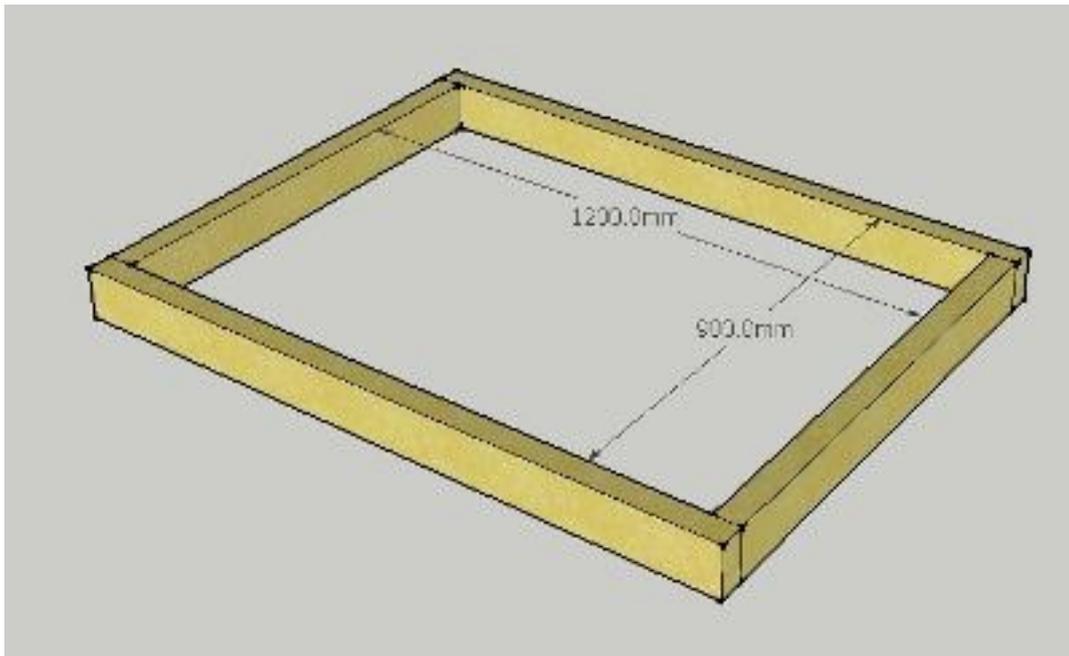


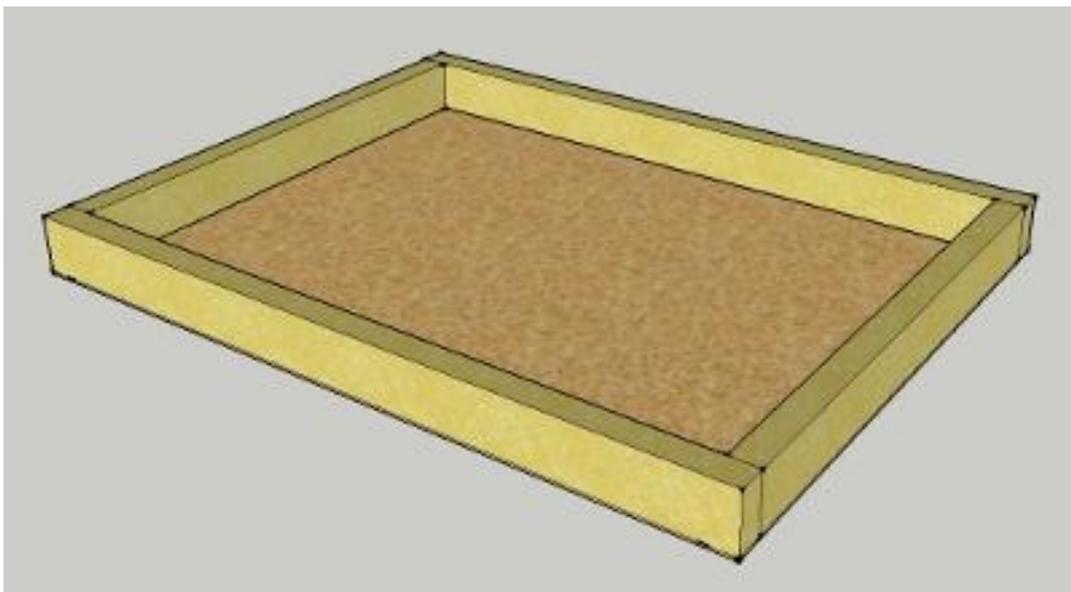
RoboCup Junior Rescue – Suggested Building Instructions

Below are suggested building plans for a single module.

