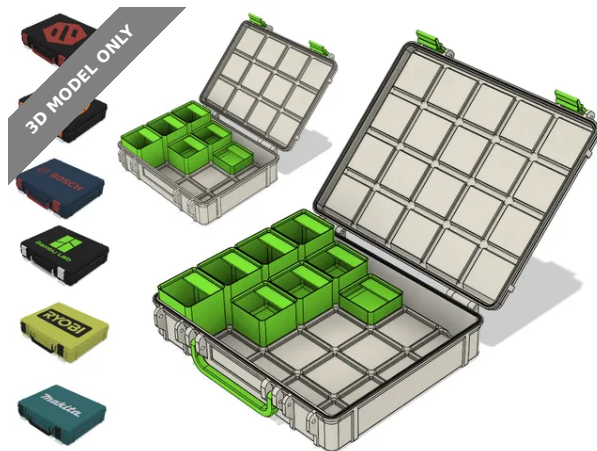




## Gridfinity Rugged Case "Light" R3 - 150+ SIZES



suit

[VIEW IN BROWSER](#)

updated 24. 11. 2025 | published 24. 11. 2025

## Summary

A resource friendly and optimized rugged box for gridfinity bins

[Hobby & Makers](#) > [Organizers](#)

Tags: [prusa](#) [parametric](#) [box](#) [case](#) [creality](#) [ender](#) [grid](#) [rugged](#) [nosupports](#) [voron](#) [ratrig](#) [5x4](#) [vorondesign](#) [gridfinity](#) [bambulab](#) [5x4gridfinity](#) [grindfinty](#)

I really like the Gridfinity Case by Aiko since but the the model is extremely resource hungry - without any sacrifice in functionality or robustness I shaved down everything to yield about 33 % savings and added a list of other cool features to this gridfinity box.

## Key Features

- top and bottom Grid (no parts spilling out)
- resource friendly, yet rugged
- stands upright in 5 orientations
- 12 mm label slot in the front (9 mm for the 3 U version)

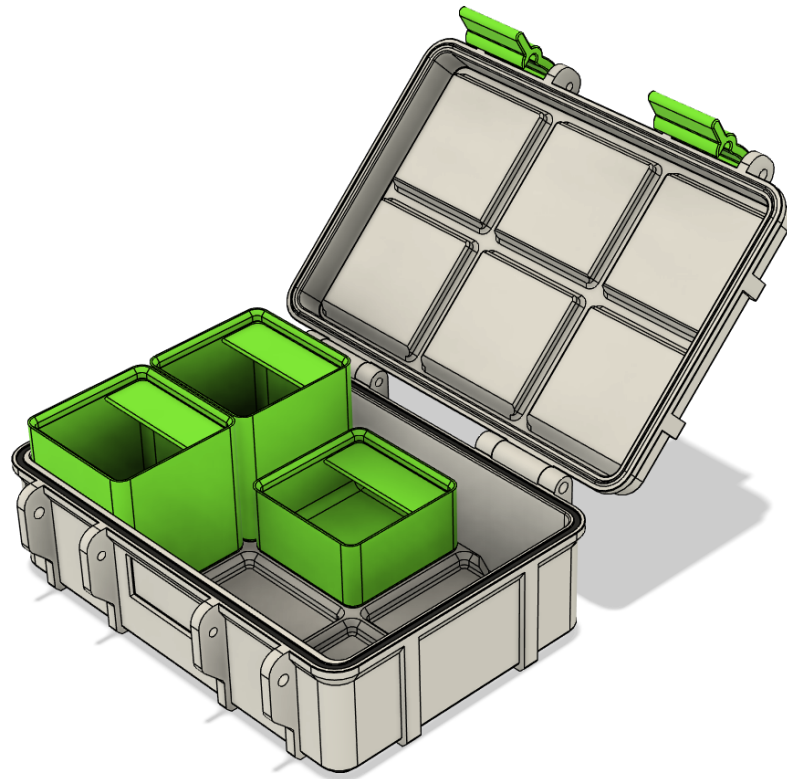
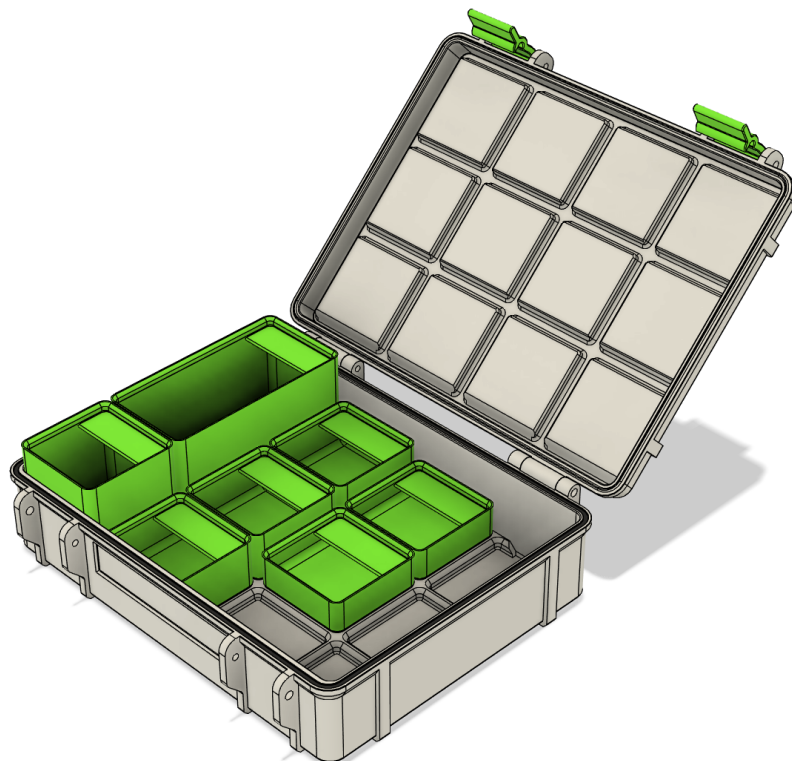
## Size availability

