



Mini Warehouse



Wim V

[VIEW IN BROWSER](#)

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Summary

Create your own mini warehouse. Use for storing anything you like in plain sight. All needed parts printable on a MINI+.

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Tags: [miniature](#) [fun](#) [storage](#) [customizable](#) [rack](#)
[nosupport](#) [easyprint](#) [warehouse](#) [nohardware](#)

Create your own mini warehouse. Use it for storing anything you like playfull and tastefull in plain sight. Fully customizable to your own taste.

Designed for the Office Accessories contest here on Printables, but definitely not limited to office supplies storage only...*

All parts are easy to print, require no supports and no additional hardware for assembly.

I printed everything with 0.4 nozzle, 0.2 layer height and 15% infill.

Backstory

I thought of a scaled down version of the pallet racks that were used in our warehouse to store office supplies. Because I could not find published

models that could be put together without screws or had the right scale, I decided to get started myself.

When this idea came to me, it immediately evoked memories of my childhood and the desire to be able to build and combine endlessly.

I had a lot of fun thinking about and designing the add-ons. Because the competition unfortunately has an end date, I had to publish before I could realize all my ideas. I will add more in the future and keep updating.

Scale is roughly about 1:10 to have enough storage space also for the bigger parts (like f.i. a stapler).

Basic Sytem

The basic system consists of vertical uprights that are linked with horizontal support beams. Pallets are used as basic storage.

For extra strength, a horizontal crossbeam can be added or 2 vertical uprights can be linked with a coupling piece. Also the vertical uprights can be stacked. With only 1 crossbeam per construction or 2 coupling pieces, the whole becomes rigid as if it where screwed!

Additional add-ons

Because pallets only are limited in storage options, I have added several extra parts with existing storage methods as inspiration.

At publication I've added the following parts:

- 3 sizes of oil drums with additional lids.
- Stackable pallet edges to create boxes of different heighths.
- Plywood Decking for storing directly without a pallet.
- 3 types of Bars for cilinders (for stacking cilindrical shapes like batteries or pens).

Added add-ons after publication:

- 2 big V-blocks for use on normal pallet. (24-08)
- 2 sizes of Cardbord like pallet boxes with additional lid. (26-08)
- Pallet box dividers to make 4-24 compartment divisions, for use with Stackable pallet edges. (26-08)
- Vertical Stand (160) (27-08)
- Plywood Decking 104.6x94, for full length 105mm Horizontal Beam(28-08)

*** With the addition of the Vertical Stand (160) all parts to assemble a complete Mini Warehouse are printable on a**

Mini+ ! To print the Horizontal Crossbeam (190) and Horizontal Beams (190) rotate them 45°.

Future planned add-ons:

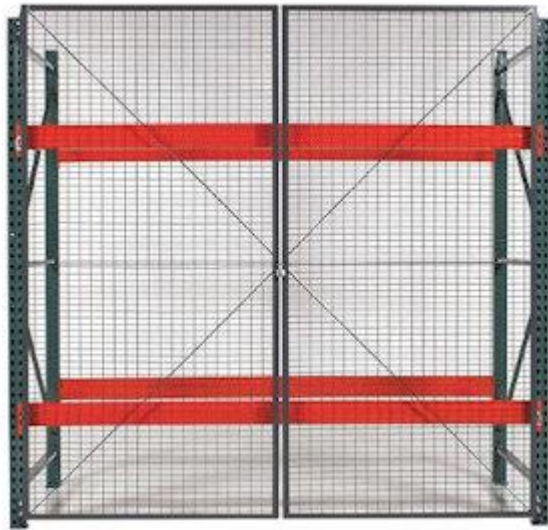
- Plastic box pallet (accubox):



- IBC container with screwlid (great for storing your hobby paints?):



- Back and Side paneling:



- Column Protectors:



I'm open for suggestions, so if you have any good idea, please let me know!

For use other than for office supplies, you can think of displaying your most beautiful 3D model prints, hobby materials, hardware, small plants, for in the coffee/tea corner at the office/home or any other things with a maximum footprint of 100x120mm and height of about 100-150mm.

Originally I designed a pallet rack that closely resembled the actual racks at work. Because this design was a bit more difficult to print and required gluing of the different parts, I changed course and created the current design. However, I was encouraged by my family members to share this one as well, simply because it looks even better visually.

It is shared as: **Pallet Rack 1:10**



Please note that this design is larger, ideal is a print bed of 300 in length or width, but rotated 45° a print bed of 220x220 is also workable. Note that I not intent to update that model.

Model files



Basis Parts

12 files



vertical-stand-220.stl



vertical-stand-160.stl



horizontal-beam-190.stl

☐ For 2 pallets wide (2x80 or 1x80 + 1x100)



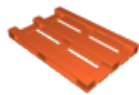
horizontal-beam-105.stl

☐ For 1 pallet wide (80 or 100)



horizontal-crossbeam-190.stl

☐ For extra structural support



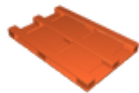
pallet-120x80.stl

☐ Basis "euro" Pallet



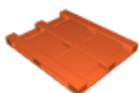
pallet-120x100.stl

☐ Wide pallet



pallet-120x80-closed-top.stl

☐ Basis "euro" Pallet with closed deck



pallet-120x100-closed-top.stl

☐ Wide pallet with closed deck



vertical-stand-height-coupler.stl



vertical-stand-height-coupler-double.stl



vertical-stand-side-coupler.stl



Add-ons

20 files



oildrum-o60.stl



oildrum-lid-o60.stl



oildrum-o50.stl



oildrum-lid-o50.stl



oildrum-o40.stl



oildrum-lid-o40.stl



stackable-pallet-edge-120x80.stl



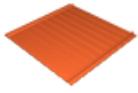
pallet-box-divider-length.stl

☐ For use with Stackable Pallet Edge (1-3)

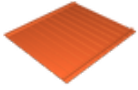


pallet-box-divider-width.stl

☐ For use with Stackable Pallet Edge (1-5)



plywoord-decking-94x94.stl



plywoord-decking-1046x94.stl

☐ Added 1 plank for use with full length 105mm Horizontal Beam



bar-for-cilinders-7-pos.stl

☐ Great for AAA Batteries (print in TPU for friction, or use double sided tape pieces)

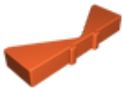


bar-for-cilinders-5-pos.stl

☐ Great for AA Batteries (print in TPU for friction, or use double sided tape pieces)

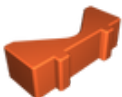


bar-for-cilinders-4-pos.stl



v-blok-for-80mm-pallet-single.stl

☐ For use on normal pallet. Scale 125% in lengt only for use on wide pallet.



v-blok-for-80mm-pallet-double.stl

☐ For use on normal pallet. Scale 125% in lengt only for use on wide pallet.



cardboard-box-120x80x60.stl

☐ Scale in (only in) Z for higher or lower box (50%-200%)



cardboard-box-120x80-lid.stl



cardboard-box-80x60x60.stl

☐ Scale in (only in) Z for higher or lower box (50%-200%)



cardboard-box-80x60-lid.stl

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