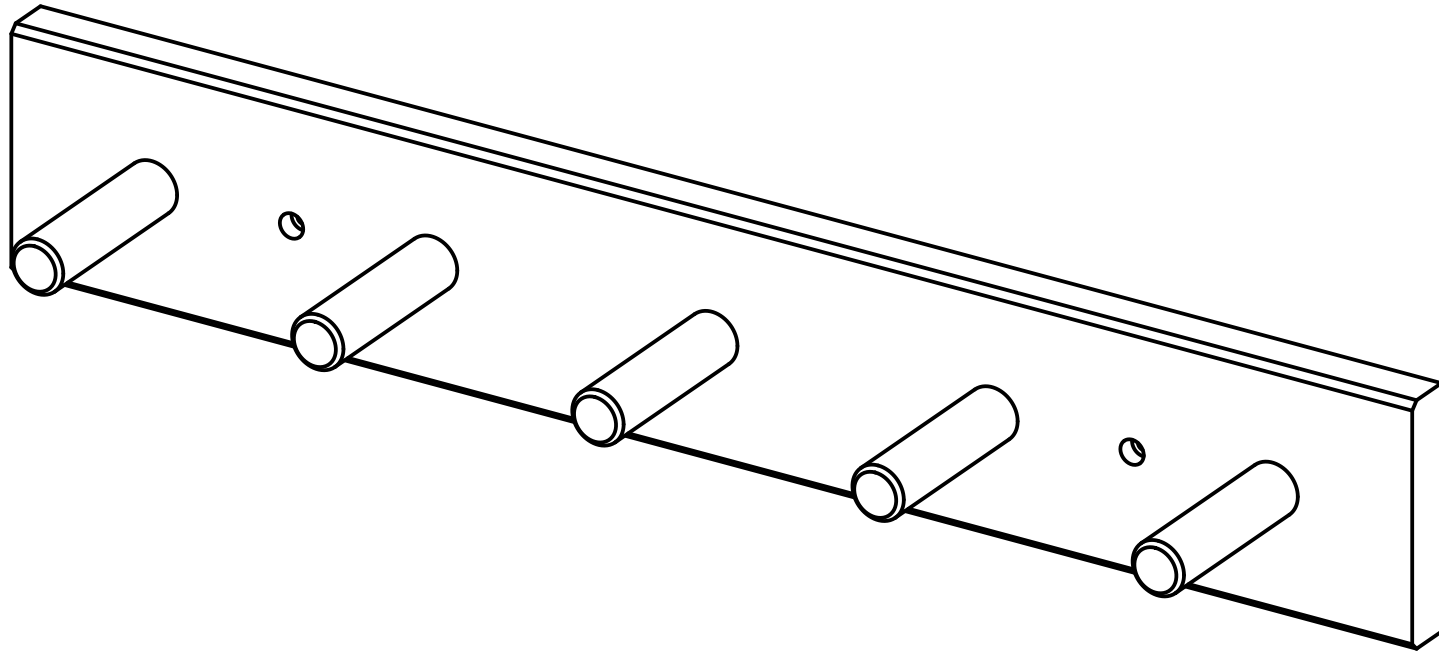


# Coat rack

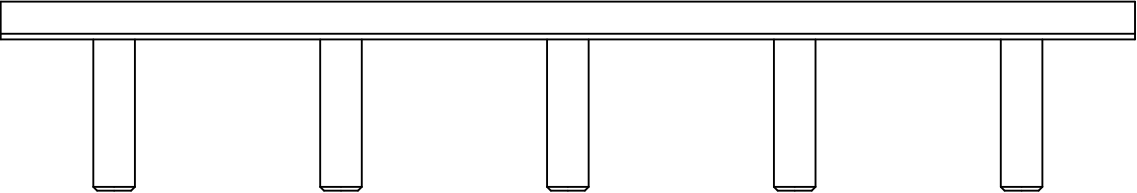
---



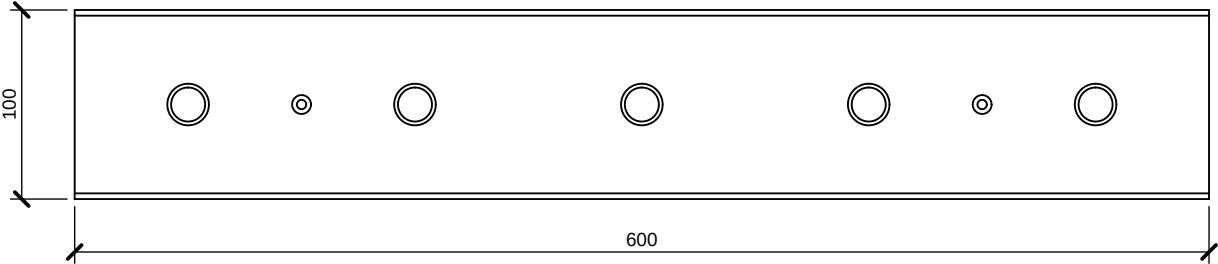
|           |                             |
|-----------|-----------------------------|
| parts     | 6 (2 different)             |
| overall   | 600 x 100 x 100 (W x D x H) |
| material  | oak                         |
| date      | 2026-10-25                  |
| made with | woodwright 0.9.0            |

# Contents

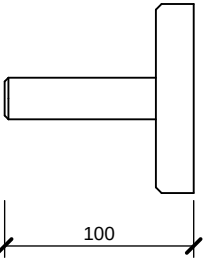
|                         |          |
|-------------------------|----------|
| <b>Drawings</b>         | <b>3</b> |
| Assembly . . . . .      | 3        |
| Parts . . . . .         | 4        |
| 1 board . . . . .       | 5        |
| 2 peg . . . . .         | 6        |
| <b>Cut list</b>         | <b>7</b> |
| <b>Appendix: source</b> | <b>8</b> |