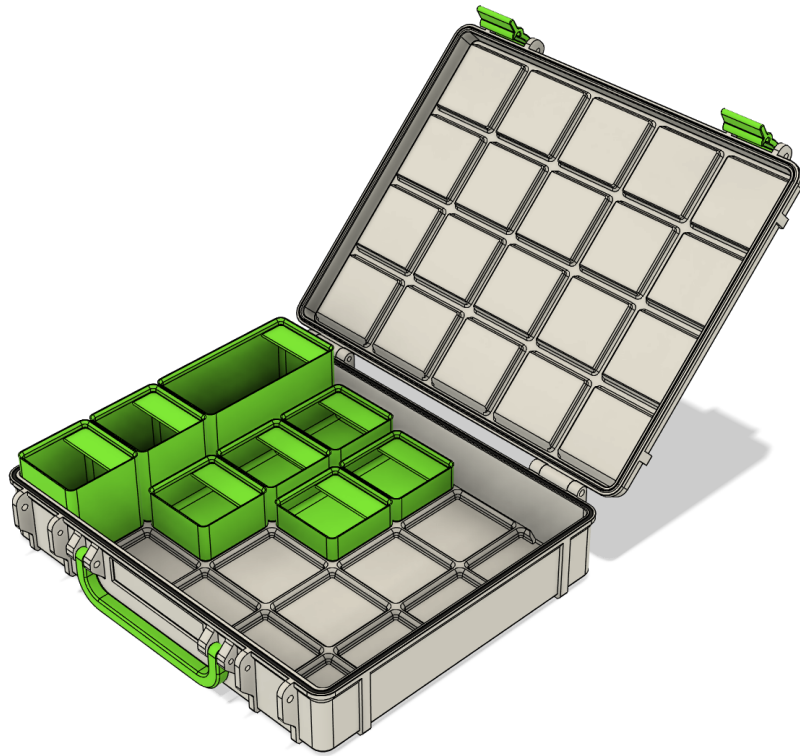
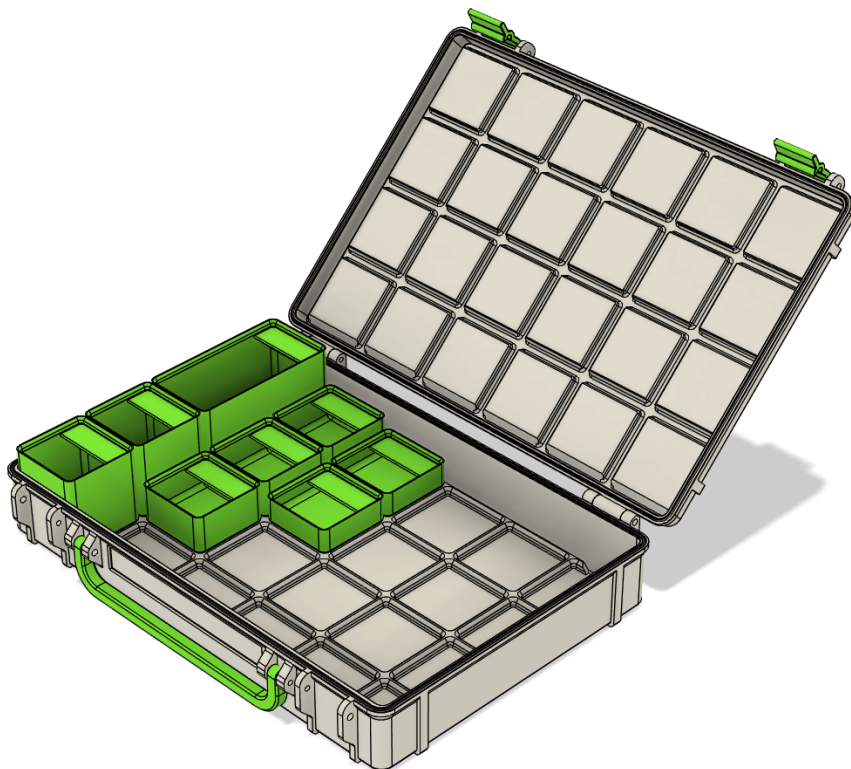
My source file allows for various different sizes and shapes. For experienced users in Fusion the file is fairly easy to handle, though due to limitations in Fusion (lacking conditions on features especially) changing certain parameters will break a few bits here and there. Especially edge cases need to be handled manually (especially the label slot or the handle for example). Therefore i won't release the source publicly for now.

