Call for Entries

2017 INTERNATIONAL ALUMINUM EXTRUSION DESIGN COMPETITION

Students studying design, engineering, architecture or related fields are invited to enter the 2017 International Aluminum Extrusion Design Competition. Show off your talent, ingenuity and creativity by designing products and systems that feature extruded aluminum.

STUDENT DESIGN COMPETITION

Students have a unique way of looking at the world, which makes them well qualified to offer innovative solutions to design challenges. Think outside the box to come up with new, inventive, and resourceful uses for extruded aluminum!

Scholarship Awards are presented to the First, Second and Third Place entries. Additional scholarships may—at the judges’ discretion—be awarded to other exemplary entries. See Student Scholarship Awards for details.

Undergraduate, graduate and high school students from around the world are invited to enter the competition.

For more detailed information, be sure to visit www.ETFdesign.org
Your Idea Taking Shape

Aluminum extrusions are found all around us – from buildings and transportation to consumer products and machinery. Aluminum extrusion is often the most functional, cost-effective and quickest path between function and form. Aluminum profiles can be formed to:

- Reduce piece count / provide complex integral features
- Facilitate manufacturing and assembly
- Reduce costs and lead times for materials and production
- Increase product reliability and durability
- Simplify maintenance and repairs for the final user
- “Build in” functionality and an attractive appearance that can make the product easier to sell

Aluminum Extrusion:

Alloy + Geometry = Performance

The right shape, utilizing the right alloy, can then be enhanced and perfected through additional fabrication and finishing to yield an effective product solution…allowing you to design to the limits of your imagination!

CASH PRIZES AND STUDENT SCHOLARSHIP AWARDS

Your design could win money!

Enter the 2017 Aluminum Extrusion Design Competition to compete for student scholarships totaling $8,500! Scholarships will be presented as cash awards to the best student designs submitted.

Student Class

Scholarships totaling $8,500 will be presented as cash awards to the best student designs submitted. Winning entries in the Student Class will be awarded in the following amounts:

- First Place $3,000
- Second Place $2,000
- Third Place $1,000
- LED Lighting Design Award $2,500

Sponsored by

Bonnell Aluminum
Experience with Confidence
2017 STUDENT CLASS

The 2017 Student Aluminum Extrusion Design Competition will include a special design category that challenges students to think about aluminum extrusions as a holistic solution to a design problem. Students are tasked with designing a product that incorporates LED lights and uses aluminum extrusions for structural, thermal management and/or some of the other excellent material advantages for this application. Examples include a park bench with incorporated LED lights, an LED solar-powered signboard, stairway lighting, and road sign. Think beyond a light fixture; your limit is your imagination!

The Bonnell Aluminum LED Lighting Design Challenge Award will be presented to the student entry that in addition to the four basic judging criteria, addresses the following:

1. Entry is an LED lighting application that utilizes either standard or custom-designed extruded aluminum shapes
2. The LED lighting application can be for either a residential or commercial, interior or exterior application
3. Entry addresses the technical aspects of extrusion design:
   - Demonstrates the entrant’s knowledge and application of lightweighting aluminum extrusion design relative to competing materials
   - Demonstrates heat transfer knowledge and application in designing the heat dissipating specifications for the lighting fixture
   - Takes advantage of the natural reflectivity of aluminum versus competing materials
4. Designer takes into consideration the limitations of the extrusion process.
   For details, visit the Aluminum Extruders Council website at [www.aec.org](http://www.aec.org) for design tips.
5. Quality of the design aesthetics in the intended target market place.

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

JUDGING CRITERIA

Entries are judged based on the following criteria:

**Creativity**
Have you created innovation in design? Have you created a new extrusion application? Have you used aluminum extrusion to solve a design challenge?

**Practicality**
Is your design cost-effective, easy to fabricate and assemble? Have you improved a product by using extruded aluminum over another material and/or process?

**Product/Process Advantage**
Does your design take full advantage of the capabilities of the extrusion process? Does it employ the performance characteristics of aluminum; demonstrate the inherent advantages of the material and the process?

**Market Impact/Potential**
Will your design be marketable? What is the likelihood of its commercial success?

A panel of respected professionals from the aluminum extrusion industry, academia, and/or the trade press will judge the competition in spring 2017.

