

Portable Sheep or Goat Loading Ramp 2.2 Metre Plans Book

Includes Plans To Build The Following:

- 2.2 metre portable loading ramp
- Dismantles into 3 parts
- Suitable for sheep and goats



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2.2 Metre Portable Sheep and Goat Loading Ramp



This portable loading ramp is suitable for both goats and sheep. It is ideal for loading and unloading from small trailers, utes and tabletop vehicles. Being able to break down into 3 sections means that it can be taken wherever you need to load or unload your animals. The floor can either be timber or sheet steel or aluminium.

Tools required include a welder, either stick or mig, G clamps or welding clamps, tape measure, angle grinder for cutting and cleaning up welds, electric drill and a square. You may buy lengths of steel and cut it to the correct sizes and angles if you have either an angle grinder or electric bandsaw or you may choose to have the steel cut for you from a local steel supplier. One thing that will make your job a lot easier is to construct a pair of welding trestles as shown on our website (www.kurraglenindustries.com.au). The plans for the welding trestles are free.

Another useful to is our Linear Cutting List Calculator which you can use to determine the most economical way to cut the lengths of steel. The free tool can be found here:

https://www.kurraglenindustries.com.au/linear-cutting-list-calculator.htm

The following steel and materials are required to build the 2.2 metre loading ramp:

30x30x1.6 SHS – 6.5 metres (painted or galvanised)	D Shackles – 4
25x25x1.6 SHS – 6 x 6.5 metre lengths plus an additional 1.1 metres (painted or galvanised)	Turnbuckles – 2
25x5 flat bar – 1 metre	Over centre latches – 2
25x8 flat bar – 250mm	M8 zinc plated nuts – 2
40x5 flat bar – 350mm	M8x40 zinc plated bolt – 2
Sheet for sides of ramp. Approx. 1-1.1mm thick	25x25 plastic caps – 4 (for top of items 5)
Steel or aluminium sheet or timber for floor	

Cutting & Parts List for Portable Loading Ramp				
Item No	Quantity	Material	Size (mm)	Notes
1	1	30x30mm shs	1100	
2	2	30x30mm shs	2170	Cut one end 45 degree angle – refer diagram 1
3	1	30x30mm shs	580	Cut both ends at 45 degree angle – refer diagram 1
4	2	25x25mm shs	2140	
5	4	25x25mm shs	1100	
6	14	25x25mm shs	2145	Cut both ends at 20 degree angle – refer diagram 2
7	4	40x5mm flat bar	75	See Note A
8	8	25x8mm flat bar	25	
9	4	25x5mm flat bar	95	
10	1	25x5mm flat bar	580	

Note A: The length of this may vary depending on the thickness of the floor you are using. Measurement is based on using timber floor with a thickness of 15-20mm.

- 1. Begin by cutting all of the steel as indicated in the cutting list. Label each with the item number on it using a marking pen and set aside.
- 2. Tack weld items 1, 2 and 3 together as shown in diagram 1. Ensure that base frame is square and fully weld.

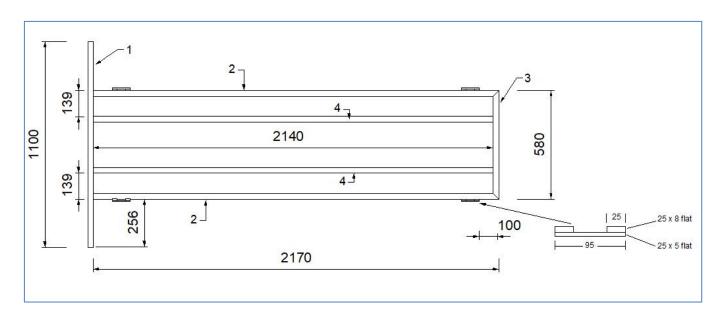


Diagram 1

- 3. Tack weld together 2 of items 5 and 7 of items 6 as shown in diagram 2. Check that everything is aligned as it should be and fully weld.
- 4. The second side can now be welded as done in the previous step. This first side can be used as a jig for the second side.