The following variants are tested and exported in various heights ranging from 3U up to 21U in common factors including the required build area.

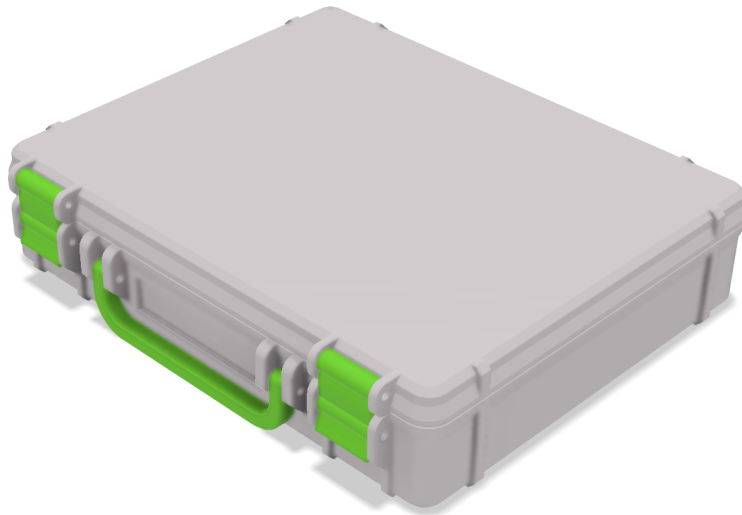
- **3x2U (135 × 108 mm)**
- **3x3U (135 × 150 mm)**
- **4x2U (177 × 108 mm)**
- **4x3U (177 × 150 mm)**
- **4x4U (177 × 192 mm)**
- **5x3U (219 × 150 mm)**
- **5x4U (219 × 192 mm)**
- **5x5U (219 × 234 mm)**
- **6x4U (261 × 192 mm)**
- **6x5U (261 × 234 mm)**
- **7x6U (303 × 276 mm)**

If you are interested in other sizes, drop me a line (keep in mind that the project consists of hundreds of file - some sizes and experimental files requested by some folks are only available on the [model page on Printables](#) or on the [model page on MakerWorld](#) if i have not had time to sync the project pages, make sure to check both).





for your convenience i've included various logos if you want to store your printer accessories or tools in the box - if you miss a logo, just drop me a line



## BOM

- 6x M3x30 screws
- 2x M3x16 or 2x M3x18 screws
- PETG or ABS recommended, PLA is OK aswell
- TPU (optional)

(affiliate Links)

## Printing

I've included print Profiles for Bambu Lab Printers for all sizes that will fit on their machines. For other sizes, use the following rough guidelines (0,4 mm nozzle).

