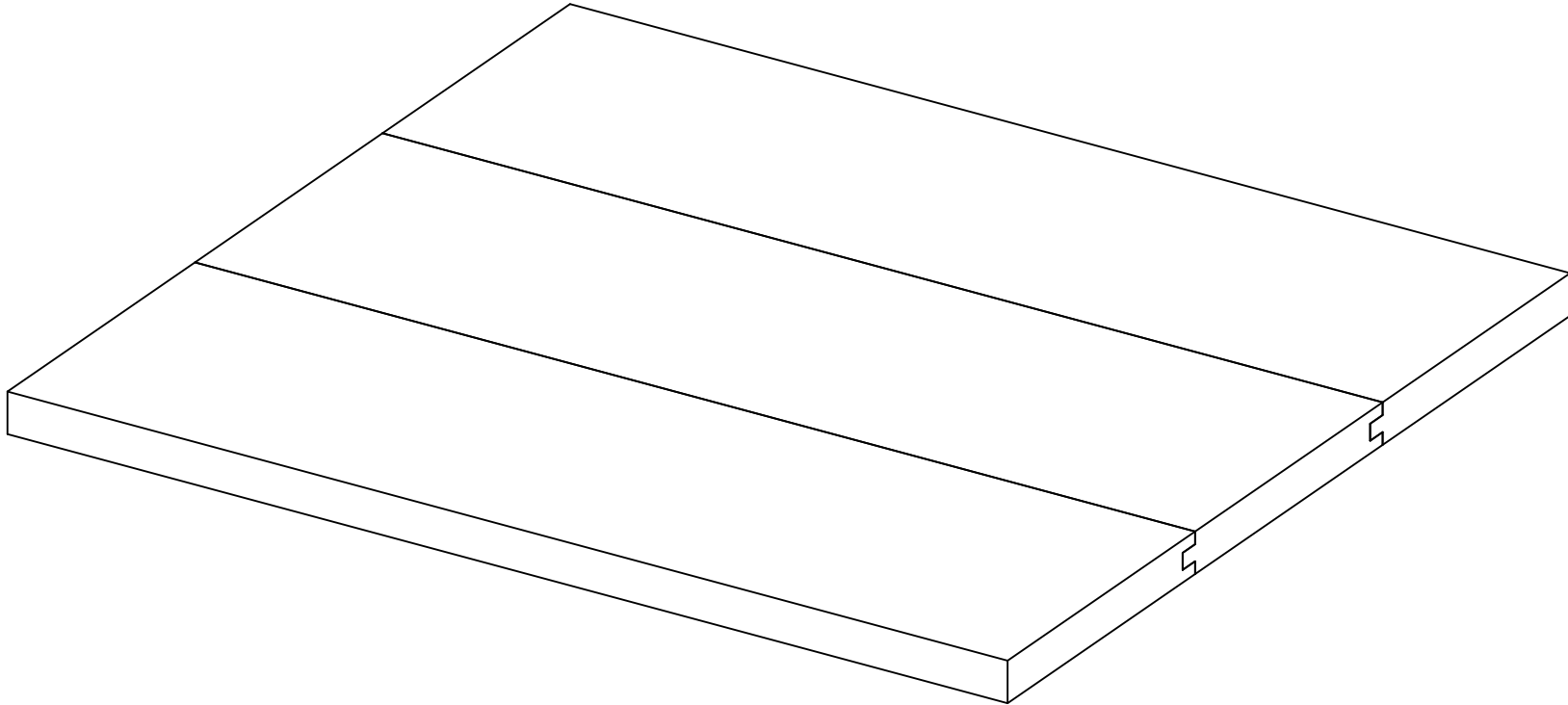


Tongue and groove panel



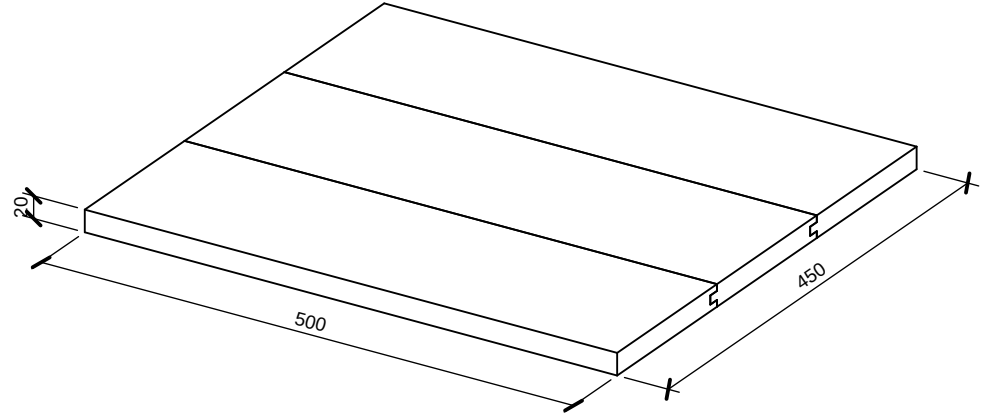
parts	3
overall	500 x 450 x 20 (W x D x H)
material	oak
date	2026-10-25
made with	woodwright 0.9.0

Contents

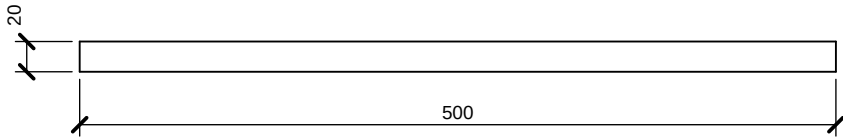
Drawings	3
Assembly	3
Parts	4
1 board_1	5
2 board_2	6
3 board_3	7
Cut list	8
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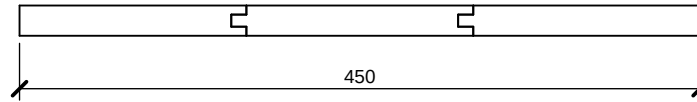
TOP



