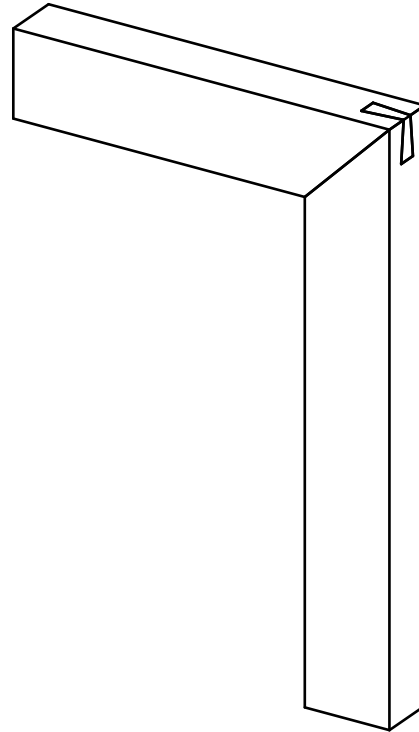


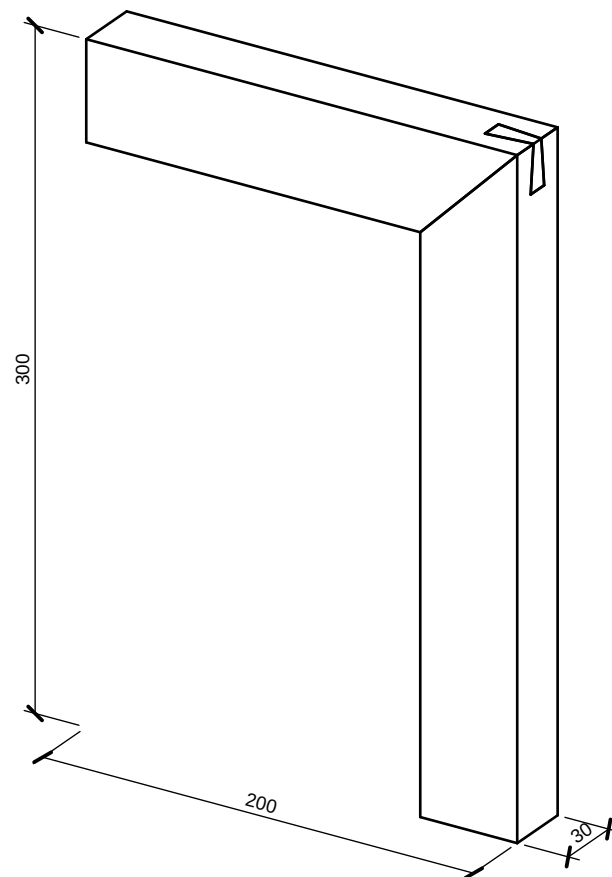
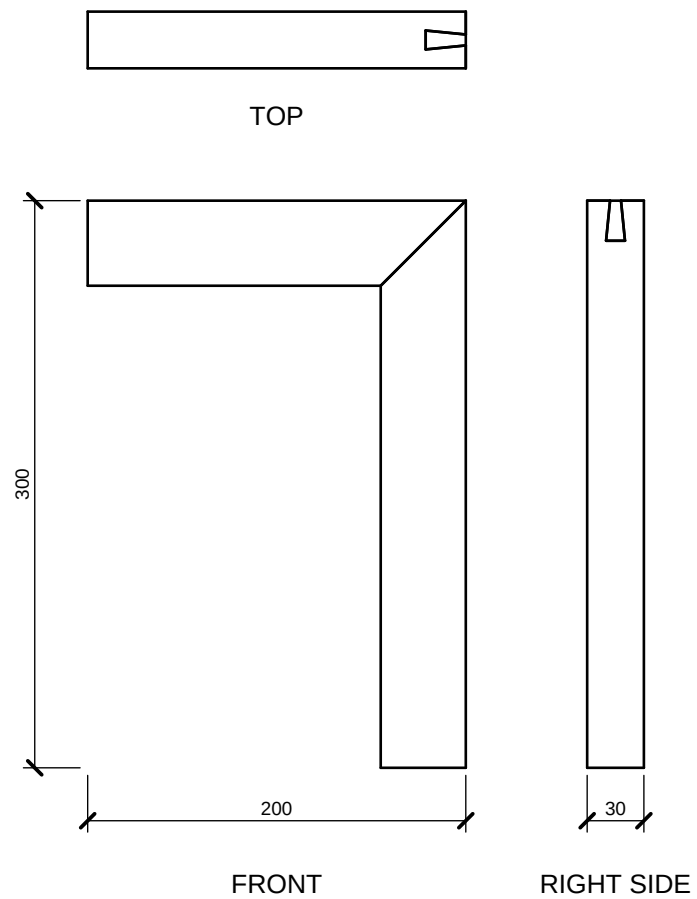
Dovetail keyed mitre corner



