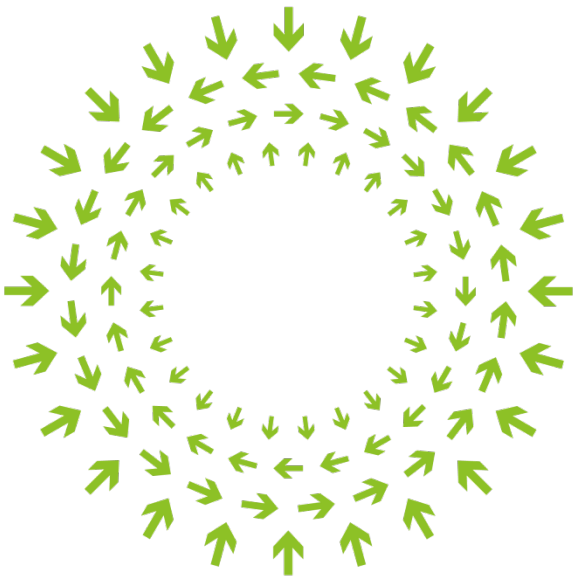

OPEN

Compute Project

Open Rack EIA Conversion Shelves V0.1

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Contents

1 Revision History

Date	Name	Description
2017/06/23	HJT	0.1 Preliminary Release

2 License

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Rack Solutions

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3 Overview

This product is an attempt to create a series of EIA 19″ Conversion Shelves to fit into the Open Rack v1.1 / v1.2 / v2.0 series of standardized racks. These conversion shelves provide a way to convert legacy EIA 19″ equipment, which come in the form of mostly switches to OCP 21″ form factor. The shelves provide pass-through openings that can be used to move cabling and power between the front and rear. Air gaps between the shelves are managed by hemmed over sections that close the ~3.5mm gap per OU created by differing unit heights.

The conversion shelf product follows the specifications laid out by Facebook 06-000050 (referred as v1) / 06-000060 (referred as v2) and intermediate designs such as the Fidelity Open Bridge Rack.

4 Specifications

The metal EIA 19″ conversion shelf consists of a one-piece design with bent flanges and screw holes to provide attachment to the Open Rack. The shelf can either be installed with screws only or installed on top of existing IT rails. These shelves are asymmetrical so that they can be installed with the cable pass through offset left or right.

