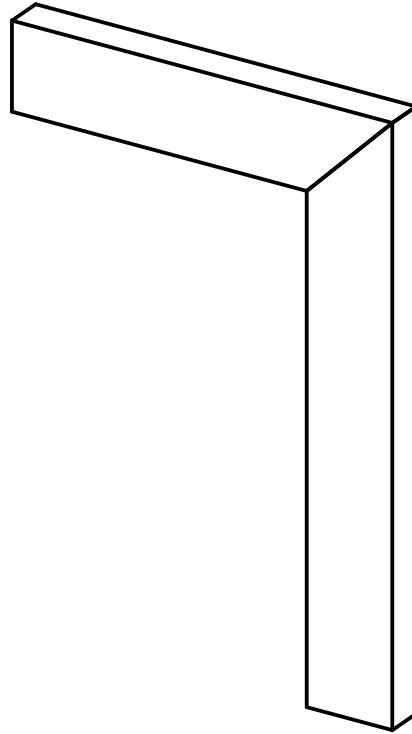


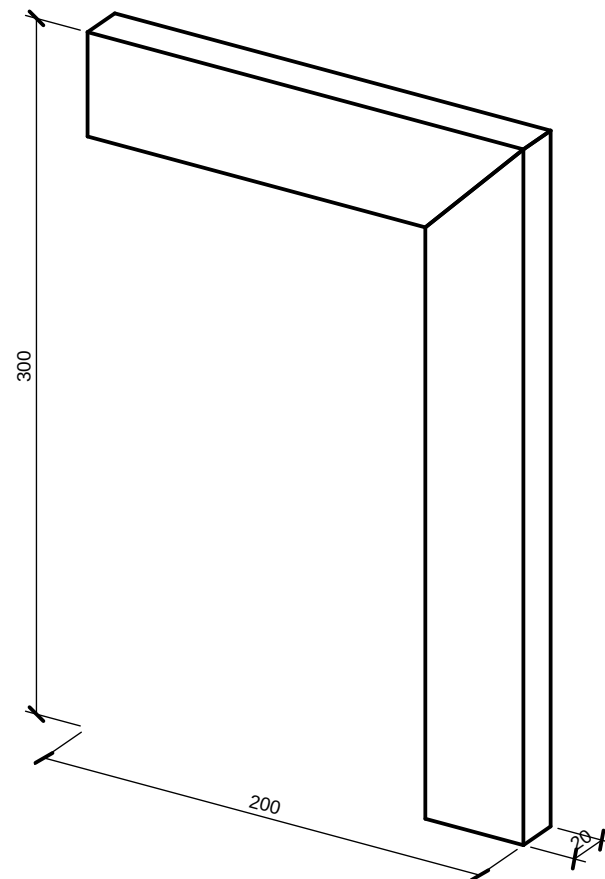
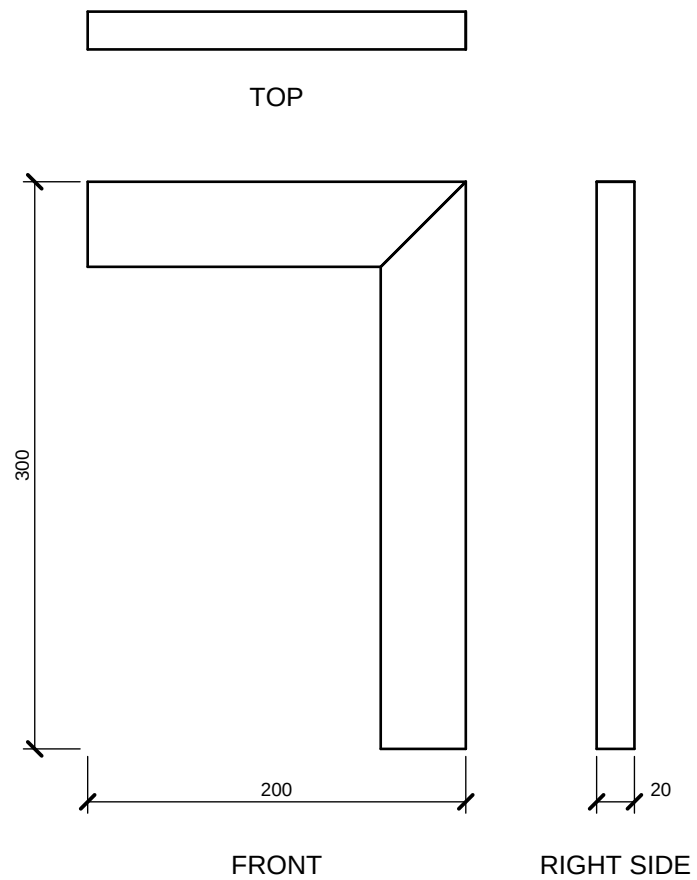
Splined mitre corner



parts	3
overall	200 x 20 x 300 (W x D x H)
material	oak
date	2026-10-25
made with	woodwright 0.9.0

