

SURFACES

THE CHALLENGE

Throughout history, architects have designed small independent structures, pavilions, that marked the landscape. They often displayed formal and sculptural qualities, having to address many viewpoints. They acted as a destination, terminating an axis or as a window, framing a scenery.

In this competition, the challenge is to create a pavilion solely made of steel, whose surfaces are to define a volume as well as a space, depending if we see the pavilion from a distance or from within. The pavilion's shape and material qualities should establish relations with its surroundings. The site is an open site at the student's discretion. The scale is what is deemed appropriate for its context.

Investigations in the types of steel, textures, surface treatments and colours are to play an important role in defining the pavilion's identity. Students should specify the type of steel (carbon steel, weathered steel, stainless, ...), the surface finish (natural, weathered, brushed, gun blue, galvanized, painted) and the finish quality (AESS categories). Steel members and steel plates are to compose the pavilion's architecture. Connections can be welded or bolted, seamless or expressed.

The proposal must include a site plan at a scale that includes significant element in relation with the pavilion, plans of all levels (1:50), 4 elevations (1:50), 2 cross sections (1:50), 1 connection detail (1:5), images of the type of steel and its finish, AESS categories in a chart (the pavilion can have more than one AESS specification, indicate to which part each category applies). Submission should be presented on maximum three horizontal A1 size boards.

Competition Statement

The intention of this design competition is primarily to provide students of architecture in Canada with a unique opportunity: to enter into a design process that brings together, of necessity, concept and reality. It is important for students of architecture to grasp the fact that structural design lies not just in the realm of the engineer, but can be a means for architects of arriving at a meaningful realization of architectural ideas. It is when theory meets physical necessity that architecture can become really interesting.

To that end, this competition calls upon students to conceptualize, and realize in detail, a structure of simple program that explores the qualities of steel surfaces. The exploration will, of course, include issues related to program and site, but the emphasis in this competition is upon the architectural exploration through form and material, on the essential relationship between architecture and structure.

The reality of this competition comes in two forms: through the requirement for buildable details utilizing structural steel; and through the collaboration with the steel fabrication industry on those choices and details. This collaboration is an important component of this competition, as a secondary objective is to expose students to both the opportunities and restraints inherent in realizing steel conceptual design.

The conceptual component of this competition will come through the recommendation that this competition be run through either a studio, or a lecture based course, most probably within a structures course. Under the guidance of faculty sponsors, students will conduct the design process as an academic exercise, within the guidelines set out in this brief. As an academic project, the design process will adhere to the standards set forth by the students' school of architecture.

Technical Requirements

The ultimate goal for a team's submission should combine excellent architectural design with sound structural considerations and material choices. The presentation of the design should provide easy understanding of all components of the project clearly and creatively.

Entries in this competition must exclusively use steel in the design for structure and surfaces. By specifying structural steel as both architectural and structural elements, the designers must demonstrate an understanding of the building properties and the architectural possibilities of the material. Entries that include specifications of steel sizes, shapes and/or product specifications will be given stronger consideration by the jury.

Teams should also consider the practical application of their design. The potential for buildability will be given strong consideration, as the potential exists to build the winning entry. While theoretical studio projects are strongly encouraged, submissions should reflect a clear vision of the project's place and purpose.

Collaborative Process

Collaboration between designer(s) and fabricator(s) is encouraged as a reflection of architectural practice, as a means of enhancing students' ability to realize conceptual design within the framework of real construction. Students and faculty sponsors are encouraged to draw upon the experience and expertise of their local steel fabricators as part of the design process. For a list of local fabricators interested in participating with students, please contact Manon Gagnon at the Canadian Institute of Steel Construction.

Eligibility

This competition is open to all current full-time students registered in a Canadian school that offers an accredited or non-accredited program of architecture of at least 3 years duration. Students may work individually or in teams. Entries that include students in Engineering are encouraged. Each entry must have at least one faculty sponsor from the architecture program.

Submission Requirements

The full submission requirements are posted on the CISC website (<https://cisc-icca.ca/architecture-student-design-competition/>). Submissions not conforming to these requirements will be disqualified. Although copyright of design is maintained by the entrants, submission of design images as part of this competition releases the right of use of submitted images to CISC. Entrants will be appropriately credited when their images are used.

Judging Criteria

- Incorporation of the competition theme
- Creative approach to interpreting the competition theme
- Demonstration of the potential of structural steel
- Buildable details

Awards

Award of Excellence:	student team	\$3,000
	faculty sponsor	\$1,500
Awards (2) of Merit:	student team	\$2,000
	faculty sponsor	\$1,000

Schedule

October 15, 2018	Competition announced
May 17, 2019	Deadline for receipt of entries
June 21, 2019	Announcement of winners and publication of winning entries
October 3, 2019	Award of Excellence presented at the CISC Canadian Steel Conference in Montreal and exhibition of the winning entries
November 2019	Touring exhibition of finalists

For further information please contact

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