parts	3
overall	200 x 30 x 300 (W x D x H)
material	oak, walnut
date	2026-10-25
made with	woodwright 0.9.0

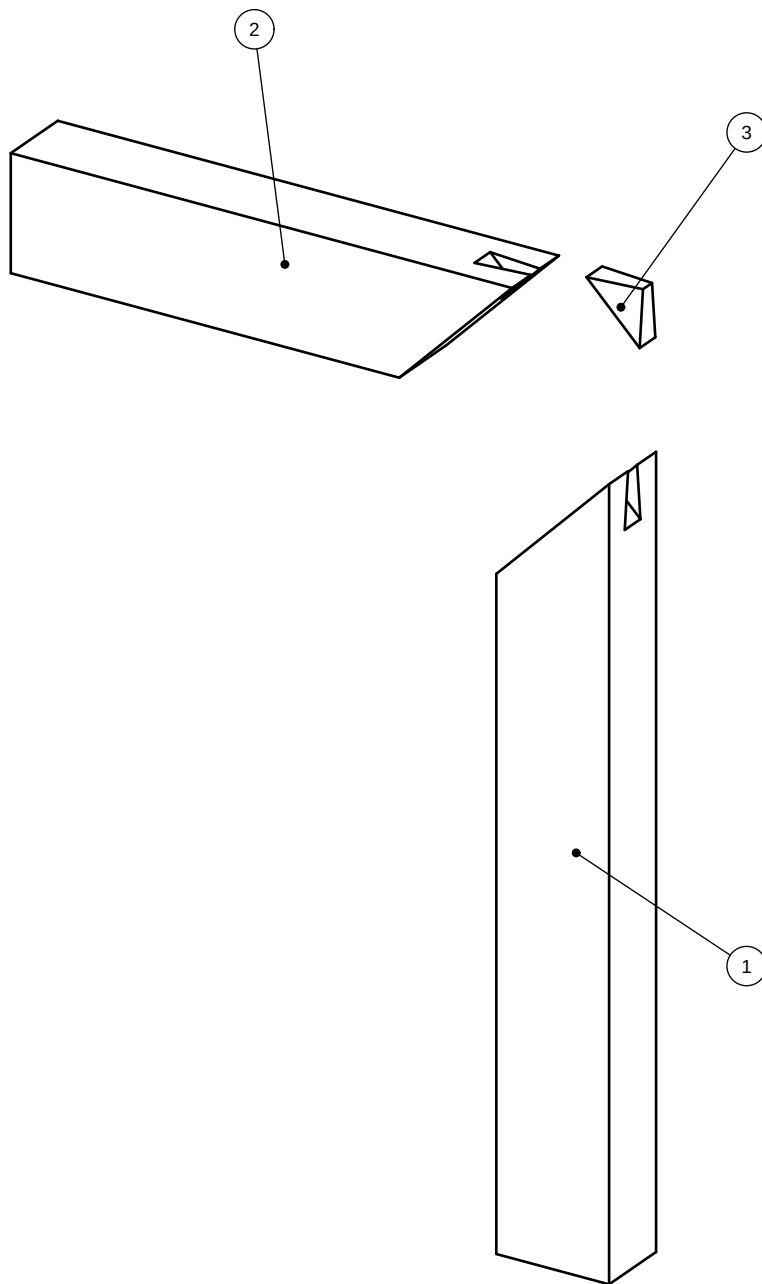
Contents

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1 stile	5
2 rail	6
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ISOMETRIC

