



GEN II Robot Soccer

Field Construction For Table Tops

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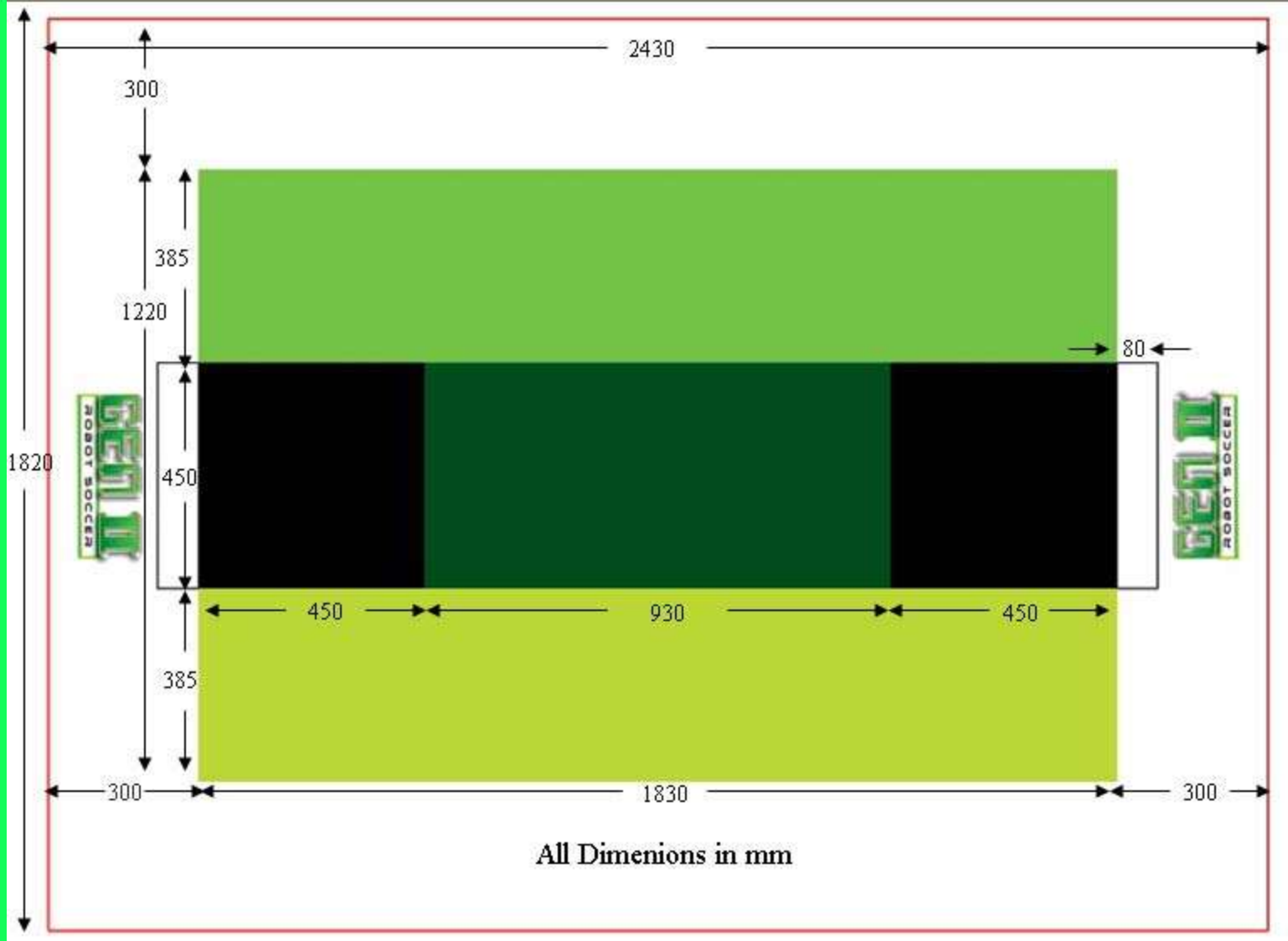


Competition Setup -On a Table

- This is a suggested field construction for competitions that need to be held on a table.
- For ease of spectating, it is suggested that GEN II games are conducted on the floor. If magnetic or other conditions do not allow this then the field will need to be placed on a table.
- Variations to the suggested construction can be made due to local constraints, within the rules, but should be consistent for all fields at an event.
- Construction should be as accurate as possible as commercially supplied walls and goals are mm perfect.
- If construction is done carefully, a wrinkle free field is easily achieved
- Due to the roll resistance of the mat, the horizontal nature of the table is not as critical.



The GEN II Field



The white outer edges of the field are inclined by 1cm

Materials

- 2 2430X300X6mm mdf, ply, masonite or similar
- 2 1830X300X6mm mdf, ply, masonite or similar
(some wood yards will cut an 2430 X 1220 sheet to 300mm strips)
- 2 1830X1220X 12mm(or close) chip board, ply wood or mdf
(must be accurate if using manufactured walls)
- 1 2000X 1500 2-5mm industrial carpet, felt, polar fleece etc.
- 3 2430X12X10mm pine strips(cut from 140x12mm pine wood)
- 1 Set of Goals and Walls supplied by MTA or Semia
- 1 GEN II Soccer Mat
- PVA Glue
- 12mm brad nails
- 20mm Flat Head drill in wood screws





Marking Out

- Use the 300 borders to mark out the field on the table.(shown)
- Find the centre of the 1220 end then mark in the position of the goals.



