2025 ASCE Mid-South Student Symposium Concrete Frisbee

(adapted from Texas ASCE Region 6 Student Symposium)

A team is to consist of two to four students from a university in good standing and meet requirements of other competitions required by the symposium. Each participant must be a registered attendee of the symposium.

General Rules

Each team shall fabricate five identical concrete frisbees as outlined below. Judges will number each frisbee 1 through 5, then pick numbers out of a hat to determine which frisbee is used in which competition. Failure to meet the criteria will result in an automatic disqualification. At the judges' discretion, disqualified teams may still be allowed to participate in the throwing aspect of the competition, but will not be eligible for placing.

- 1. Diameter must be between 8 and 12 inches.
- 2. Overall thickness shall not exceed 2.5 inches.
- 3. No resin or epoxy may be used in the construction of the frisbee.
- 4. Pre-packaged or pre-mixed cement or concrete is prohibited. Only Type I L cement is to be used.
- 5. Reinforcement may be used, but should not be visible. Visible reinforcement in any frisbee will result in disqualification. Judges' decision is final.
- School names shall be shown on each frisbee. Logos, inlays, etc., are allowed for aesthetics. Paint should be limited to logo or school name. No paint is allowed within 2 inches of the edge of the frisbee.
- 7. Mix design is at the discretion of the school.
- 8. Each team shall submit one technical poster outlining design and construction. The poster shall be 24" X 36". The poster shall be supported on a vertical orientation during judging.

<u>Scoring</u>

Overall score will be based on durability (20 points), aesthetics (20 points), distance (30 points), and accuracy (30 points). Details are as follows:

Durability (20) – The weight of each frisbee will be determined prior to each throw. The largest piece will be weighed after each throw and used in calculating durability score. If more than 20% of the weight is lost, the score will be zero. Durability for each throw will be calculated and averaged for a final durability score. The score will be determined by dividing the weight after throw by the original weight, then multiplying the result by 20.

Aesthetics (20) – Judges will score each frisbee and each technical poster 1 through 10 for a combined score. Judging will take place prior to throwing events. Decorations may consist of inlays, logos, etc. No paint is allowed within 2 inches of the edge of the frisbee or on the bottom. The school name must appear on the front side of the frisbee. Judges' scores for aesthetics may not be disputed.

Throws - A standing line and competition area will be laid out by the judges. A judge will verify the competition area is clear prior to each throw and verbally signal the thrower. Different throwers may be used for each throw at the discretion of the school. If any portion of the frisbee is out of the competition area after the throw, the score will be zero. If the thrower crosses the standing line at any time, the score will be zero. Judges will retrieve the largest piece of each frisbee after each throw for weight determination.

Distance (30 total) – The maximum distance of the event will be recorded. Two throws are required for each team for a combined score of 30.

$$Distance \ Score = \left(\frac{Distance \ Thrown \ by \ Team \ 1}{Maximum \ Distance \ Thrown \ by \ Teams(1,2,3 \dots n)} * 15\right)$$

Accuracy (30 total) – A target of 10 to 15 feet in diameter will be placed in the competition area. Distance to center will be determined by the judges on the day of the competition. Two throws are required for a combined score of 30.

 $Accuracy \, Score = (\frac{Target \, Diameter}{Target \, Diameter + Distance \, from \, Center}) * 15$