

# Construction regulations

## ConcreteCanoeRace 2026



1. The canoe must be hollow on the inside. This means there must be enough space to fit in and properly propel the canoe with two persons. Only single-blade paddles, which are not attached to the boat, may be used for this purpose. Soft mats are allowed to protect the knees and feet, but not to distribute the load on the boat.
2. The dimensions of the canoe must meet the following requirements:
  - Minimum length: 4.0 m
  - Maximum length: 6.0 m
  - Maximum width: 1.0 m
  - Maximum height: 1.0 m
3. The canoe must be made of concrete. Its strength must result from the profiling, reinforcement, and/or the composition of the concrete. Reinforcing the canoe with anything other than concrete or reinforcement incorporated into the concrete is not permitted.
4. Both natural and synthetic aggregates, whether impermeable or porous, may be used.
  - The maximum aggregate diameter of one aggregate is 5,6 mm;
  - The binder must be cement in accordance with EN 197;
  - Additives must not exceed 25% of the weight of the cement mix.;
5. The reinforcement may consist of wire and grid elements. The reinforcement must not contribute to the canoe's waterproofness or buoyancy. The buoyancy of the canoe may only be created by concrete elements or by the concrete canoe as a whole.
6. A buoy with 8 meters of rope must be attached to the canoe to indicate its location if it sinks. The rope must withstand a tensile force of at least 50 kilograms, and the buoy must provide a buoyancy of 2 kilograms. If these requirements are not met, the organization will take appropriate measures.
7. A construction report (maximum 10 A4 pages) must be submitted by email (secretarybetonkanorace@rocvantwente.nl) no later than four weeks before the event. The report must include at least the following:
  - Design: concept, name of the canoe, and people who contributed
  - Explanations of the structure
  - List of used materials, including the mixing ratio
  - Description of the fabrication process
  - Dimensions, weight, and buoyancy
  - Sustainability of the materials used

8. Sustainability and innovation may result in bonus points in the sustainability or innovation competition. If special materials or techniques are used, these must be mentioned in the construction report.
  9. With regard to the environment, no material may come loose from the canoe when exposed to water. This will be tested during inspections by applying a wet sponge to the canoe.
  10. The jury will assess the construction report. If it does not meet the requirements or contains defects or ambiguities, the jury may require revisions before a specified deadline. Failure to submit the construction report will result in exclusion from prizes.
  11. If the canoe does not meet the requirements or does not conform to the construction report, the jury may impose disqualification, a reduction of points, or a time penalty. Failure to submit the construction report will result in exclusion from prizes. This will be announced to the relevant team before the start of the race.
  12. During transportation of the canoe, bystanders must wear safety shoes to prevent injuries. Failure to comply with this rule is at your own risk.
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