

Holding Pens

Flooring

The floor of the holding area within the shed is above ground to enable sheep droppings to fall through the floor spaces to eliminate pens stain in the wool and to accumulate under the floor.

The height of the floor is a compromise between the cost of increasing the height of the floor and the height needed to gain access for the removal of the accumulated manure. A low floor reduces the amount of air circulating under the shed and there is likelihood of ammonia build up from the sheep urine in damp weather.

The floor height may also be dictated by other needs including the need to load sheep on to stock transport.

A height of 1200mm from the ground to the top of the flooring is a satisfactory height.

The floor support structure should be designed and approved by an experienced and registered builder – taking into account the number of sheep and any equipment likely to be stored in the holding area at any given time.

The floor material is traditionally a hardwood timber grating of battens measuring 50mm x 25mm or 50mm x 38mm; with a space between each batten of 15mm. Often one edge of the battens is cut at an angle to help prevent waste material from clogging the space between battens.

It is generally desirable to have the battens running at right angles to the direction in which the sheep are required to move, except in catching pens.

Woven wire mesh has also been used for the flooring of holding pens. **It should not be used in catching pens.** The benefits of a mesh approach are that it lasts well and can be used for successful replacement of batten flooring where the floor is close to the ground. Timber flooring is more prone to maintenance as the floor gets older. On the other hand wire mesh is noisy and allows more light to penetrate from under the shed leading to sheep balking. In such instances, it may require covering in the lower sides of the shed, but in a way that still provides adequate ventilation.

Where return races from the shearing station pass under the mesh problems moving unshorn sheep around the top level may arise.



Mesh floors



Lysaght Interlok II

As sheep abhor strong contrasts in light including shadows, it is a good idea to use light above catching pens to remove the light contrast under battens as that will be a real impediment to sheep movement.

Fences

The fences of the holding pens must be of height and strength to hold the sheep in a confined space whilst allowing shed staff to step over them without undue effort/stress.

A height of around 850mm is a satisfactory height.

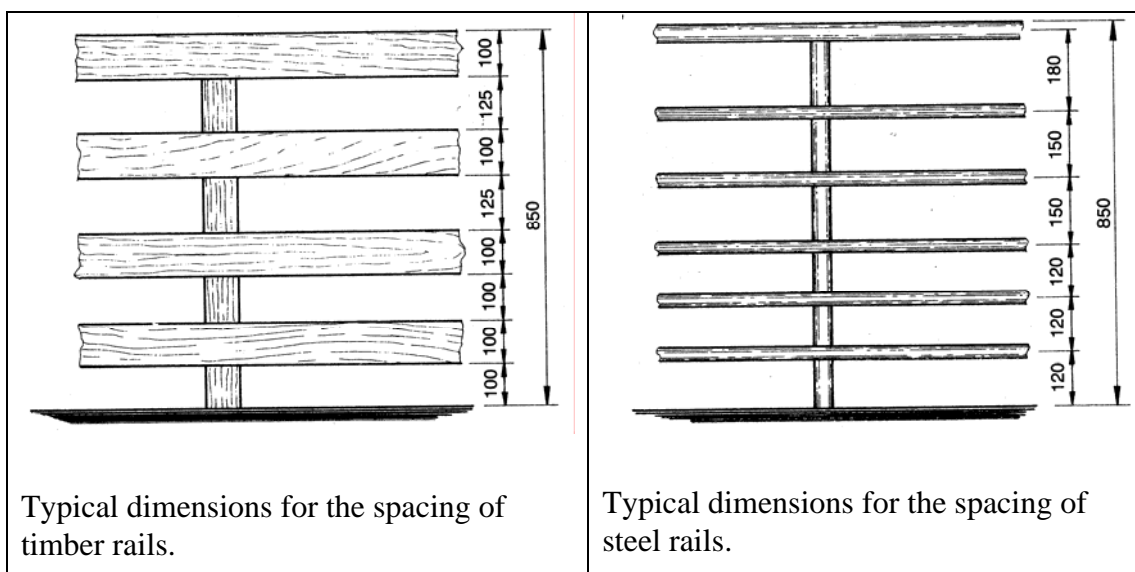
Pen fences consist of post and rails (or panels). Timber and galvanised or black steel tube are the most common materials used to construct the holding pen fences.

Weldmesh and a variety of manufactured panels can also be used if preferred.

Posts are generally 1500mm to 2000mm apart.

Rails panelled with ply are quieter and work very well in leading sheep to where you want them to go.

The following are examples of timber and steel fences with typical rail spacings identified



Source: Barber & Freeman,

Productivity

The productivity of the entry of sheep to the shearing shed is related to the time and effort required to move the sheep from the yards, up the ramp and into the holding pens. Measuring this productivity enables evaluation and comparison for your purposes when designing or altering a shearing shed.

The daily throughput can be calculated from the average tally for a shearer multiplied by the number of stands. At least one days shearing is normally required to be held in the holding pens. Depending on the weather, this number may be doubled; especially in wet weather conditions.

To calculate the space required to meet the above holding requirements, a useful guide is to allow 2.5 adult woolly sheep per square metre.

To measure and compare the productivity of holding pen sheep entry and filling we recommend the following measurements may be useful:

- Man minutes for 1st 100 sheep into the shearing shed, shed not working;
- Man minutes for 1st 100 sheep into the shearing shed, shed working;
- Man minutes for 100 sheep into a partially filled shed, shed not working;
- Man minutes for 100 sheep into a partially filled shed, shed working;
- Number of people required for the task;
- Number of sheep dogs required for the task; and
- Perceived exertion, rate the task as 1 - 10
1 = minimum exertion/easiest penning up experienced ever
10 = maximum exertion/hardest penning up experienced ever.

OH&S

The critical OH&S aspects of the holding area and its entrance are:

- Non slip decking on inclined ramps; especially when operating in wet weather conditions;
- Side fences/rails on ramps to stop shedhands falling off;
- No protruding objects that could inadvertently be walked into by shed staff;
- No protruding bolts on gates or fences;
- Do not use woven wire mesh in the catching pens; and
- Consider using used mining conveyor belting or plywood painted a dark colour to line sheep laneways. The end of the dark laneway should be light but not too bright.

See an example below of OH&S risks and their management (from the Victorian Workcover Authority):

6.2 Sheep pens and gates

Hazard or risk	Risk control
Sometimes sheep pens, races and gates expose the penner-up to risks of injuries from trips, slips and falls.	Gate hinges, catches, railings and stops should be well maintained and in good working order. Pen gates should be able to swing in and out. Penners-up should be adequately trained in their work.
There may also be sharp edges, protrusions and splinters, exposing the penner to a risk of receiving cuts and embedded objects in the skin.	All parts and components used should be free of sharp edges, protrusions and splinters. Pens and gates should be inspected for protrusions and sharp edges before each shearing and repaired as required.

Source: © Victorian Workcover Authority