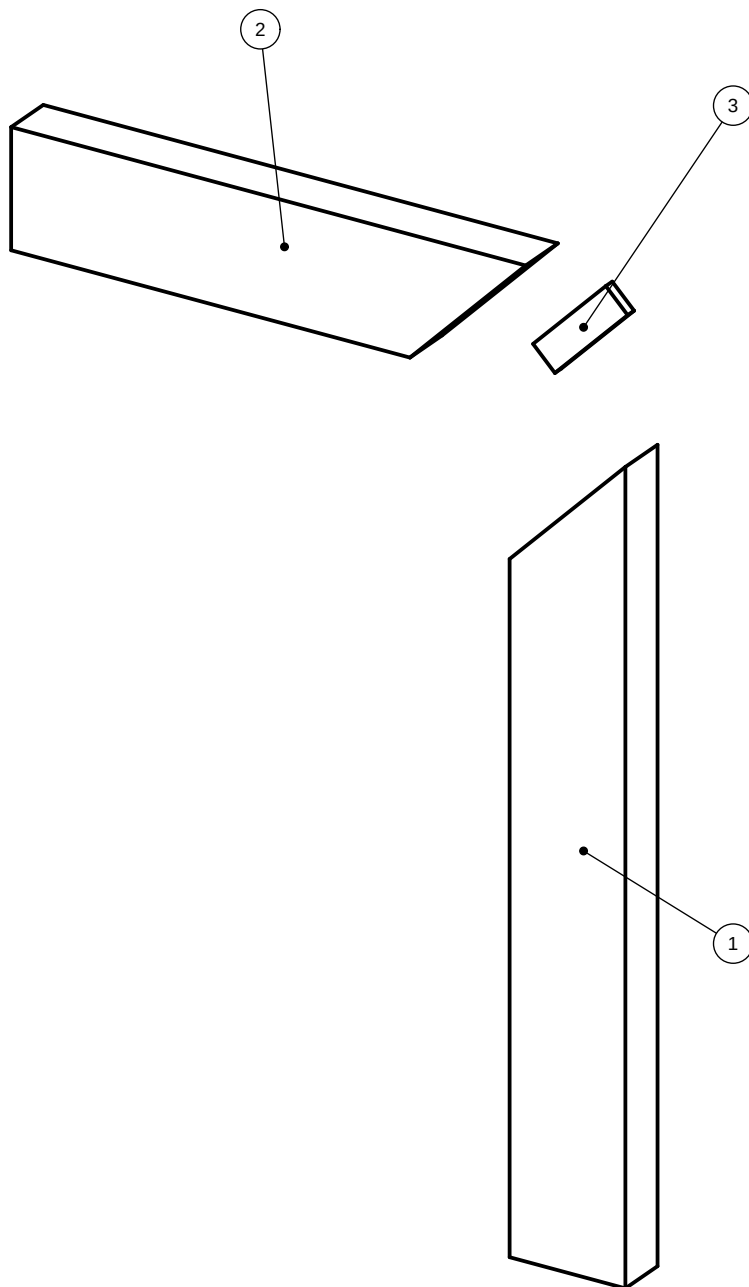
Contents

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



ISOMETRIC

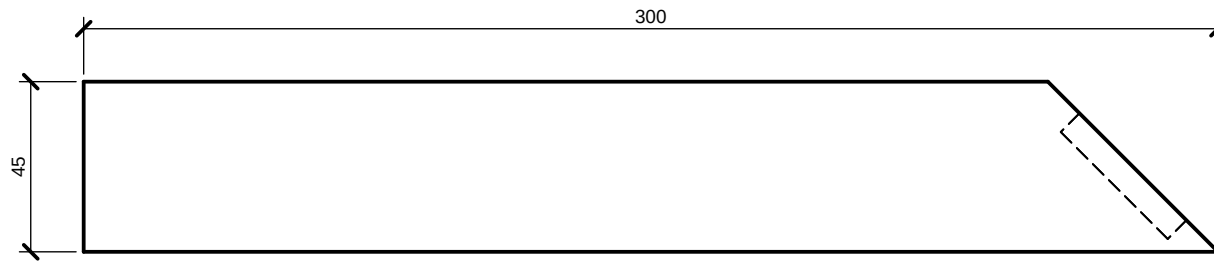
assembly	splined_mitre_corner
parts	3
overall	200 x 20 x 300 (W x D x H)
material	oak
scale	1:4, mm