ISOMETRIC

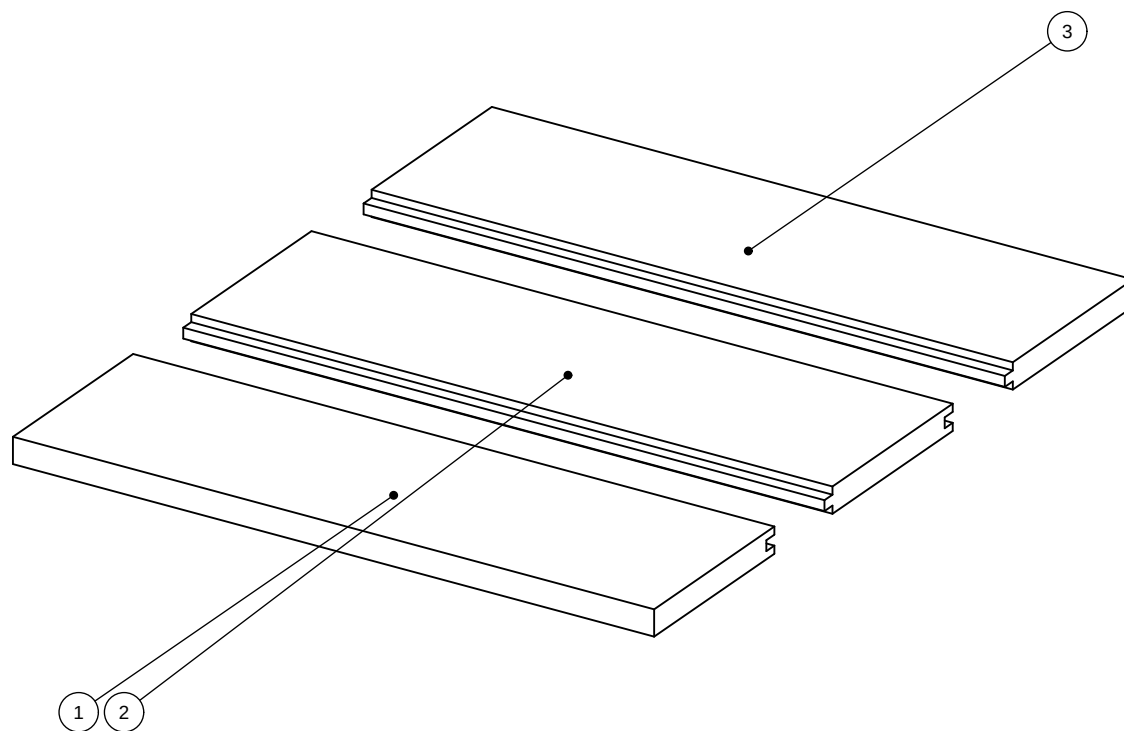


FRONT



RIGHT SIDE

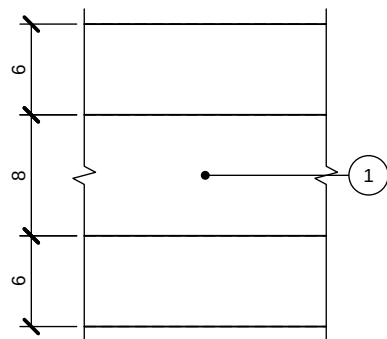
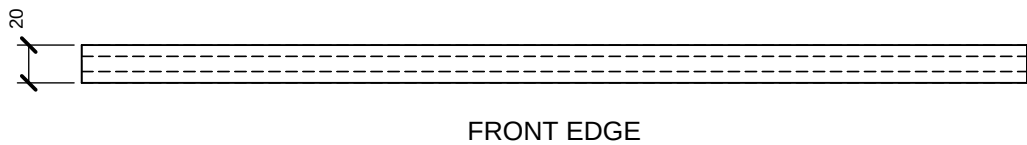
