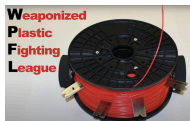


WPFL @ ASMBLY - Rules

Rev 4 - Oct. 13th, 2026

WeaponizedPlastic@asmbly.org



About this event

Weaponized Plastic @ Asmbly is a 1kg combat robot event hosted by [Asmbly Makerspace](#) in collaboration with WPFL and run under the [Weaponized Plastic Fighting League \(WPFL\) ruleset](#). This document adapts the official [WPFL 2026 rules](#) for our specific venue, arena, and event schedule; this isn't a different competition format, just a local adaptation of the same WPFL rules.

Deviations from official WPFL guidelines are marked with an asterisk (*). If you've built for a WPFL event before, most of this will be familiar; pay closest attention to the asterisked items and the [Eligibility & Registration](#) section, which is Asmbly-specific. If this is your first combat robot event, read the whole thing before you start building, especially sections about [General Safety](#) and [Robot Specifications](#).

A. Eligibility & Registration

This event is open to anyone including first-time robot builders too. This section covers who can enter, how registration works, what happens if the event fills up, and what you're agreeing to by competing.

1. **One robot rule:** To encourage broad competition, participation is welcomed from both individual builders and groups, though entry is strictly limited to **one robot per individual/team**. Contestants who attempt to circumvent this restriction may be disqualified at the discretion of the Judges and Event Organizers.
2. **Register your Robot:** Registration opens **August 26th, 2026** and closes **October 17, 2026**. You must register your robot using the following [Registration Form](#).
3. **No entry fee:** This event is sponsored by Asmbly and the City of Austin, so it is free to participate and attend.
4. **Maximum contestants:** Approximately **20 robots** will enter the actual competition. Actual number may change prior to the event. Arena will be open to unofficial fights in between rounds
5. **Waitlist:** Once the Maximum contestants cap is reached, further registrations go on a first-come, first-served waitlist. Waitlisted entrants are notified by email if a spot opens (e.g. a registered participant withdraws). The waitlist closes at the same registration deadline, October 17, 2026. Waitlisted robots that don't get a bracket slot are still invited to attend, may demo outside the bracket if arena time allows, and may get priority registration for the next event.
6. **You agree to play by these rules:** All participants (or a parent/guardian for minors) must acknowledge these rules and sign any required Asmbly liability waiver before competing.



B. General Safety

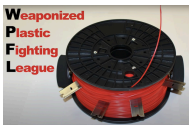
Safety tech isn't optional. Every robot is inspected before it's allowed to fight, and the rules below exist to protect competitors, volunteers, and spectators around powered, weaponized (plastic) machines. Failing safety tech means you don't compete until the issue is fixed.

1. Robots are only to be powered on inside the arena.
2. All robots must pass safety inspection before competing. Inspection verifies compliance with the rules below and the material/weapon rules in the [Robot Specifications](#) section.
3. All weapons must have a physical locking mechanism that prevents unintended startup. It must be engaged at all times the robot is outside the arena.
4. Robots must be fail-safe: on radio or data disconnect, all weapons must spin down and all movement must stop.
5. Battery voltage must not exceed 50V. Batteries must be protected from a direct hit. If a battery becomes exposed at any point during a match, the robot immediately forfeits.
6. Robots must have an easily accessed power switch.*
7. The safety inspection operates continuously on a rolling basis; please consult the [Event Dates & Schedule](#) section for specific timings. Instead of assessing all entries in a single block, robots undergo checking individually as soon as they arrive and are prepared, ensuring that each machine is fully cleared prior to the start of the first match. If a robot fails to pass inspection, it cannot participate and will be replaced by contestants in the waitlist unless the problem is resolved and the machine successfully passes a re-check, provided time allows.
8. No changes or modifications are allowed after a robot passes its safety check .
9. Up to 1 full robot replica is allowed as replacement as long as they are the exact same design as the original robot passing safety. There is no limit on how many replacement parts the participant brings to the contest.
10. Pre-fight safety inspection may be enforced if needed.

C. Robot Specifications

These are the physical build rules: weight, size, material, and weapon requirements a robot must meet to be legal for competition.

1. Maximum weight: 1 kg
2. Maximum size: must fit in a box 30cm x 30cm x 30cm at all times.
3. Allowed materials:
 - 3.1. 3D-printed plastics: PLA, PETG, ABS, nylon, polypropylene, and similar filaments/resins.
 - 3.2. Reinforced/engineered plastics — fiber-reinforced filaments and similar. TPU is not permitted on the exterior of the robot or on the weapon.
 - 3.3. Non-polycarbonate plastic sheet, 1mm thick or less, is allowed to shield electronics, batteries, or drive components.
 - 3.4. Weaker-than-plastic materials such as paper, cardboard, foam, balsa wood, and similar.
 - 3.5. Weaker-than-plastic materials such as paper, cardboard, foam, balsa wood, and similar are allowed, but non-plastic armor materials are limited to a maximum



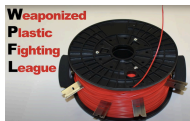
thickness of 12mm (e.g., a robot with a cardboard shell can only have 12mm thick walls).

