



# ENDER 3, V2, S1, S1 PRO... ALU EXTRUSION REINFORCEMENT BRACKET



VIEW IN BROWSER

updated 24. 2. 2024 | published 24. 2. 2024

## Summary

ALU EXTRUSION REINFORCEMENT BRACKET

[3D Printers](#) > [Creality Parts & Upgrades](#)

Tags: [extrusion](#) [creality](#) [v2](#) [bracket](#) [ender3](#) [aluminumextrusion](#) [square](#) [crealityender3](#) [reinforcement](#) [s1](#) [crealityender3s1](#) [crealityender3s1pro](#) [s1pro](#)

FIND ALL MY DESIGNS HERE : <https://cults3d.com/en/users/Zuff/creations>

Do you like my work? Can you **support me** with a ☕ or maybe a ?  
It all depends on the time 😊

---

I created this element to stiffen the frame of my printer.  
In addition to my Pull Rod design for S1 and S1 Pro which greatly reduces resonances and improves the quality of part surfaces <https://cults3d.com/1085289>

**/!\ Caution: if your extruder cable passes over the rear inside the Z-axis gantry as on the original printer, you'll certainly have to reduce your print height to avoid conflict.**

**I use an extruder cable support that passes over the front of the gantry which allows me to keep a print height of around 260-270 mm. You can find the design here : <https://cults3d.com/:1410305>**

I haven't really done any tests to see if it actually does anything but it won't hurt and the look is nice.

Requires the use of four screws approximately 12 mm long with washers and four T-Nuts in M3, M4 or M5.

For the S1 and S1 Pro with the original Z-axis screw holders, you'll need to use the "S1, S1 Pro" files, as there's a notch on the parts. If you have another printer or are using my replacement parts <https://cults3d.com/:1071416>, you can use the universal version.

I printed the parts sideways as I think the stiffness is better that way. It is necessary to add supports on the non-visible parts which fit into the aluminum profile.

I think you can also print them on the inside face (large length of the triangle where there are the holes) without supports.

## Model files



**universal-bracket-m3-t-nut.stl**



**universal-bracket-m4-t-nut.stl**



**universal-bracket-m5-t-nut.stl**



**s1-s1-pro-left-bracket-m3-t-nut.stl**



**s1-s1-pro-right-bracket-m3-t-nut.stl**



**s1-s1-pro-left-bracket-m4-t-nut.stl**



**s1-s1-pro-right-bracket-m4-t-nut.stl**



**s1-s1-pro-left-bracket-m5-t-nut.stl**



**s1-s1-pro-right-bracket-m5-t-nut.stl**

## License ©

This work is licensed under a  
[Creative Commons \(4.0 International License\)](https://creativecommons.org/licenses/by-nc-nd/4.0/)



**Attribution—Noncommercial—No Derivatives**

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