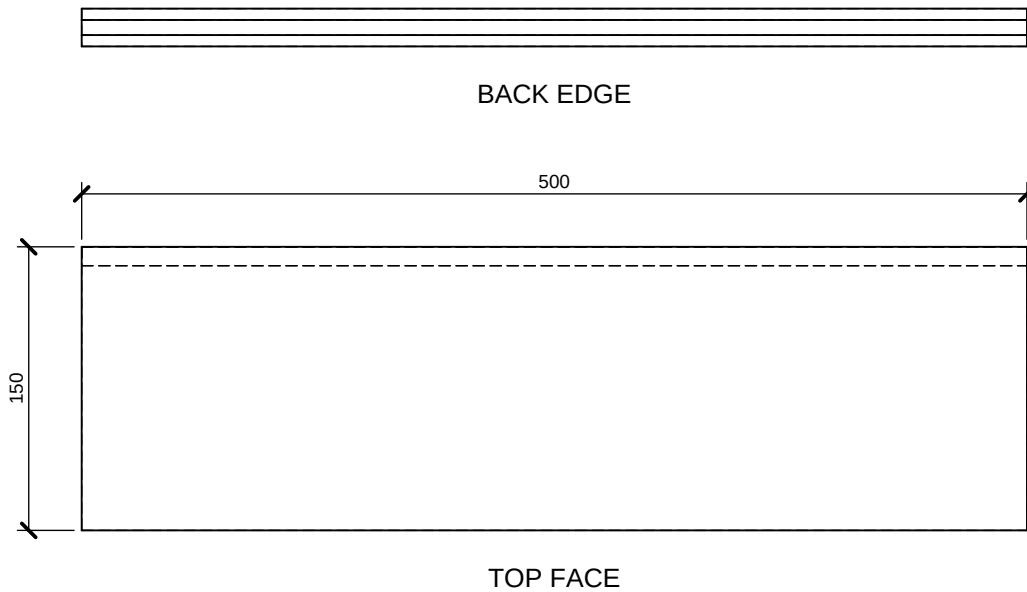
assembly	tongue_and_groove_panel
parts	3
overall	500 x 450 x 20 (W x D x H)
material	oak
scale	1:5, mm



