

# OGMA Filter Drawer 3D Models

Thank you for downloading the 3D models for the OGMA Filter Drawer. This README file contains important information to help you print and use these models successfully.

## CONTENT OF THIS FOLDER

### EDIT:

This folder contains 3D models in STEP format. You can import these files into your favorite CAD software to make any necessary edits or modifications.

### SLICE:

This folder contains mesh files in STL format. Before 3D printing, you can slice these files using software like Ultimaker Cura.

### IMAGES:

This folder contains images of the models for reference.

## DIMENSIONAL ACCURACY

These parts require a high degree of dimensional accuracy to ensure proper fit, prevent light leaks, and allow filters to screw in as expected. Achieving such accuracy through 3D printing can be challenging, especially if your printer is out of calibration or if the filament shrinks or expands as it cools.

### Recommendations:

- **Test Print:** Before printing the full models, print a test cube of known dimensions and measure it with a caliper. Use this test to determine any necessary adjustments for dimensional accuracy. Many calibration figures and test cube models are available online.
- **Slicing Adjustments:** Once you know how much your prints shrink or expand, use your slicing software to apply the corresponding correction to each axis.
- **3D Printing Services:** If you're ordering prints from a 3D printing service, inquire about their processes for ensuring dimensional accuracy.

## MATERIAL RECOMMENDATIONS

We recommend using materials like **PLA, ABS, or PETG for best results**. Each material has its own advantages:

- **PLA:** Easy to print with minimal warping but less durable in high-temperature environments.
- **ABS:** Stronger, more heat-resistant, but prone to warping and requires a heated bed.
- **PETG:** A good balance between PLA and ABS, offering strength, flexibility, and better heat resistance, but requires a printing enclosure.

## PRINT SETTINGS

To achieve optimal results, we suggest the following print settings:

- **Layer Height:** 0.2 mm
- **Infill Percentage:** 20-30%
- **Supports:** Yes.

## POST-PROCESSING

Due to the shape of the filter drawers, they can only be printed using support structures. Removing these support structures is part of the post-processing stage. If you have a dual-filament printer, use a soluble filament for the support structures to simplify removal and achieve a smoother finish.

If you need to print the support structures using the same filament as the drawers, be aware that the side of the drawer in contact with the support structure will not be as smooth as the other side. However, this is generally fine for the intended use of the parts. After removing the supports, avoid sanding as it can create tiny particles of dust that can fall later on the surface of the filter. If this happens, use a rubber air blower to remove dust particles.

## SUPPORT

If you encounter any issues with these models or need assistance, please visit our support page at <https://getogma.com/support> or contact us at [support@getogma.com](mailto:support@getogma.com).

## DISCLAIMER

Please note that while every effort has been made to ensure these models are accurate and functional, OGMA is not responsible for any issues that may arise during printing, such as printer damage, material waste, or unsatisfactory print quality. Use these models at your own risk.

## **LICENSING SUMMARY**

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