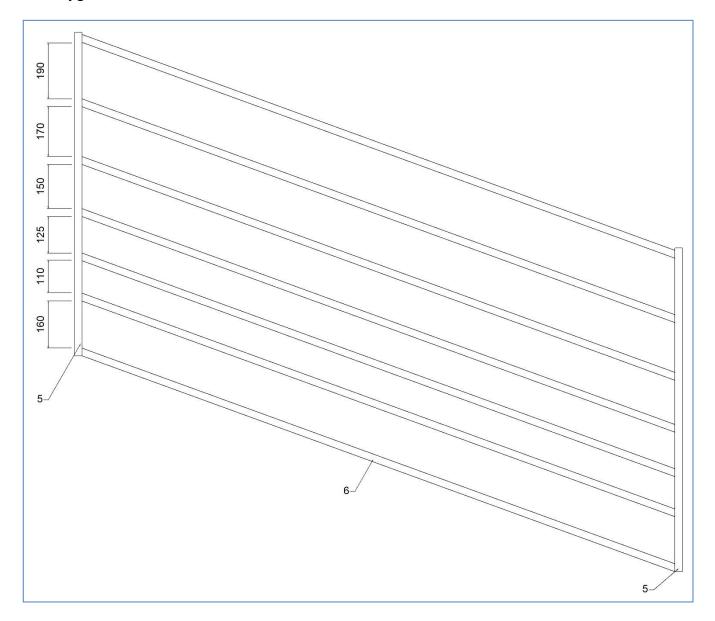


Diagram 2

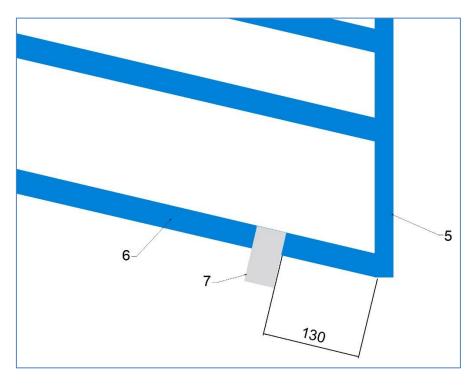


Diagram 3

- 5. Weld items 7 as shown in diagram 3. These have to be positioned on the outside edge of each side.
- 6. Cut the sheet for the sides of the ramp and secure in place to the inside face of the sides by either welding or riveting. Refer to diagram 4. These are fitted to the two lower rails of the sides.