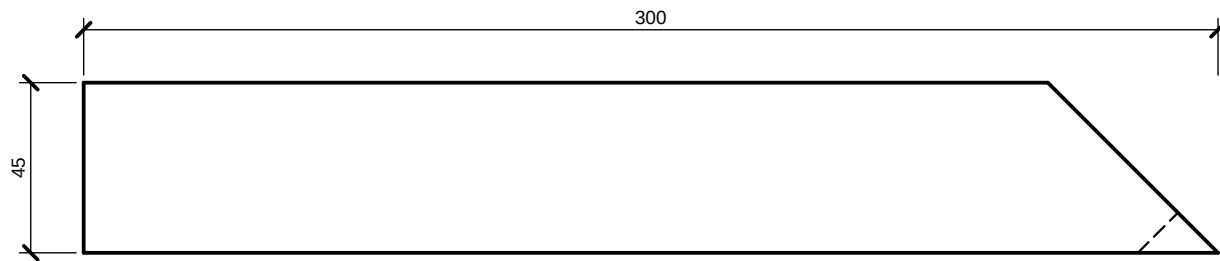
assembly	dovetail_keyed_mitre_corner
parts	3
overall	200 x 30 x 300 (W x D x H)
material	oak, walnut
scale	1:4, mm



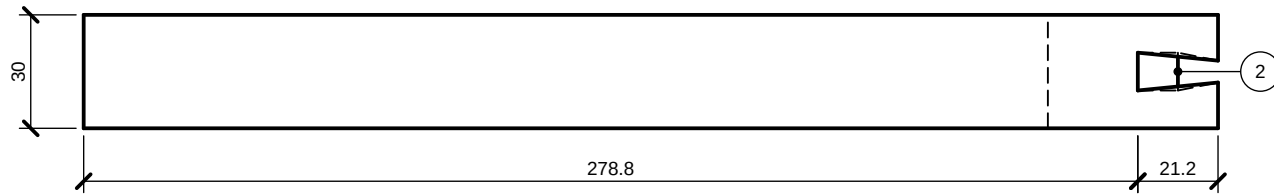
EXPLODED

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
3	key	1	40 x 20 x 10	walnut

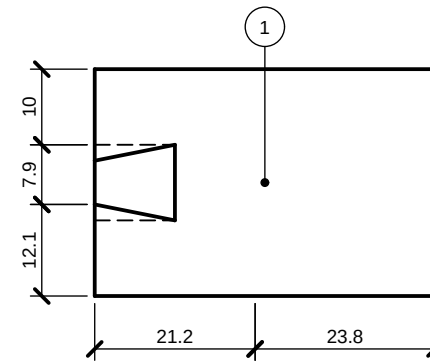
assembly	dovetail_keyed_mitre_corner
parts	3
overall	200 x 30 x 300 (W x D x H)
material	oak, walnut
scale	not to scale, mm



