**Build Instructions**

**How to build the main board and frame**

1. Cut a plywood board into 4ft x 4ft as the base board.
2. Cut the first 1in x 2in x 96in white wood into two equal wood pieces.
3. Cut the other two 1in x 2in x 96in white wood into four 44in length pieces.
4. Cut the last 1in x 2in x 96in white wood into three 13.34in length pieces.
5. Place the two 48in length pieces on both the ends of one surface of the 4ft x 4ft board.
6. Screw the white wood pieces to the plywood board using 2in wood screws.
7. Place the two 44in length pieces on the other two ends of the plywood board.
8. Screw the wood pieces to the plywood board using 2in wood screws.
9. Place the remaining two 44in at 13.34 in from each edge horizontally
10. Screw the wood pieces to the plywood board using 2in wood screws.
11. Place the three 13.34in wood pieces into between the wood pieces vertically at 21inches from the one end of the frame.
12. Screw the wood pieces to the plywood board using 2in wood screws.

(Please see the attached framing diagram)

**How to build the monkey bars**

1. Cut the 15/32 2’x4’ BCX plywood board into two 30in long and 6in wide piece of woods.
2. Measure and mark at 7inches on top edge from both the short sides (6in sides).
3. Draw a hypotenuse between the edge of the to the 7inch mark on the top of the board.

16in

7in

7in

6in

30in

1. Cut along the hypotenuse lines to make the monkey bar.
2. Use the steps 2-4 for making the second monkey bar.
3. Use two ¾ x 1 gusset angle clamps and screw them on each side of the monkey bar using 0.5in wood screws. (Total of 6 clamps are required for the construction)

(Please see the attached course board pictures to estimate the clamp locations)

**How to build the ramp**

1. Cut the 2x4-96" Prime White wood stud into six 30in long, 3in wide and 2in thickness (real thickness = 1.6in) piece of woods.
2. Measure and mark at 7inches on top edge from both the short sides (3in sides).
3. Draw a hypotenuse between the edge of the to the 7inch mark on the top of the board.

16in

7in

7in

3in

30in

1. Cut along the hypotenuse lines to make each section of the ramp.
2. Use the steps 2-4 for making the remaining five sections of ramp.
3. Glue all the six ramp sections together using gorilla wood glue to construct the complete ramp.
4. Use two ¾ x 1 gusset angle clamps and screw them on each side of ramp using 0.5in wood screws. (Total of 4 clamps are required for the construction)

(Please see the attached course board pictures to estimate the clamp locations)

**How to build the uneven terrain**

1. Cut the remaining 15/32 2’x4’ BCX plywood board into sixteen 9.6inch long and ¼ inch wide piece of woods.
2. Mark the location of each terrain piece of wood by following the measurements in the below table.
3. Glue all the sixteen terrain pieces at the marked locations using gorilla wood glue to the main course board.

(Please see the attached course board pictures to estimate the side of the board to use)

**Table for uneven terrain piece’s location**

|  |  |
| --- | --- |
| Terrain Piece Number | Location from the start of the board |
| #1 | 8 ¼ inches |
| #2 | 10 inches |
| #3 | 11 ¾ inches |
| #4 | 13 ½ inches |
| #5 | 15 ½ inches |
| #6 | 17 ½ inches |
| #7 | 19 ½ inches |
| #8 | 21 ¾ inches |
| #9 | 23 ¾ inches |
| #10 | 26 ¼ inches |
| #11 | 28 ½ inches |
| #12 | 30 ¾ inches |
| #13 | 32 ¾ inches |
| #14 | 34 ¾ inches |
| #15 | 36 ¾ inches |
| #16 | 38 ½ inches |

**How to make the goal posts**

1. Cut 1.5 inches of the dowel stick for making each goal post.

2. Repeat the process of cutting for making 27 goal posts.

3. On the main board, mark the holes for goal post according to the provided drawings.

4. Use a ½ inch spade drill bit and drill holes on the main board at the marked locations.

5. Make 27 holes on the main board as per the diagrams.

6. Apply gorilla glue to one end of each goal post and insert that end into each hole drilled.