## The Challenge

From an architectural perspective, the successful resolution of tension in a structure can be envisioned as the expression of an artistically satisfying equilibrium of opposing forces. While notions of tension might immediately bring to mind images of tensile structures, this exploration is not meant to be limiting in its scope. Students are invited not only to explore tension as it may be expressed in form, surfaces, members, and connections; they are also invited to engage in the exploration of tension as part of a structural dialogue that may occur between tension and compression as that results in the structural resolution of architectural form. While they may range from utilitarian to exquisite in their execution, all responses must, nonetheless, come to terms with one simple problem: the clear application of tension to achieve a harmonious structural solution. To this end, the solution cannot hide this structural requirement; it must, instead, be celebrated and exploited, both architecturally and structurally.

Students are challenged to design a structure that explores 'tension' on a site of the designers' choosing. While the purpose and scale are left to the discretion of the designer, it is important to focus on what it means for us to engage and experience structure as tension. The structure must be primarily steel, but otherwise, the material palette is open.

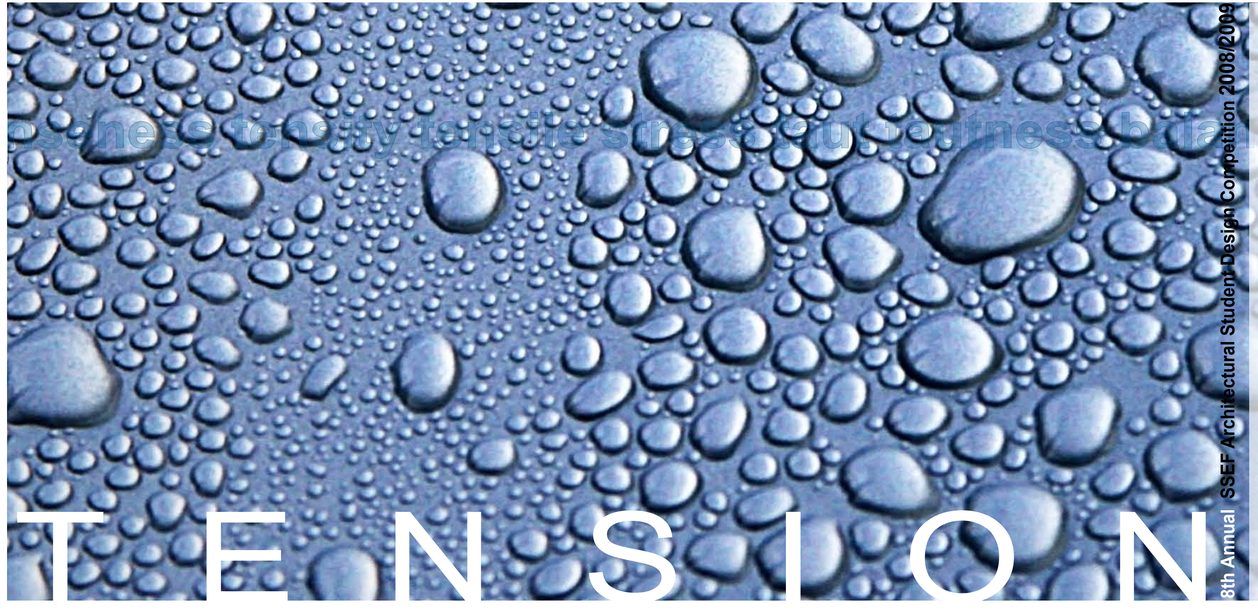
## Competition Statement

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 structure as tension. 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, primarily utilizing structural steel; and through the collaboration with the steel fabrication industry on those 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 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.




## Schedule

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| September, 2008 | Competition announced |
| January 31, 2009 | Deadline for registration |
| May 1, 2009 | Deadline for receipt of entries |
| May, 2009 | Adjudication and announcement of winners |
| June, 2009 | Awards presented at SSEF Annual General Meeting<br>Exhibition of winning entries |
| October, 2009 | Publication of winning entries |

## Technical Requirements

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

Entries in this competition should predominantly use structural steel in the design. By specifying structural steel as both architectural and structural elements, the designers demonstrate an understanding of the building properties of the material, and the architectural possibilities. 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 is encouraged as a means of obtaining architectural excellence combined with practical potential. This collaboration reflects the reality of architectural practice, and will enhance the 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. The Steel Structures Education Foundation will forward a list of local fabricators interested in participating once an entrant's registration form is received.

## Eligibility

This competition is open to all full-time students registered in an accredited program of architecture in Canada. 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.

## Awards

**Award of Excellence**

| | |
|---|---|
| student team | $3,000 |
| faculty sponsor | $1,500 |

**Award(s) of Merit**

| | |
|---|---|
| student team | $2,000 |
| faculty sponsor | $1,000 |

(Up to two Awards of Merit will be awarded)

## Tension!

**The Eighth Annual Steel Structures Education Foundation (SSEF) Architectural Student Design Competition 2008/2009**

University

Faculty Sponsor

Student Names

Mailing Address

Telephone

E-mail

**Please send all registration forms to:**

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