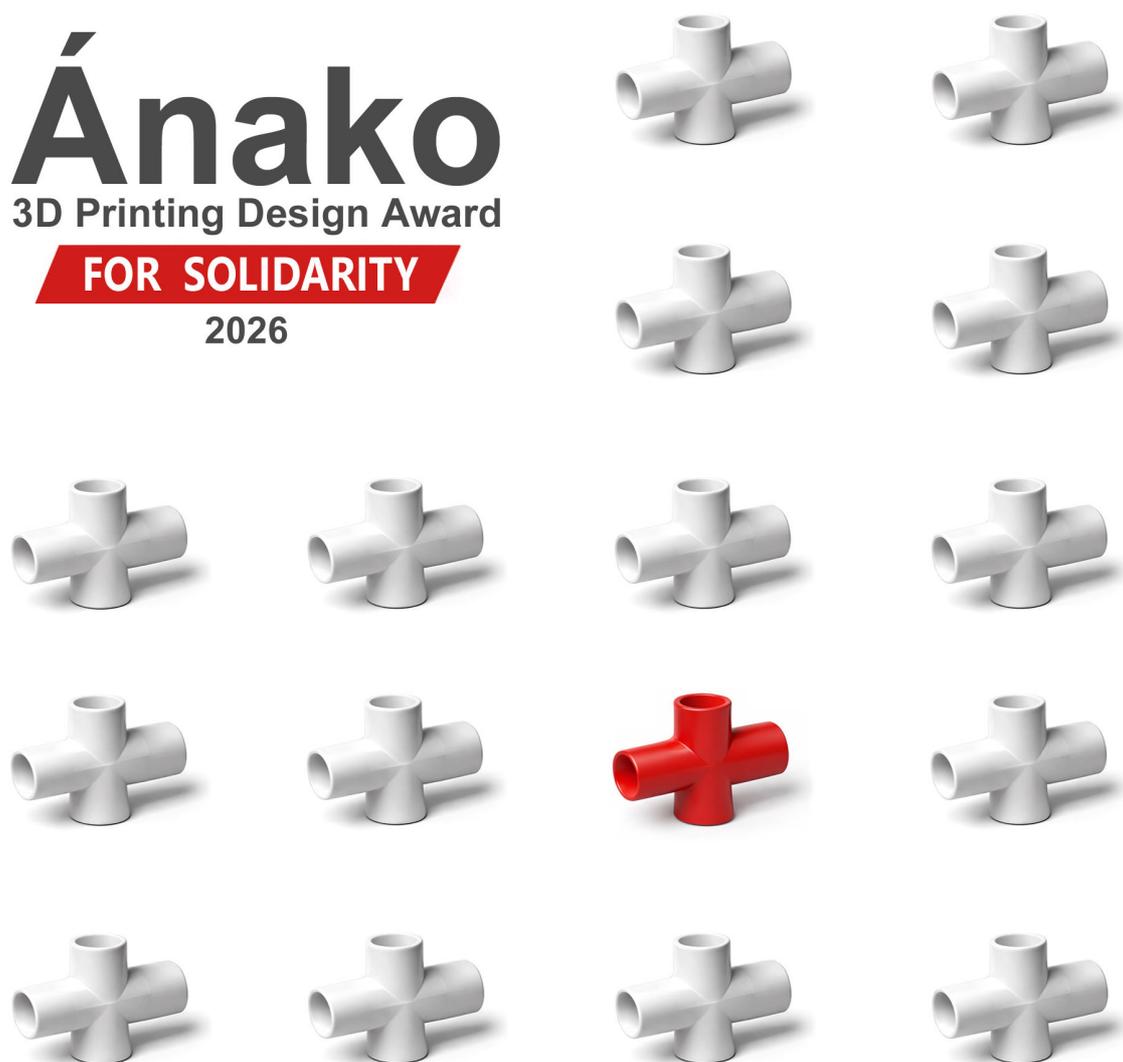


Ánako

3D Printing Design Award
FOR SOLIDARITY
2026



Open call
1 April - 31 August 2026

Celebrating designers, makers, engineers and students worldwide
Advancing humanitarian 3D solutions through open design

In collaboration with

PRUSA
RESEARCH
by JOSEF PRUSA

WDO WORLD
DESIGN
ORGANIZATION

Ánako – 3D Printing Design Award for Solidarity

Open-source design, intended to be produced and used where it is needed, for real needs.