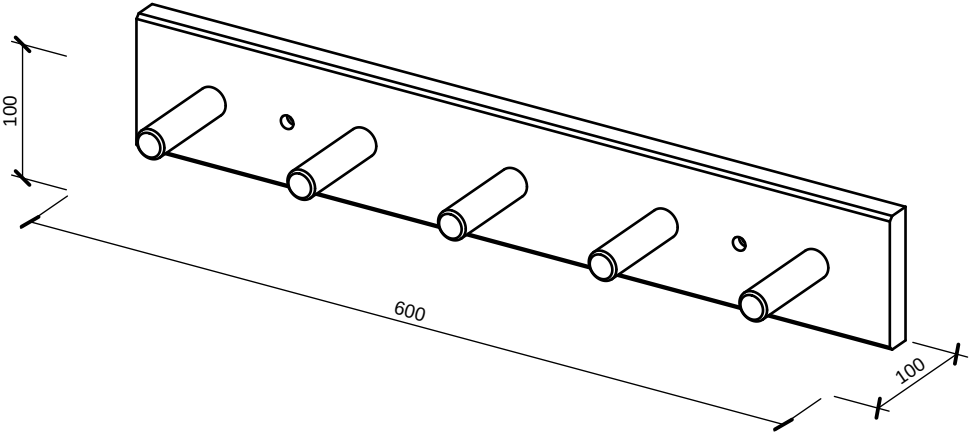
TOP



FRONT

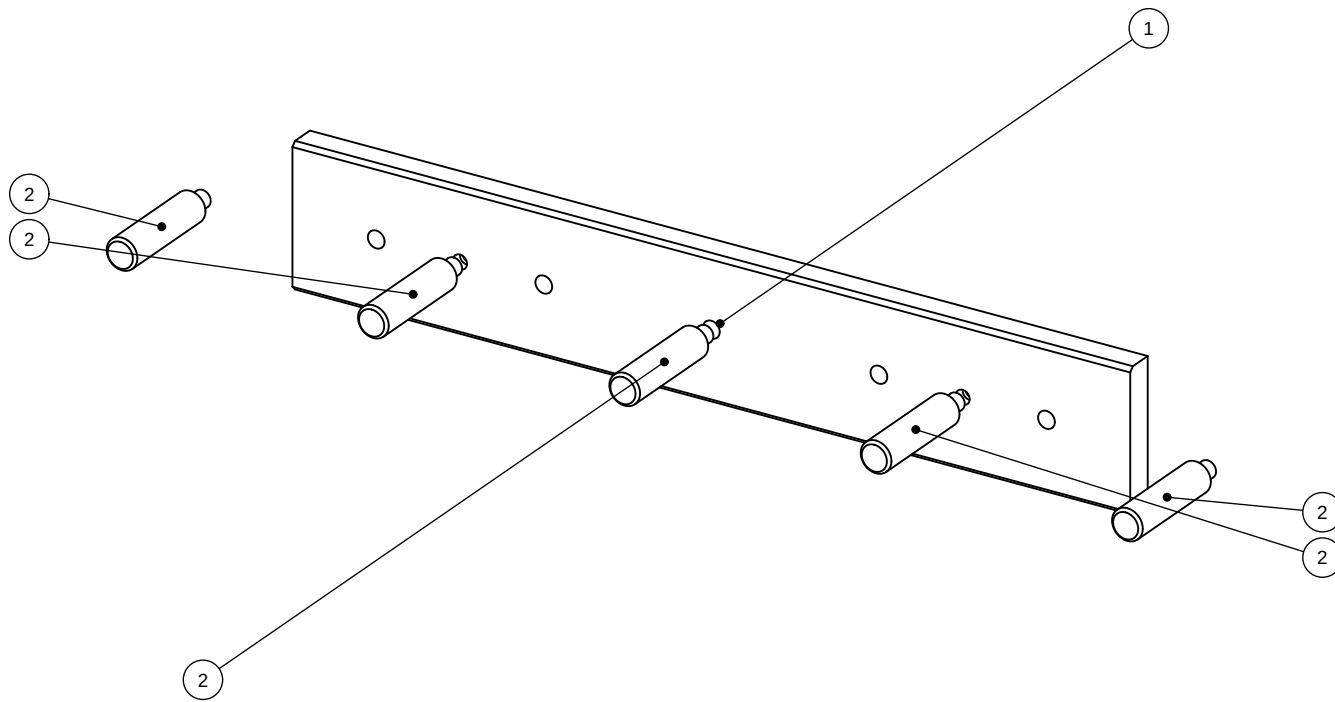


RIGHT SIDE



ISOMETRIC

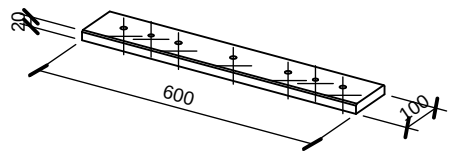
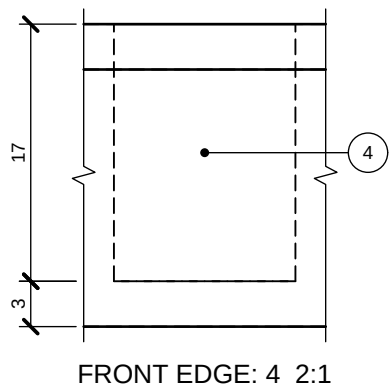
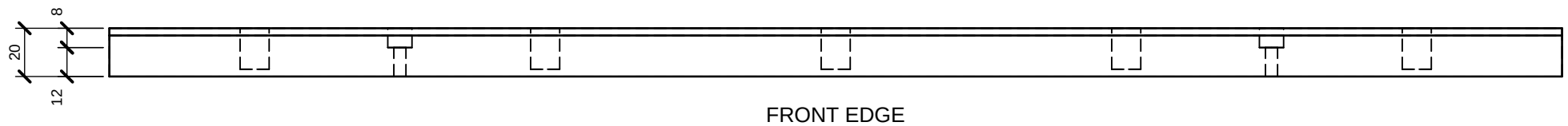
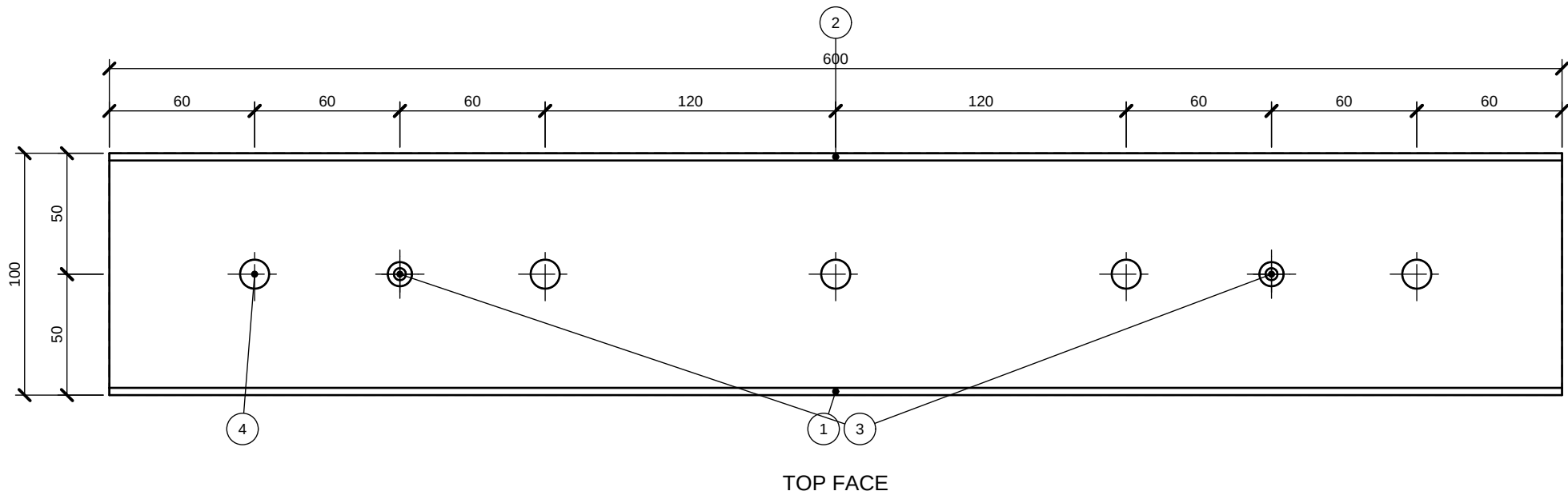
|          |                             |
|----------|-----------------------------|
| assembly | <b>coat_rack</b>            |
| parts    | 6 (2 different)             |
| overall  | 600 x 100 x 100 (W x D x H) |
| material | <b>oak</b>                  |
| scale    | 1:4, mm                     |



