



ACI CONVENTION STUDENT PROGRAM SUBCOMMITTEE



American Concrete Institute®
Advancing concrete knowledge

Overview of Student Program



- ❖ Responsibility of Host Chapter
- ❖ Competitions
- ❖ Student Lunch
- ❖ Financial Responsibilities
- ❖ Organizing a “Student Liaison Committee”
- ❖ Tips for a Successful Student Program

Chapter Responsibilities



- ❖ Student Competition—Sunday (Day 1)
 - Recruiting local students
 - Location
 - Judges for competition
 - Refreshments at student competition
- ❖ Student Lunch—Monday (Day 2)
 - ACI Event Services: lunch arrangements
 - Chapter: Speaker

Student Competitions



❖ Spring Convention

- Egg Protection Device (EPD)
 - Convention hall: 18'-6" height clearance
- Bowling Ball

❖ Fall Convention

- Cube or Cylinder
- Fiber-Reinforced Polymer (FRP) Beam

Competition Responsibilities



- ❖ Chapter is responsible for some judges
- ❖ Coordinate with ACI E801—Student Activities Committee
- ❖ Obtain testing device for cube and cylinder competitions
- ❖ Obtain company to calibrate for cube, cylinder, and bowling ball competitions
- ❖ Review rules for competition found on the ACI website www.concrete.org

Upcoming Student Competitions

Egg Protection Device Competition

Students design and build the highest-impact-load resistant plain or reinforced concrete Egg Protection Device. The competition is held in conjunction with the ACI Spring Convention in Vancouver, British Columbia, Canada, March 30, 2003.



FRP Composites Competition

Students design and construct a concrete structure reinforced with fiber-reinforced polymer (FRP) bars, which are subjected to a concentrated load at midspan and tested to failure. To be held in conjunction with the ACI Spring Convention in Vancouver, British Columbia, Canada, March 30, 2003.



ACI Concrete Projects Competition

Entries for the Concrete Projects Competition are due June 1, 2003. Virtually any project that focuses on concrete design, materials, and/or construction is eligible. These projects can include computer programs, term papers, student activities, senior design projects, or special projects.

Concrete Cube Competition

The objective is to produce a concrete cube that achieves, as closely as possible, a target design strength of 50 MPa (moderately high-strength concrete) and a target mass of 250 grams per cube (moderately lightweight concrete). The next competition will be held in conjunction with the ACI Fall Convention in Boston, MA, September 27-October 1, 2003.



FRC Bowling Ball Competition

The object is to design and construct a fiber-reinforced concrete bowling ball to achieve optimal performance under specified failure criteria and to develop a fabrication process that produces a radial uniform density while maximizing volume. The next competition will be held in conjunction with the ACI Spring Convention in Washington, D.C., in March 2004.




EPD Competition



EPD Competition

Mass falling
from a height



A diagram illustrating an EPD competition. A light blue rectangular mass is shown falling from a height, indicated by two vertical green lines. The mass is currently positioned above a grey horizontal arm that extends from a central vertical grey pillar. Below the arm, a black oval object with several red dots is positioned on a blue rectangular base. The entire setup is mounted on a dark grey base. A blue thought bubble is connected to the black oval object.

Ahhhh!
My EPD is good
and it may win this
competition

EPD Competition

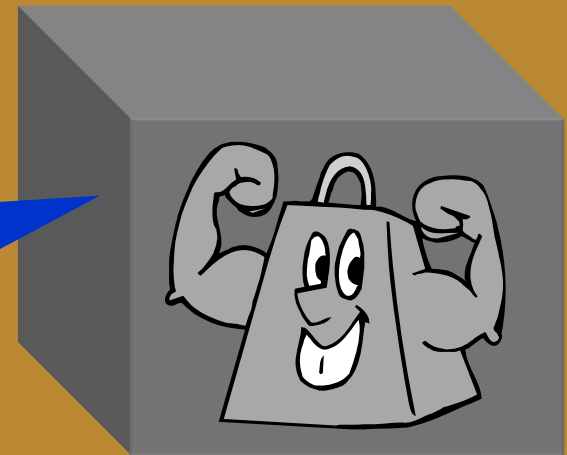
Mass falling
from a greater height

Oh no!
This EPD has failed



Cube Competition

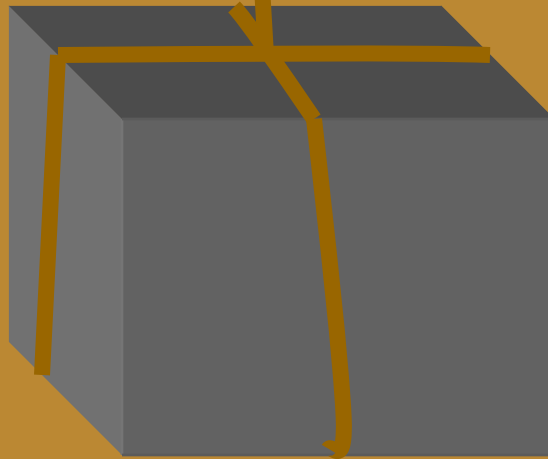
Preparing a concrete
cube that is strong



