

25 August 2020

REGULATION BULLETIN #1

PVC Pat

We have had several Teams enquire about how PVC Pat may be fitted into a seat.

The primary intent of Regulation 2.13.2 is to ensure that the solar car cockpit has adequate room to reduce fatigue for a broad range of possible occupants. Requiring cars to accommodate Pat will also ensure that Teams do not get an advantage by having small occupants.

Pat's dimensions are based on a 95th percentile person. Rather than require Teams to obtain an expensive anthropomorphic manikin, we have designed a manikin that has low cost and is easy for Teams to build.

The following points clarify how PVC Pat must fit into each seat:

- When seated in the normal seating position, Pat must be protected by the occupant cell (Regulation 2.11), with the exception that Pat does not have to wear a helmet (Regulation 2.11.4).
- Pat does not have to meet the vision requirements (Regulation 2.17).
- The outer edges of Pat's ankles will be 436 mm apart, as shown in the drawing.
- Pat's head can tilt forwards, but no more than 20°. Pat's head does not yaw.
- Pat, or a person no smaller than Pat, must be able to get in and out of the normal seating positions. You may remove Pat's legs, temporarily, to help get the torso and head into position.
- Pat's hip point must be in the same position as the hips of an actual driver in the normal driving position, or an actual passenger in the normal seated position.

Any questions with regards to the Regulations should be addresses to the Participant Liaison Officer via email - teams@worldsolarchallenge.org