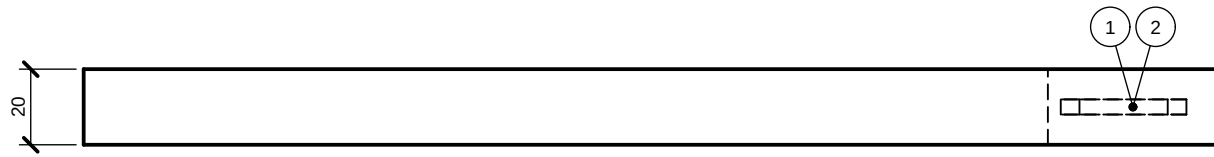
EXPLODED

no.	part	qty	cut size (L x W x T)	material
1	stile	1	300 x 45 x 20	oak
2	rail	1	200 x 45 x 20	oak
3	spline	1	40 x 12 x 4	oak

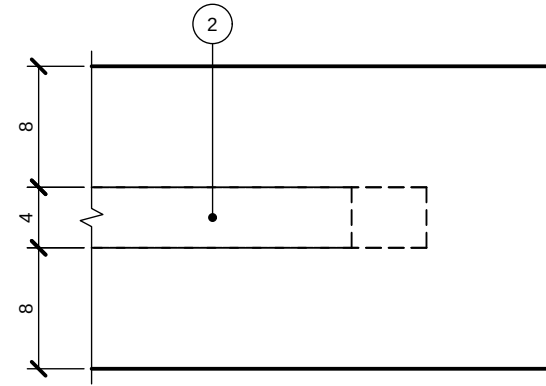
assembly	splined_mitre_corner
parts	3
overall	200 x 20 x 300 (W x D x H)
material	oak
scale	not to scale, mm



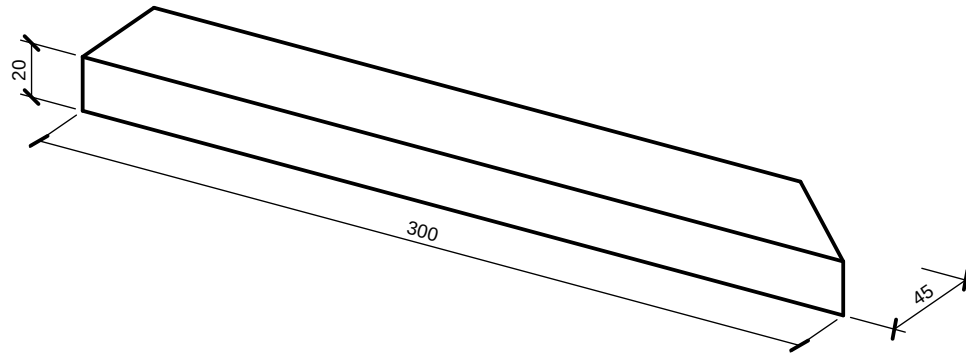
TOP FACE



FRONT EDGE



FRONT EDGE: 2 2:1



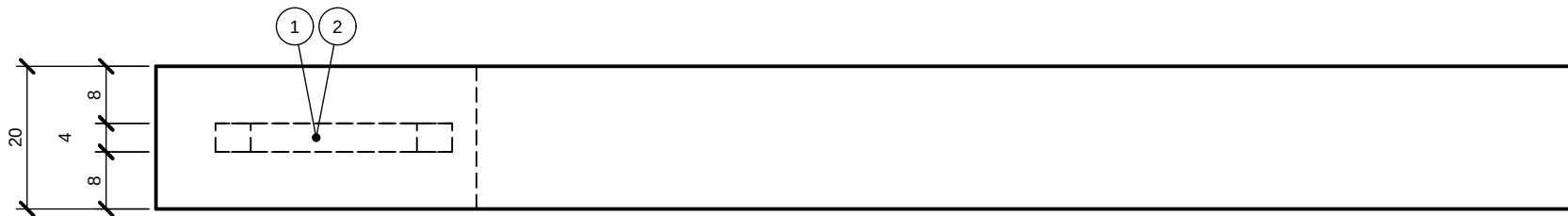
ISOMETRIC

- 1 mitre 45 deg on right_end, back_edge inside
- 2 spline groove 4 mm, 7 deep, square to the mitre with rail, along the mitre line, 10 from top_face

