

## 2016 SAMPE Student Bridge Contest QUESTIONS AND ANSWERS

Updated April 2017

- 1) Is there a limit to the size of each team?

Teams are limited to a maximum of 5 members. The registration form requires that one member be identified as the team leader and up to four additional members can be listed.

- 2) What typically goes into a design proposal, and are there any examples we might be able to use?

Please see Item 3 in the Contest Rules. It gives a clear outline of what the design proposal must include and what the format must be. We cannot provide examples of past design proposals but if you have specific questions after reviewing Item 3, please send questions to [SAMPEBridgeContest@gmail.com](mailto:SAMPEBridgeContest@gmail.com) and we'll do our best to answer.

- 3) We are interested in the recycled Carbon Fiber Category. Can we make our own recycled fiber?

The recycled Carbon Fiber is being supplied by Carbon Conversions. We are only allowing the supplied recycled Carbon Fiber to be used in this Category. Teams will need to supply their own resin or request a material kit in addition to the recycled fiber.

For the recycled Carbon Fiber Category, teams may fabricate an I beam or a square beam in this category. If you are interested in registering a bridge in Category C, please submit a preliminary design proposal. Since there is a limited amount of recycled Carbon Fiber available, it will be supplied on a first come, first serve basis to the teams which register and submit a proposal for this category.

- 4) Will resins be supplied in the kits?

Resins and prepregs will only be supplied if requested on the registration form. Resins and prepregs will vary based on what is being donated by the sponsors.

- 5) I've seen the spreadsheet with kit materials that have been donated so far. Is that the amount that is given per team?

We basically divide up the donation as listed by 75 and send that amount out per kit. We have not yet calculated what lengths those will be for things like the braided materials. When 2 or more kits are prepared for given school, we usually give in one length X times the number of kits and let them decide how to cut up.

- 6) When should we expect our kit material to arrive? And which address will the package be sent to?

The kits will be shipped at the end of March and should arrive by mid-April. The faculty advisors will be contacted to verify the shipping addresses. For schools with multiple teams, we are working to facilitate shipping all kits to one address.

- 7) The \$45 fee is per team, not per member, correct?

That is correct—it is per team. The fee covers expenses for shipping the kits and holding the contest.

- 8) I'm trying to register for the conference right now as well. If a team has paid the \$45 fee, then does that mean each of the members also gets access to the exhibits at the conference?

Each participant still needs to register for the conference. When each team member registers for the conference they should include the code given to the team leader. This will give each member access to the exhibit hall during bridge check in.

- 9) If I am a registered student at a community college, can I participate in the contest or can I join an existing team at another college or university?

If you are a registered student at a community college, you may join the contest as either a representative of your community college or you may join an existing team at another college or university. If you decide to join an existing team at another college or university, it is assumed the Faculty Advisor at that college or university will confirm you are a registered student at your community college.

- 10) Is attendance at the conference mandatory in order to participate in the contest? If we did decide to participate but couldn't attend, would it be possible to ship our bridge component?

You do not need to attend the conference to participate in the Bridge Contest. You do need to contact the Bridge Committee at [SampeBridgeContest@gmail.com](mailto:SampeBridgeContest@gmail.com) to determine how you will ship the bridge to the committee and who can load it into the test fixture for you. In the past, students have elected to either send their bridges and posters via Fed Ex (overnight) or standard mail (must mail 2 weeks prior to event) to the committee and authorize one of the committee members to load the bridge into the loading fixture for you the day of the contest. If this is something you and your team need to do, you must contact the committee via email to make arrangements.

11) Is there any limit to the bridge weight if we don't use the donated materials?

There is no weight requirement, but weight is considered if multiple entries achieve the design load requirement for that category. Please see Item 11 in the Contest Rules.

12) Can Basalt fibers be used in the Natural Fiber Category?

While Basalt fibers are made from naturally occurring minerals, they are not naturally occurring in a fiber form. Consequently, they are categorized as a synthetic fiber (see table below). For additional information regarding fiber categorization, please refer to <http://en.wikipedia.org/wiki/Fiber> for additional information.

13) Can animal fibers be used in the natural fiber category?

Animal fibers may not be used in the natural fiber category; the intent of the category is to use natural plant fibers.

14) Are we allowed to use core materials?

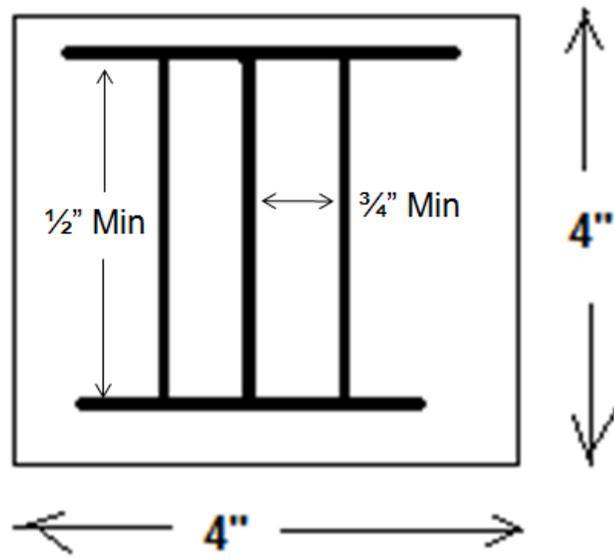
Item 6 of the Contest Rules addresses core materials. If you have more questions about the type of core you are using, please contact the Bridge Committee at [SampeBridgeContest@gmail.com](mailto:SampeBridgeContest@gmail.com).

15) For any of the I-beam bridge categories are we allowed to use gussets or ribs to reinforce the design, or does that count as part of the web and take it over the 0.6" maximum width requirement?

Gussets or ribs extending perpendicularly outward from the web that exceed the .6" max are prohibited.

16) I am confused by the statement "a minimum gap between the caps of  $\frac{1}{2}$ " and the webs of  $\frac{3}{4}$ " must be maintained along the entire length of the bridge". Can you clarify this?

See figure below. The intent of this requirement is to ensure each web/cap is a distinct part that meets the maximum thickness requirement.



17) For the video alternative to making a poster, do we need to bring a monitor or anything to play our video during the contest?

Video submittal by the due date is the only step that is required of teams submitting videos instead of posters. The judging of the videos will be completed between the video submittal deadline and competition Test Day. SAMPE will work out the logistics of playing the videos during the contest.

18) How long should the video be?

We recommend that the videos be around 2-3 minutes. This should be enough time to convey all of the information.

19) Should the video have sound, like music or commentary?

You are welcome to use whatever you feel will best convey the information. The committee is working out the logistics to show the video as the team is setting up their bridge for testing, so having some sort of audio would make it more engaging. But also keep in mind that the videos will be playing on a TV screen near the posters and the sound will probably not be heard, so having some text on the video would also be a good idea.