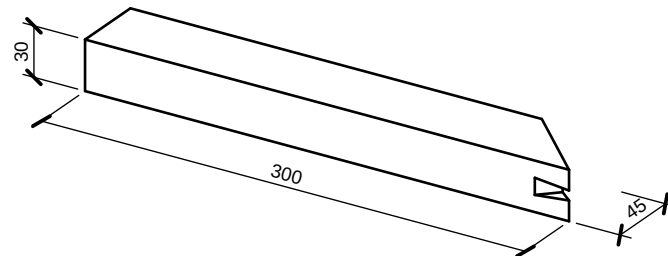
TOP FACE



FRONT EDGE



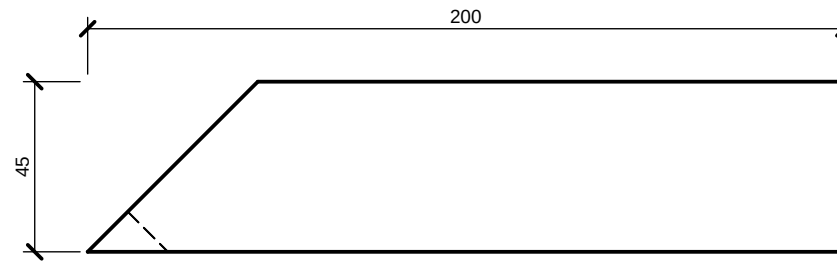
RIGHT END 1:1



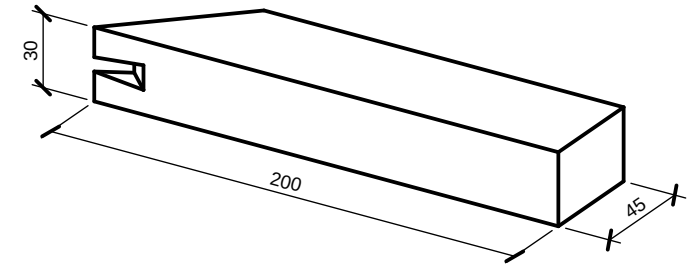
ISOMETRIC

- 1 mitre 45 deg on right_end, back_edge inside
- 2 dovetail key kerf 10 mm wide at its bottom, its sides at 8 deg, 15 deep across the corner with rail, 15 from top_face

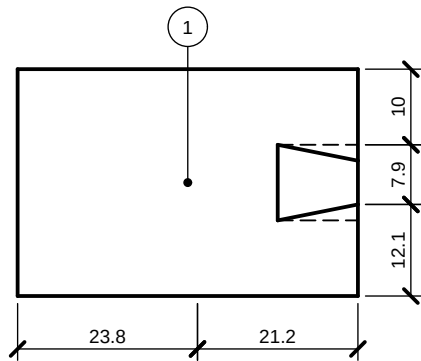
part	stile
of	dovetail_keyed_mitre_corner
make	1
cut size	300 x 45 x 30
material	oak
scale	1:2, mm



