



ETFdesign.org

# 2025 Aluminum Extrusion Student DESIGN COMPETITION

*Your Ideas Taking Shape!*

**Entry Due Date: March 24, 2025**

## Call for Entries!

### FAST FACTS

#### ELIGIBILITY

High school, undergraduate, graduate, trade and vocational/technical and design school students are eligible to enter the competition. You **must** be enrolled in and attending school to enter.

Individual and team submissions will be accepted. Each student on the team must complete and submit an official entry form with the submission.

#### HOW TO ENTER

To enter, design a product that incorporates at least one extruded aluminum profile (custom designs are preferred, however, product designs that incorporate standard shapes will also be considered). Be sure to review all the information in this “Call for Entries” for guidelines and tips on creating a potential winning design.

All entries must include a completed 2025 Official Student Design Competition Entry Form. Enter using the form in this brochure or download the official entry form at [ETFdesign.org](http://ETFdesign.org).

Entries may be mailed by post, or emailed to [mail@ETFoundation.org](mailto:mail@ETFoundation.org).

**IMPORTANT!** When mailing your entry materials, you **must include in the body of the email a list of the items you are attaching to your message** (for example: “I have attached a total of 3 files: entry form, design presentation file in PDF, link to video showing product prototype in use”).

#### ENTRY DEADLINE

All entries must be received in the ET Foundation office no later than **Monday, March 24, 2025**.

That doesn't mean you can't send your entry early! We understand that class schedules, Spring Break, mid-term exams, and other commitments can sometimes affect your participation in the competition. Just be sure your entry arrives **NO LATER THAN March 24, 2025**.

#### WINNERS

Winning Designs will be selected by a panel of aluminum extrusion industry professionals who will judge entries based on the competition criteria as outlined in this brochure.

Winners will be announced in Spring 2025 and will be featured on [AEC.org](http://AEC.org) as well as promoted to design and trade press publications.

**\$15,500**  
In Student  
**SCHOLARSHIPS**



2023 Second Place Winner –  
*ATLAS Electric Motorcycle, Brady Hawks,  
Purdue University, West Lafayette, IN USA*

#### SCHOLARSHIP AWARDS

The following awards will be available to the winning entries in the Student Class:

- **First Place - \$5,000**
- **Second Place - \$4,000**
- **Third Place - \$3,000**
- **Sustainable Design Challenge - \$3,500**

Prizes will be split between team members for team submissions that win.

#### MORE INFORMATION

For more information and educational resources, **see inside this brochure and visit [ETFDesign.org](http://ETFDesign.org)**.

#### Questions?

Contact us at  
[mail@ETFoundation.org](mailto:mail@ETFoundation.org)

We Thank the Following  
Design Competition Sponsors:

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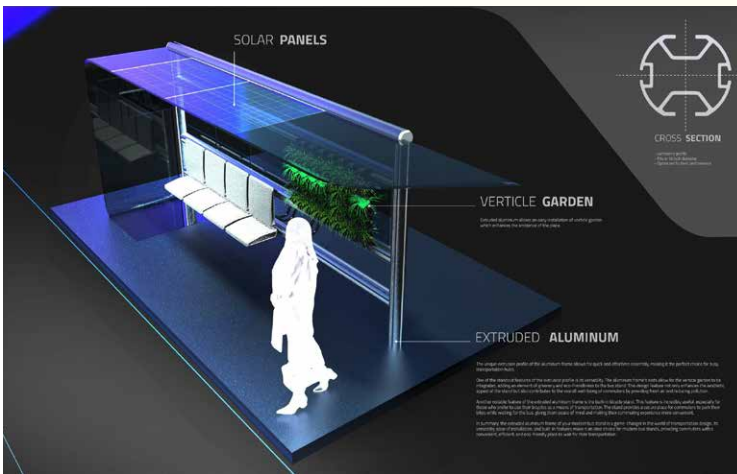
# 2025 Aluminum Extrusion Student DESIGN COMPETITION – Call for Entries!

