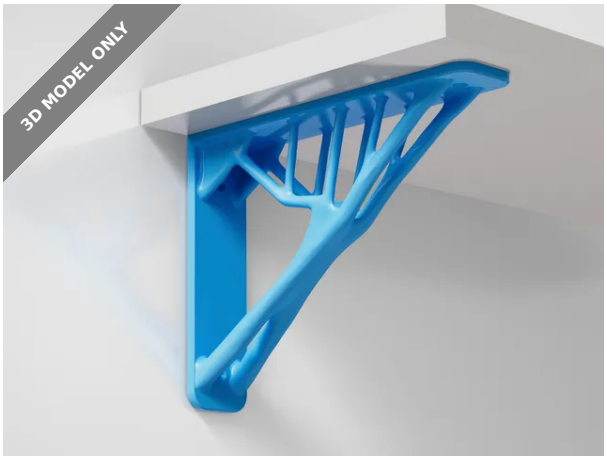


# Shelf Bracket Topology Optimized

LV3D

VIEW IN BROWSER

updated 29. 7. 2025 | published 29. 7. 2025

## Summary

Shelf bracket, topology optimized, 4 mm screws, minimal supports

Hobby & Makers > Mechanical Parts

Tags: wallmount topologyoptimized shelfbracket shelfmount

### Shelf Bracket Topology Optimized

This is a lightweight, topology-optimized shelf bracket designed for strength and minimal material usage. Its organic structure ensures high load capacity while maintaining an elegant appearance.

**Dimensions**: 150 mm wall side × 200 mm shelf side

**Mounting holes**: 4 mm diameter, suitable for standard 4 mm screws

**Support-efficient design**: Optimized for 3D printing with minimal supports

**Installation**: Designed for mounting to both wall and shelf

**Recommended print settings**:

Material: PETG or PLA

Layer height: 0.2 mm

Perimeters: 3 or more (depending on load)

Infill: 30–50% (gyroid or cubic recommended)

Orientation: Print with the longer (200 mm) shelf side flat on the print bed

Supports: Enable **tree supports** for optimal results

Perfect for modern or industrial interiors where strength and design go hand in hand.

## Model files

**topology-optimized-shelf-bracket.stl**

## License

This work is licensed under a
Creative Commons (4.0 International License)

**Attribution—Noncommercial—No Derivatives**

---

✖ | Sharing without ATTRIBUTION
✖ | Remix Culture allowed
✖ | Commercial Use
✖ | Free Cultural Works
✖ | Meets Open Definition