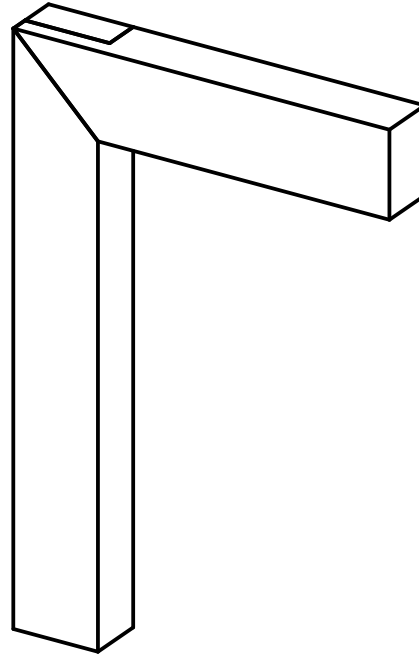


Mitred face tenon corner



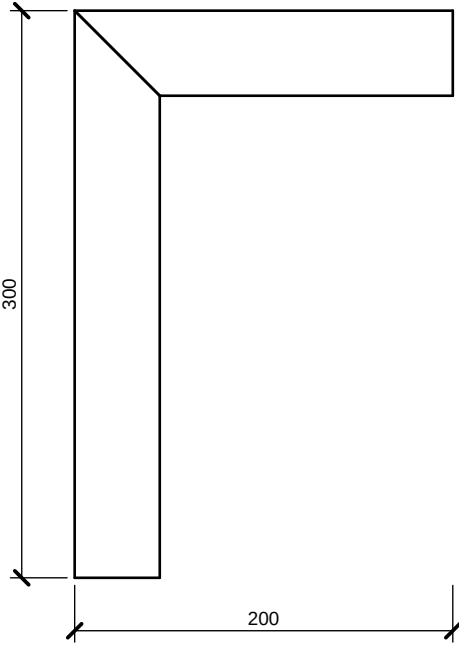
parts	2
overall	200 x 30 x 300 (W x D x H)
material	oak
date	2026-10-25
made with	woodwright 0.9.0