International competition for designers, makers, engineers and students, individually or in teams

Design of 3D-printable solutions for humanitarian contexts

In collaboration with **Prusa Research**

1. Background

In humanitarian emergency contexts, resources are limited, infrastructures are fragile, and time is always insufficient. In these scenarios, design is not a formal exercise, but an operational tool capable of reducing risks, simplifying everyday actions, and improving people's safety and dignity.

3D printing, if used with realism and responsibility, can enable local production of useful, repairable and adaptable objects. Not spectacular solutions, but concrete tools designed to work in difficult conditions and with limited resources.

This award is one of the first operational building blocks of Design for Gaza, an open-design programme currently being developed by Ánako APS to generate concrete, replicable and field-testable solutions for humanitarian contexts through open design and local production.

Ánako – 3D Printing Design Award for Solidarity is created with this objective: to involve universities, students and designers in the design of objects that are truly printable, intended for emergency settings, humanitarian crises and situations of vulnerability.

The competition does not end with the selection of the winning projects. In a subsequent phase, the solutions considered most effective may be further developed and tested in a real context.

Prusa Research, in collaboration with Ánako APS, will contribute to the creation of a pilot 3D-printing laboratory in a refugee camp, providing the necessary 3D printers to verify on site the usefulness, replicability and adaptability of the selected projects.

2. Objective of the competition

The competition invites participants to design physical objects that can be 3D printed (FDM technology) and respond to real needs in contexts of emergency and solidarity.

Projects must be:

- useful and usable in the field;
- printable with 3D printers, in compliance with the technical constraints indicated in section 5;
- robust, simple and repairable;
- understandable also by non-technical users;
- consistent with a real humanitarian context.

The competition also aims to identify solutions suitable for real-world experimentation through a pilot 3D-printing laboratory in a humanitarian context.

3. Eligibility

The competition is open to **designers, engineers, makers and students**, individually or in teams (up to 5 members). For larger groups, please nominate up to 5 official team members; additional contributors may be acknowledged in the project documentation. There are no age limits and no geographical restrictions. Participation is open worldwide and is not restricted by age or professional background.

Each team may submit one project only.

4. Project categories

Each team must choose one single category.

The categories do not indicate a specific object, but an area of real need within which to develop the proposal.

A. Water & Hygiene

Objects for:

- low-consumption personal washing;
- management of jerry cans (supports, caps, taps, hooks);
- clear separation between drinking water and non-drinking water;
- drainage, cleaning and contamination reduction.

Examples (non-binding):

error-proof taps, supports for 20 L jerry cans, fixing clips, passive hand-washing stations.

B. Health, Maternity & Care

Objects for:

- newborn and maternal care;
- light first aid;
- basic healthcare organisation;
- storage and protection of small tools, devices or medicines.

Examples (non-binding):

supports for emergency cradles, medical organisers, splints for fractures and dislocations, robust containers, spacers, privacy supports, accessories for basic care and diagnostic activities.

C. Safety & Protection

Objects for:

- reducing domestic accidents;
- improving stability, anchoring and protections;
- signalling risks or states of use (open/closed, safe/danger).

Examples (non-binding):

stabilising feet, corner protections, structural hooks, mechanical indicators.

D. Repair, Maintenance & Creative Recycling

Objects for:

- repairing, adapting and keeping other systems in use;
- replacing missing or damaged parts;
- making discarded objects or materials reusable;
- creating universal interfaces and adapters.

Examples (non-binding):

clips, brackets, adapters, joints, spacers, tensioning systems, adapters to reuse containers or packaging.

E. Organisation & Everyday Governance

Objects for:

- organising shifts, spaces and shared objects;
- making rules and functions readable;

- reducing conflict and confusion through physical tools.

Examples (non-binding):

physical tokens, occupied/free indicators, supports for visual panels, modular signalling.

5. Technical design constraints

This section is mandatory. Projects that do not comply will not be admitted.