EXPLODED

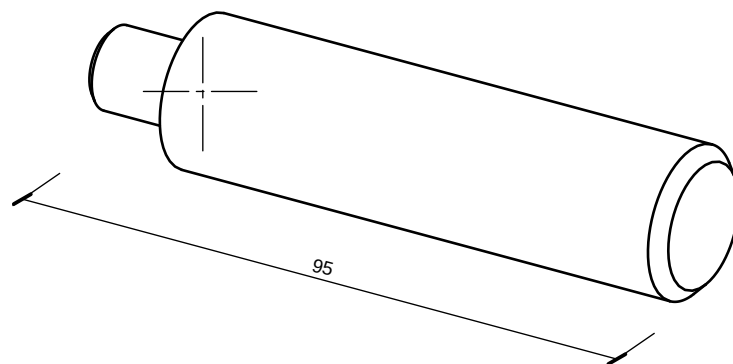
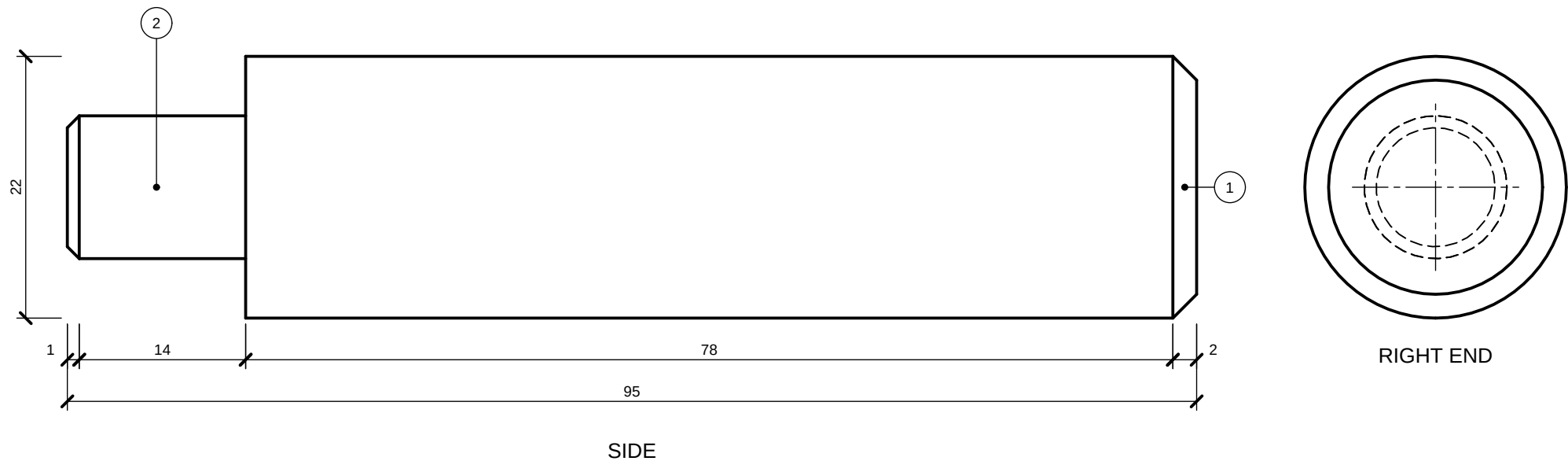
| no. | part  | qty | cut size (L x W x T) | material |
|-----|-------|-----|----------------------|----------|
| 1   | board | 1   | 600 x 100 x 20       | oak      |
| 2   | peg   | 5   | ø22 x 95             | oak      |

