



Your Ideas Taking Shape

ETFdesign.org



Winning designs will be displayed at the aluminum extrusion industry's most prestigious industry technical event – the Thirteenth International Aluminum Extrusion Technology Seminar and Exposition – ET '24. This event covers nearly all aspects of aluminum extrusion technology, including process, alloys, equipment, die design, applications and more.

The program includes more than 100 technical sessions in seven concurrent tracks, the ET Expo, industry educational classes, networking, and the Extrusion Showcase – an exhibition highlighting extrusion applications, including exemplary Design Competition entries from the past few years.

Scan this code for ET '24 program details or visit

ET24.us



DESIGN TIPS

Visit the Aluminum Extruders Council (AEC) website at AEC.org for a wealth of design resources, including design tips, application examples, technical information, and more to help you in your extrusion design journey at:

AEC.org/Extrusion-Design-Tips



2024 Aluminum Extrusion DESIGN COMPETITION

Open to the Students and Professionals

Show Off Your Talent, Creativity and Design Skills to Earn Money!

Call for Entries!

Entry Due Date: February 26, 2024

The Aluminum Extrusion Design Competition strives to challenge and empower the next generation of designers to think about how aluminum extrusions can shape a better, more sustainable world.

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

PARTICIPATION

The competition is FREE to enter and is open to entries from **Student and Professional designers**, architects and engineers. Manufacturers are invited to enter the competition in partnership with their extruder. **Entries are due no later than February 26, 2024.**

Your unique and original designs in the 2024 International Aluminum Extrusion Design Competition must feature at least one extruded aluminum component. Your design materials and product explanation should highlight extrusion's many advantages.

FORM OF SUBMISSION

Provide as much detail as possible for the judges to accurately evaluate the design, including design renderings and drawings, 3D-printed models, extruded samples, images, product marketing collateral, CAD drawings saved as PDF or jpg files, videos, written explanation of the design, design boards, design report book, etc. Anything that helps explain what the design is, how it is used, and why aluminum extrusion was used in the design over other processes and materials. Entries may be emailed to mail@ETFoundation.org or mailed to the address shown on the Call for Entries Form.

EVALUATION & JUDGING CRITERIA

A panel of aluminum extrusion industry professionals will judge the competition entries in Spring 2024 using the following criteria as a guide: **Creativity, Practicality, Product/Process Advantage, Market Impact/Potential.**

AWARDS - \$29,000 in Prizes!

A total of **\$15,500 in scholarship awards** for top designs from students and **\$10,000 in cash awards** for the best designs from professionals – **plus a \$3,500 Grand Prize** awarded across all categories and classes – are available.

Winners will be notified following judging via the email listed on the participant's entry form (so write legibly!). See inside and visit ETFdesign.org for complete details.

Student awards sponsored by:



ENTRIES
Due Date:
Feb. 26

STUDENT CLASS

Students have a unique and clear way of looking at the world, which makes them well-qualified to offer creative solutions to design challenges. Think beyond the ordinary to come up with new, innovative and resourceful ways to use extruded aluminum!

Tips for a Winning Design

To ensure your best chance of winning an award in the 2024 Aluminum Extrusion Design Competition, it is highly recommended that you conduct research and consider these tips prior to beginning your project:

- 1) **Visit AEC.org** to review the wealth of information about aluminum extrusions and the process.
- 2) **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.
- 3) **Visit the AEC YouTube channel** (YouTube.com/AEC) to view educational design webinars.
- 4) **Demonstrate the knowledge** gained from viewing the educational information noted above was carefully incorporated into your design.
- 5) **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.
- 6) **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!
- 7) **Extra consideration** will be given to entries that supply a 3-D printed sample or other forms of prototyping of your profile.
- 8) **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?
- 9) **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.
- 10) **Be certain that your entry adequately addresses all four judging criteria** and is supported in your presentation materials.

THE SUSTAINABLE DESIGN AWARD

Your only limit is your imagination!

A \$3,500 Student Scholarship Award is available to the student design that best addresses societal and/or environmental challenges or concerns, in addition to the four basic Design Competition judging criteria. 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 the intended users. Often a student's own situation or experiences contribute to product design ideas for this category.

Past entries for the Sustainable Design Challenge Award have included:

- Soil Erosion Control System
- Water Purification System
- Refugee or temporary housing
- Portable Medical Isolation Unit
- Portable Cart/Bed for Refugees
- Space-saving Greenhouse
- Hydroponic Gardening System

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

STUDENT SCHOLARSHIP AWARDS

Scholarships totaling \$15,500 are available to be presented as cash awards to the best student designs submitted. Winning entries will be awarded in the following amounts:

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

- **PLUS – One Grand Prize of \$3,500 Awarded across all categories and classes!**

FOR COMPLETE COMPETITION RULES VISIT AEC.org/CompetitionRules

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

PROFESSIONAL CLASS

Individual designers and companies are eligible to enter the ET Foundation Design Competition. Aluminum extruders and their customers are encouraged to team up to enter their extrusion design in the competition. Prizes may be awarded in the following four categories:

1) Architectural/Structural

Versatile aluminum extruders enable sophisticated and expressive design features and labor-saving multi-functionality to be readily incorporated into building components, including:

- Modular building systems
- Shading, ventilation and lighting louvers
- Skylights, entryways, windows and doors
- Office component systems
- Walkways, bridges, decking and much more



2) Transportation

Design engineers focused on lightweighting, durability and strength increasingly are turning to aluminum extrusions to improve fuel economy, crash performance and load-carrying capacity for:

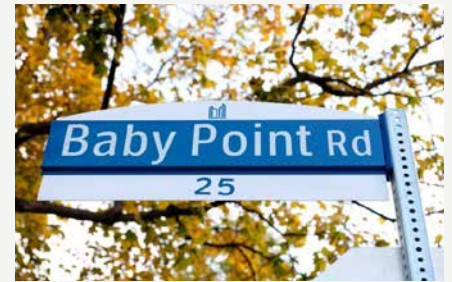
- Automotive
- Rail and mass transit
- Aerospace
- Marine
- Truck/trailer and recreational vehicles
- Space vehicles



3) Engineered/Industrial Products

Aluminum extrusions are used in a variety of consumer and industrial components due to aluminum's many material and process advantages. This category may include:

- Sporting and recreational equipment
- Machine components and controls
- Heatsinks and insulating components
- Lighting and lighting components
- Electrical and communications components
- Appliances and more



4) Alternative Energy

Aluminum extrusions play a key role in both alternative and conventional energy generation and power distribution systems, including:

- Solar power systems/photovoltaics (PV)
- Building-integrated photovoltaic (BIPV)
- Wind power and turbines
- Hydro-electric power and geothermal energy



PROFESSIONAL CASH PRIZES

*A total of \$13,500 in cash prizes is available for professional winning entries, including one **Grand Prize of \$3,500** awarded across all categories and classes!*

First Place cash awards are available for the best aluminum extrusion design in each of the following four categories:

- Architectural/Structural \$2,500
- Transportation \$2,500
- Engineered/Industrial Products. . . \$2,500
- Alternative Energy \$2,500

For complete rules and criteria, visit:

AEC.org/CompetitionRules





STEP 1: Complete Your Information - please print legibly

ENTRY DUE BY FEBRUARY 26, 2024

CHOOSE ONE:

- Designator checkboxes: Designer, Engineer, Extruder, Manufacturer, Other

Name, Title, Company, Email, Company Address, City, State/Province, Country, Telephone, Zip/Postal Code

STEP 2: Explain Your Entry

Name of part, Product that uses part, Is product in production?, Alloy Specified, Reason aluminum and this alloy was chosen

Explain why this entry is an exceptional example of aluminum extrusion. What objective(s) does it accomplish? Explain what judging criteria it addresses.

ACCOMPANYING MATERIALS

While it is not always practical to include a sample of the product, it is advisable to include as much support material as possible, to illustrate the design, its utility, and practicality.

- Material checkboxes: sample of part/product, design drawings (PDF or JPG files preferred), 3-D model (printed), descriptive literature, audio-visual materials, photos, video (3 minutes or less), 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.

Signature, Date

STEP 3: Mail Your Entry

Please enclose completed entry form with your supporting materials by February 26, 2024 and send to:

2024 International Aluminum Extrusion Design Competition

ET Foundation, 1000 N. Rand Road, Suite 214, Wauconda, IL 60084 USA, phone 847.526.2010 fax 847.526.3993 email mail@etfoundation.org



Visit www.etfdesign.org for updates and additional information.

COMPETITION RULES: Entries must be received by the ET Foundation* at the address above by February 26, 2024.

Submission of an entry acknowledges the right of the ET Foundation to use it for exhibition and publication. All entries received shall become the property of the ET Foundation. However, 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 its name, likeness, and affiliation for promotional purposes without further compensation.

Any person signing the application on behalf of a company, firm, 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 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.



STEP 1: Complete Your Information - please print legibly

ENTRY DUE BY FEBRUARY 26, 2024

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

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2024 International Aluminum Extrusion Design Competition

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Wauconda, IL 60084 USA
phone 847.526.2010 fax 847.526.3993
or email mail@etfoundation.org



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ETFdesign.org

1000 N. Rand Road, Suite 214
Wauconda, IL 60084 USA

2024 ALUMINUM EXTRUSION
DESIGN COMPETITION



Call for Entries

Open to **Students** and **Professionals**

Enter for your chance to win cash prizes and student scholarship awards!

Details Inside!

ENTRIES ARE DUE FEBRUARY 26, 2024

 @AExtDesignCompetition  @AEC_org



Call for Entries

Aluminum Extrusion DESIGN COMPETITION

Open to **Students** and **Professionals**

Entries Due Date:

February 26, 2024

ETFdesign.org for details



Student awards sponsored by:

ALMAG / Made possible.
A L U M I N U M