Dimensional Limitations

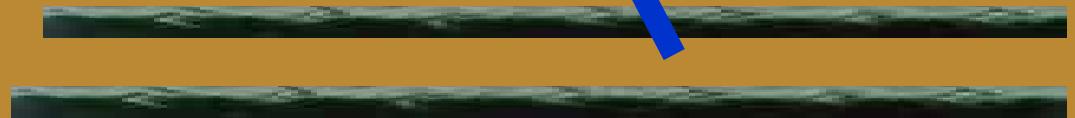
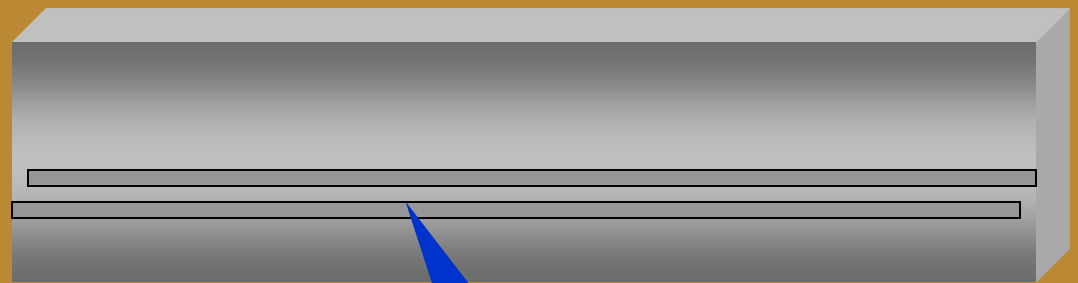


