

### Task 3.1 - Biped Patrol (BP)

Greetings from e-Yantra!

After construction of the supply Items, we will construct the Bridge for the arena as indicated in the Rulebook.

For construction of the Bridge we will use **MDF board of 4 mm thickness**. MDF stands for Medium-density fibreboard, which can be purchased from any Hardware/Plywood store.

For making the bridge we will cut out shapes given in the “**Bridge Shapes.jpg**”. You will find this image in the same folder as this document.

There are three types of shapes you will cut from the MDF board based on “**Bridge Shapes.jpg**”. All the dimensions in this image are in mm (millimeter) First shape for the top will be required in a quantity of two. Refer to image below:

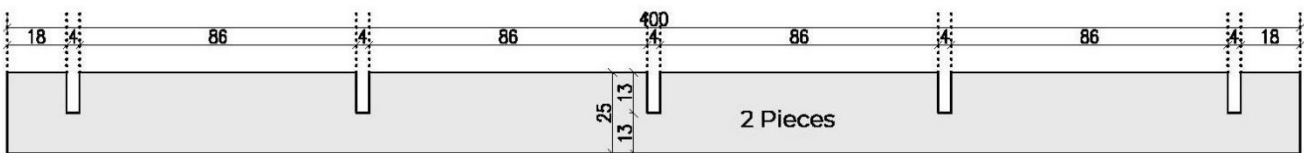


Figure 1: Shape 1

Second shape for the top will be required in a quantity of three. Refer to image below:

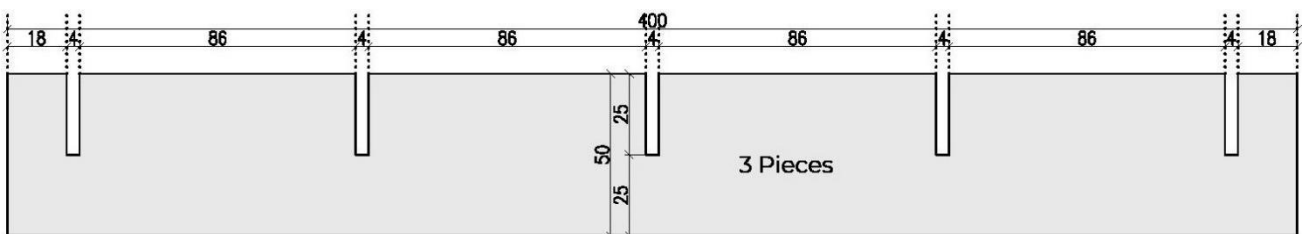
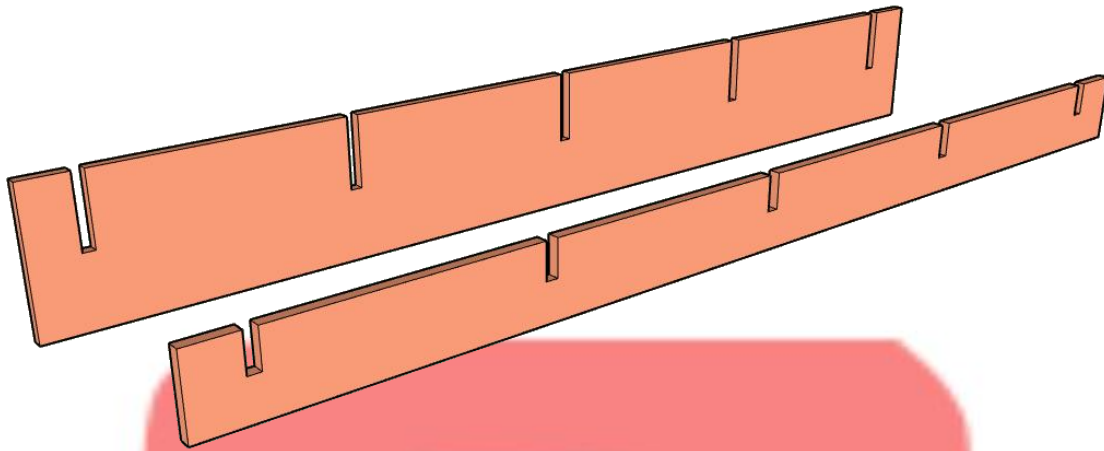


