

### ***Questions about the Competition***

Read and study all of the competition documents including this document to help your team understand this competition and its rules and requirements.  
All of the competition documents are related, meaning that you must read every document in order to coordinate all of the pieces and ensure your teams' compliance.

### ***Why should my team ask a question?***

Your team's understanding and interpretation of these documents are like executing any "competitive" work project.  
Therefore, it is important that teams understand the competition and its documents.  
Questions help the judges provide clarity to all the teams as appropriate and improve this competition and its documents.

### ***How should my team ask a question?***

Line numbers have been provided in most competition documents (see the Rules for example).  
Please include the appropriate line numbers to refer to the content that your team has questions about.  
Line numbers allow the judges to pinpoint your question and provide a relevant answer.  
If no line numbers are available, then include a limited screen capture for reference to help the Judges understand and answer your questions.

### ***How and when are questions answered?***

Please submit your questions as soon as practical and not after the deadline explained further below.  
When a question is received, the judges will decide if the question is a *Competition* question or a *Team* question.  
Every *Competition* and *Team* question will be answered by e-mail to the Team Contact and no later than 14 days after submittal.

### ***What are Competition questions?***

*Competition* questions are relevant to all teams (e.g. clarification of rules, submittal documents, etc.).  
*Competition* questions must be submitted by **February 12, 2025** for a response.  
*Competition* questions submitted after this date will not be answered.  
*Competition* questions and answers will be posted to the Competition webpage so that all teams have the same information.  
In order to communicate all *Competition* questions and answers in a timely manner, they will be compiled on a monthly basis, amended to this FAQS document, and then the updated document re-posted according to these dates:

- November 27, 2024
- December 18, 2024
- January 22, 2025
- February 12, 2025

The updated FAQ document can be accessed at the same FAQS link on the Competition webpage.

Each time this document is posted the link name will reflect the date that it was posted.  
No team will be identified in the posted document.  
Questions will be posted exactly as they are received.  
See Line 113 for an Example FAQS, Questions and Answers as of November 12, 2024.

### ***What are Team questions?***

*Team* questions are relevant to that team only (e.g., clarification of team registration, contact email, etc.).

*Team* questions should be submitted by March 19, 2025 for a response.

*Team* questions submitted after this date will be received but may not be answered.

*Team* questions will not be posted to the website.

### ***Why are the questions responded to in the manner that they are answered?***

Judges provide answers that are very typical, similar, and consistent for all teams.

No questions are answered with an intent to give any team an advantage.

Questions are usually answered by citing the competition documents (for example “see the Rules”).

The answers also usually cite the competition documents’ relevant subheadings, line numbers, and or paragraph/sentence numbers.

General questions receive general answers.

Ask specific questions to get specific answers.

Some questions are answered with “Judges will not answer.”

### ***Why are some questions answered with “Judges will not answer”?***

Some of the reasons that questions are answered with “Judges will not answer” are as follows:

1. Judges will not answer questions about rules from previous competitions because those rules do not apply to the current competition.
2. Judges will not answer questions that are phrased as an implied question or that ask if a team understands a rule correctly or not.
3. Judges will not answer questions that ask for permission to do something or for their opinion on what a team wants to do. (For example: questions that include phrases such as “we plan on doing this ...” or “we want to do this ...” or “what do you think ...” or “can we do this ...”.)
4. Judges will not answer questions that are outside of the scope of the competition documents. If something is not stated in the competition documents, then there is nothing against what you want to do. In other words, permission is given to do whatever you want to do unless the competition documents state otherwise.
5. Judges will not answer questions that are your team’s decision. Understand that there may or may not be competition documents (rules) that are either for or against your team decision and the judges will not answer.
6. Judges will not answer if they don’t want to answer incorrectly, or with an answer to cause more questions, or with an answer that changes the established competition documents.
7. Judges will not answer *Competition* questions that were submitted after the deadline of **February 12, 2025**.

Judges are not required to identify the reason for “no answer” responses (i.e., one of the reasons listed above).  
 If the team still needs an answer, then consider rephrasing and resubmitting “no answer” questions.  
 Please keep and use the appropriate email trail for the judge’s context and keep aware of the question type for submittal deadlines.

### ***How do we submit our questions?***

Only the Team Contact can submit questions.  
 Questions can be submitted by e-mail only.  
 Questions should have an appropriate Subject line (as shown below) and sent to the following email address:

[students@concrete.org](mailto:students@concrete.org)

Subject: QUESTION – Your school’s acronym – subject of question

Address to: Rachel Belcher

A confirmation email will be sent back to the Team Contact when a question is received.

Note – This email address ([students@concrete.org](mailto:students@concrete.org)) should be used for any and all communication with ACI regarding a team’s participation in the competition.