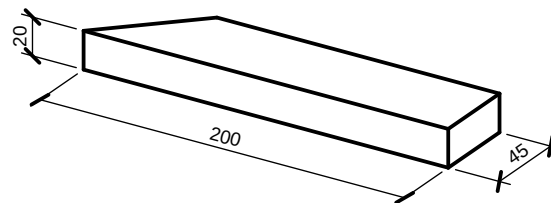
part	stile
of	splined_mitre_corner
make	1
cut size	300 x 45 x 20
material	oak
scale	1:2, mm



TOP FACE



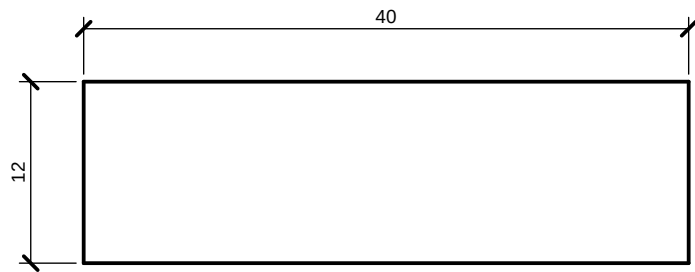
FRONT EDGE



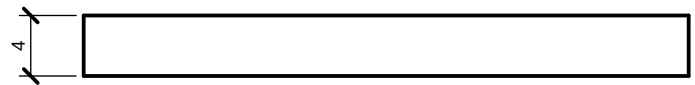
ISOMETRIC

- 1 mitre 45 deg on left_end, back_edge inside
- 2 spline groove 4 mm, 7 deep, square to the mitre with stile, along the mitre line, 10 from top_face

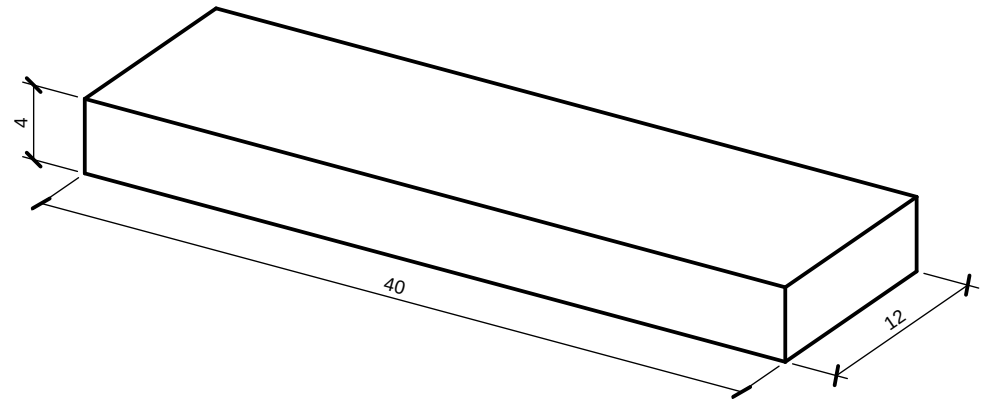
part	rail
of	splined_mitre_corner
make	1
cut size	200 x 45 x 20
material	oak
scale	1:1, mm



TOP FACE



FRONT EDGE



ISOMETRIC

part	spline
of	splined_mitre_corner
make	1
cut size	40 x 12 x 4
material	oak
scale	2:1, mm

Cut list

stile 300 x 45 x 20 mm oak
- mitre 45 deg on right_end, back_edge inside
- spline groove 4 mm, 7 deep, square to the mitre with rail, along the mitre line, 10 from top_face
rail 200 x 45 x 20 mm oak
- mitre 45 deg on left_end, back_edge inside
- spline groove 4 mm, 7 deep, square to the mitre with stile, along the mitre line, 10 from top_face
spline 40 x 12 x 4 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.splined_mitre_corner
```

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

```
def splined_mitre_corner(
    stile_length: float = 300, rail_length: float = 200, width: float = 45, stock: Stock = OAK
) -> Assembly:
    """A picture frame corner with a spline hidden in the mitre.

    The spline, 4 mm oak, 40 mm long, runs along the mitre line in the
    middle of the thickness, 6 mm into each part, in grooves cut square to
    the mitre faces (with a slot cutter), stopped short of both edges.
    """
    asm = Assembly("splined_mitre_corner", root_location=OUTSIDE_CORNER_UP)
    stile = asm.add(Board("stile", stock, length=stile_length, width=width))
    rail = asm.add(Board("rail", stock, length=rail_length, width=width))
    spline = asm.add(Board("spline", THIN_SPLINE_OAK, length=40, width=12))
    asm.join(
        SplinedMitre(
            stile.right_end,
            rail.left_end,
            stile.back_edge,
            rail.back_edge,
            splines=(spline,),
        )
    )
    return asm
```