290 gm
maximum



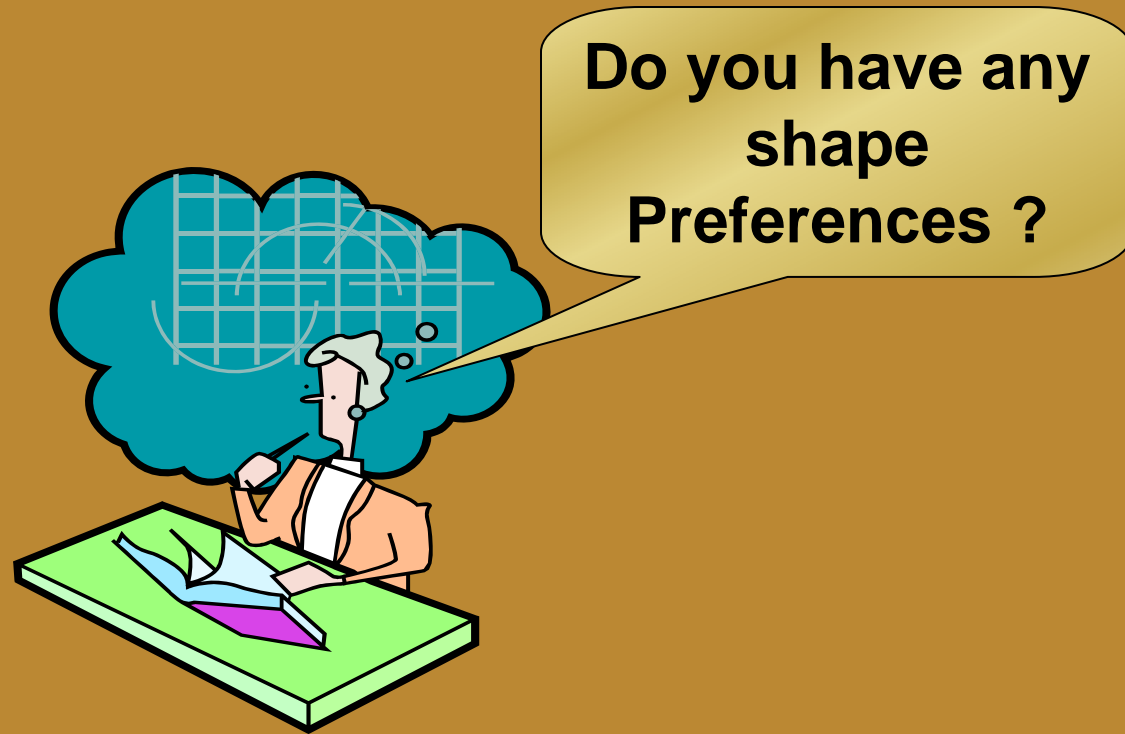
FRP Competition

Reinforced
with two
FRP rods



FRP bars

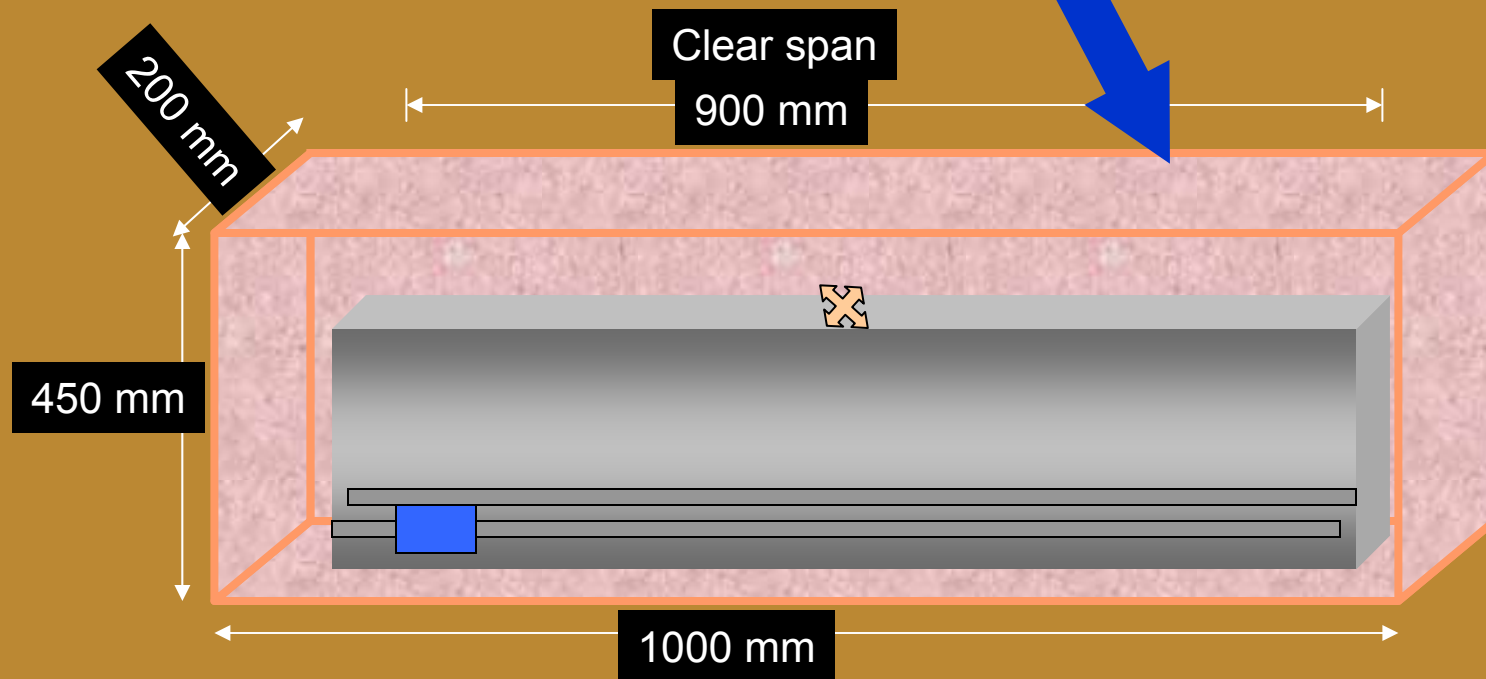
FRP Competition



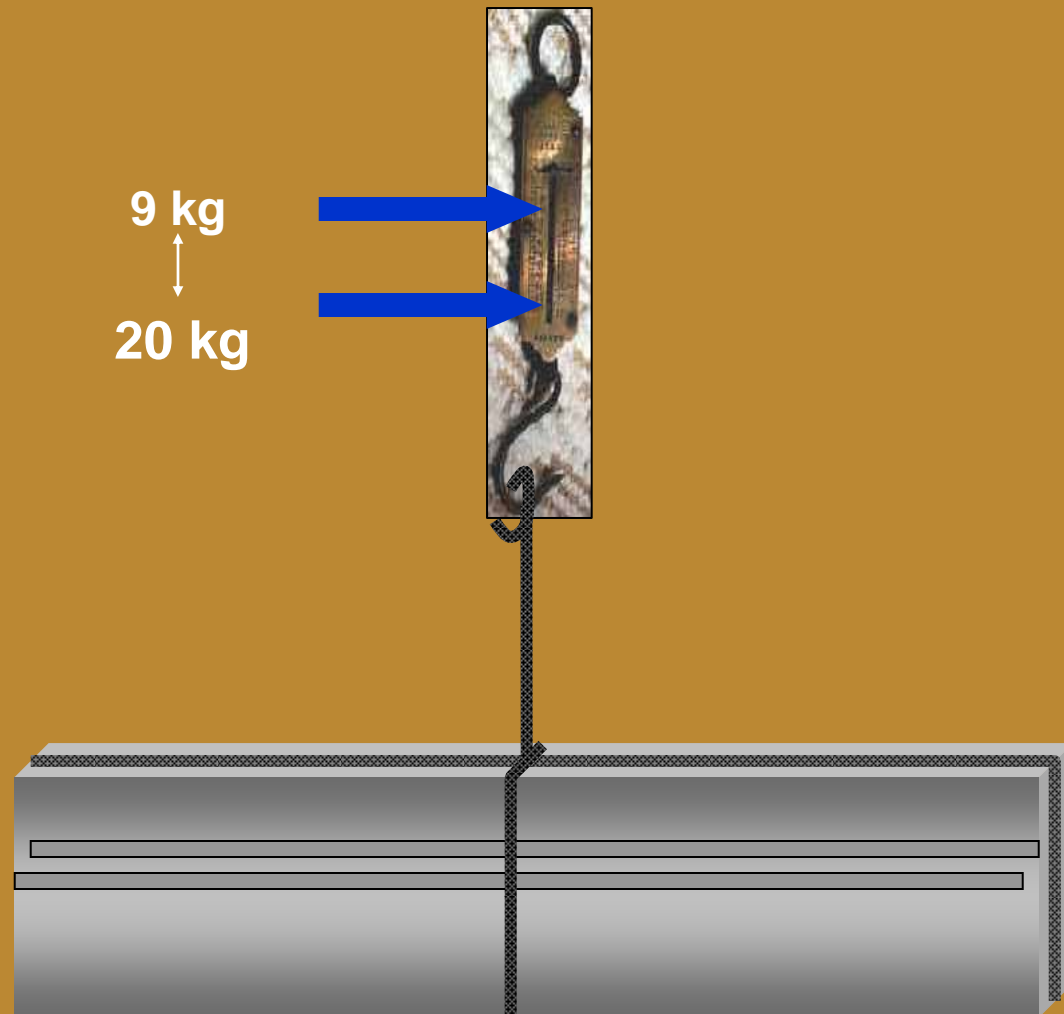
