

WOOL HARVESTING NOTE

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SHEEP LOADING RAMPS

GENERAL

An effective loading ramp is an essential part of a sheep handling system. It is usually built at a convenient location in the sheep yards to allow loading of sheep from ground level. However it can be incorporated into the shearing shed allowing sheep to be held on the grating under cover before or after trucking.

In addition to a main fixed loading ramp, it may be useful to have a portable ramp of lighter construction.

For fixed ramps, there must be:-

appropriate access for the sheep being transported, adequate area for vehicles to manoeuvre.

A forcing area is needed in the yards to simplify handling of the sheep up the ramp. This forcing area may be the same as that used for the drafting or working races, or it may be a separate area used only for loading.

In addition, the ramp must be in a position which allows adequate area for the largest vehicles to turn and reverse. This area should preferably be reasonably flat and adequately drained. If necessary, gravel can be spread to reduce mud problems in wet weather.

An essential feature of fixed ramps is a robust barrier against which trucks can be reversed in readiness for loading. Large posts set well into the ground, and adequately braced to withstand the likely forces arising from the reversing vehicle, are necessary to prevent damage to the ramp. In some cases the floor of the ramp is free standing as in the ramps in Photo 1. In others, where no variation in height of the ramp is needed, the floor is part of a solid concrete base structure which improves robustness of the entire ramp as in Photo 2.

The sides of the ramp are best closed in or sheeted. This restricts the vision of the sheep to the straight ahead direction, and, provided they are then not looking directly towards the sun, sheep flow should be improved.

To allow the operator to have access to the sheep as they are being loaded, it is important to have a walkway along at least one side of the ramp.

Where a variety of vehicles may use the ramp, it is advisable to allow for differences in loading height. The ramp is then pivoted at the bottom end, while the free end moves in the arc of a circle. Alternatively, the lower end is fitted with wheels to allow some horizontal movement which will occur if the raised end is constrained to move vertically. The change in height is generally by means of cables and counterweights, or by a handwinch fitted to the frame.

Portable loading races can be a useful aid. They are much lighter in construction, and are ideal for loading small numbers of sheep, or loading sheep from temporary yards located some distance from the main yards and loading ramp. One type of portable ramp is illustrated in Diagram 1.

DIMENSIONS

Length varies from three to five metres. Races adjustable for height need to be longer than those of fixed height, in order that the angle of inclination to the ground is not excessive at the greater heights. Angles of inclination between 20 and 25 degrees seem satisfactory, while 30 degrees is probably an upper limit. The steeper the slope of the ramp, the more difficult it is to get the sheep to move freely.

Width varies from 450 mm to 1000 mm. The narrow ramps allow sheep to move in single file only, while wider ramps allow two or three to move side by side.

Because of the fact that most trucks have sliding gates at the rear of the stock crate, which are half the width of the vehicle tray, the ramp width should not be greater than the width of these gates. The practical limit of width is therefore about 1000 mm. A block-off gate is a useful feature at the bottom end of wide ramps.

The height of the sides of the ramp (measured at right angles to the inclined floor) should be from 850 to 900 mm.

To suit most trucks, the raised end of the ramp should be about 1200 mm above ground. If it is required to serve double-deck stock transports, then the height should be adjustable from, say, 1000 mm to 2100 mm.



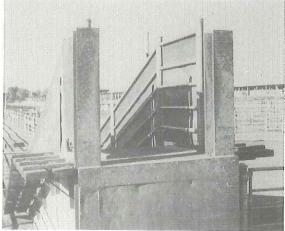


Photo 1. Fixed ramps with height adjustment

Photo 2. Fixed ramp with built-in

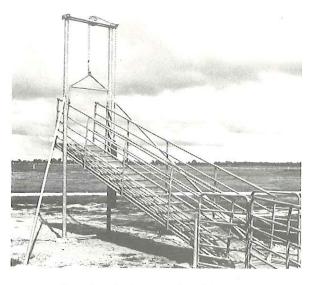


Photo 3. Fixed ramp with height adjustment using pipe construction

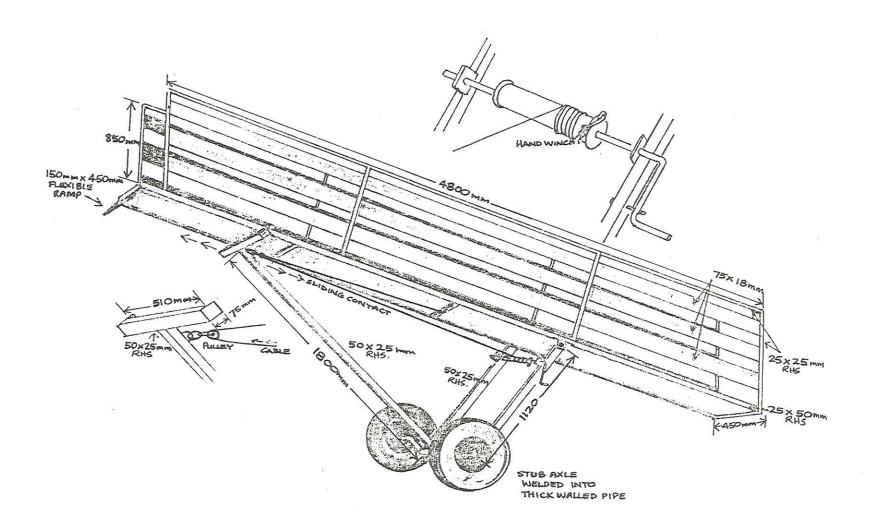


Diagram 1. Portable loading ramp details