Students have a unique way of looking at the world, which makes them well-qualified to offer creative solutions to design challenges.

The Aluminum Extrusion Design Competition is intended to enlighten students about the many design advantages and infinite application possibilities of aluminum extrusions.

Enter your unique and original design in the **2025 Aluminum Extrusion Design Competition**. Show off your talent, ingenuity and creativity by designing components, systems, products, or product assemblies that feature aluminum extrusions. You may earn a scholarship award for your winning design!

The Aluminum Extruders Council (AEC) and its educational and research organization, the ET Foundation, are inviting design and engineering students from around the world to share their vision for the future using aluminum extrusions.



2023 Sustainable Design Challenge Winner – Urban Bus Stop  
Bhushan Deshmukh, Royal College of Art, London UK

## STUDENT SCHOLARSHIP AWARDS

**Your design could win money!**

Enter the Aluminum Extrusion Design Competition by **March 24, 2025** to compete for the student scholarships totally **\$15,500!** Scholarships will be presented as cash rewards to the best student aluminum extrusion designs submitted. The following awards will be available to the winning entries in the Student Class:

- First Place** ..... **\$5,000**
- Second Place** ..... **\$4,000**
- Third Place** ..... **\$3,000**
- Sustainable Design Challenge** .... **\$3,500**

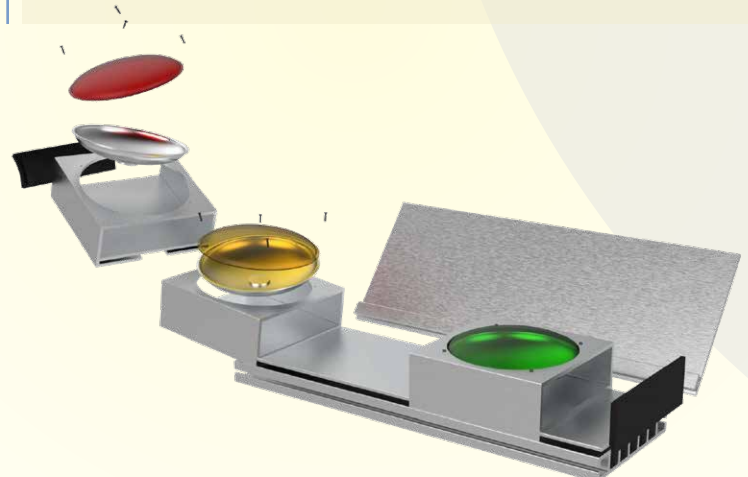
## DESIGNING FOR SUCCESS

Aluminum extrusions are found everywhere, from buildings and transportation to consumer products and machinery, and are often the most functional and cost-effective material and process option.

The right extruded shape using the right aluminum alloy that can be enhanced through additional fabrication and finishing steps can yield an effective product design solution. Aluminum profiles can:

- Reduce piece count by consolidating several components into one extruded part
- Provide multi-functionality using complex integrated features
- Facilitate easier manufacturing and assembly
- Reduce material and production costs and lead times
- Increase product reliability and durability
- Simplify maintenance and repairs for product users
- Build in functionality and attractive appearance to increase marketability
- Advance sustainability goals with aluminum’s recyclability.

In what ways will your design incorporate some of these features to deliver an effective, inventive and interesting product solution? Think beyond the ordinary to come up with new, innovative and resourceful ways to use extruded aluminum!