- Lid and Base: flat on build plate, 3 walls 10 % infill
- Latches: upright 3 walls, concentric top/bottom
- Handle: flat on build plate; 4 walls, 25 % infill; concentric top/bottom
- Seal: flexible Filament; flat on build plate; 3 walls concentric top/bottom

## Logo on the lid

The logos in the lid are provided as a separate multipart file. To use them, follow these easy steps to make adjustments in your slicer software. This guide applies to PrusaSlicer, Bambu Studio, or OrcaSlicer:

1. **Open the file in your slicer** as "a single object with multiple parts."
2. **In the object tree, delete any logos you don't need**, as well as the "Dummy (delete me)" body. Only the lid and the logos you want to keep should remain.
3. **Change the type of the logo** from "part" to "modifier."
4. **Orient the part** so that the top side with the logo is facing the build plate. The "Auto Orient" function should simplify this step.
5. **Set the filament or color of the logo** to your desired color.
6. Remember that the logos are **0.6 mm high**. This design is optimized for a multiple of a 0.2 mm layer height. If you use a different layer height, you may need to **rescale the logo body** to match your preferred height.
7. If you don't have a multi-color-capable printer, you can change the logo type to **"negative part."** This way, the printer will omit the logo. Be aware that for logos with a larger surface area, this may require supports.

## Assembly

- longer screws in the hinges or latches (from the outside)
- shorter for the handle (from the inside)

## **Changelog**

### **2025-11-24 R3 v58:**

- added new size: 3x3

### **2025-08-30 R3 v58:**

- fix: 4x3 screw holes adjusted
- add: a few files (heights) without profiles

### **2025-06-21 R3 v58:**

- added new size: 5x3

### **2025-04-27 R3 v58:**

- added new size: 7x6

### **2025-01-26 R3 v47:**

- added new size 4x4

### **2025-02-22 R3 v47:**

- added 6x1U experimental

### **2025-01-26 R3 v44:**

- added new size 4x4

### **2025-01-07 R3 v44:**

- added 2 new sizes 3x2 and 6x4

### **2024-12-08 R3 v44:**

- added new size 4x2

### **2024-11-03 R3 v38:**

- added 2 new sizes 5x5 and 6x5

### **2024-11-01 R3 v34:**

- lids with logos added (new logos, 2 different sizes)

#### **2024-11-01 R3 v31:**

- added experimental 5x5 version in 5 and 6U

#### **2024-10-30 R3 v26:**

- complete overhaul with fully parametric base file in the background
- shaved off even more material and print time, prints now roughly 5 % faster (~ 15 minutes)
- compatible with existing boxes - but be aware that the geometry slightly changed, your inner monk might be a bit triggered, if you combine an old lid with a new box or vice versa
- virtually an size an variant possible
- 5x4 and 4x3 are added for now
- if you miss a variant, drop me a line

#### **2024-06-22 R1 v35:**

- added tool company logos: Bosch, DeWalt, Dremel, Makita, Milwaukee, Ryobi, Stanley & Stihl

#### **2024-06-10 R1 v34:**

- added an Anycubic lid

#### **2024-05-18 R1 v31:**

- added a 9U version

#### **2024-05-18 R1 v33:**

- added a 12U version
- slight geometry change to the label slot to make it easier to print (thx to **Markurian** for the input)
- parts are fully compatible

## **This remix is based on**



**Gridfinity 5x4 rugged case**

by Akio



### Rugged Gridfinity Box (Parametric)

by PeterDesigns



### Rugged Box (Parametric)

by Whity



### Gridfinity Storage Box by Pred (now parametric)

by Pred

## Model files

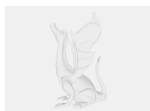


print profiles (for Bambu Studio)