Inclined Borders

- Cut the field mat to width using a cutting knife and the edge of one of the 300mm borders.
- Accurate markings are printed on the field.
- Always cut with the incline on the interior of the field so that any slips will not result in damage to the field.
- Check the length measurements of the inclines accurately. (2430mm and 1820mm)
- Cut accurately to size.
- Mark 300mm along the interior edge of the inclines (shown)
- Rule in 45 degree corners with marking pen.
- Cut 45 degree corners out.



Inclined Borders

- Lay out the borders on the table
- Check for size and fit by placing the walls around the borders
- The borders must fit comfortably inside of the walls.
- Find the central point of the end borders.
- Accurately locate the goals centrally on the borders.
- Mark the outer surface of the goal on the end border (shown below left)
- Cut end pieces to accommodate goals.
- Use a chisel to cut in the slot. (shown below right)
- This must be a good fit to ensure structural strength of the goals.



Inclined Borders

Attach 10mm strips using glue and 12mm brads or nails



Inclined Borders (Optional)

- If you have access to a planer, you may want to minimise the step from the field to the incline. Remember to leave a 3mm step to allow for felt or fabric on the table
- An alternative border design is to progressively plane and glue 3mm mdf as shown.



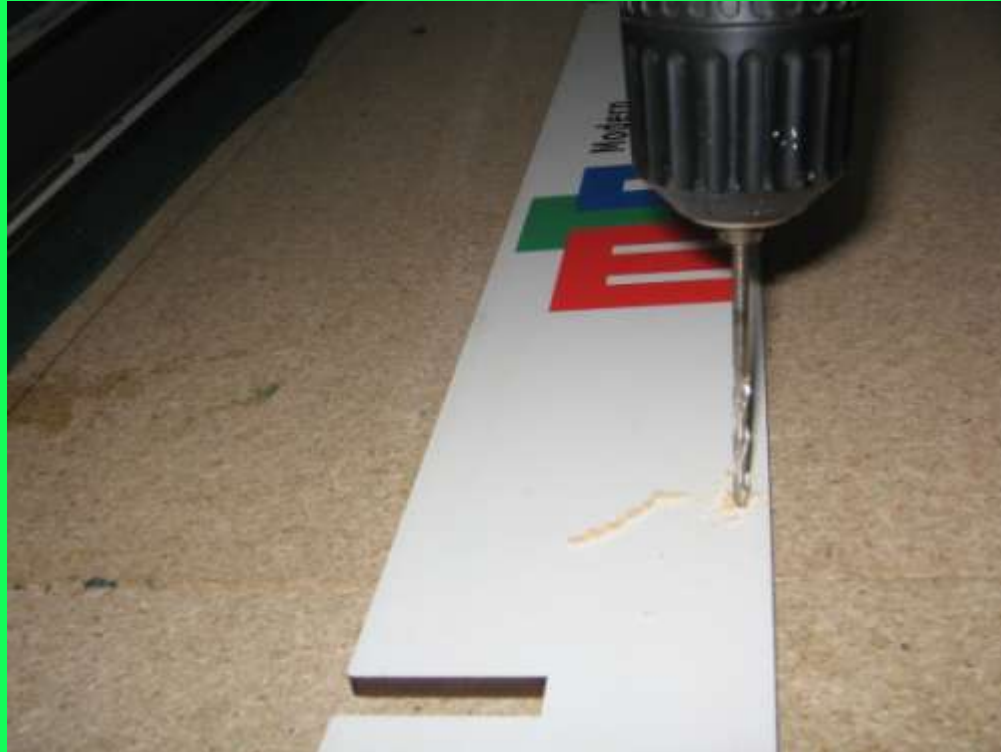
Mat Preparation

- Carefully cut the outer edges of the side of the goals onto the mat
- It is critical that this must be as accurate as possible to prevent wrinkles.
- Cut the slots into the mat to accommodate the goal support. (not shown)



Walls

- Pre drill screw holes in walls at regular intervals, 5mm from bottom edge.
- Ensure that holes are drilled close to either side of the back supports of the goals



Fabric

- Cut the fabric, felt, carpet etc to size.
- Glue to the table surface using Art Gum or Contact Adhesive.
- Glue in goal inserts. These are important so that a lip is not created on the goal line.





Assembly

Screw the walls onto the table. The slots must match perfectly with the corners of the table or pieces will not slot together.

Place borders on the table

Insert and check the goals for a good fit and then remove them.



Assembly

- Gaffer tape the corners of the inclines (shown)
- Gaffer tape the borders to the table (shown)
- Apply two sided tape at corners to the inside of the border on top of the gaffer tape (shown)
- Roll the mat out carefully by starting with it tightly placed on one end, then rolling, smoothing and attaching to the tape as you go.(shown)



Assembly

- Insert the goals.
- Screw the walls in pre drilled holes.
- The wall at the back of the goal must be strongly secured.



Lets Play!!



- If the field is accurately constructed any wrinkles from packaging and storage
- will disappear after an hour or so.
- The mat can be cleaned with water.
- Solvents of any kind must not be used