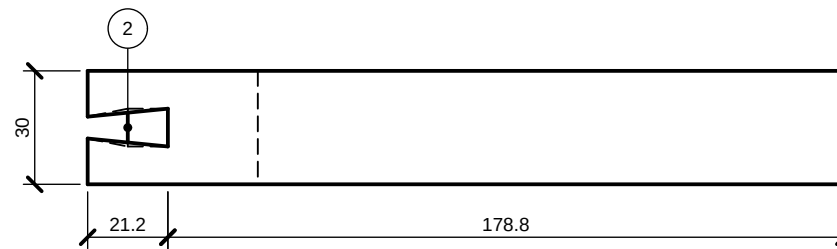
TOP FACE



ISOMETRIC



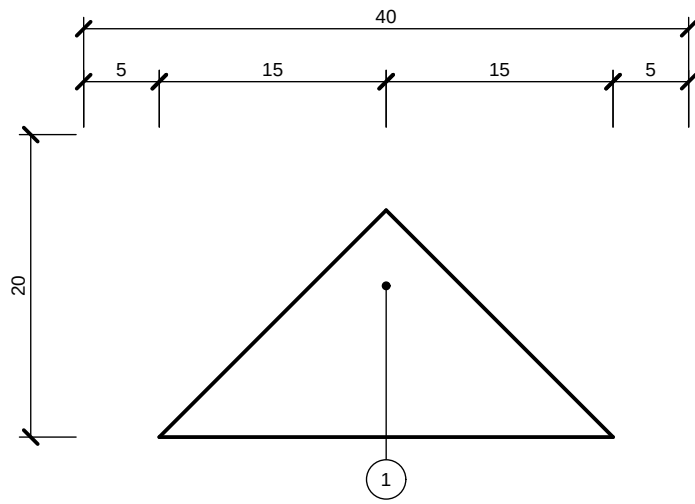
LEFT END 1:1



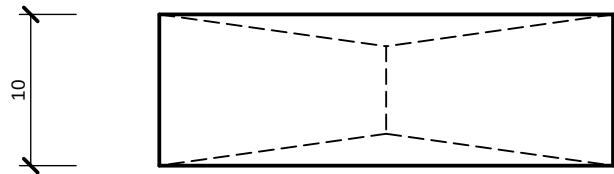
FRONT EDGE

- 1 mitre 45 deg on left_end, back_edge inside
- 2 dovetail key kerf 10 mm wide at its bottom, its sides at 8 deg, 15 deep across the corner with stile, 15 from top_face

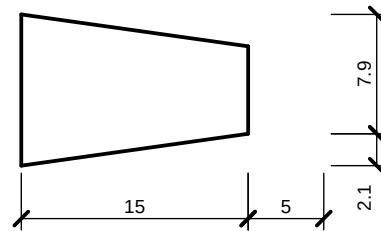
part	rail
of	dovetail_keyed_mitre_corner
make	1
cut size	200 x 45 x 30
material	oak
scale	1:2, mm



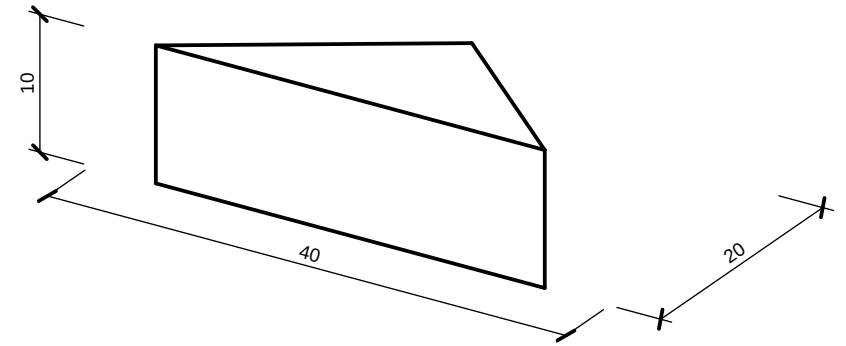
TOP FACE



FRONT EDGE



RIGHT END



ISOMETRIC

1 trimmed flush with stile and rail, to a dovetail

part	key
of	dovetail_keyed_mitre_corner
make	1
cut size	40 x 20 x 10
material	walnut
scale	2:1, mm

Cut list

stile 300 x 45 x 30 mm oak
- mitre 45 deg on right_end, back_edge inside
- dovetail key kerf 10 mm wide at its bottom, its sides at 8 deg, 15 deep across the corner with rail, 15 from top_face

rail 200 x 45 x 30 mm oak
- mitre 45 deg on left_end, back_edge inside
- dovetail key kerf 10 mm wide at its bottom, its sides at 8 deg, 15 deep across the corner with stile, 15 from top_face

key 40 x 20 x 10 mm walnut
- trimmed flush with stile and rail, to a dovetail

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.dovetail_keyed_mitre_corner
```

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

```
def dovetail_keyed_mitre_corner(
    stile_length: float = 300, rail_length: float = 200, width: float = 45, stock: Stock = THICK_OAK
) -> Assembly:
    """A frame corner with a dovetail key across the outside corner.

    The kerf is cut with a 10 mm dovetail bit (sides at 8 degrees) with
    the frame in a cradle on the router table, 15 mm deep: 10 mm wide at
    its bottom, about 6 mm at the corner, so the key can't pull out
    sideways. The key is a dovetail strip, trimmed flush.
    """
    asm = Assembly("dovetail_keyed_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))
    key = asm.add(Board("key", Stock.board(thickness=10, species="walnut"), length=40, width=20))
    asm.join(
        KeyedMitre(
            stile.right_end,
            rail.left_end,
            stile.back_edge,
            rail.back_edge,
            keys=(key,),
            depth=15,
            dovetail=8,
        )
    )
    return asm
```