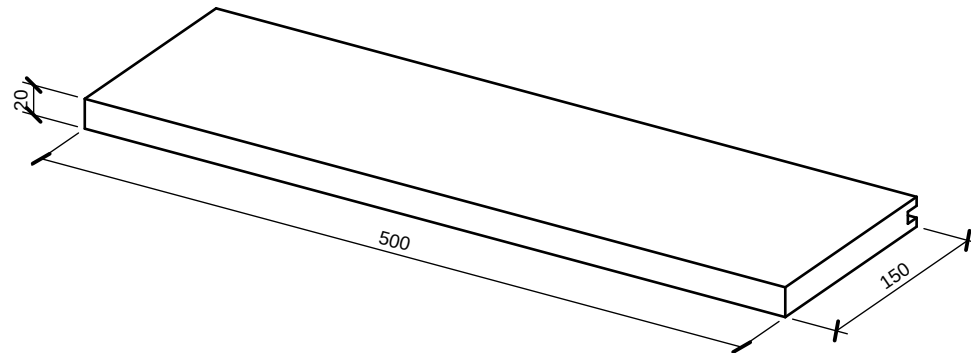
EXPLODED

no.	part	qty	cut size (L x W x T)	material
1	board_1	1	500 x 150 x 20	oak
2	board_2	1	500 x 160 x 20	oak
3	board_3	1	500 x 160 x 20	oak

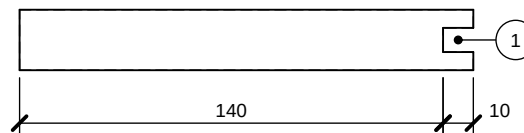
assembly	tongue_and_groove_panel
parts	3
overall	500 x 450 x 20 (W x D x H)
material	oak
scale	not to scale, mm



BACK EDGE: 1 2:1



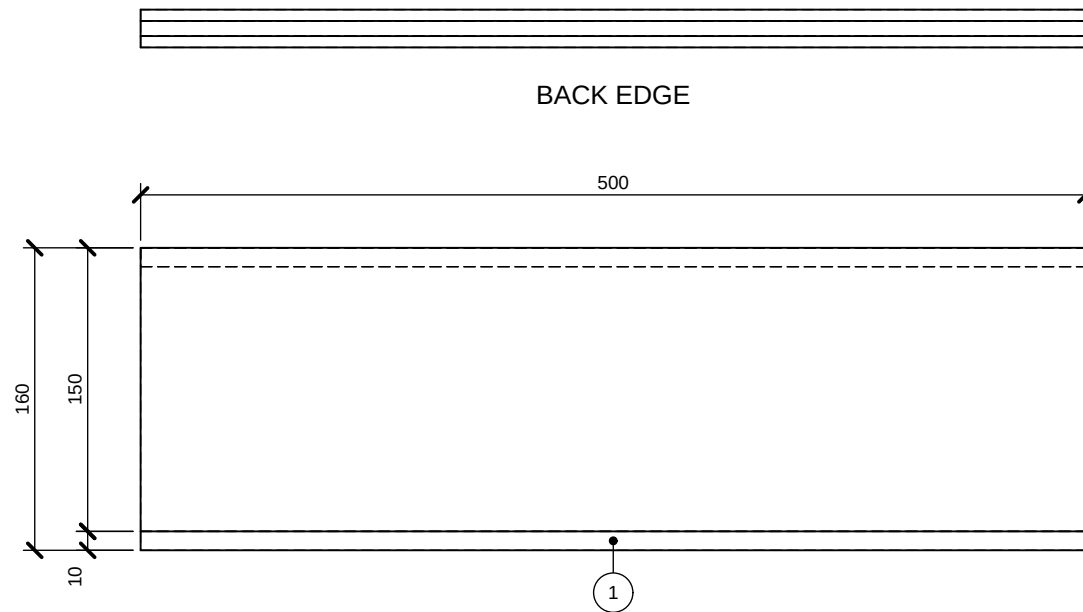
ISOMETRIC



RIGHT END 1:2.5

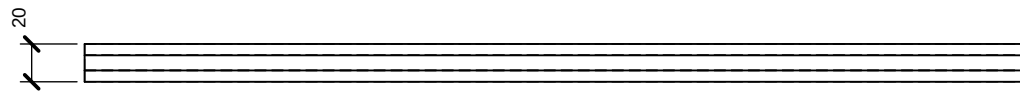
1 groove 8 mm, 10 deep, in back_edge

part	board_1
of	tongue_and_groove_panel
make	1
cut size	500 x 150 x 20
material	oak
scale	1:4, mm

