Concrete Cornhole

OVERVIEW
Teams will design and fabricate a cornhole board to be presented at the GLSC Regional Competition. Teams will be judged on aesthetics, functionality as a playable cornhole board, fulfilment of design criteria, and placement in the double elimination tournament.

TEAM REQUIREMENTS
Teams may be composed of 2-4 members. Teams must present two players for each game of the tournament. Players must remain in the game for the full duration of each game but can be alternated throughout the tournament. All players must be registered GLSC members.

DELIVERABLES
Teams must produce the following:

- A cornhole board (brought to competition)
- A mix design spreadsheet (submit by 11:59 PM CST on 03.27.20 to asce-glsc2020@wisc.edu)
  - Email must have the following subject: ‘Concrete Cornhole Mix Design: School Name’
  - Mix design must include a statement about the recycled material included in the mix.
MIX DESIGN

• Cementitious Material
  o Any cementitious material is allowed.

• Aggregates
  o Aggregates must be retained on a #200 sieve and at least 75% of aggregate by mass must pass a ½ inch sieve.
  o At least 20% of aggregate by mass must be a recycled material.

• Admixtures
  o Any admixture is allowed.

• Reinforcement
  o Any reinforcement is allowed.

Failure to meet design criteria and/or submit a mix design table will result in disqualification.

BOARD DESIGN

The board must fit meet the following criteria (see figure 1):

• 48” length
• 24” width
• 2” thickness
• 6” diameter hole with its center at 12” from each side and 9” from the top
  o See Figure 1
• All dimensions are allowed ±0.25”

A support frame will be provided by the host school for tournament play to angle the board at approximately fifteen degrees from horizontal. The structure will support the board on the four outer edges, with two evenly spaced joists running across the underside of the board. See Figure 1 for locations of the joists on the underside of the board.
Concrete Cornhole

AESTHETICS
Teams have full creative license over their board. All finish materials are permissible. Smoothness and cleanliness of the board will be judged as well as the teams’ design (see the aesthetics rubric).

PERFORMANCE
If the board fails structurally or is otherwise unable to function as a working cornhole board during tournament play, the team will lose their current game and be eliminated from the tournament. A functioning board will be defined as a board that is smooth and not warped or cracked.

TOURNAMENT
Teams will be randomly seeded and entered into a double elimination bracket. The games will follow conventional cornhole rules, with a few important clarifications:

- The wooden support structures and boards will be placed 27” apart.
- The games will use cancellation scoring rather than net point scoring.
- If a team ends a round with more than 21 points, they will “bust” and will start the next round with 15 points.
- If both teams reach exactly 21 in the same round, both teams will return to their scores from the previous round and continue until only one team reaches 21.
## Concrete Cornhole

### SCORING

#### 1- AESTHETICS RUBRIC:

<table>
<thead>
<tr>
<th></th>
<th>Poor (1-2)</th>
<th>Good (3-4)</th>
<th>Excellent (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concrete Pour</strong></td>
<td>Concrete is lumpy and rough. Not functional as a fair cornhole board.</td>
<td>Concrete is uniform and provides a consistent playing surface.</td>
<td>Concrete is smoothed and shaped to professional standards.</td>
</tr>
<tr>
<td>/5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Design</strong></td>
<td>Little to no design or aesthetic features on the board.</td>
<td>Some design elements to the board.</td>
<td>Board design is a work of art. Looks more like a piece to hang on a wall rather than throw beanbags at.</td>
</tr>
<tr>
<td>/5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2- OVERALL RUBRIC

The scoring will be determined as follows:

<table>
<thead>
<tr>
<th>Board Design</th>
<th>/5</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Board meets all dimensional requirements.</td>
<td>/5</td>
</tr>
<tr>
<td>• Board meets all mix design criteria.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aesthetics</th>
<th>/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The raw score from the aesthetics rubric will be represented here.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance</th>
<th>/10</th>
</tr>
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<tbody>
<tr>
<td>• Board meets performance criteria for the entirety of the tournament.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Tournament Placing</th>
<th>/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 1st place: 15 Points</td>
<td></td>
</tr>
<tr>
<td>• 2nd place: 10 Points</td>
<td></td>
</tr>
<tr>
<td>• 3rd place: 8 Points</td>
<td></td>
</tr>
</tbody>
</table>

| TOTAL POINTS EARNED:                                                        | /45    |

CONFERENCE SCORING

- The winning team will be awarded 15 points.
- The second-place team will be awarded 10 points.
- The third-place team will be awarded 5 points.
- All other teams with a valid cornhole board entry will receive 1 point.
- Any team that is disqualified for not meeting the rules will receive no points.
- All ties will be broken by awarding the higher place to the team which placed better in the tournament.
Figure 1: Top view of cornhole board.