4. All weapons must be made of 3D-printed plastic or other allowed materials. This is core to the spirit of the WPFL competition. Participants who intentionally build with stronger materials or techniques will be disqualified.
5. The robot body should also be primarily 3D-printed or made of allowed materials.
6. No metal may be used as a cutting or impact edge in a weapon; e.g. a screw body or head may not be designed to make contact with an opponent's robot. Metal may be used internally to increase weapon inertia provided it is completely enclosed and not exposed. If internal metal becomes exposed during a match, the robot is immediately eliminated.
7. Metal fasteners (screws, bolts, nuts) must not serve as a cutting/impact edge, armor or shield intentionally.
8. Banned outright: polycarbonate sheet goods, metal cutting/impact edges, fire/explosives, fluids, EMP systems, jamming devices, projectile weapons. Don't get clever here; you will fail safety tech and be immediately disqualified.
9. Robots should incorporate an active weapon system, actuated independently from the drivetrain. Passive designs are generally scored lower by judges.
10. Robots may not be hazardous to the arena; e.g. a robot uncontrollably bouncing off arena walls may be disqualified at the discretion of any judge.
11. Cluster or swarm configurations are permitted, provided the combined units stay within the maximum weight cap (1 kg) and fit together inside the 30cm x 30cm x 30cm sizing cube. Each distinct bot must remain physically independent without tethering or physical connections to other entries.

D. Arena Specifications

The arena is what keeps combat contained and spectators safe, and its dimensions shape what weapon and mobility strategies make sense. Confirm the built Asmbly arena against the spec below before finalizing your weapon design.

1. Arena is approximately 4ft x 4ft x 2ft tall.
2. Floor is plywood, painted black. Walls are 1/4" polycarbonate.
3. The arena edge is lined with a sacrificial 1x4 pine edge, painted black.



E. Combat Rules

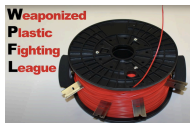
These rules govern what happens once robots are in the arena: match length, win conditions, and the safety stoppages that can pause or end a fight mid-match. Most of this matches the general WPFL ruleset; the one exception is match length.

1. Each match lasts 2 minutes*
2. Matches are conducted using standard tournament bracket formats (e.g., double elimination, Swiss style, or round robin depending on participant count).
3. A competitor may forfeit at any time to prevent further damage to their robot.
4. If a robot appears incapacitated, judges start a 10-second countdown. If the robot fails to move within that window, it forfeits the match. If both robots are stuck or stuck together, a judge may pause the match to manually unstick them.
5. A robot may pin and hold an opponent for a maximum of 10 seconds. Judges will instruct competitors when they must separate.
6. If both robots survive the full match, judges decide the winner.
7. Competitors get at least 10 minutes between their own matches. Plan battery charging and spares accordingly.
8. Expect roughly 3 minutes of arena transition time between matches generally (robot swap, arena reset, safety re-check). This is separate from the 10-minute personal rest rule above.

F. Conduct Policy

Weaponized Plastic @ Asmbly is a public, family-friendly event, and the arena sits alongside general Asmbly Makerspace visitors and their families. This section covers the sportsmanship and behavior expectations that apply to everyone on-site, competitor or not.

1. Good sportsmanship is expected from every competitor, team, and guest.
2. Unsafe, reckless, or disruptive behavior toward people, robots, or the arena is not tolerated, and may result in forfeiture, disqualification, or removal from the event at event staff's discretion.
3. Minors may participate with a parent or guardian present and a signed waiver on file.



G. Event Dates & Schedule

Dates and times specific to the October 24, 2026 event.

1. Important dates for Participants:

Date	What happens
Aug. 26th	Registration Opens
Oct. 17th	Registration Closes
Oct. 24th	Event day

2. Event Schedule

Time	Activity
10:00 AM	Open for participants (load-in / pit setup)
11:00 AM	Safety checks start
3:00 PM	Safety checks end
4:00 PM	Brackets announced
4:00 PM	Doors open to public
4:00 PM	First fight begins (robots pre-cleared via rolling 11 AM–3 PM safety checks)
8:30 PM	Event ends
9:00 PM	Doors closed

H. Contact

Questions about these rules, registration, or the event in general?

Email us at
weaponizedplastic@asmbly.org