2023 First Place Winner – TRIadd Modular  
Aluminum Extruded Traffic Light,  
Drew Klopfenstein, Purdue University, West Lafayette, IN USA

## *Tips for a Winning Design*

To ensure your best chance of winning an award in the 2025 Aluminum Extrusion Design Competition, it is highly recommended that you conduct research and consider these tips prior to beginning your project:

- **Visit AEC.org** to review the wealth of information about aluminum extrusions and the process.
- **Download & Read “Designing to the Limit of Your Imagination”** educational presentation PDF in the Design Competition/ Students page of the website at [AEC.org/design-competition](http://AEC.org/design-competition).
- **Visit the AEC YouTube channel ([YouTube.com/AEC](http://YouTube.com/AEC))** to view educational design webinars.
- **Demonstrate** the knowledge gained from viewing the educational information noted above was carefully incorporated into your design.
- **Size matters.** See the shaded circle in this brochure to ensure your shape fits within the 10-inch circle (no larger); if your profile doesn't fit within this circle size, you won't win.
- **Presentation is important.** A winning design will demonstrate an innovative product made with extrusions, and the use of an innovative extrusion design. Spelling and grammar counts!
- **Extra consideration** will be given to entries that supply a 3-D printed sample or other forms of prototyping of your profile.
- **Do your research:** is your design idea new, or has it been done before? Have you considered the market and performed research to support your product development?
- **Provide a variety of supporting materials** (a video, explanation, drawings, model, slide presentation, etc.) Include as much as possible to explain and demonstrate your design and why it should win.
- **Be certain that your entry adequately addresses all four judging criteria** and is supported in your presentation materials (*See page 4*).

If your extrusion profile fits within this 10" inch shaded circle – you are one step closer to winning!

## THE SUSTAINABLE DESIGN AWARD

*Your only limit is your imagination!*

The Sustainable Design Challenge Award will be presented to a Student design that, in addition to meeting the four basic ET Foundation Design Competition criteria, best addresses societal and/or environmental challenges/concerns. The entry must be a viable, extrusion-based product that meets the sustainability demands for the environment, while contributing to the quality of life for its intended users. Students should indicate they are seeking consideration for the Sustainable Design Award on the Entry Form and explain in the written brief how their entry meets the criteria.

Examples of past entries for the Sustainable Design Challenge Category include:

- Refugee Tent
- Water Purifier
- Hydroponic Farming System
- Assistive Device for Individuals with Physical Limitations
- Emergency or Specialty Medical Equipment
- Temporary Housing

## DESIGN RESOURCES & TIPS

Students are encouraged to learn more about aluminum extrusion design, processes and applications. Visit the AEC website at [AEC.org](http://AEC.org) for a wealth of resources, including design tips, application examples, webinars, technical information, and more to help you in your design journey.



Scan this QR Code with your smart phone for easy access to design resources.

[AEC.org/Extrusion-Design-Tips](http://AEC.org/Extrusion-Design-Tips)

## COMPETITION RULES & JUDGING CRITERIA

To be eligible, you must be currently enrolled as a student in high school, college/university, technical or design college, or graduate school.

Designs must be original and use at least one extruded aluminum component. Multiple entries may be accepted. If any category yields no entries deemed by the judges to adequately address the competition's criteria, a prize will not be awarded in that category.

Winning entries will be those that best demonstrate the benefits of aluminum extrusions – whether by inventing a new product or improving an existing one, by achieving the following objectives:

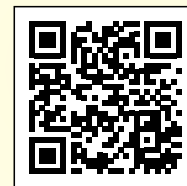
- 1) Creativity** – Innovative design, new or expanded application capability, methods to meet a new design challenge.
- 2) Practicality** – Ease of fabrication and assembly, cost-effectiveness, integrated or multi-functionality, use of extruded aluminum over other materials and/or processes.
- 3) Product/Process Advantage** – Product/process improvement: product design versatility or customization capability, improvement of extrusion processes, close tolerances, takes full advantage of extrusion's abilities to improve a product.
- 4) Market Impact/Potential** – Product design marketability, clearly identified product use(s) within the target market, and likelihood of market success.



*2024 Sustainable Design Challenge Winner – Strataponix Hydroponic Farming System, Soren Bruehler, Purdue University, West Lafayette, IN USA*

A panel of aluminum extrusion industry professionals will judge the competition entries in Spring 2025. Winners will be notified following judging via the email listed on their entry form (so write legibly!).