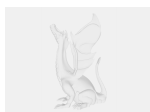
9 files



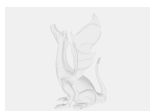
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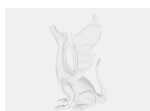
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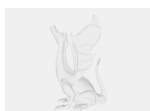
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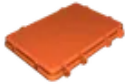


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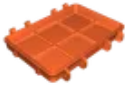


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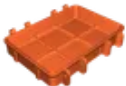
14 files



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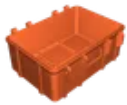
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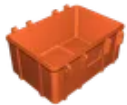
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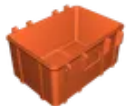
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**rugged-box-light-r3-base-3x2x10u-v44.stl**



**rugged-box-light-r3-base-3x2x12u-v44.stl**



**rugged-box-light-r3-base-3x2x14u-v44.stl**



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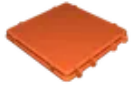


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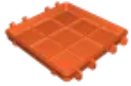


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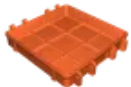
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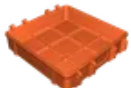
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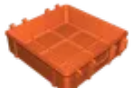
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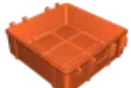
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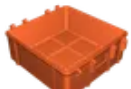
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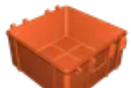
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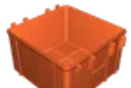
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**rugged-box-light-r3-base-3x3x15u-v58.stl**



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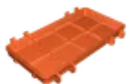


**4x2U**

14 files



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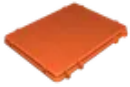


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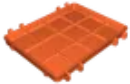


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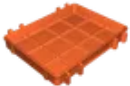
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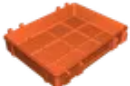
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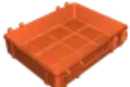
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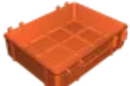
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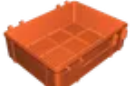
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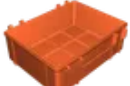
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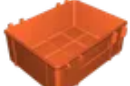
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**rugged-box-light-r3-base-4x3x10u-v26.stl**



**rugged-box-light-r3-base-4x3x12u-v26.stl**



**rugged-box-light-r3-base-4x3x14u-v26.stl**



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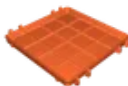


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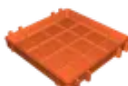
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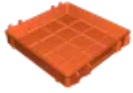
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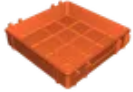


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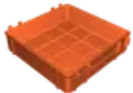
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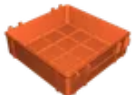
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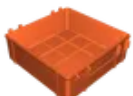
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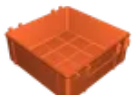
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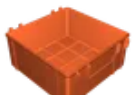
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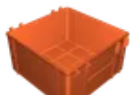
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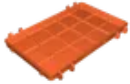


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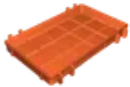


**5x3U**

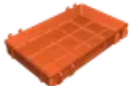
14 files



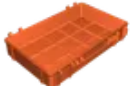
**rugged-box-light-r3-base-5x3x3u-v58.stl**



**rugged-box-light-r3-base-5x3x4u-v58.stl**



**rugged-box-light-r3-base-5x3x5u-v58.stl**



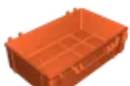
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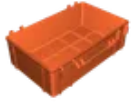
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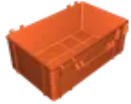
**rugged-box-light-r3-base-5x3x8u-v58.stl**



**rugged-box-light-r3-base-5x3x9u-v58.stl**



**rugged-box-light-r3-base-5x3x10u-v58.stl**



**rugged-box-light-r3-base-5x3x12u-v58.stl**



**rugged-box-light-r3-base-5x3x14u-v58.stl**



**rugged-box-light-r3-base-5x3x15u-v58.stl**



**rugged-box-light-r3-base-5x3x18u-v58.stl**



**rugged-box-light-r3-base-5x3x21u-v58.stl**

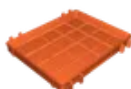


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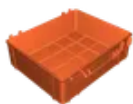