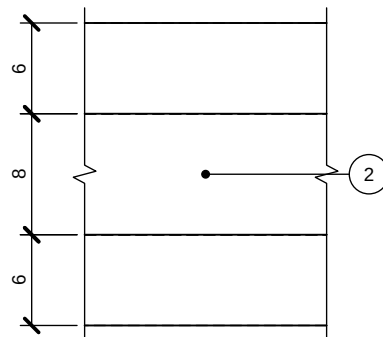


BACK EDGE

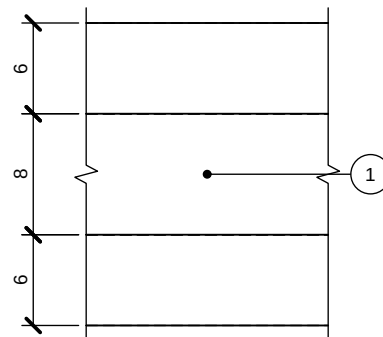
TOP FACE



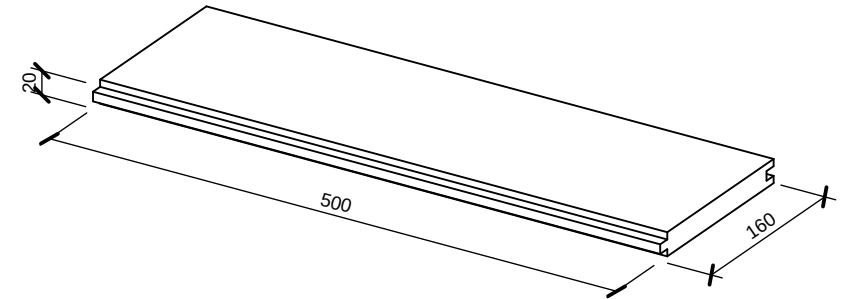
FRONT EDGE



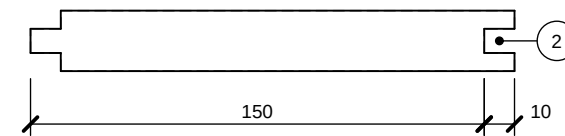
BACK EDGE: 2 2:1



FRONT EDGE: 1 2:1



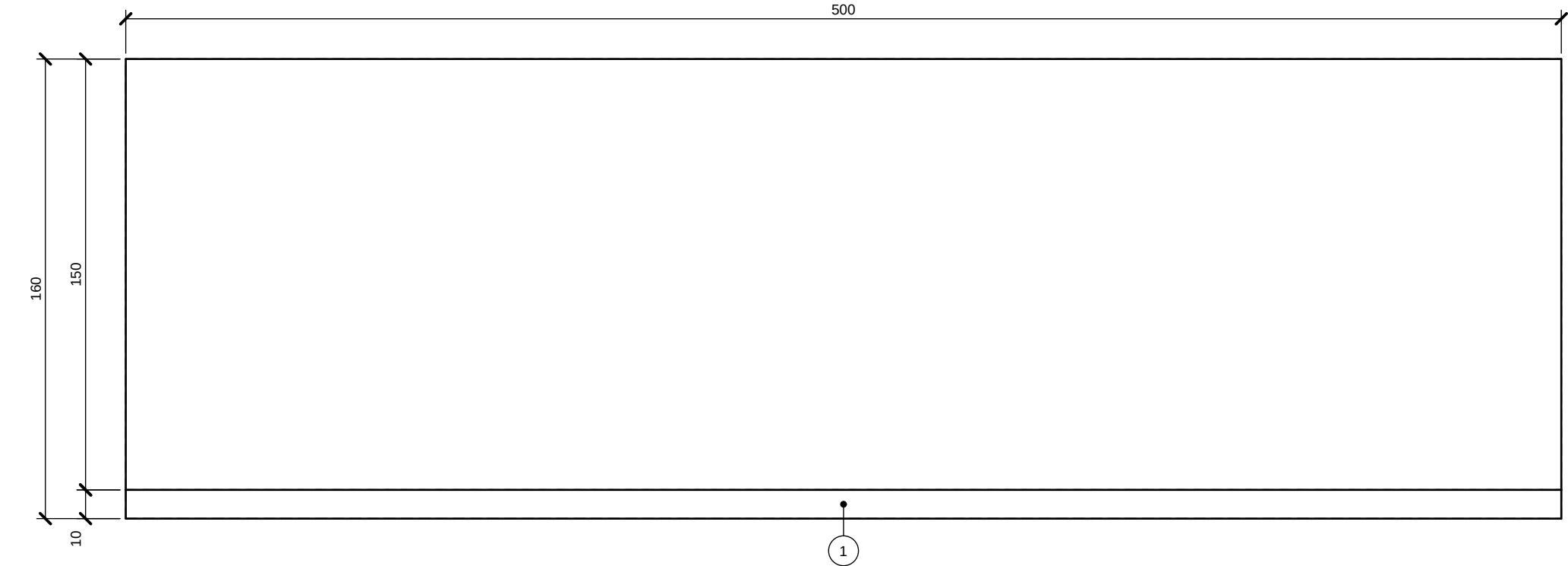
ISOMETRIC



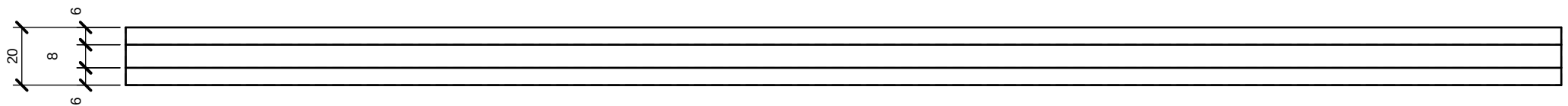
RIGHT END 1:2.5

- 1 tongue 8 mm thick, 10 long, on front_edge
- 2 groove 8 mm, 10 deep, in back_edge

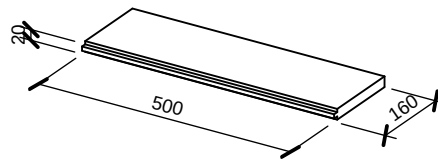
part	board_2
of	tongue_and_groove_panel
make	1
cut size	500 x 160 x 20
material	oak
scale	1:4, mm



TOP FACE



FRONT EDGE



ISOMETRIC

1 tongue 8 mm thick, 10 long, on front_edge

part	board_3
of	tongue_and_groove_panel
make	1
cut size	500 x 160 x 20
material	oak
scale	1:2, mm

Cut list

board_1 500 x 150 x 20 mm oak
- groove 8 mm, 10 deep, in back_edge
board_2 500 x 160 x 20 mm oak
- tongue 8 mm thick, 10 long, on front_edge
- groove 8 mm, 10 deep, in back_edge
board_3 500 x 160 x 20 mm oak
- tongue 8 mm thick, 10 long, on front_edge

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.tongue_and_groove_panel
```

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

```
def tongue_and_groove_panel(
    length: float = 500, width: float = 150, count: int = 3, stock: Stock = OAK
) -> Assembly:
    """Boards edge to edge, a tongue along each in a groove along the next one."""
    asm = Assembly("tongue_and_groove_panel")
    boards = [
        asm.add(Board(f"board_{i + 1}", stock, length=length, width=width)) for i in range(count)
    ]
    for a, b in itertools.pairwise(boards):
        asm.join(TongueAndGroove(tongue=b.front_edge, groove=a.back_edge))
    return asm
```