

Track for Train Shelves

This 3d Printed track design is for O gauge trains. Raising the trains on the track also prevents collapsing of pickup springs over time on the shelf.

There are 2 versions of the files. One set for O gauge Height Track and One set of O27 height track. There is 6mm/.25" height difference.

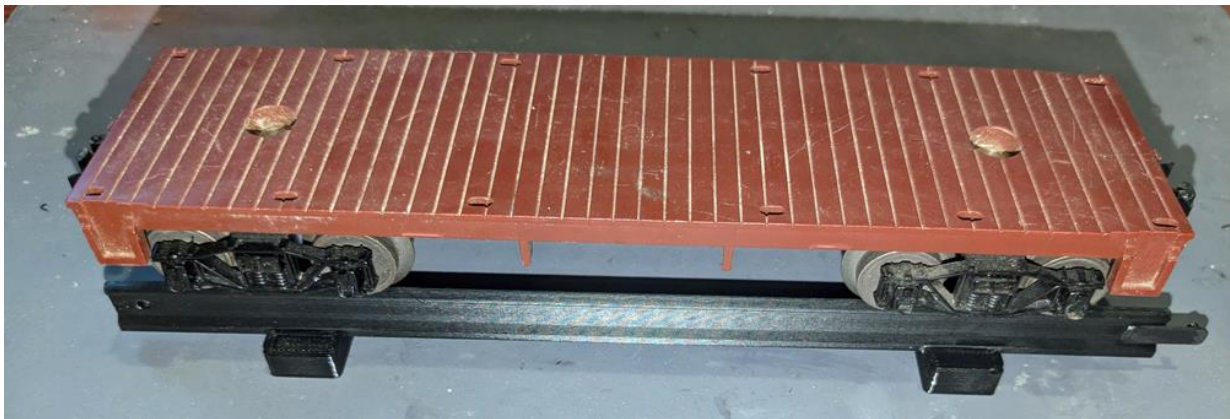
The track is 230mm/9" long to fit many 3D printers.

The track assembled.

Use of joiners to tie the tracks together is optional. There is a counter sunk hole in the cross tie to allow it to be screwed down.



Track with a car.

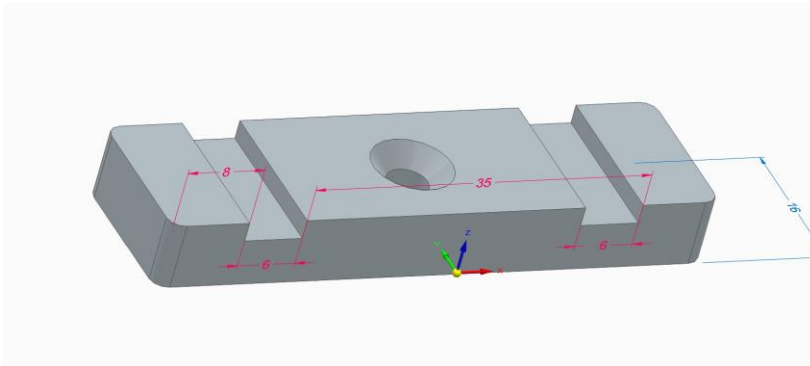


.stl and .stp files are provided. Models are in mm. The O gauge track pieces are named:

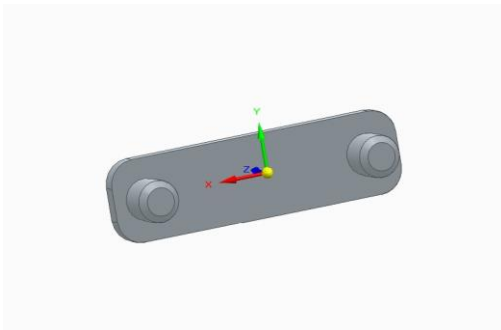
- Vhubbard-display-track-O.xxx



- vhubbard-display-tie-O.xxx



- vhubbard-track-joiner-0.xxx

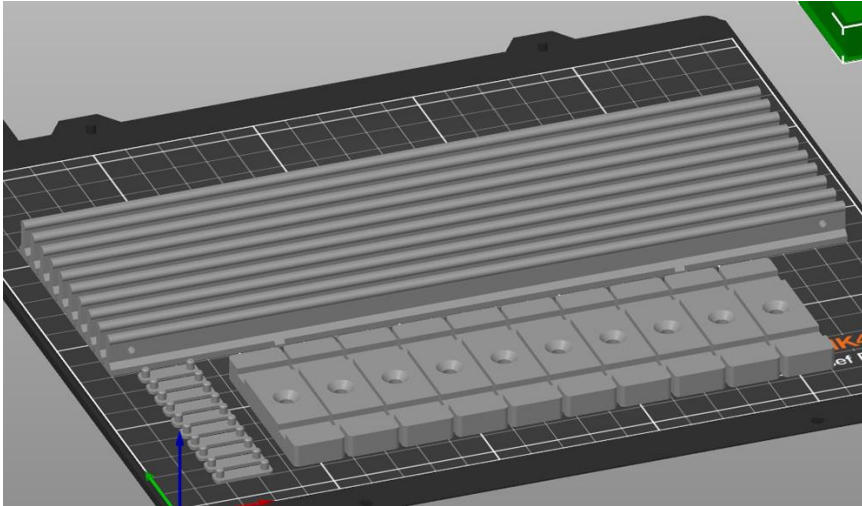


The O27 versions are:

- vhubbard-display-tie-O27.xxx
- vhubbard-display-track-O27.xxx
- vhubbard-track-joiner-O27.xxx

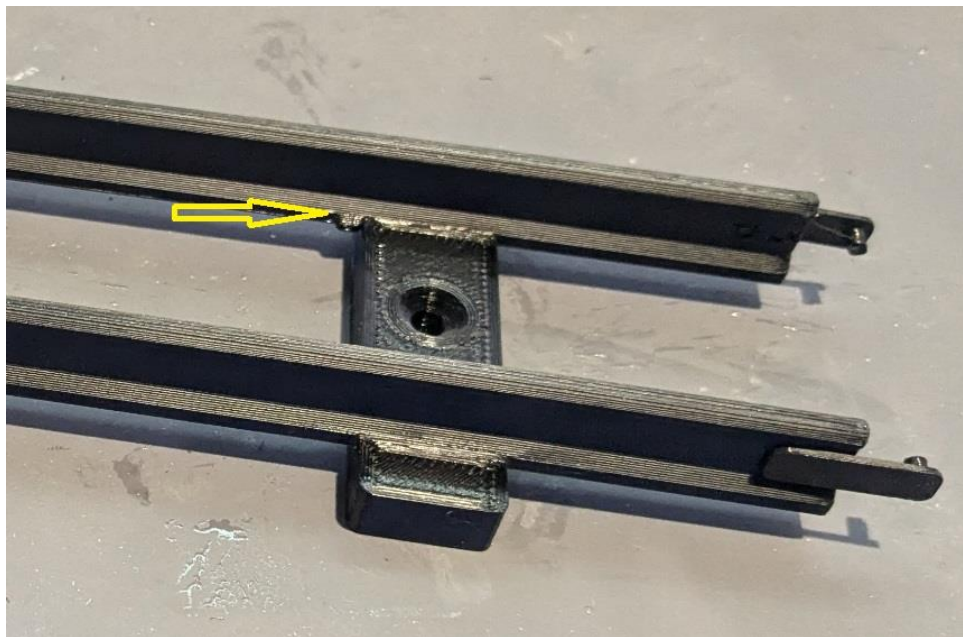
Printing and assembly

Orientation of pieces are shown in this layout. 5 sets, 10 pieces of each are shown.



I used a .4mm nozzle and 3-4 profile passes. The thin section of the track is optimized for a .4mm nozzle with a default .45mm print width. $2.7 \text{ mm thick. } 6 \times .45 = 2.7$. It takes 6 profiles exactly. When it was .24 thickness, there kept being whiskers on the thin section as some material pushed out. Sometimes the design needs to fit the print process.

There are 2 small tabs on the track. These go inside during assembly and slide up against the tie for easy spacing during assembly. They are 51mm/2" from the end of the track. The tie is 16mm/.625" wide.



A drop of glue can be used for assembly in the slots of the ties. Alternatively, the width of the track could be increased 1-4% in the slicer to make a press fit.

The joiners are a tight press fit to the holes in the track. Glue should not be needed.

V Hubbard

Oct 4, 2024