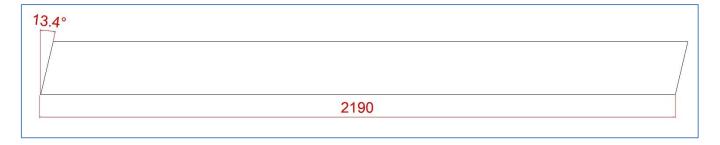


Diagram 4

7. Weld items 8 and 9 together as shown in diagram 5. Four of these assemblies are required.

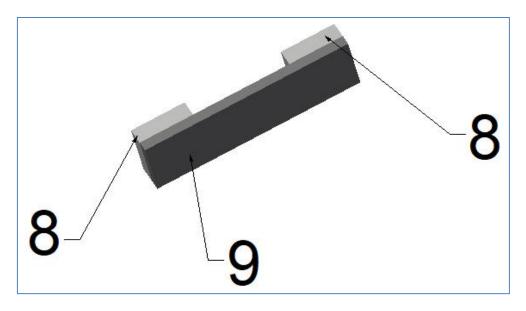


Diagram 5

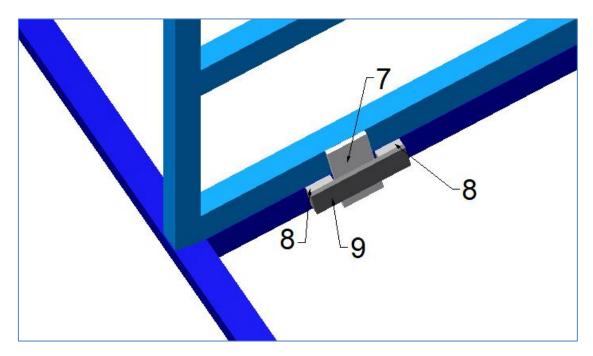


Diagram 6

- 8. Position one of the sides on top of the base and weld the assembled items 8 and 9 onto the base frame as shown in diagram 6. Repeat for the remaining 3.
- 9. Next step is to install your choice of floor to the base. This can either be steel or aluminium sheet or timber. Install either timber or steel SHS cleats to the floor approximately 250mm apart.
- 10. Drill an 8.5mm hole into each end of item 10. The centre of each hole should be approximately 12mm in from each end.
- 11. Position item 10 on the top of the rail and drill an 8.5mm hole through each. Refer to diagram 6. Secure the flat bar using M8x40mm bolt and nut. If you wish, one bolt can be installed with a nyloc nut (nylon-insert lock nut) and the remaining bolt can be tack welded so that the head of the bolt is on the under side of the top rail and secure with a wing nut for easy assembly. Refer to diagram 6.

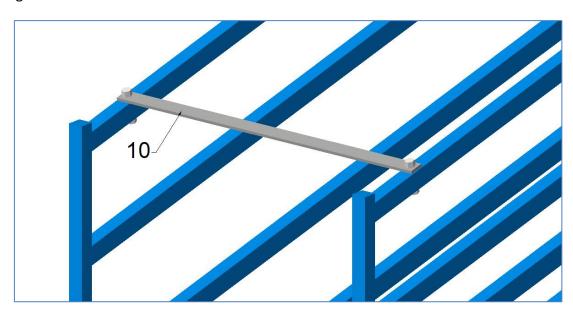


Diagram 6

12. Install the D shackles and turnbuckles to each end of the ramp as shown in diagram 7.

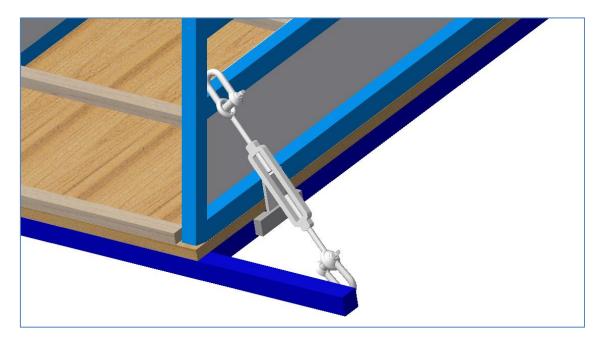


Diagram 7

13. Install the over centre latches to the opposite end of the ramp. Refer to diagram 8.

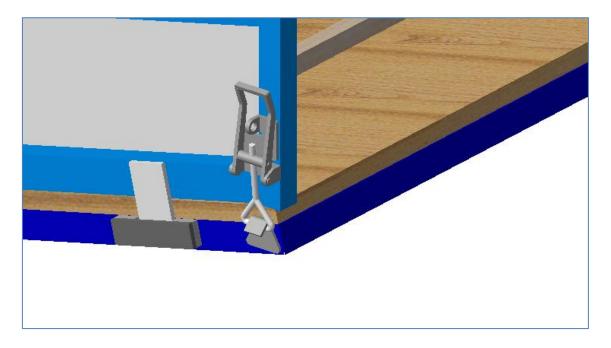


Diagram 8

- 14. Clean any welds using a grinding wheel or flap disc and paint as required.
- 15. Insert the 25x25 plastic caps into the tops of items 5 (side post uprights).

If you have any problems or issues and need assistance, we are here to help. Send an email to help@kurraglenindustries.com.au

Feel free to view, download and print our sheep, goat or cattle yard plans by visiting www.kurraglenindustries.com.au

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