**5x4U**

14 files

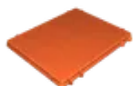


**rugged-box-light-r3-base-5x4x4u-v26.stl**



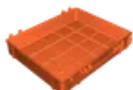
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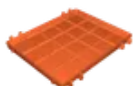
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**rugged-box-light-r3-base-5x4x6u-v26.stl**

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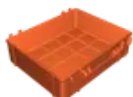
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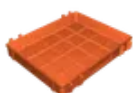
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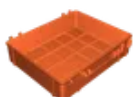
**rugged-box-light-r3-base-5x4x9u-v26.stl**

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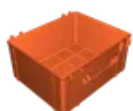
**rugged-box-light-r3-base-5x4x5u-v26.stl**

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**rugged-box-light-r3-base-5x4x8u-v26.stl**

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**rugged-box-light-r3-base-5x4x15u-v26.stl**

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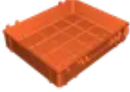


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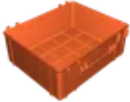
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**rugged-box-light-r3-base-5x4x18u-v26.stl**



**rugged-box-light-r3-base-5x4x7u-v26.stl**

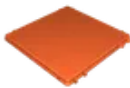


**rugged-box-light-r3-base-5x4x12u-v26.stl**

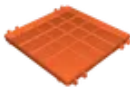


**5x5U**

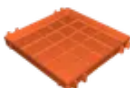
14 files



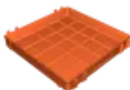
**rugged-box-light-r3-lid-5x5-v38.stl**



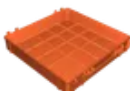
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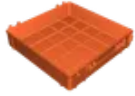
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**rugged-box-light-r3-base-5x5x5u-v38.stl**

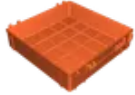


**rugged-box-light-r3-base-5x5x6u-v38.stl**



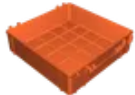
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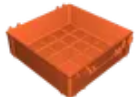
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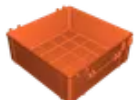
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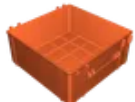
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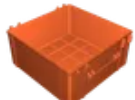
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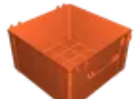
**rugged-box-light-r3-base-5x5x14u-v38.stl**

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**rugged-box-light-r3-base-5x5x15u-v38.stl**

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**rugged-box-light-r3-base-5x5x18u-v38.stl**

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**rugged-box-light-r3-base-5x5x21u-v38.stl**



## 6x1U

3 files



**rugged-box-light-r3-lid-6x1u-v47.stl**



**rugged-box-light-r3-base-6x1x6u-v47.stl**



**rugged-box-light-r3-base-6x1x6u-no-handle-v47.stl**



## 6x4U

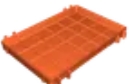
13 files



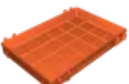
**rugged-box-light-r3-lid-6x4u-v44.stl**



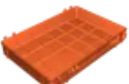
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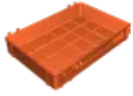
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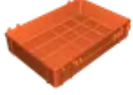
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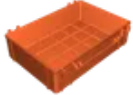
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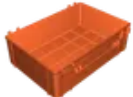
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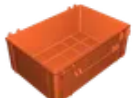
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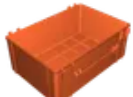
**rugged-box-light-r3-base-6x4x10u-v44.stl**



**rugged-box-light-r3-base-6x4x12u-v44.stl**



**rugged-box-light-r3-base-6x4x14u-v44.stl**



**rugged-box-light-r3-base-6x4x15u-v44.stl**



**rugged-box-light-r3-base-6x4x18u-v44.stl**

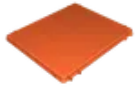


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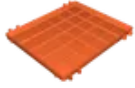
**6x5U**

14 files



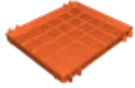
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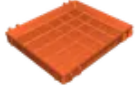
**rugged-box-light-r3-base-6x5x3u-v38.stl**