|          |                             |
|----------|-----------------------------|
| assembly | <b>coat_rack</b>            |
| parts    | 6 (2 different)             |
| overall  | 600 x 100 x 100 (W x D x H) |
| material | oak                         |
| scale    | not to scale, mm            |



|          |                |
|----------|----------------|
| part     | <b>board</b>   |
| of       | coat_rack      |
| make     | 1              |
| cut size | 600 x 100 x 20 |
| material | oak            |
| scale    | 1:2.5, mm      |

- 1 chamfer 3 mm on top\_face\_front\_edge\_arris
- 2 chamfer 3 mm on top\_face\_back\_edge\_arris
- 3 2 x screw hole  $\varnothing 5$ , counterbored  $\varnothing 10$ , 8 deep, in top\_face, for a 4.5 x 50 screw into the wall
- 4 5 x hole  $\varnothing 12$ , 17 deep, in top\_face



5 pieces: peg\_1, peg\_2, peg\_3, peg\_4, peg\_5

1 chamfer 2 mm around right\_end

2 round tenon  $\varnothing 12$ , 15 long, end chamfered 1 mm, on left\_end

|          |                            |
|----------|----------------------------|
| part     | <b>peg</b>                 |
| of       | coat_rack                  |
| make     | 5                          |
| cut size | $\varnothing 22 \times 95$ |
| material | oak                        |
| scale    | 2:1, mm                    |

# Cut list

board 600 x 100 x 20 mm oak

- chamfer 3 mm on top\_face\_front\_edge\_arris
- chamfer 3 mm on top\_face\_back\_edge\_arris
- 2 x screw hole  $\varnothing 5$ , counterbored  $\varnothing 10$ , 8 deep, in top\_face, 120 from left\_end and right\_end; centered, for a 4.5 x 50 screw into the wall
- 5 x hole  $\varnothing 12$ , 17 deep, in top\_face, 60, 180, 420 and 540 from left\_end, centered; centered

peg  $\varnothing 22$  x 95 mm oak, 5 pieces: peg\_1, peg\_2, peg\_3, peg\_4, peg\_5

- chamfer 2 mm around right\_end
- round tenon  $\varnothing 12$ , 15 long, end chamfered 1 mm, on left\_end

## 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 projects.coat_rack
```

### **projects.coat\_rack, in woodwright/examples/projects.py**

```
def coat_rack(
    length: float = 600,
    width: float = 100,
    pegs: int = 5,
    peg_length: float = 80,
    tenon: float = 12,
    chamfer: float = 3,
    stock: Stock = OAK,
) -> Assembly:
    """A coat rack: a board on the wall with `pegs` round pegs, evenly spaced.

    The pegs (`peg_length` long from the board) have round tenons `tenon`
    wide, glued into blind holes in the board's front, their ends
    chamfered. The board's front arrises along its length are chamfered;
    it is screwed to the wall through two counterbored holes between the
    outer pegs, to be closed by plugs.
    """
    asm = Assembly("coat_rack", root_location=orient(top_face=FRONT, back_edge=UP))
    board = asm.add(Board("board", stock, length=length, width=width))
    for edge in (board.front_edge, board.back_edge):
        board.cut(Chamfer(board.aris(board.top_face, edge), size=chamfer))
    pitch = length / pegs
    for i in range(pegs):
        peg = asm.add(Rod(f"peg_{i + 1}", PEG_STOCK, length=peg_length))
        peg.cut(EndChamfer(peg.right_end, size=2))
        asm.join(
            RoundMortiseTenon(
                tenon=peg.left_end,
                mortise=board.top_face,
                diameter=tenon,
```

```

        length=15,
        chamfer=1,
        position=offset((i + 0.5) * pitch - PEG_STOCK.diameter / 2, ref=board.left_end),
    )
)
for end in (board.left_end, board.right_end):
    board.cut(
        Hole(
            board.top_face,
            5,
            at={end: pitch},
            counterbore=10,
            counterbore_depth=8,
            kind="screw hole",
            note="for a 4.5 x 50 screw into the wall",
        )
    )
return asm

```