No... you can design whatever shape you wish to use

FRP Competition

The structure must fit in this box

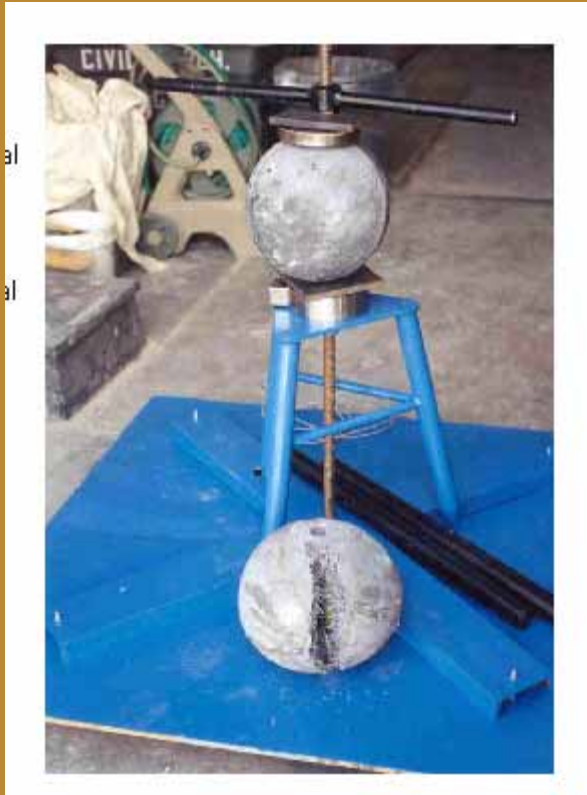


FRP Competition



Bowling Ball Competition

Make it strong!