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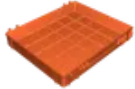
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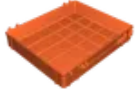
**rugged-box-light-r3-base-6x5x5u-v38.stl**

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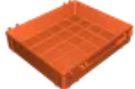
**rugged-box-light-r3-base-6x5x6u-v38.stl**

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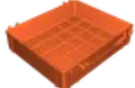
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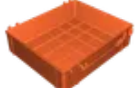
**rugged-box-light-r3-base-6x5x8u-v38.stl**

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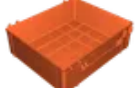
**rugged-box-light-r3-base-6x5x9u-v38.stl**

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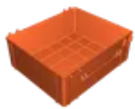
**rugged-box-light-r3-base-6x5x10u-v38.stl**

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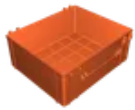


**rugged-box-light-r3-base-6x5x12u-v38.stl**

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**rugged-box-light-r3-base-6x5x14u-v38.stl**



**rugged-box-light-r3-base-6x5x15u-v38.stl**



**rugged-box-light-r3-base-6x5x18u-v38.stl**



**rugged-box-light-r3-base-6x5x21u-v38.stl**



**7x6U**

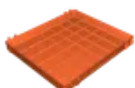
15 files



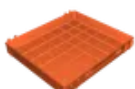
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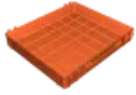
**rugged-box-light-r3-base-7x6x4u-v58.stl**



**rugged-box-light-r3-base-7x6x5u-v58.stl**

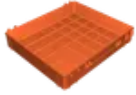


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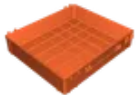
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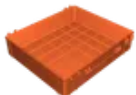
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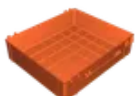
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**rugged-box-light-r3-base-7x6x10u-v58.stl**

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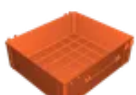
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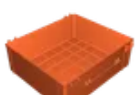
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**rugged-box-light-r3-base-7x6x14u-v58.stl**

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**rugged-box-light-r3-base-7x6x15u-v58.stl**

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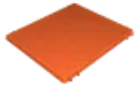
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**rugged-box-light-r3-base-7x6x21u-v58.stl**

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**rugged-box-light-r3-lid-7x6u-v58.stl**



**common parts**

16 files



**rugged-box-light-r3-latch-3u-v26.stl**



**rugged-box-light-r3-latch-4u-v26.stl**



**rugged-box-light-r3-handle-5u-v26.stl**



**rugged-box-light-r3-handle-6u-v56.stl**



**rugged-box-light-r3-gasket-3x2u-v44.stl**



**rugged-box-light-r3-gasket-3x3u-v58.stl**



**rugged-box-light-r3-gasket-4x2u-v44.stl**



**rugged-box-light-r3-gasket-4x3u-v26.stl**

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**rugged-box-light-r3-gasket-4x4u-v47.stl**

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**rugged-box-light-r3-gasket-5x3u-v58.stl**

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**rugged-box-light-r3-gasket-5x4u-v26.stl**

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**rugged-box-light-r3-gasket-5x5u-v38.stl**

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**rugged-box-light-r3-gasket-6x1u-v47.stl**

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**rugged-box-light-r3-gasket-6x4u-v44.stl**

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**rugged-box-light-r3-gasket-6x5u-v38.stl**

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**rugged-box-light-r3-gasket-7x6u-v58.stl**



## logo lids

2 files



**rugged-box-light-r3-logo-lid-4x3u-v11.3mf**



**rugged-box-light-r3-logo-lid-5x4u-v11.3mf**



## R1 - 5x4U - legacy files

9 files



**rugged-box-light-lid-plain-v26.3mf**



**rugged-box-light-gasket-v26.3mf**



**rugged-box-light-handle-v26.3mf**



**rugged-box-light-latch-v26.3mf**

☐ print 2x



**rugged-box-light-base-6u-v33.3mf**



**rugged-box-light-base-9u-v33.3mf**



**rugged-box-light-base-12u-v33.3mf**



**rugged-box-light-lid-with-logos-3d-printing-v34.3mf**

☐ multipart file with all logos



**rugged-box-light-lid-with-logos-tool-companies-v35.3mf**

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