

ACI Egg Protection Device Competition
Fall 2025 - Baltimore, MD, USA

Addendum 1 - Aesthetics

Responsible Committee

124 – Concrete Aesthetics

Scope

The objective of the aesthetic component of the egg protection device (EPD) competition is to enhance and promote the beauty and artistry of the concrete surface and form of the EPD using techniques and materials specifically intended for use on portland cement (and other calcium-silica based cements) concrete

Format

The Aesthetics Rules are presented in a code/commentary style for ease of use and to familiarize participants with real world documentation and specifications.

Aesthetics Rules

1. Summary

CODE	COMMENTARY
1.1. All Rules and documents of the Egg Protection Device Competition shall be followed.	This includes, but is not limited to: Student Team eligibility Competition registration Competition schedule Egg Protection Device fabrication Worksheet design submittal Competition submittal Safety and behavior

2. Submission, Display, and Theme

CODE	COMMENTARY
2.1. Teams shall not construct replicate devices for the purpose of this competition.	<p>The Team's devices that are prepared and brought to the Egg Protection Device Competition are the same devices that will be evaluated for this Aesthetics Evaluation. The judges will evaluate the device before the device is tested in the egg protection portion of the competition.</p> <p>Photographs, as outlined 2.4, will assist the public in voting for the People's Choice award.</p>
2.2. Teams shall arrive at the start time of the competition to setup their device for display to be eligible for the Public Vote and Judge's Choice assessment.	<p>Each Team's device will be on display prior to being tested as part of the Egg Protection Device competition. The judges will evaluate the device before the device is tested in the egg protection portion of the competition.</p> <p>Photographs, as outlined 2.4, will assist the public in voting for the People's Choice award.</p>
2.3. Teams shall provide a hard copy printout of the aesthetic questionnaire (Exhibit A) that will be displayed with the device.	<p>The answers to the questionnaire have been noted by past judges as being the deciding factor in selecting a winner. This is the opportunity to provide the judges and public with the rationale and reasoning behind the chosen aesthetic choices. It is especially important if the choices are not readily apparent.</p> <p>This submittal is separate from the report submittal required by the EPD competition and outlined in EPD rules Section 4.</p>

2.4. Teams shall provide a hard copy of at least one photo, but no more than three photos, of the device that will be displayed with the device. The photo(s) shall fit completely within or on an 8.5"x11" [216 x 279 mm] rectangle. The media on which the photo(s) are printed shall be no thicker than 39 mils [1 mm].	<p>While the devices will be physically displayed, public voting will be open throughout the event, including after the device has been tested. To allow the public voters to see what the device was prior to testing, the photographs will be displayed alongside the device.</p> <p>The intent is to have photos that are printed either on a single letter-sized paper or multiple individual photos from a photo printer. The photos should not be mounted onto anything, which is the reason for the thickness maximum.</p> <p>This submittal is separate from the report submittal required by the EPD competition and outlined in EPD rules Section 4.</p>
2.5. The theme for the Egg Protection Device Competition shall be "Cultural History of Baltimore."	Baltimore has an incredible and rich history. The intent of the theme is to have teams explore and represent a small portion of that history through an aesthetic design process.
2.6. Teams shall not incorporate their school name, mascot, emblem, or other representative elements into the aesthetic design.	The intent is to have the design represent the theme of "Cultural History of Baltimore" and not focus on the schools competing. Additionally, the lack of identifying school information will allow for the judges to evaluate the devices in an unbiased manner.