Roll it straight!



Student Lunch



- ❖ Lunch Menu and Logistics, Awards, and Registration
 - Arranged by ACI
- ❖ Luncheon Speaker
 - Arranged by Chapter
- ❖ Chapter
 - Don't forget to publicize this event
 - Not all local students and professors get ACI info
 - You are the principal contacts/conduits for info

Student Lunch



❖ Chapter Scholarships

- This is an excellent opportunity to award

❖ Invitations

- Student (complimentary luncheon)
- Parents, professor, and friends



ACI maintains an active student scholarship and fellowship program. Adding to that tradition, this is the first year that ACI is including a new set of awards—the ACI Student Fellowships. [Read about ACI's recent student award winners.](#)

Students are invited to participate in ACI's Students' Day, held at each ACI convention.



Top: University of Michigan student Peter Haupt (left) won a scholarship from the ACI Greater Michigan Chapter, presented by Doug Sordyl at the 2002 ACI Spring Convention. Above, from left: [Justin D. Brennan](#), [Stephen P. Cline](#), [Raissa Douglas](#), [Jennifer Duquette](#), [Stephan A. Durham](#), [Britta M. Goldstein](#), [Audra L. Hansen](#), [Amy L. C. Kehrer](#), and [Katherine G. Kuder](#).

Chapter Financial Responsibilities



- ❖ Student Program Subcommittee needs a budget for local **Publicity**
- ❖ **Student Registrations** (Chapter Option)
 - Cost: \$10 per student
 - Logistics of collecting need to be carefully worked out with ACI Event Services

Chapter Financial Responsibilities



❖ Refreshments on Sunday (optional)

– Possibilities include:

- Pizza and soft drink party (need a location near competition)
- Tickets for nearby food courts/restaurants (remember to invite judges and team professor/advisors)
- Dry snacks

Chapter Financial Responsibilities



- ❖ Tickets for students to attend Student Lunch
 - Typically \$25 or \$35 per student
 - Chapter responsible to pay fee for all students
 - Lunch/snacks for judges
 - “Thank-you” mementos for judges (optional)

Organizing a Student Liaison Committee



Establish a committee with clear goals and understanding of its responsibilities

- ❖ Chair
- ❖ Vice Chair
- ❖ Members
 - Local university professors
 - Testing laboratory contact
 - Nearby local Student Chapter

Organizing a Student Liaison Committee



Clearly define expected activities including:

- ❖ Communication
- ❖ Recruitment
- ❖ Publicity (coordinate with Publicity Committee)
- ❖ General convention attendance
- ❖ Competitions
- ❖ Student luncheon

Organizing a Student Liaison Committee



Recruitment

- ❖ Chapter is responsible for promoting locally
 - Consider looking for repeat attendees
 - ACI and E801 handle foreign-student publicity and recruitment of foreign students

Participants



❖ Brazil



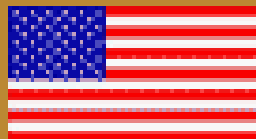
❖ Iran



❖ Mexico



❖ U.S.



Planning



- ❖ Start **EARLY**—you can't start **too** early!
- ❖ Enlist people with a vested interest in success on Student Liaison Committee
 - Members who are in academia
 - Local professors
 - Local student chapters
- ❖ Budget
- ❖ Publicize early and often
- ❖ Personal contact

Communications



- ❖ Spring—initial contact in September
 - Follow-up in January after holiday break
 - Need to assure that students are doing testing
- ❖ Fall—more difficult because students are out of school for summer
 - Initial contact in January
 - Don't wait too long – schools let out in early April

Follow-up, then follow-up, then personally follow-up

Recruitment



- ❖ Remember that students are usually in school at Convention time
 - Sunday isn't a problem
 - Work with a specific school/professor to arrange Monday off from classes for attendance at Convention
- ❖ Get commitment from students/professors

Overseas Student Entrants



- ❖ Remember that the names of your Student Subcommittee members may be on ACI website, so
 - Expect a lot of overseas e-mails from students
 - Expect overseas packages of samples

Recruit people who can speak
Spanish and Portuguese

Odds and Ends



- ❖ Publicity
- ❖ Space to place samples for display and judging
- ❖ Have an off-site “Testing Lab” in “your pocket”

Questions & Answers



Thank You!