

# **WCA Competition Templates**

#### DO NOT use any templates before reading this entire document!

Here you can find printable templates for cube covers and Clock covers, both of which are stackable; 3D-printable cover designs for Square-1, Clock and Skewb puzzles; results boxes for scorecards: a design that can be hung on a wall and another that can be put on a table; Square-1 inserts (21 per page) and an outline of some important competition rules.



## **Instructions**

- If you would like to use the WCA designs, use the files in the folder for the language used in your region. WARNING: Some of the PDF previews might have rendering artifacts, but these won't show up if you download the files. If you would like to make custom designs, use the files in the Editable Files folder. DO NOT make colored Clock cover designs, they must be in black and white (BW).
- 2. The designs for paper Clock covers and competition rules can be printed on a home printer; the Clock covers need to be printed in BW and the competition rules need to be printed in color. The other designs MUST be printed using an industry-grade printer, so you will have to find a printing place in your area. They will require PDF files to make your prints.





3. If you are making **custom Clock covers**, you will need to copy your finished design to a new A4-sized document (210\*297mm / 8.27\*11.69in), rotate the whole design 12 degrees counterclockwise and save the file as PDF. If you are printing them on a regular office printer that can't print all the way to the edges, try selecting the setting "fit to printable area".



Francisco's 3D Clock cover



Brendan's 3D multipurpose cover

4. There are three 3D-printable cover designs: two for Clocks and one that fits Square-1, Clock and Skewb puzzles. Francisco's Clock design is stackable, while Cady's design isn't, but is more sturdy and can fit Clocks with a thicker outer shell (clocks like this have never been mass-produced, only custom made). The multipurpose cover is stackable, fits any Clock <= 24mm (0.94in) in thickness and any Square-1/Skewb <= 57mm (2.24in), and prevents accidental turns being applied to the puzzle during transit. 3D-printed covers last much longer and work better than the paper/card alternatives, but are more difficult and expensive to produce. We recommend that you look for a 3D printing service in your area or try to find a 3D printing enthusiast who could print them for you.



5. Make sure you print all templates **STRICTLY** within the following specifications:

Template	Paper size	Paper density	Paper type	
Cube cover	A3	350-400 gsm *	Color	
Paper Clock cover **	A4	60-90 gsm	BW	
Results box (table)	A3	350-400 gsm *	Color	
Results box (wall)	A4	250-400 gsm	Color	
Square-1 inserts	A4	250-400 gsm	Color	
Competition rules	A4	Any	Color	

<sup>&</sup>quot;gsm" stands for grams per square meter. This is the standard unit of measurement for paper density.

<sup>\*\*</sup> Clock covers are printed on standard printing paper used in regular BW office printers. 80 gsm is the best option.

Template	Resolution	Infill	Filament	Rafts	Supports
3D multipurpose cover	0.2-0.3mm	15%	PLA / PETG	None	None
3D Clock cover (Francisco's design)	0.4mm	15% **	PLA / PETG	None	None
3D Clock cover (Cady's design)	0.2-0.3mm	15%	PLA	Any	None *

<sup>\*</sup> None are needed when printing upright.

- 6. You will need the following tools in order to assemble the paper prints:
- Scissors
- Ruler
- Paper glue (only for Clock covers)
- Double-sided tape up to 1cm in width (only for results boxes and cube covers)
- Blade (knife, box cutter, etc.) (only for results boxes and cube covers)
- 7. On all templates except for the Clock covers, make all cuts on the **INNER** side of the black lines, leaving no black color visible after the cuts are done. On the Clock cover the cuts need to be made **THROUGH** the black lines.

#### **Link to the templates folder**

Please only share the link to THIS page and not the direct link to the folder.

### **Credits**

Paper/card templates - Deni Mintsaev Multipurpose cover - Brendan Bakker and Patrick Dwyer Stackable 3D Clock cover - Francisco Montañés Barbudo and Mitchell Lane 3D Clock cover - Cady Shields Competition rules image - Tom Nelson

<sup>\*</sup> Thicker is better.

<sup>\*\*</sup> If needed.



## **Translations**

Below you can find translations of this document. Contact quality@worldcubeassociation.org for instructions on how to add your own translation.

- <u>Русский (Russian)</u> translated by Deni Mintsaev
- Español (Spanish) translated by Gennaro Monetti