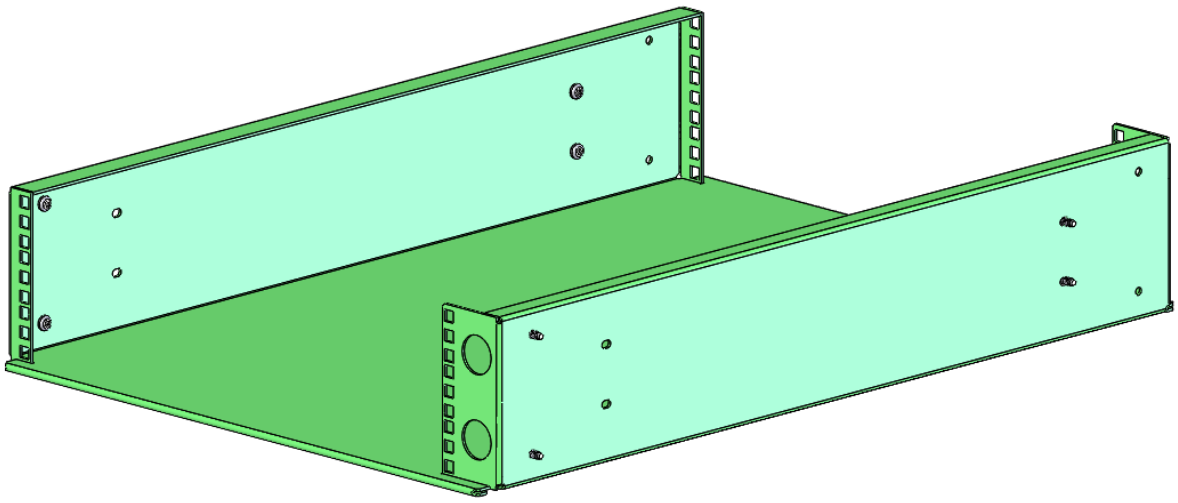

Figure 1: Shelf Overview

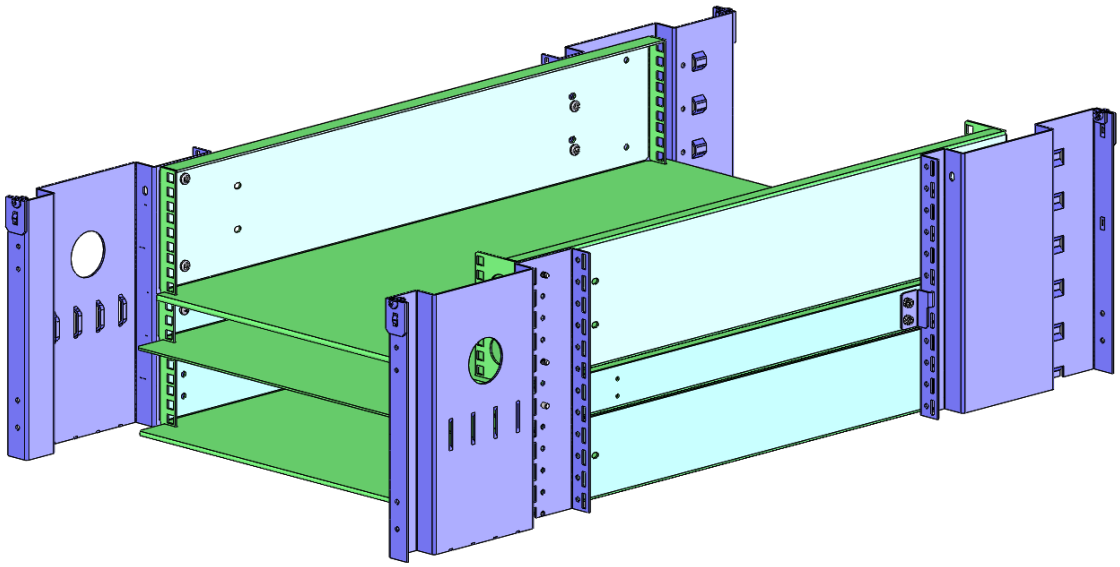

Figure 2: Product Line Overview

4.1 Mounting

The shelf can either rest on IT rails, screwed in or in the case of the 1OU shelf, installed with brackets that slot into the rear post of the rack. All the versions of the shelf require M6 thread forming screws (Taptite or similar) to secure to the rack.

The 1OU shelf has mounting brackets that slot into the rear post since there is not enough room in the OU to both support the shelf with IT rails and have material to fill the air gap.

The 2/3OU shelves use screws to install and can be used with or without IT Rails.

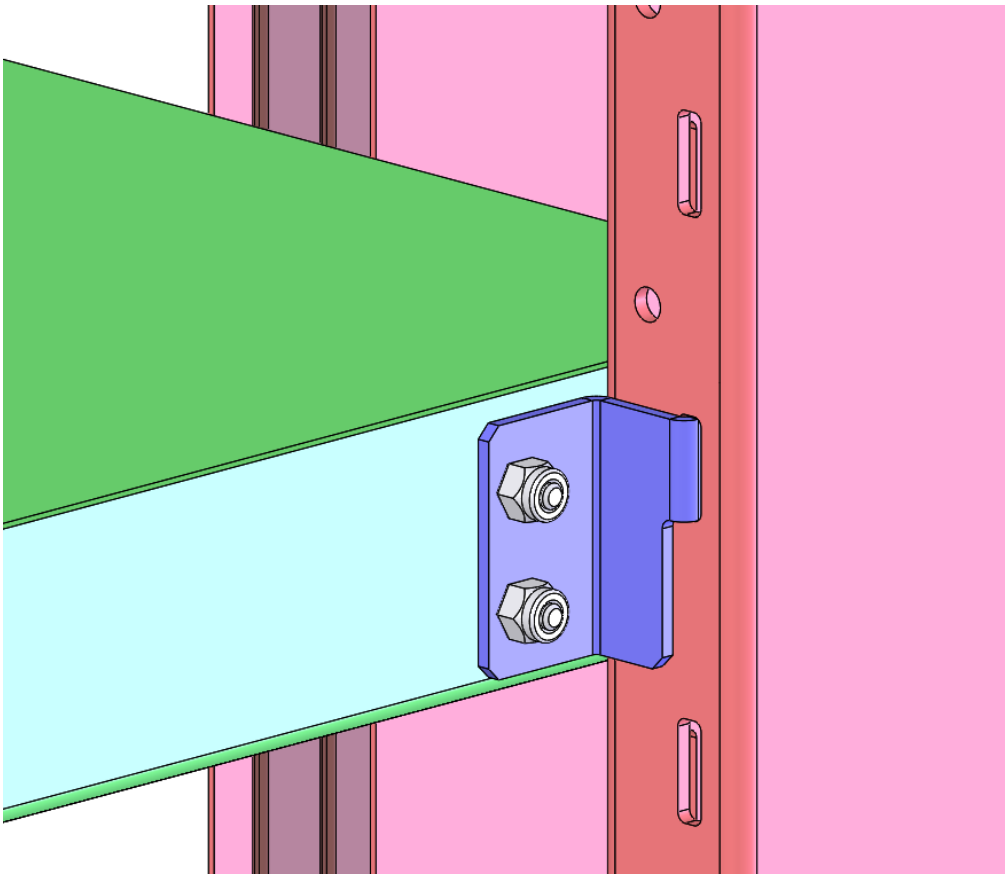

Figure 3: 1OU Rear Mounting Bracket

4.2 Grommet

The front hole for cable pass-through should also be compatible with an off the shelf grommet preferably with wings/flaps such as McMaster P/N 4946A27. The flaps provide a passive way to self-seal in case a small amount of cables are used or if there are no cables installed.