


















# CHECK-LIST Homologation guide



Are my robots ready for the approval tests? Check it yourself!









Test these following points (non exhaustive list) before presenting your robots to the approval area.

## Robot

-  ≤ 120 cm: **non deployed perimeter** (in vertical projection)
-  ≤ 140 cm: **fully deployed perimeter** (in vertical projection)
-  ≤ 35 cm: **height** (beacon support and emergency stop button excluded)
-  ≥ 50 cm: cord length (**starting system**)
-  Beacon mast support (optional): convex hull at any altitude, between a 7×7 cm circle & a 10×10 cm square, solid & opaque.
-  Beacon support (optional): min a Ø 7×7 cm circle to max a 10×10 cm square, Velcro rough hook side, stable, height=43 cm, may support 300 g
-  **Obstacle avoidance system**; sufficient coverage around the robot in order to guarantee the detection in all the moves
-  Ø ≥ 2 cm, height ≤ 37.5 cm and red coloured: **emergency stop button**
-  A space of 100 x 70 mm is visible on one side for sticking the participation label.
-  Presence of an **actuator** that can be used for one action (not necessarily to move)
-  ≤ 4 bars at any point of non-commercial compressed air systems
-  **Lasers**: classes 1, 1M authorized; classes 2 accepted if the laser stays inside the playing area; higher classes forbidden. Provide the data-sheets.
-  All the **Lithium** batteries in safety bags (except LiFePO4 & Mindstorm); bring the chargers.
-  No forbidden equipments or **dangerous** for the persons or the goods (playing areas). File the projecting parts.
-  The robot must stand in the starting area.
-  The SIMAs must stand in the starting area.
-  The score display is visible and easy to read. It is installed on the robot







## SIMA

I do not have a SIMA (skip the following)




-  **fully deployed perimeter** ≤ 10 cm + **non deployed perimeter**
-  ≤ 15 cm: **height** (beacon support and emergency stop button excluded)
-  **Obstacle avoidance system**; sufficient coverage around the robot in order to guarantee the detection in all the moves
-  Ø ≥ 2 cm, height ≤ 37.5 cm and red coloured: **emergency stop button**
-  ≤ 4 bars at any point of non-commercial compressed air systems
-  **Lasers**: classes 1, 1M authorized; classes 2 accepted if the laser stays inside the playing area; higher classes forbidden. Provide the data-sheets.
-  All the **Lithium** batteries in safety bags (except LiFePO4 & Mindstorm); bring the chargers.
-  No forbidden equipments or **dangerous** for the persons or the goods (playing areas). File the projecting parts.

## Additional constraints




### Remote computing device

-  Should be contained in the dedicated platform
-  - Width  $\leq 32.2$  cm;
-  - Length  $\leq 45$  cm.
-  - Height  $\leq 160$  cm.
-   $\leq 5$  kg : weight
-  Emergency button (if batteries)  
Fixation: threaded rod of  $\varnothing 8$  mm & butterfly nut.





### Embedded beacons

-   $\leq 10 \times 10 \times 8$  cm, velcro soft loop side/bottom, rough hook side/top.
-   $\leq 300$  g : weight
-  Laser & batteries constraints are the same as for robots.

### Fixed beacons

-   $\leq 10 \times 10 \times 100$  cm
-   $\leq 1,5$  kg : weight
-  Fixation: threaded rod of  $\varnothing 8$  mm & butterfly nut.  
Laser & batteries constraints are the same as for robots.

### Banner

-  Long  $\geq 50$  cm and heigh  $\geq 20$  cm
-   $\leq 5$  cm : deep inside the table
-  No forbidden equipments or **dangerous** for the persons or the goods (playing areas).
-  Emergency button (if batteries)  
All the **Lithium** batteries in safety bags (except LiFePO4 & Mindstorm); bring the chargers

### Good to know!

- I anticipate my passage to the approval area. I do not wait until the last minute!
- I do not hesitate to homologate my systems individually when they are ready.
- When a substantial material modification is done, I must re-homologate what is necessary.