For complete rules and criteria, visit:  
**[AEC.org/Judging-Criteria-Rules](https://www.aec.org/Judging-Criteria-Rules)**



## INSTRUCTORS

If you would like an AEC member to deliver a presentation detailing the aluminum extrusion process to your class, please contact AEC at [mail@aec.org](mailto:mail@aec.org).

 @AlExtDesignCompetition

 @AEC\_org

Visit **ETFdesign.org**  
for updates and  
additional information.



[ETFoundation.org](https://www.ETFoundation.org)

In conjunction with



**AEC.org**

Please direct inquiries  
to the ET Foundation.



STEP 1: Complete Your Information - please print legibly

ENTRY DUE BY MARCH 24, 2025

I AM A STUDENT STUDYING:

Design  Engineering  Architecture  Other \_\_\_\_\_

In addition, I am entering my design in the SUSTAINABLE DESIGN CHALLENGE Category. (See the "Call for Entries" for Entry Criteria).

STUDENT'S PERMANENT ADDRESS

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

City \_\_\_\_\_

State/Province \_\_\_\_\_

Country \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_

Telephone \_\_\_\_\_

E-mail \_\_\_\_\_

Class (junior, senior, etc.) \_\_\_\_\_

Student's Major \_\_\_\_\_

UNIVERSITY OR COLLEGE ATTENDING INFORMATION

School Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_

Country \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_

STUDENT'S FACULTY ADVISOR INFORMATION

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_

Country \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_

Instructor's Email \_\_\_\_\_

Instructor's Phone \_\_\_\_\_

STEP 2: Explain Your Entry - use additional pages to explain if necessary

Name of part and/or product \_\_\_\_\_

What is your product's use? \_\_\_\_\_

Alloy Specified \_\_\_\_\_

On this form or on a separate sheet of paper answer and explain in detail the following questions:

Reason aluminum and this alloy were chosen?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Why is this entry an exceptional example of aluminum extrusion? What objective(s) does it accomplish? Explain what judging criteria your entry addresses. (Use additional pages if necessary.)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ACCOMPANYING MATERIALS

Include as much support material with as much detail as possible that illustrates the design, its utility, and practicality.

- Sample of part/product
- Design drawings (PDF or JPG files preferred)
- Model
- Photos
- Video (3 minutes or less)
- Audio-visual materials
- Descriptive literature
- 3-D printed model (Recommended if available)
- Other \_\_\_\_\_

For team submissions, each member shall complete and sign a copy of this form. A photocopy of this form may be used for additional submissions.

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

STEP 3: Send Your Entry

Please enclose completed entry form with your supporting materials by March 24, 2025 and send to:

2025 Aluminum Extrusion Design Competition

ET Foundation

1000 N. Rand Road, Suite 214

Wauconda, IL 60084 USA

phone 847.526.2010 fax 847.526.3993

or email mail@etfoundation.org



Visit [ETFdesign.org](http://ETFdesign.org) for updates and additional information.

**COMPETITION RULES:** Entries must be received by the ET Foundation at the address (shown at left) by **March 24, 2025**. Submission of an entry acknowledges the right of the ET Foundation to use the entry for exhibition and publication. All entries received shall become the property of the ET Foundation. Entrants may request that their entries be returned at the conclusion of the competition at their own expense. The ET Foundation is not responsible for any lost, late, or damaged entries. Winners shall be selected by a panel of independent judges chosen by the ET Foundation. If any category yields no entries deemed by the judges to address adequately the competition criteria, a prize will not be awarded in that category. Winners will be announced via a news release posted to the ET Foundation website and disseminated to the media. All taxes due on cash awards are the winner's responsibility. Entry into the competition constitutes permission to use the entrant's design and his, her or their name, likeness, and affiliation for promotional purposes without further compensation.

Any person signing the application on behalf of a company, firm, institution, or organizational entity represents and warrants that he or she has authority to enter the competition on the company's behalf and bind the company, institution or organization to any and all competition rules. All entrants agree to be bound by any and all additional rules established by the ET Foundation for the competition.