

Egg Drop Competition

Sponsored by: American Institute of Chemical Engineers

Teams are required to purchase their own materials and build their Egg drop container prior to arrival at the competition

Objective

The objective of this competition is to design and construct a container which will prevent two raw eggs from breaking when the container is dropped. The competition will be judged on the number of times the container can be dropped without breaking the eggs. The eggs may be dropped at several different heights, from one, two, and/or four stories.

Judging Criteria

- Height of the last drop; or height from which the eggs did not break.
- Originality, feasibility and reusability (in the case of a tie in highest drop).

Design Principals

The following principals constrain the design and materials used so that the competition is safe and does not damage OU property. The judges will not allow a container to be dropped if they deem that it does not follow these principles:

Containers must:

- 1) Not be dangerous to spectators while falling or after impact
- 2) Not damage the landing surface
- 3) Not make a mess that cannot be quickly picked up after impact

Rules

The following rules are based on the principals listed above. However, the following rules do not exhaust every possibility and the judges have final discretion of what is not allowed within the design principals.

- Containers must be ready for loading at the site of competition. Only the eggs supplied by competition officials on site may be used.
- The container may not be "fixed" between drops, except to replace the eggs after inspection.
- Containers must be designed so that they may be dropped from any position. They must also be immediately reusable.
- Container must entirely fit within a 12 in × 12 in × 12 in cube before and within one (1) minute of drop. It must hold two (2) eggs that touch before and after release.
- Container must weigh less than 5 lbs. or 2.27 kg
- The container must hit a 30 ft × 30 ft landing zone on every drop.
- The judges must be able to access the eggs for inspection within one (1) minute of landing.
- No parachutes allowed. This will be strictly enforced.
- Must not break into many small pieces upon impact.

Must not contain:

- liquid or gel
- Food Products
- Many small pieces (such as shredded paper)
- A large quantity of metal (such as a steel frame)
- Styrofoam in any form.

*To be absolutely clear, the judges may consider any material with the suffix FOAM to be Styrofoam. A strict interpretation of this rule will be applied to all containers.

*In the case if inclement weather, Egg drop will relocate indoors.

Material Allowances:

- Wood
- Glue
- Paper products
- Straw
- Rubber
- Rubber bands
- Cardboard
- String
- Plastics
- Bubble wrap
- Tape
- Yarn
- Cups
- Bowls