

# Playing Field

## Playing Field

- Light blue floor. The floor is composed of sheets of indoor/outdoor carpet which may have seams or small gaps. The robot should be able to cope with such imperfections.
  - Walls 11.75" high, painted white on the bottom with blue tape on the top 2". Walls may be straight or circular, but the minimum heads-on profile will be at least 3". (i.e., a wall will not be shaped such that you could view one from any direction and see less than 3" of material.)
  - The blue line will have irregularly spaced tick marks of identical blue tick marks 1.5-inch wide.
  - On parts of the wall between the blue line and the carpet will be vertical green and black bar codes with five bits. Every bar code will have an odd number of green bits (this can be a check for your code). The bar code will be 10 inches tall and 2 inches wide (each bit will be a 2 inch by 2 inch square).
  - There may be imperfections where the wall units meet. Organizers will attempt to minimize these.
  - The carpet may have seams, gaps, and the floor may be imperfectly flat. Students should examine typical seams and the floor to understand these imperfections.
  - A mousehole is a 6-inch-high by 10-inch-wide hole at the bottom of a wall. The mousehole is trimmed on the both sides and the top by a 2 inch-wide yellow stripe. A Landing zone is the 14x14 inch area on the floor centered in front of each mousehole. A white wall will be placed behind the mouse hole so that from the majority of angles on the playing field, nothing other than white wall is visible through the hole. From extreme angles, non-wall may be visible.
  - Above each mousehole will be a goal, flanked by 1.5-inch wide yellow goal posts sticking about 8" above the top of the wall. Behind the wall will be a goal bin with a ramped floor. The top of the bin's wall will be 2" above the field walls.
  - Small pieces of black electrical tape may appear on the playing field surface. They will be about 1" long and no less than 3" apart. They will be used by the judges to mark scoring areas for the audience. Their presence, shape, etc are not guaranteed. Robots must be able to cope with such electrical tape appearing at any location.
  - The playing field may have island obstacles, in addition to an irregular perimeter. There will be a path at least 18" wide connecting all targets, scoring areas, and the starting location. There may be additional paths that are smaller.
  - Targets are small wooden balls painted red, 2.25" in diameter.
  - There will be a minimum of 1 mouse hole, and a maximum of 4.
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