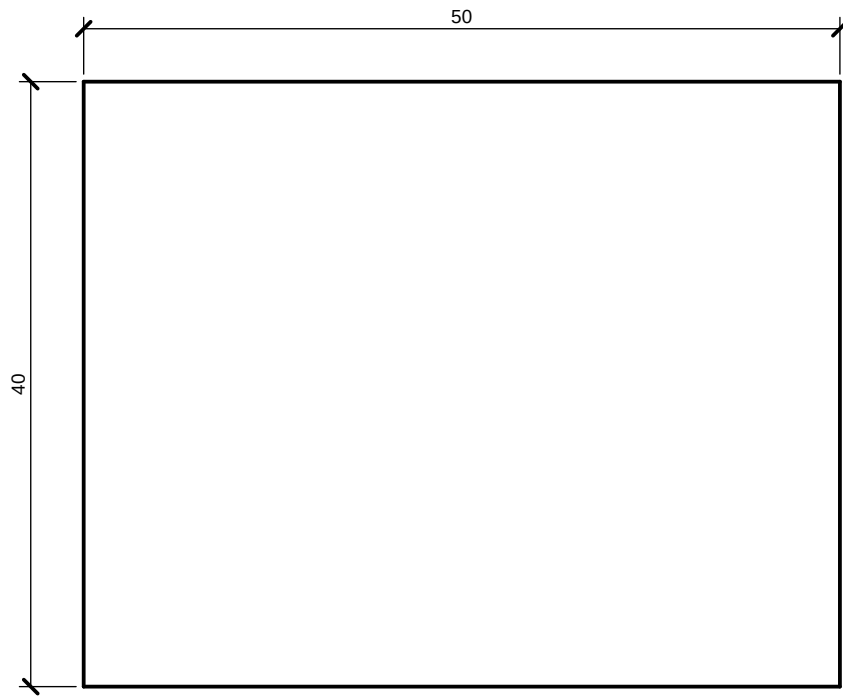
FRONT EDGE



ISOMETRIC

1 mortise 40 x 8 mm, 27 deep, in left_end

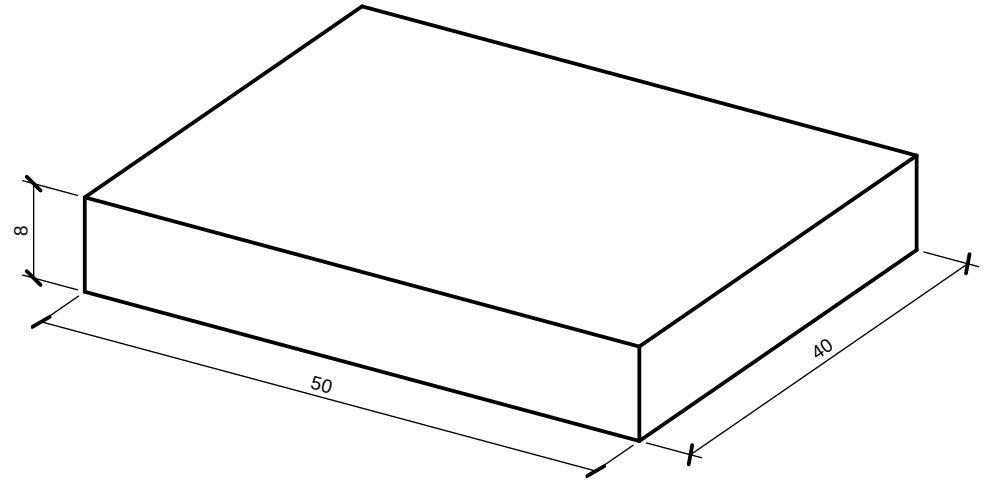
part	rail
of	loose_tendon
make	1
cut size	300 x 60 x 20
material	oak
scale	1:2, mm



TOP FACE



FRONT EDGE



ISOMETRIC

part	loose_tenon
of	loose_tenon
make	1
cut size	50 x 40 x 8
material	oak
scale	2:1, mm

Cut list

stile	600 x 60 x 20 mm	oak
	- mortise 40 x 8 mm, 27 deep, in back_edge	
rail	300 x 60 x 20 mm	oak
	- mortise 40 x 8 mm, 27 deep, in left_end	
loose_tenon	50 x 40 x 8 mm	oak

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.loose_tenon
```

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

```
def loose_tenon(
    stile_length: float = 600,
    rail_length: float = 300,
    width: float = 60,
    tenon_length: float = 50,
    tenon_width: float = 40,
    stock: Stock = OAK,
) -> Assembly:
    """A rail joined to the back edge of a stile by a loose tenon.

    The loose tenon is a strip of 8 mm oak glued into a mortise in the
    stile's edge and one in the rail's end, half its length in each, as cut
    with a router or a domino jointer (the mortises here square-ended).
    """
    asm = Assembly("loose_tenon", root_location=STANDING)
    stile = asm.add(Board("stile", stock, length=stile_length, width=width))
    rail = asm.add(Board("rail", stock, length=rail_length, width=width))
    tenon_stock = Stock.board(thickness=rules.tenon_thickness(stock.thickness), species="oak")
    tenon = asm.add(Board("loose_tenon", tenon_stock, length=tenon_length, width=tenon_width))
    asm.join(LooseTenon(stile.back_edge, rail.left_end, tenon))
    return asm
```