3. Process, Methods, and Materials

CODE	COMMENTARY
3.1. The aesthetic process shall be effectively produced using commercially viable techniques and materials.	The challenge in this competition is develop a striking aesthetic process for the device while also employing commercially available materials and techniques. This is also referenced in the EPD rules 2.1.9 and 3.2. Some examples of those materials and techniques include, but are not limited to, the following:

	<p>Acid staining</p> <p>Stamping</p> <p>Integral color</p> <p>Polishing</p> <p>Usage of 3D printed formwork to create a non-prismatic structural shape</p> <p>While at first glance it may appear that usage of 3D printed parts and formwork is not a commercially viable process, precast concrete companies and others have efficiently and effectively utilized 3D printed formwork at full-scale for real-world projects for a number of years. There is no cost analysis of the chosen technique. The competition is setup to spark creativity only bounded by state-of-the-practice, not life cycle cost, cost-benefit, or other metrics.</p> <p>For best practices and information on the state-of-the-practice, teams are encouraged to look at the following ACI documents:</p> <p>ACI SPEC-310.1-20: Specification for Polished Concrete Slab Finishes</p> <p>ACI/ASCC PRC-310-25: Decorative Concrete—Guide</p> <p>ACI PRC-303-12 Guide to Cast-in-Place Architectural Concrete Practice</p>
<p>3.2. All materials applied, embedded, or otherwise incorporated into the Egg Protection Device shall have an accompanying Technical Data Sheet (TDS) or Manufacturers Certification (i.e. Mill Test Report) that explicitly identifies the material is appropriate for use in concrete and/or cementitious materials applications.</p>	<p>Acceptable substitution for the TDS or Manufacturers Certification is a signed and dated letter from a technical representative of the manufacturer stating the material meets the requirements of these rules. The judges and aesthetics committee reserves the right to contact the technical representative listed or another representative at the manufacturer to inquire about the specific suitability of the material application in concrete/cementitious</p>

	<p>scenarios. Teams found to be fabricating or otherwise misleading the judges on the applicability of a material in concrete usage will be ineligible for awards.</p> <p>TDS or other documentation is not required for batch water or natural aggregates.</p> <p>Materials used for formwork, stamping, and/or patterning that are not part of the final device do not need a TDS. For example, if polylactic acid (PLA) is used to 3D print formwork, a datasheet for PLA is not required.</p>
<p>3.3. Teams shall bring 1 set of hardcopies of all TDS and/or Manufacturers Certification, bound with a staple, binder clip, or comb binding with the explicit reference to usage in concrete/cementitious materials highlighted for easy verification. The team name shall be printed on the cover of the submission packet.</p>	<p>These will be turned into the judges and will not be returned. Often times teams will forget to physically print out the documentation. While there are facilities in most hotels and convention centers to print, teams are encouraged to create a punchlist or checklist for their travel to the convention so that the required documentation is not forgotten. Teams without a hardcopy of the TDS and/or Manufacturers Certification documentation will not be eligible for aesthetics awards.</p> <p>This submittal is completely separate from the submittal required by the EPD competition and outlined in EPD rules Section 4.</p>

4. Eligibility

CODE	COMMENTARY
<p>4.1. Teams violating any of the code requirements in this document shall be ineligible for aesthetics awards.</p>	<p>Eligibility for the aesthetics competition does not affect the eligibility for the Egg Protection Device competition. For example, a team found to be ineligible due to non-compliant materials will still be fully eligible for the Egg Protection Device competition.</p>

<p>4.2. Teams found to be violating the spirit and intent of the public vote shall be ineligible for aesthetics awards.</p>	<p>Activities such as, but not limited to, identifying schools to the voting public, asking for the public to vote for a specific device, and/or ballot box stuffing are all grounds for being ruled ineligible for the aesthetics competition.</p>
<p>4.3. Teams found to be interacting with the judges during official judging shall be ineligible for aesthetics awards.</p>	<p>The judges may want to discuss the processes, materials, and techniques with teams but this will occur after the judges have made their ranking of the devices.</p>

Exhibit A – Aesthetics Information Sheet

Requirements:

- Each question shall have a response of no more than 40 words.
- Responses shall not have identifying information of the school or other affiliations.
- Responses shall be in English.
- Responses shall be typed or neatly hand-written.

1. What aspect of “Cultural History of Baltimore” is your aesthetic design focused on?

2. How does your team’s design capture those aspects?

3. What techniques and/or materials did your team use to create your design?

4. Why did your team choose those techniques and/or materials to convey the design?

TEAM ID:

Official Use Only.

Place label here.