Contents

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



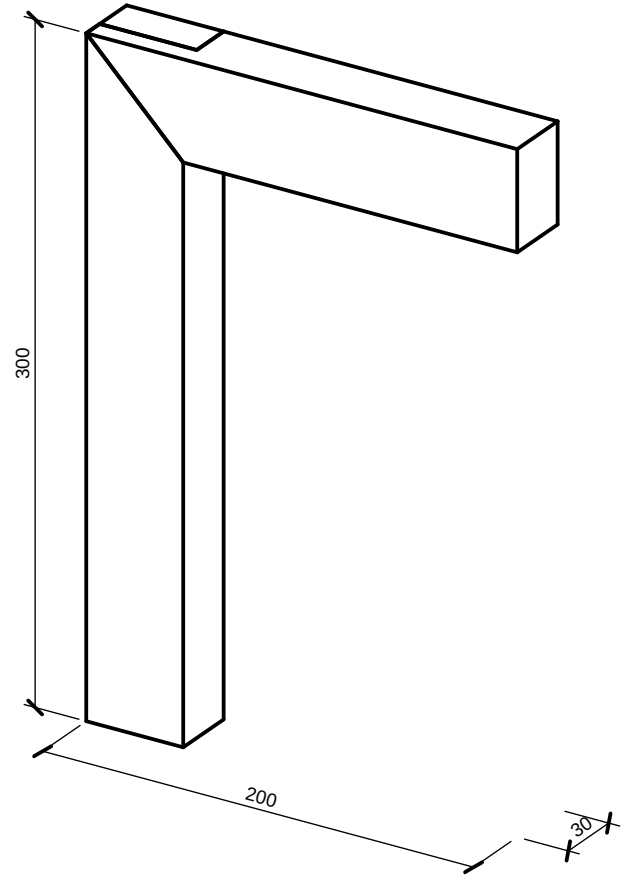
TOP



FRONT

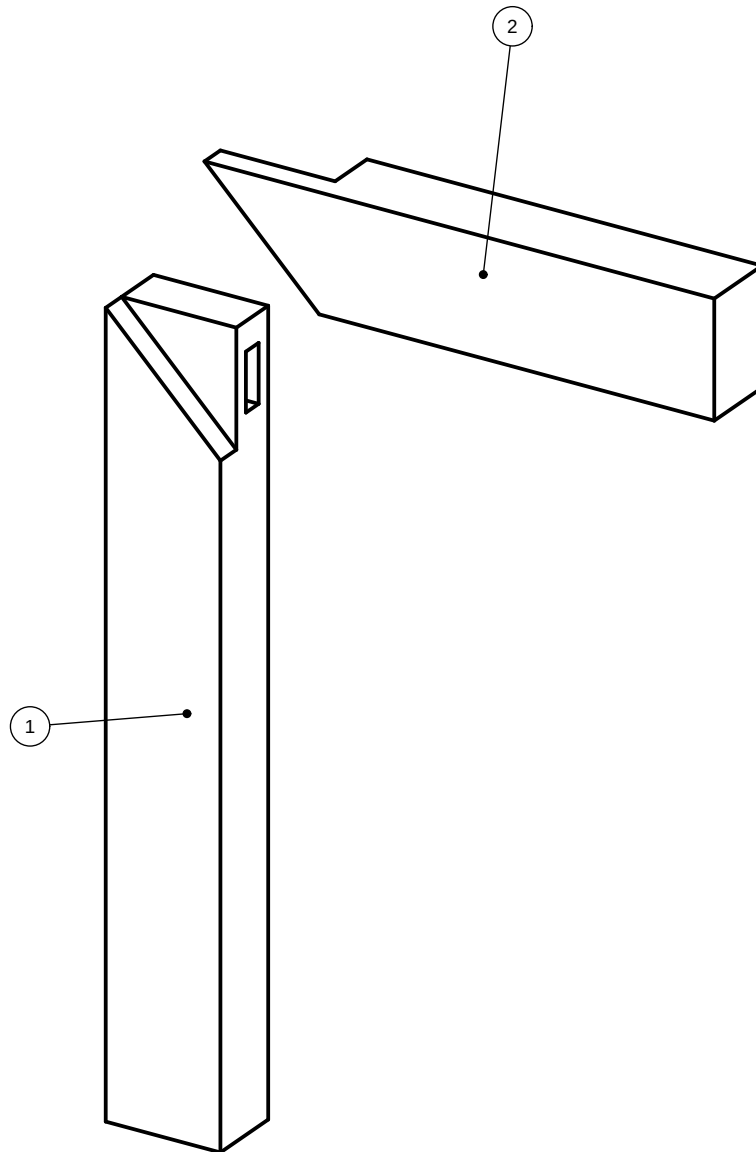


RIGHT SIDE



ISOMETRIC

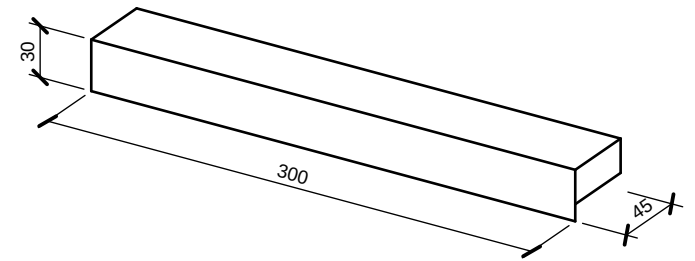
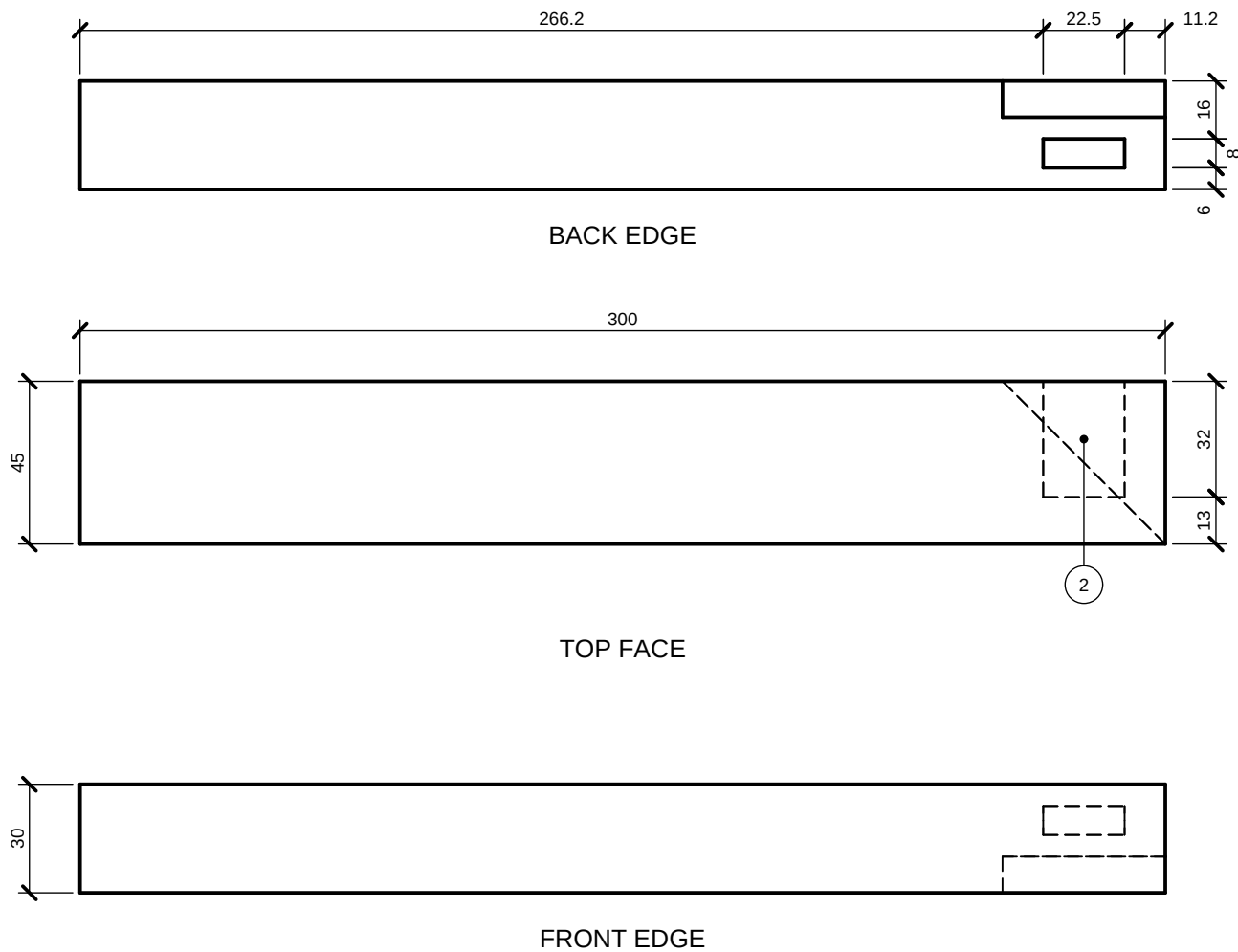
assembly	mitred_face_tenon_corner
parts	2
overall	200 x 30 x 300 (W x D x H)
material	oak
scale	1:4, mm



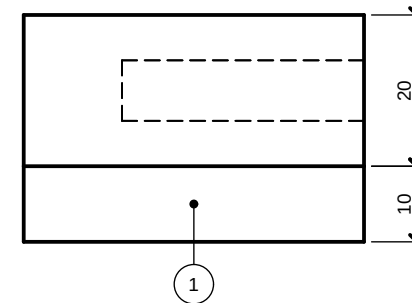
no.	part	qty	cut size (L x W x T)	material
1	stile	1	300 x 45 x 30	oak
2	rail	1	200 x 45 x 30	oak

EXPLODED

assembly	mitred_face_tenon_corner
parts	2
overall	200 x 30 x 300 (W x D x H)
material	oak
scale	not to scale, mm



