



Significant Changes to the Rules and Regulations for the 2008 ASCE National Concrete Canoe Competition™

Each year the rules and regulations are modified and updated in an effort to improve the overall competition and to assure that competitors design and build new canoes. Changes have been made to this year's edition of the rules based on responses to questions, issues that may have arisen at conference and national competitions, and feedback provided by students and judges. Some of these changes are significant while others are minor edits in language.

The intent of the significant changes is to challenge the student's skills, engineering judgment and creativity. The minor edits are primarily for clarification purposes.

The following is a list of the MAJOR changes to the rules and regulations applicable to the 2008 competition (as compared to the 2007 rules and regulations). Please note that not all of the changes are listed here and that it is the responsibility of all teams to carefully review the rules and regulations.

Section 1

No significant changes to Section 1 have been made

Section 2

No significant changes to Section 2 have been made. Clarifications in regards to the dimensional restrictions (length and beam width) have been provided in the form of figures.

Section 3

- The gradation requirement for the aggregate(s) selected has been revised and no longer needs to meet ASTM C 33 fine aggregate standards. The composite gradation of the aggregates selected shall have no more than 5% (by weight) passing the No. 100 sieve (0.15 mm)
- The amount of aggregate required in any given concrete mixture has been reduced to a minimum of 15% of the total weight of any concrete mixture and is based on the oven-dry condition.
- The binding mass options have been changed and a minimum of 60% of the binding mass must be portland cement meeting ASTM C 150.
- The maximum allowable water-to-cementitious material ratio (w/cm) has been lowered to 0.40.
- Updated version of Table 3.1 - "Concrete Mixture Data Table" is presented in the rules and regulations and can be downloaded for use.

- The requirement for teams that qualify for the National Competition to submit two (2) 4 in. x 8 in. cylinders of their structural concrete mixture(s) for testing and verification purposes has been rescinded.

Section 4

No significant changes to Section 4 have been made. The example computation for the percent open area (POA) has been corrected, using the same example provided in the *Errata* issued during the course of the 2007 competition season.

Section 5

- Any stains that are applied to the canoe must meet the following requirements: commercially available; acid-based; maximum solids content of 5 percent; and a volatile organic content (VOC) less than or equal to 700 g/L.

Section 6

No significant changes to Section 6 have been made. Please note that the CNCCC does not dictate the submission deadline for conference competitions (that is left to the host school). In addition, the electronic submission of design paper and the Engineer's Notebook are not required at the conference level and should not be requested by the conference host school.

Section 7

- In an effort to reduce the volume of the notebook, the following sections have been removed: Gradation Curves and Tables, and the Repair Procedure Report/Reconstruction Request.

Section 8

No significant changes to Section 8 have been made.

Section 9

No significant changes to Section 9 have been made with the exception of the item listed in Section 10.

Section 10

- The Product Display shall count for 10 percent of the Final Product score (Section 9).

Section 11

No significant changes to Section 11 as the same race configuration and paddler loading conditions used in recent competitions are implemented. A note has been added to indicate that the direction of turning around the sprint buoy can be clockwise or counterclockwise, but shall be consistent for all race heats (preliminary and finals)

Section 12

No significant changes to Section 12 have been made.

Section 13

No significant changes to Section 13 have been made.

The Rules and Regulations of the 2008 ASCE National Concrete Canoe Competition is a very comprehensive document as it serves multiple purposes – it provides the specifications that the students need to meet for the competition, it provides guidance to the conference and national judges on the various aspects that they need to evaluate and judge, and it serves as a guide to the host schools for determining the requirements for hosting the competition.

Every effort has been made to provide clear language in this edition of the rules and regulations. Students are advised to read the rules carefully and to make interpretations based on sound engineering judgment and experience. The CNCCC will provide clarifications as needed.

Questions regarding rule interpretations should be directed via e-mail to cnccc@ermail.asce.org.

Official responses will come from CNCCC@asce.org. This e-mail account will be BLOCKED from receiving e-mail and is only intended to be used to send out responses and other announcements.