



Professional Engineers
and Geoscientists of BC
www.apeg.bc.ca

20th ANNUAL ULTIMATE BRIDGE BUILDING CONTEST

Saturday, April 1, 2017
Pine Centre Mall at Centre Court

Contest Rules and Guidelines

First Rule is to have fun building your bridge!

Registration:

1. One entry per person or team.
2. Contestants are encouraged to register in advance to speed up registration on the day of the event. All bridges must be weighed at the registration table prior to the event. Please email your completed registration form to ci@apeg.bc.ca by March 30th, 2017. The registration form and additional contest information can be found on our website www.apeg.bc.ca/ci.

Bridge Construction:

1. Bridges must be built using a maximum of 100 standard popsicle sticks and standard all-purpose white glue. No other glues are acceptable (including carpenter's glue).
2. The popsicle sticks must be left whole. They cannot be cut or split.
3. The bridge is required to span a 500 mm gap and should be long enough to have a bearing area on both ends beyond 500 mm (i.e. 50 mm excess on either end for a total length of 600 mm). The bridge must incorporate a flat area to attach the loading mechanism. Please note, that the 'Crusher' is top loading.
4. The bridge must be a minimum 50mm (2") wide.
5. Feel free to add some colour and non-structural decorations. Please do not paint your bridge.
6. Bridges will be inspected during registration. Any violations of the rules above will result in disqualification from the prizes; however, the contestants will still be able to test the bridge.

Maximum/Minimum Bridge Dimensions

Length: Min. 550mm/Max. 660mm

Width: Min. 50mm/Max. Unlimited

Height: Max. 450mm

Judging Criteria:

1. Bridges will be judged separately on the basis of aesthetics and the ratio of load carrying capacity to bridge mass.
2. Bridges will be weighed upon registration on the day of the event.
3. There will be 5 categories for the contest: Primary (Grades 1 through 3), Intermediate (Grades 4 through 7), Secondary (Grades 8 through 12), Professional and Open Adult.
4. There will be a single aesthetics prize for a combined Professional and Open Adult category.

Bridge Testing:

1. Bring your built bridge to the contest.
2. The bridges will be loaded from the top. Sufficient space must be provided for the loading mechanism (approx. 50mm x 50mm).
3. All contestants and officials within the loading area must wear protective eyewear (provided).
4. An electronic load cell will record the maximum load that each bridge carries prior to failure.
5. The recorded load will be divided by the bridge's mass to determine the load/mass ratio.
6. The highest load/mass ratio will determine the winners. In the event of a tie (same load/mass ratio) the lighter bridge will win.