

2023

Design for the Kitchen & Bathroom

The Brief

Design a functional item for the kitchen or bathroom that is an original concept or a significant improvement on an existing product and made mainly from plastic.

The design could address problems that affect people of any age from children to the elderly and those with disabilities, or deal with other issues such as accessibility or the lack of space. The setting can be either home or commercial.

Plastics are lightweight, hygienic and recyclable materials possessing excellent durability and the capacity for creative innovation. This brief aims to unlock the design potential of these unique and diverse materials for the creation of an aspirational product which will stand the test of time. Consideration should also be given to how your design will maximise the product's lifespan.

Competition Requirements

1. Originality

Design submitted **MUST** be your own idea and, to the best of your knowledge, no similar product has ever been on the market.

2. Plastic

Your entry must be made predominantly in plastic and any suitable polymeric material may be used.

3. Model / prototype

Not required at the preliminary judging stage. Models and prototypes are crucial at the final judging stage to show essential working elements.

4. Summary of key points

A clear description (approx. 300 words) of the function of the design and why there is a need for the product, together with one sentence summarising its 'unique selling point'.

5. Technical description:

A description (approx. 300 words) of overall dimensions, materials and specified plastics, and anticipated method of production.

6. Costing

An estimate of tooling and unit production cost with a suggested retail cost. Professional estimates preferred.

7. Sustainability

A clear view as to how the design addresses environmental, economic and social issues. In addition, how sustainability is considered in the design and/or materials.

7. Formats:

Electronic submission via email.

8. Software:

Indication the software system(s), if any, that have been used in the development of the submission.

9. Visual presentation:

The product and the processes that have led to its development to be submitted a maximum 4x A3 paper.

Important Dates

Closing Date

March 26th 2023

Preliminary Judging

April 14th 2023

Final Judging

May 26th 2023

Awards Ceremony

July 7th 2023

Intellectual Property



Intellectual
Property
Office

[Intellectual Property Office](#)
Search here for international patents

[Click here](#) to download notes explaining various intellectual property classes.

Any design that the student creates for this competition will remain solely the student's intellectual property. DIP does NOT take over any intellectual property from students, nor does it attempt to commercialise any student concepts. Please keep in mind that if you become a finalist, your project will be publicised in the press - this will lead to your design becoming **prior art** and therefore will make it difficult or impossible to patent afterwards. If you feel your design is worth protecting, it is your responsibility to protect the intellectual property before it is publicised the day the ceremony is held.

Designing with Plastics



Proto Labs

Proto Labs Services provides designers and engineers with Firstcut® CNC Machining and Protomold® injection moulding in a wide range of plastics for prototyping and short run manufacturing.

www.protolabs.co.uk/resources/design-tips/



British Plastics Federation

All the processes you might need are listed in the BPF's Plastipedia Processes section here.

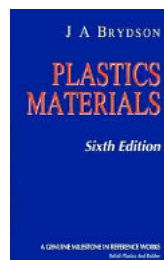
Recommended Publications



[Manufacturing Processes for Design Professionals](#)

Rob Thompson

Design Innovation in Plastics Award winner 2001, Thames & Hudson 2007, ISBN 978-0-500-5137-0. Comprehensive resource with illustrated sections on plastics materials and moulding processes.



[Plastics Materials](#)

John Brydson, Butterworth-Heinemann.

The classic reference for information about commercially available plastics materials. Now in its seventh edition, it includes the latest polymers. ISBN (print): 9780750641326, ISBN (eBook): 9780080514086

Designing with Plastics



[Covestro](#)

Headline industry sponsor of the competition and one of the world's largest producers of polymers and high-performance plastics.

Download the Covestro Sample Lab app to discover the world of polymers. Download free at Google Play or Apple App Store.



[Materials Information Service \(MIS\)](#)

Primarily aimed at helping professionals to select appropriate materials and processes, but will help students if queries are relatively straightforward.



[Circular Design Guide](#)

The design thinking approach that underpins this guide allows you to explore new ways to create sustainable, resilient, long-lasting value in the circular economy – giving you the creative confidence to redesign the world around you.



[Design Council](#)

The UK's strategic body for design providing information about all aspects of managing design, including choosing materials and careers in design.

This web-site offers a significant knowledge base on design practice with a strong focus on inclusive design both for business decision-makers and as an educational resource.



[Tangram Technology](#)

Consulting Engineers for plastics products. This site provides an Introduction to Plastics and Processing plus downloadable Design Guides for Plastics by Clive Maier, Econology, Ltd



[The British Plastics Federation \(BPF\)](#)

The leading trade association of the UK plastics industry. Its website provides educational information through

Plastipedia, the world's largest on-line plastics encyclopedia, providing an A-Z of plastics. an introduction to processes and applications, animations illustrating processing methods, and a costing guide.



[PlasticsEurope](#)

Good source of information about plastics sustainability and recycling plus facts about plastics



[The Museum of Design in Plastics \(MoDiP\)](#)

the only accredited museum in the UK with a focus on plastics. It is the UK's leading resource for the study and interpretation of design in plastics. MoDiP is a specialist research resource at the Arts University Bournemouth.



[Ellen MacArthur Foundation](#)

Today's linear 'take, make, dispose' economic model relies on large quantities of cheap, easily accessible materials and energy, and is a model that is reaching its physical limits. A circular economy is an attractive and viable alternative that businesses have already started exploring today.