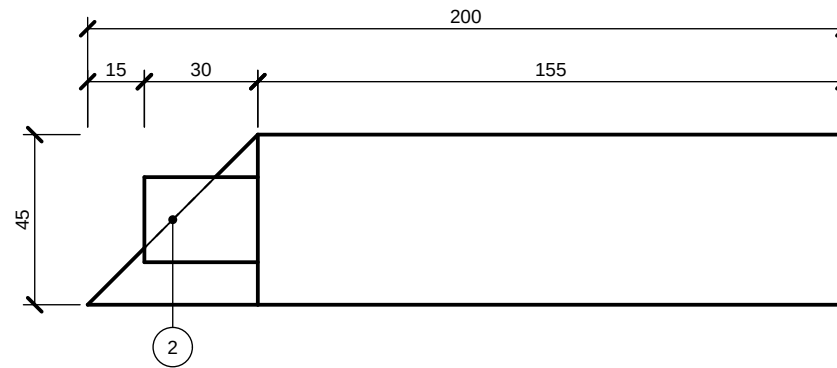
ISOMETRIC



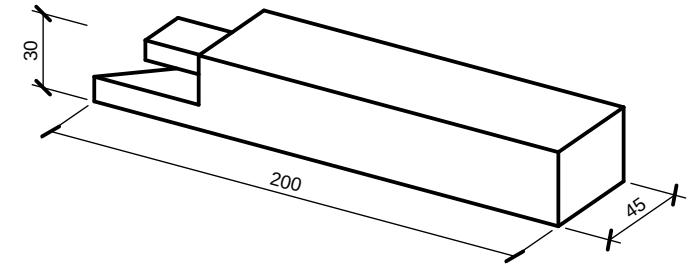
RIGHT END 1:1

- 1 mitre 45 deg on right_end, back_edge inside, 10 deep from bottom_face
 2 mortise 22.5 x 8 mm, 32 deep, in back_edge

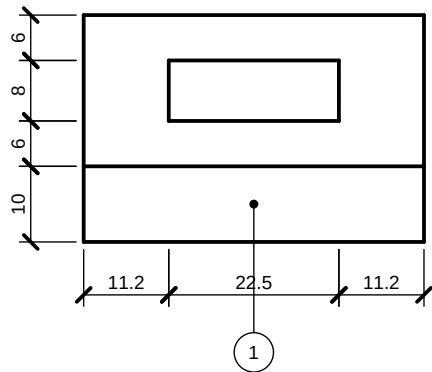
part	stile
of	mitred_face_tennon_corner
make	1
cut size	300 x 45 x 30
material	oak
scale	1:2, mm



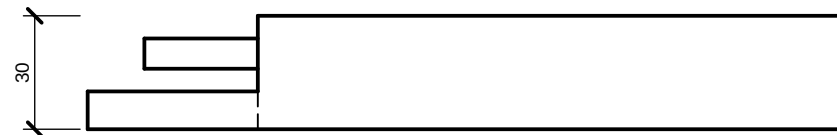
TOP FACE



ISOMETRIC



LEFT END 1:1



FRONT EDGE

- 1 mitre 45 deg on left_end, back_edge inside, 10 deep from bottom_face
 2 end rabbet 45 mm, 20 deep, in top_face at left_end, leaving a tenon 22.5 x 8 mm, 30 long

part	rail
of	mitred_face_tennon_corner
make	1
cut size	200 x 45 x 30
material	oak
scale	1:2, mm

Cut list

stile 300 x 45 x 30 mm oak
- mitre 45 deg on right_end, back_edge inside, 10 deep from bottom_face
- mortise 22.5 x 8 mm, 32 deep, in back_edge
rail 200 x 45 x 30 mm oak
- mitre 45 deg on left_end, back_edge inside, 10 deep from bottom_face
- end rabbet 45 mm, 20 deep, in top_face at left_end, leaving a tenon 22.5 x 8 mm, 30 long

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.mitred_face_tenon_corner
```

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

```
def mitred_face_tenon_corner(
    stile_length: float = 300, rail_length: float = 200, width: float = 45, stock: Stock = THICK_OAK
) -> Assembly:
    """A frame corner mitred on the face, with a hidden mortise and tenon behind.

    The front third of both parts is mitred, so the face towards the viewer
    looks like a mitre corner, e.g. on a frame with a chamfered or moulded
    front. Behind it the stile runs on to the corner and the rail butts
    against its inside edge, with a 22.5 x 8 mm tenon, 30 mm long, centered
    in the layer behind the mitre and across the rail's width, in a blind
    mortise; it shows neither at the end of the stile nor at its outer edge.
    """
    asm = Assembly("mitred_face_tenon_corner", 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))
    asm.join(
        MitredFaceTenon(
            stile.right_end, rail.left_end, stile.back_edge, rail.back_edge, face=stile.bottom_face
        )
    )
    return asm
```