1. Construct a frame out of sturdy wood such as 2x4s, 2x3s or 2x2s. Cut two pieces 900mm long and two pieces approximately 1300mm Long (assuming you 50mm thick wood). Attach them together to create a frame, as follows:

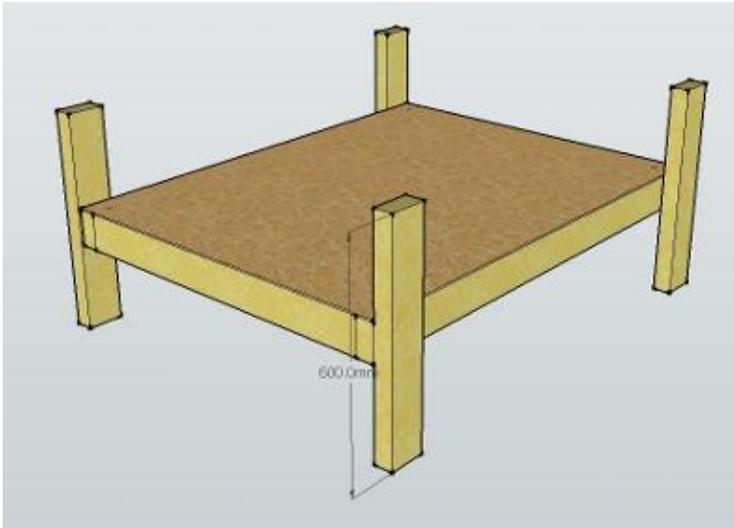


2. Lay a piece of 1200x900mm (4 foot by 3 foot) plywood or fibreboard (1/4" thickness is adequate) on top of the frame and attach it securely.

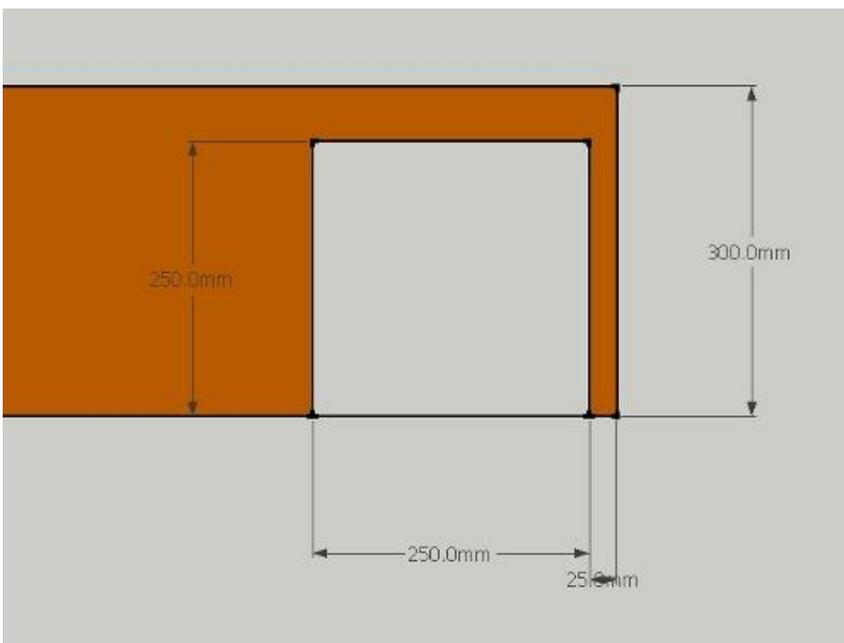


3. Cut four 2 foot long pieces of the 2x4s (or 2x3s or 2x2s) to act as vertical supports (like legs).

- Attach the vertical supports to the outside of the frame at each corner so that each vertical piece extends 11 inches above the floor of the module. It is recommended that you drill holes through the vertical support and attach them to the frame using bolts, so that it is easy to take the module apart to transport it.



- Cut 4 walls out of fibreboard, cardboard or foamcore, two of each size of 900x300mm and 1200x300mm
- Cut out doorways as necessary and attach to the vertical supports. Note that you can turn the pieces with the doorways to face either way (i.e., the doorway can be on the left or the right).



You can make multiple modules and connect them via hallways or ramps. The hallways and ramps are at least 12 inches (approximately 30 cm) wide. Note that a ramp begins and ends on square platforms, level with the room it is going into/out of. The pitch of a ramp will be no steeper than 25 degrees.



(Unlike the sample above, continue the wall along the ramp so that the robot won't fall off!)

Original Concept and Photos - [Sklar, Parsons, Anderson and Baltes, 2002]