5.1 Printing technology

- FDM 3D printing
- Projects designed for consumer/prosumer printers (e.g. Prusa or equivalent)

5.2 Maximum dimensions

- Maximum size of a single printed part: 20 × 20 × 20 cm
- Multiple parts printed separately and assembled are allowed
- Assembly must be simple and must not require complex tools

5.3 Printing material

- Required material: PETG
- Any alternative choices (if allowed in specific cases) must be justified and approved by the organisation before submission

5.4 Modelling requirements (design for printability)

Projects must comply with the following modelling criteria to ensure printability and robustness:

- Overhangs/angles from the print plane: avoid geometries generating angles over 45° from the plane (or provide solutions that do not require complex supports)
- Minimum wall thickness: 0.8 mm
- Geometry: avoid internal 90° corners; prefer chamfers (or fillets) to reduce weak points and improve printing
- Dimensional tolerances: allow approximately 0.2 mm (especially for joints and assemblies)
- Print bed contact area: provide a sufficiently large contact area on the bed to increase stability and reduce detachment risks
- Load orientation: whenever possible, orient main loads so that forces work in XY, for better mechanical strength (avoiding critical stresses along Z)

5.5 Context of use

Objects must work without continuous electricity, with non-technical users, in dirty, hot, humid or dusty environments, with minimal maintenance. In case of breakage, the object must be repairable or re-printable.

6. What is not allowed

Not allowed:

- purely aesthetic objects;
- solutions requiring complex electronics;
- systems dependent on stable infrastructures;
- unrealistic or non-printable projects;
- concepts that ignore the declared technical constraints;
- projects that do not comply with the technical and modelling constraints in section 5.

7. Evaluation criteria

Projects will be evaluated based on:

1. real usefulness;
2. printability and replicability;
3. robustness and repairability;
4. clarity of use;
5. consistency with the humanitarian context.

8. Required deliverables

Each team must submit:

1. a concise concept (maximum 2 pages);
2. 3D files of the object;
3. essential technical drawings;
4. a visual assembly and use manual;
5. a printed prototype or documentation of print tests.

9. Prizes

9.1 First prize

A 3D printer **PRUSA CORE One+ kit** , provided by Prusa Research
<https://www.prusa3d.com/it/prodotto/prusa-core-one-kit/>

9.2 Second prize

An Original **Prusa MINI+ Semi-assembled** – Enclosure Bundle, provided by Prusa Research.

Reference link:

<https://www.prusa3d.com/it/prodotto/original-prusa-mini-3/>

9.3 Additional prizes

Access to official Prusa Academy training paths dedicated to 3D printing and modelling.

9.4 Special mentions

Mentions without a material prize for social impact, technical quality, clarity of the project and consistency with the humanitarian context.

10. Jury

The jury will be composed of designers and university professors, experts in social and humanitarian design, representatives of Prusa Research, and 3D-printing professionals.

11. Open source and use of the projects

All projects submitted to Ánako – 3D Design Award for Solidarity will be released as open source.

All submitted projects must be released as open source to encourage adoption, improvement and dissemination in humanitarian contexts.

Project files will be published under a **Creative Commons Attribution–ShareAlike (CC BY-SA)** license. Authors retain ownership of their work, and attribution will always be guaranteed.

Participation implies acceptance that projects and related files may be publicly shared, used, adapted and replicated for humanitarian, educational and social purposes.

12. Pilot phase and on-field 3D-printing laboratory

After the selection of the winning projects and the development of the most mature solutions, Prusa Research will provide 3D printers for the creation of a pilot 3D-printing laboratory in a refugee camp, together with basic technical support.

The pilot laboratory will aim to:

- test real production of the designed objects;
- verify print quality in non-ideal conditions;
- assess ease of use, maintenance and local adaptation;
- explore the potential of 3D printing as a humanitarian support tool in the field.

Ánako APS will coordinate the integration of the laboratory in the humanitarian context, in collaboration with partner organisations active on the ground.

13. Calendar and participation

Timeline

Call opening: 1 April 2026

Call closing: 31 August 2026

Selection: September 2026

Results announcement: 31 October 2026

Information link: www.anako.it/3daward.html

Further updates and information will be communicated on the official competition website and through the channels of partner universities.