

Shearing Shed Design Note

VIOSH Australia
University of Ballarat
PO Box 663
Ballarat 3353
Tel: 03-5327-9150

Number One: Catching Pen Floors

Traditional Design

The traditional design of catching pen floors is a horizontal wooden batten floor. The battens are often oriented perpendicular to the direction of the drag (across the pen) but sometimes parallel to the drag (toward the door).

Shearers say that sheep can be more difficult to tip when the battens run across the pen as the sheep can obtain a better grip. In addition dragging the sheep was said to be more difficult when the battens are across the pen. Although not yet widespread some people believe that a slope in the catching pen would be useful.

Experiment: What is the Best Floor?

In a laboratory, several experienced shearers dragged sheep over floors of various slopes and materials. The dragging forces and coefficients of friction were calculated. The trials included two slopes and five materials.



*Worst Floor Tested:
Horizontal Steel Mesh*



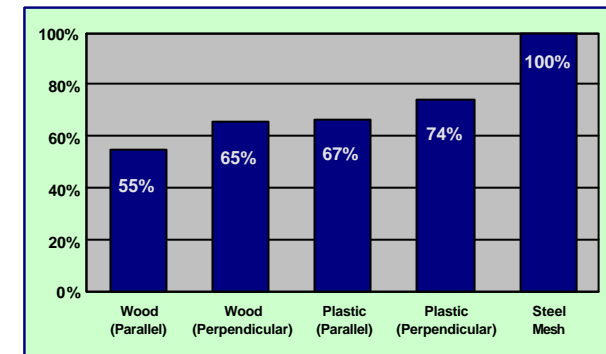
*Best Floor Tested:
Wooden Battens on
1:10 Slope*

Results

The chart shows that the best floor has only 55% of the friction of the worst floor.

Adding a slope to the floor makes the job about 10% easier again.

Combining a slope and the best surface means that a shearer will drag 6kg less per sheep or about 1200kg less per day therefore decreasing the risk of injury.



*Friction When Dragging Sheep
100% = Worst Floor (Steel Mesh)*

Recommended Floor

The best floor tested consisted of:

Wooden battens running toward the door.
Slope toward the door of 1:20.