The seesaw is a very popular kind of playground equipment and you can see it in almost every playground.

The seesaw (teeter-totter or teeterboard) construction consists of a pole supported at the center by a fulcrum and having a seat and handle at each end. The game of riding a seesaw consists of two children sitting and facing each other on each end of a pole which is balanced in the center. Their role is to take turns pushing their feet against the ground to raise their side in the air. So, when one child is on the ground, the other is high in the air, and thus a back-and-forth or up-and-down movement is achieved, which children find particularly amusing.

One problem with the seesaw's construction is that if a child on one end allows himself/herself to hit the ground, the other child may fall and be injured. In order to prevent an accident or reduce the effects thereof, a flexible object should be placed under the seat to soften the blow when the seesaw hits the ground (e.g., bury an old car tire in the ground). The seesaw is potentially a dangerous piece of play equipment, so extra caution is needed when playing on it. and under the seesaw should not be a hard surface like concrete. Make sure that your seesaw is mounted above a soft surface such as foam, wood chips, or sand (avoid hard surfaces such as concrete or asphalt).
Before starting to play on a seesaw, instruct children to:

– Sit facing each other

– Hold the handle with both hands

– Keep feet out from underneath the seat as it descends.

For safety purposes, it is important to teach children how to stop playing on the seesaw. The procedure is simple, both children have to stop and flatten the rocker arm, so as to get off their seats at the same time. Otherwise, if a child that is closer to the ground abruptly leaves the seat, the balance is disturbed and this may lead to the fall of another child that is left high in the air.

The complete seesaw design from the plan is metal, only the seats are wooden. Actually, the seesaw is not difficult to make, but for the sake of children’s safety it is advised that such projects are dealt with only by people who are experienced and skilled in welding and assembly of metal structures.

The seesaw according to our plan has been designed for older children, and if yours are small, you must adapt its dimensions to suit them and watch out while they are playing.

The plan is intended to create a set of playground seesaws (allowing six children to play at the same time), i.e., it consists of 3 seesaws in parallel. If you like, you can use the drawings and adapt in size to a smaller number.

Mounting: In-ground mount in concrete (Embedded column)

Finish: undercoat paint (Primer paint - protection against rust and corrosion) and two coats of enamel gloss paint.

Adjust the height of the Frame subassembly and length of the subassembly Rocket Arm to suit your child. Needed dimensions can be calculated easily by following the next picture.
Seesaw subassembly list

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Title</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frame</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Rocker Arm 3400mm</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Rocker Arm 4200mm</td>
<td>1</td>
</tr>
</tbody>
</table>
Seesaw 2D assembly drawing
Frame subassembly - Parts list

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Title</th>
<th>Material</th>
<th>Quantity</th>
<th>Cut Length</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Round Tubing D73x4mm</td>
<td>Steel</td>
<td>2</td>
<td>1887.00 mm</td>
</tr>
<tr>
<td>2</td>
<td>Round Tubing D73x4mm</td>
<td>Steel</td>
<td>1</td>
<td>3314.00 mm</td>
</tr>
<tr>
<td>3</td>
<td>Concrete</td>
<td>Concrete</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Support</td>
<td>Steel</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Axle</td>
<td>Steel</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Bar D12mm</td>
<td>Steel</td>
<td>4</td>
<td>300.00 mm</td>
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Frame subassembly drawing
1. Frame
Parts 1.01, 1.02

<table>
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<tr>
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<tr>
<td>2</td>
<td>Round Tubing D73x4mm</td>
<td>1</td>
<td>3314,16 mm</td>
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1.03. Concrete
1.05 Axle

1.06 Bar D12mm
Rocker Arm 3400mm subassembly – Parts list

<table>
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<th>Item Number</th>
<th>Title</th>
<th>Material</th>
<th>Quantity</th>
<th>Cut Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Round Tubing D51 x 3.6mm</td>
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<td>2</td>
<td>Cover D51mm</td>
<td>Steel</td>
<td>2</td>
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</tr>
<tr>
<td>3</td>
<td>Shell</td>
<td>Steel</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Arm Support</td>
<td>Steel</td>
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</tr>
<tr>
<td>5</td>
<td>Washer M6</td>
<td>Steel</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Hexagon Nut M6</td>
<td>Steel</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Seat Support</td>
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<td>2</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Seat</td>
<td>Wood</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Hand Holder</td>
<td>Steel</td>
<td>2</td>
<td>763.00mm</td>
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<tr>
<td>10</td>
<td>Bolt M6x30mm</td>
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Rocker Arm 3400mm 2D subassembly drawing

2. Rocker Arm 3400mm
Rocker Arm 3400mm welds
2.01 Round Tubing D51 x 3.6mm
Cut Length = 3400.00mm
3. Shell
4. Arm Support
7. Seat Support
8. Seat
9. Hand Holder
Standard parts

10. Bolt M6 x 30mm
5. Washer M6
6. Hexagon Nut M6

STANDARD PARTS
### Rocker Arm 4200mm parts list

<table>
<thead>
<tr>
<th>Item Number</th>
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<th>Quantity</th>
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<td>4200.00 mm</td>
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<td>Cover D51mm</td>
<td>Steel</td>
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</tr>
<tr>
<td>3</td>
<td>Shell</td>
<td>Steel</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Arm Support</td>
<td>Steel</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Washer M6</td>
<td>Steel</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Hexagon Nut M6</td>
<td>Steel</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Seat Support</td>
<td>Steel</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Seat</td>
<td>Wood</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Hand Holder</td>
<td>Steel</td>
<td>2</td>
<td>763.00 mm</td>
</tr>
<tr>
<td>10</td>
<td>Bolt M6x30mm</td>
<td>Steel</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>
Rocker Arm 4200mm subassembly 2D drawing

3. Rocker Arm 4200mm

SECTION B-B

SECTION C-C

DETAIL D
Rocker Arm 4200mm welds
1. Round Tubing D51 x 3,6mm
Cut Length = 4200,00mm
3. Shell

48 (1,89)

(0,08)° × 45°

(20,5) (0,81)

(26,02) (1,02)
4. Arm Support
7. Seat Support
8. Seat

SECTION A-A

20
(0.79)

4
(0.16)

150
(5.91)

165
(6.50)

30
(1.18)

30
(1.18)

14
(0.55) (Typ)

7
(0.28) (Typ)

R
(3.35)

R
(5.72)

R
(6.71)
9. Hand Holder
Standard parts

10. Bolt M6 x 30mm
5. Washer M6
6. Hexagon Nut M6

STANDARD PARTS
Assemblage images

Frame

1.
2. Weld the Supports (Part 4) to the construction made in the previous step following 2D documentation.
3.

4.
**Rocker Arms**

1.
2.

3.
4.

5.
Seesaw assemblage

1.
2.

3.
It’s very practical to dig in the ground some old tires on the exact spot, where the Rocket Arms touches the ground. The idea is shown on the picture below. This way, the safety of the children is improved, and it will be easier to ride it up and down.