High Strength Concrete Competition

Design and make your own high strength concrete! Impress your friends! Break stuff!

Prizes for the best specimens!!

Winners will be selected from 2 categories: Advanced and Beginner

Friday, March 1st at 3:00 pm to 5:00 pm (casting)
1220 Newmark Civil Engineering Lab (Concrete Lab)

Friday, March 8th (testing during EOH)
Newmark Civil Engineering Lab Crane Bay

THE RULES

Participants will select a category depending on their experience level. Graduates of CEE 401 or 314 will not be allowed to participate as a beginner; everyone else may choose their category.

ADVANCED RULES

• Limit 1 specimen per entry, a 4"x8" cylinder mold will be provided
• Limit 500g portland cement, to be weighed by a moderator (you may bring your own cement)
• Limit 1 batch per specimen (don’t waste your cement!)
• Hand mixing only, supervised in the Concrete Lab (preferably in 5 gal bucket)
• Surface modification to finished cylinder is allowed. Final dimensions must be 4(±0.125)" X 8(±0.25)"
• Capping of cylinder ends is permissible
• Curing
  o Any curing methods is allowed provided that the cylinder does not leave Newmark
  o Cylinder must be at or near room temperature at the time of testing
  o No external loads may be applied during curing (including pressure)
• Laboratory materials available: Type I portland cement, fly ash, silica fume, crushed limestone, natural sand, superplasticizer, calcium chloride, set retarder
• Any other materials will be allowed except those specifically prohibited below:
  o No steel or metallic aggregate or reinforcement
  o No fibers of any size or external reinforcement (fiber wraps)

BEGINNER RULES

Same as ADVANCED rules with the following exceptions

• No limit on cement
• Curing is restricted to the concrete lab curing room
• Cylinders will be capped by a qualified technician

Everyone is invited!

For questions, clarifications, or a copy of the rules, e-mail ACI UIUC (aciuiuc@gmail.com) or go to our website (go.illinois.edu/aci)