### ***Example FAQs***

Questions and Answers as of November 12, 2024		
241112-01	Q	What will the questions and answers look like in this PDF document?
	A	The questions and answers will be numbered as follows: YYMMDD-NN. Where YYMMDD is the posted date (see Lines 41-44 of this FAQs document) and NN is a sequential number assigned to Competition questions as they are received from the teams.
241112-02	Q	Why are the questions numbered?
	A	The questions are numbered to allow the judges to refer to previously answered questions. For example: See Answer to Question 241112-01.
241112-03	Q	Why are there no Competition questions in this FAQs PDF document?
	A	This PDF document was completed before the Competition registration was opened. The judges have not yet received any questions to answer. This PDF document is to show all participants by example how the Competition questions will be answered.
End of Update November 12, 2024		

### ***End Example FAQs***

**FAQ Updates**

Questions and Answers as of January 22, 2025		
250122-01	Q	For the upcoming student bowling ball competition, I just wanted to clarify: aggregates are allowed yes? There weren't any limit specifications provided, should we assume ASTM 192 specifications?
	A	There is nothing in the competition documents that addresses "Other concrete materials" such as aggregates. The use of any material in a bowling ball's composition is a question for a team's faculty advisor. Please review the text under "What does a Team do if they have questions about the competition?" on the ACI webpage for the competition (i.e. <i>Introduction to the Fiber-Reinforced Concrete Bowling Ball Competition</i> ), as well as lines 80-86 of the FAQS document. In other words, there is no rule regarding this, so it is the teams' decision. Although do keep in mind that this is the Fiber-Reinforced CONCRETE Bowling Ball Competition, and what are the ingredients for concrete?

Questions and Answers as of February 12, 2025		
250212-01	Q	On lines 179-195: Can I choose any mass and diameter within the given ranges, or must I aim to be as close as possible to the target mass?
	A	Read line 180, and consult with your Faculty Advisor on this question.
250212-02	Q	Additionally, does proximity to the target mass affect the score for both parameters?
	A	Yes, and consult with your Faculty Advisor on this question.
250212-03	Q	On line 93: Referring to the 'FRP-Bowling-Design-Submittal' : Does the sum of all values (including fiber) in kg/m <sup>3</sup> have to add to 1.000 kg/m <sup>3</sup> total?
	A	Consult with your Faculty Advisor on this question.
250212-04	Q	and, to convert kg/m <sup>3</sup> to lb/yd <sup>3</sup> do we use a conversion factor of 1 kg/m <sup>3</sup> = 0.168 lb/yd <sup>3</sup> ?
	A	Consult with your Faculty Advisor on this question.
250212-05	Q	The ramp and the bowling lane appear to be attached at a 30-degree angle without any smoothing at the transition. Could you confirm whether both planes meet at a sharp edge, or if there is a gradual smoothing at the point of contact? If the transition is not smooth, the bowling ball could change its path due to the impact at this edge.
	A	There is an approximate drop of 3/8 inch from the ramp to the lane surface (in previous competitions this drop was 1 inch). Every team will be bowling under the same conditions. The trajectory of the ball is more

		affected by the sphericity of the ball than by any vertical drop. In other words, the trueness of your ball's trajectory is in your hands, and not the arrangement of the competition equipment.
250212-06	Q	Currently due to limited molding availability, we are using plastic soccer balls for our mold. Since the surface is not 100% smooth, are we allowed to have a honeycomb soccer ball pattern also casted with the ball?
	A	Read lines 76-86 of this FAQ document and consult with your Faculty Advisor.
250212-07	Q	We have some questions regarding the pre-packed mixture allowance. Currently, we are working with SikaGrout®-215 , a pre-packed cementitious pre-mixed grouting. We have consulted with Sika Indonesia and it can be considered as a fiber reinforced concrete after it mixed with fiber that we've chosen. We would like to make sure, if it is okay to use the pre-packed mixture that being sold as "grouting"?
	A	Read lines 76-86 of this FAQ document and consult with your Faculty Advisor.
250212-08	Q	Also, is there any information that must be contain in the technical data sheet for the pre-packed mixture? Since if there's any missing information we could request to our SIKA local branch.
	A	Read lines 80-83 of this FAQ document and consult with your Faculty Advisor. There are no requirements for the content of any manufacturer's technical data sheet.
250212-09	Q	I am reaching out for some clarification regarding the design of a core for my team's bowling ball design. Relevant Line #'s from Rules: 149 The Other Ball Materials can be grouped together as a centered Core. 155 A balloon filled with expanded polystyrene beads and encased within the FRC/UHPC 156 mixture is an example of Core materials. Our question is: Can we 3D print a core to center in our ball, and if so, what is permitted? 1. Hollow Core 2. Core filled with other materials (i.e., Foam) 3. Solid/Partially Solid
	A	Read lines 76-86 of this FAQ document and consult with your Faculty Advisor.
250212-10	Q	Do we need a submittal for each individual ball or are all 6 on the same sheet?
	A	Refer to lines 169-170 of the Rules and consult with your Faculty Advisor.
250212-11	Q	Are there any restrictions on air reducers?
	A	Read lines 76-86 of this FAQ document and consult with your Faculty Advisor.

250212-12	Q	Would we be able to access any previous years and team questions from this competition?
	A	Read lines 72-73 of this FAQ document and consult with your Faculty Advisor.
250212-13	Q	Line 135- All fibers must be the same length Line 133- All fibers must be commercially available and unadulterated  Question: Does this mean we can't use certain natural fibers such as Coconut Coir? Since they have a distribution of different lengths, and reducing them to the same size would be a modification to them?"
	A	While this natural fiber choice is specified in lines 131-132 of the Rules, it falls outside the Rules regarding various lengths. If you chose to use this fiber and report a varied length on your submittal, you would lose Specification points. Modification of the fiber would also result in loss of Specification points.

*End of Updates*