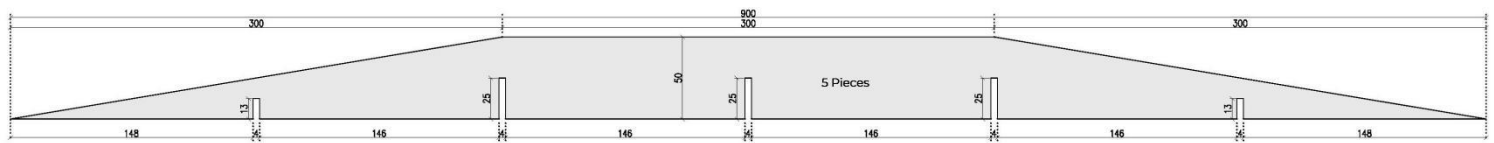
Figure 2: Shape 2



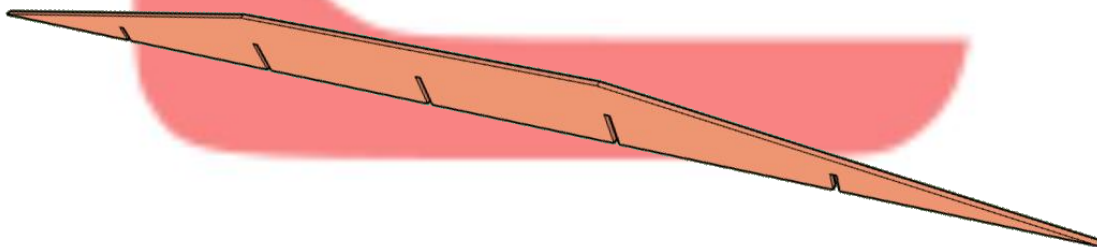
**Figure 3**

Shape 1 & Shape 2 will look something like the objects shown in the image above.

Third shape for the top will be required in a quantity of five. Refer to image below:



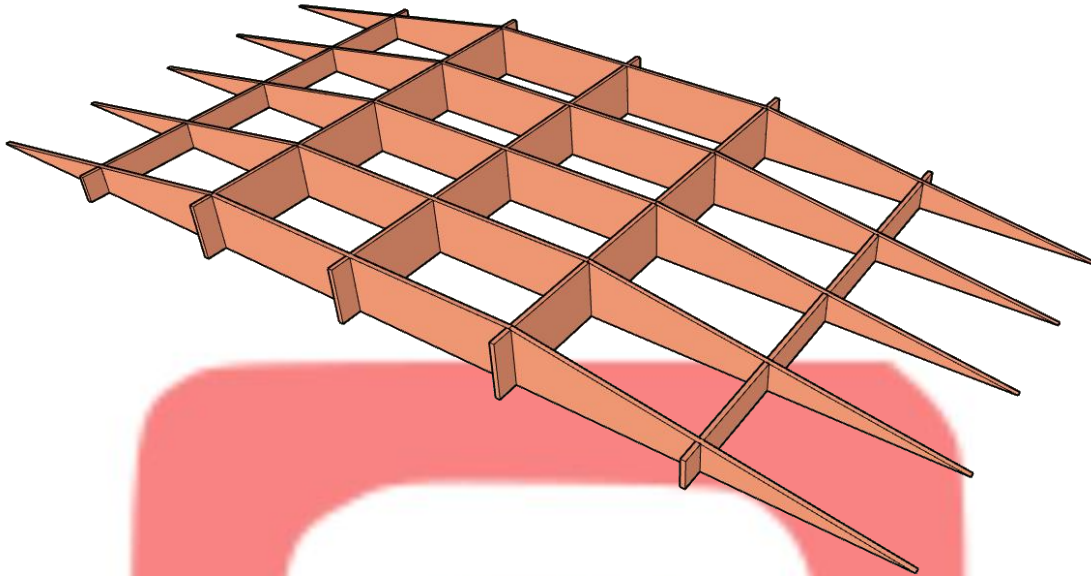
**Figure 4: Shape 3**



**Figure 5**

Shape 3 will look something like the objects shown in the image above.