Winning designs will be those that best demonstrate the superior benefits of aluminum extrusions whether by creating a new product or improving an existing one. Designs must be original and make use of at least one extruded aluminum component. Multiple entries may be accepted.

Note: 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.
**Ten Tips for a Winning Design**

In order to ensure your best chance of winning the 2017 Aluminum Extrusion Design Competition, it is highly recommended that you conduct the following minimum research and take these tips into consideration prior to starting your project.

1. Visit the Aluminum Extruders Council website at www.aec.org and review the following sections and materials:
   - Applications to better understand where and how extrusions are used
   - Extrusion Design to understand the manufacturing processes and better understand practical limitations of the process
   - Sustainability to better understand the environmental aspects associated with using extrusions
   - ET Foundation/Aluminum Extrusion Design Competition/Resources and all the links

2. Visit the AEC YouTube channel (AECorg) to view the educational design webinars.

3. Download and read “Designing to the Limits of Your Imagination” PDF in the Design Competition/For Students section.

4. All winning entries will demonstrate that the knowledge gained from viewing the educational information noted above was carefully incorporated into the design.

5. Be sure your profile fits within a 10 inch circle.
   - See the circle to the left in this brochure to make sure your shape fits (no larger).
   - If your profile doesn’t fit, it won’t win!

6. Winning designs will demonstrate innovative products made with extrusions, as well as the use of innovative extrusion designs.

7. Extra consideration will be given to 3D printing or other forms of prototyping of your profile.

8. Do your research. Is your entry a new idea or has it been done many times before?

9. Provide a variety of supporting materials (explanation, drawings, model, audio-visual, etc.).

10. Be sure your entry adequately addresses all four of the judging criteria.

If you would like to have an AEC member representative come to your school to give a presentation to your class, we can help arrange that! Contact AEC at mail@aec.org for more information or use the “Contact Us” form on the AEC website at www.aec.org.
I AM A STUDENT STUDYING:
[ ] Design  [ ] Engineering  [ ] Architecture  [ ] Other

[ ] In addition, I am entering my design in the BONNELL ALUMINUM LED LIGHTING DESIGN CATEGORY (see the Call for Entries for entry criteria).

UNIVERSITY OR COLLEGE ATTENDING INFORMATION
Name __________________________
Address __________________________
City __________________________ State/Province __________
Country __________________________ Zip/Postal Code __________
Class (junior, senior, etc.) __________ Student’s Major __________

STUDENT’S PERMANENT ADDRESS
Name __________________________
Address __________________________
City __________________________ State/Province __________
Country __________________________ Zip/Postal Code __________
Telephone __________________________
E-mail __________________________

STUDENT’S SCHOOL ADDRESS
Name __________________________
Address __________________________
City __________________________ State/Province __________
Country __________________________ Zip/Postal Code __________

STUDENT’S FACULTY ADVISOR INFORMATION
Name __________________________
Address __________________________
City __________________________ State/Province __________
Country __________________________ Zip/Postal Code __________
Advisor Email __________________________

STEP 2: Explain Your Entry
Name of part and/or product __________________________
Is product in production? __________
Alloy Specified __________________________

On this form or on a separate sheet of paper answer and explain the following questions:
Reason aluminum and this alloy was chosen __________________________
Why is this entry an exceptional example of aluminum extrusion?
(What objectives does it accomplish? Explain what judging criteria your entry addresses)
Use additional pages if necessary. __________________________

ACCOMPANYING MATERIALS
While it is not always practical to include a sample of the product, it is advisable to 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
- descriptive literature
- audio-visual materials
- photos
- other __________________________

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

Student Signature __________________________ Date __________________________

STEP 3: Mail your Entry
Please enclose completed entry form with your supporting materials by March 27, 2017 and send to:

International Aluminum Extrusion Design Competition
ET Foundation
1000 N. Rand Road, Suite 214
Wauconda, IL 60084
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 March 27, 2017. 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.
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Call for Entries

Open to students.
Enter for a chance to win scholarship awards!

HURRY!
ENTRIES ARE DUE MARCH 27, 2017

www.etfdesign.org
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@AEC_org