ADVENTIO - Advent Calendar

Description

This 3D-printable advent calendar is designed as a compact, hinged box that opens to reveal **24 numbered drawers**. The calendar prints as two main body components (Grid A and Grid B) plus 24 drawers.
Fully printed, the model uses approximately **1 kg of filament**.

- **Overall size:** 220 × 175 mm
- **Drawer inner dimensions:** 36 × 37 × 43 mm
- **Hinge system:** Uses a piece of **1.75 mm filament** as the hinge pin

It is available in **two versions**:

1. Standard Version

- Front panel with a **Christmas-themed design**
- Drawers include **embossed numbers 1–24**

2. Blank Version

- **No front design**
- **No numbers on the drawers**
- Ideal for custom decoration, painting, vinyl decals, or year-round use

Printing Instructions

1. Print Order

1. Print **Grid A** (main body half)
2. Print **Grid B**
3. **Test-print one drawer**
4. Adjust if needed → print remaining drawers

2. Drawer Fit Check

Due to printer tolerance differences:

- If the drawer is **slightly tight**, scale the drawer **up by 0.2–0.4%**
- If the drawer is **slightly loose**, scale the drawer **down by 0.2–0.4%**

Only adjust **drawers**, not the main body.

3. Hinge Assembly

1. Align the hinge joints on Grid A and Grid B.
2. Slide a piece of **1.75 mm PETG filament** through the hinge holes.
3. Trim excess filament on both sides.

PETG is recommended for the hinge pin, as it resists brittleness and provides smoother movement.

4. Printing Recommendations

- **Layer height: 0.2–0.24 mm**
- **Walls/perimeters: 2**
- **Infill: 5–8% gyroid**
- **Supports: None required**