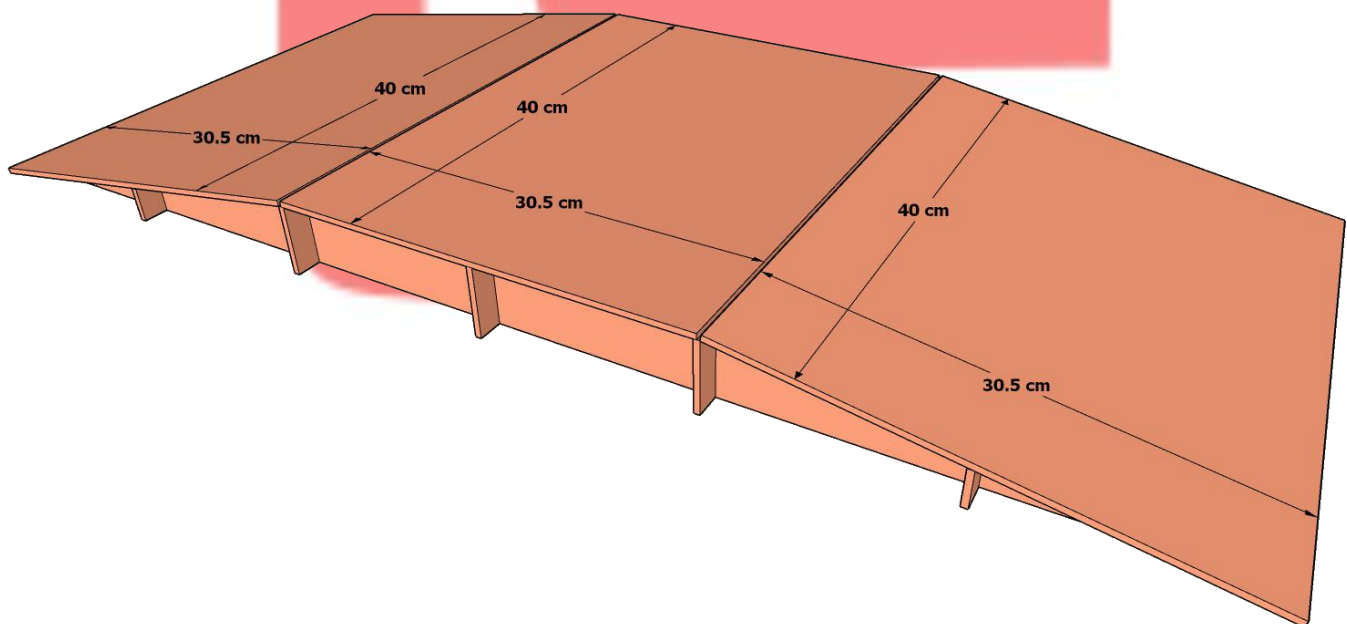
Once shape are ready after cutting then arrange them as shown in the image below:



**Figure 6**

Once the structure is ready as indicated in the Figure 6, cut three rectangular pieces from MDF board for covering the structure.

The dimensions of these rectangular pieces are shown in the image below:



**Figure 7**

You can refer the video file named “**Bridge\_Construction.mp4**” for step by step assembly of Shape 1, 2, 3 and the Rectangular Pieces for full construction of the Bridge.

**Best Of Luck!!!!**

