

2008 ASCE Pacific Southwest Regional Conference

Event: Concrete Frisbee

Description:

To design and construct a Frisbee out of concrete that is both durable and practical.

Participants:

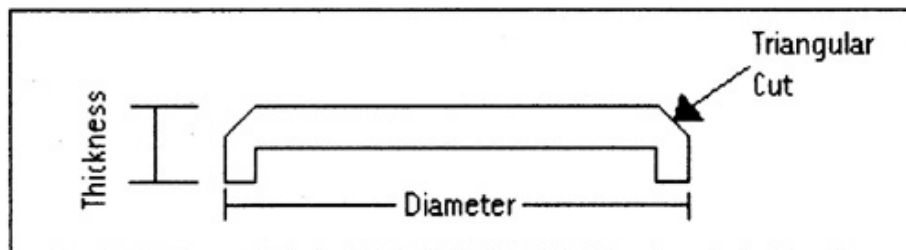
- Each team should have at least two participants
- All participants on this event must be National ASCE members and must be registered for the PSWRC

Materials:

- The primary composite of the concrete Frisbee must be Portland Cement by strength
- All reinforcement must be non-metallic mesh

Event Guidelines:

- The Frisbee must be circular
- The Frisbee must be 8 to 12 inches in diameter measured at extremities in the horizontal plane as shown below
- Must be solid Frisbee and may not contain any holes.
- No more than 15% of the surface area of the Frisbee may be covered by anything other than concrete. This includes, but not limited to, external reinforcement, paint, or stains.
- External reinforcement must not create a shell around the Frisbee.
- The sides of the Frisbee must display an angled cut (or curve) similar to that displayed below.



Scoring:

Scoring will be based on the following factors:

- Aesthetics, Weight, Distance, Accuracy, and Durability.

Aesthetics (15%):

Will be based on uniformity, surface texture, and finish prior to competition as awarded at the discretion of guest judges

Weight (25%):

Each Frisbee will be weighed prior to competition and be compared to the lightest Frisbee at competition (that is not disqualified due to durability portion) by the following equation. The lightest Frisbee will receive the highest points.

$$\text{Points for Weight} = \left[\frac{\text{Weight of Lightest Frisbee}}{\text{Weight of Your Frisbee}} \right] * 25$$

Distance Event (20%):

Boundaries will be marked and shown prior to the beginning of the event. Each team will have two opportunities to throw the Frisbee, by the same or different people. The better of the two throws will be counted. Measurement will be taken from the base line to where it first makes contact with the ground. If the Frisbee lands outside the boundaries or if the thrower's hand crosses the baseline, the throw will be disqualified. The furthest throw will receive the total points.

$$\text{Points for Distance} = \left[\frac{\text{Your Throw}}{\text{Longest Throw}} \right] * 20$$

Accuracy Event (20%):

A fixed target will be placed 50 feet away from the baseline. Each team has two chances of throwing the Frisbee, by the same or different people. The better of the two throws will be counted. Measurements will be taken after the Frisbee comes to rest from the target to the closest edge of the Frisbee. The shortest distance from the target will receive the total points.

$$\text{Points for Accuracy} = \left[\frac{\text{Shortest Distance to Target}}{\text{Your Distance to Target}} \right] * 20$$

Durability (20%):

Durability will be calculated by the following equation. Any Frisbee that has less than 90% of the original weight after the competition will receive a score of 0 for the durability portion. Any Frisbee that has less than 80% of the original weight after competition will be disqualified entirely from the competition and will receive only participation points.

$$\text{Points for Durability} = \left[\frac{\text{Weight after Competitions}}{\text{Weight before Competitions}} \right] * 20$$

Overall Scores

- First : 40 points
- Second: 30 points
- Third: 20 points
- Participation: 10 points

Reference:

2006 UCLA Concrete Frisbee Rules