

Dimensions and Design Tips for Free stalls 10.21.05

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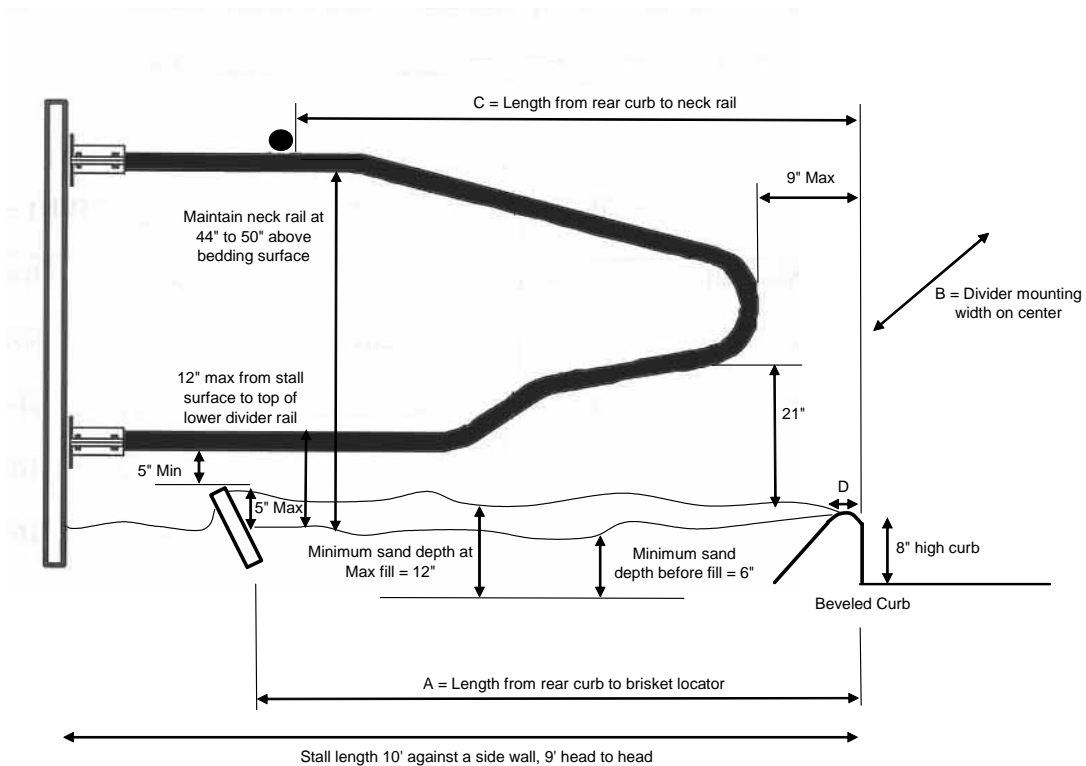
Stall Dimension (inches)	Body Weight Estimate (lbs)			
	1200	1400	1600	1800
Total stall length facing a wall	96	108	120	120
Head to head platform length	192	204	216	216
Distance from rear curb to brisket locator	66	68	70	72
Stall divider placement on center (Stall width)	46	48	50	54
Height of brisket locator above stall surface	3	4	4	4
Height of upper edge of lower divider rail above stall surface	10	11	12	12
Height below neck rail	46	48	50	52
Horizontal distance between rear edge of neck rail and rear curb (minus width of rear curb in sand stall)	66 (60)	68 (62)	70 (64)	72 (66)
Rear curb height	8	8	8	8
Rear curb width (loose bedded stalls)	6	6	6	6

Build Sequence

1. Pour the curb 8 inches high on the alley side and 6 inches high on the stall side, with a slope and rounded corners. Alternatively pour a rounded curb 3 inches wide, sloping steeply into the stall bed. For mattress stalls, pour the platform 7 inches high at the alley, with a 2 inch slope to the brisket locator.
2. Locate the rear edge of the brisket locator 68 to 72 inches from the rear edge of the curb
3. Locate the upper edge of the brisket locator 4 inches above the rear lip of the curb in a sand stall and 4 inches above the stall surface in a mattress stall
4. Fill the stall with sand to the appropriate level
5. Locate the rear edge of the divider loop 9-12 inches from the rear edge of the curb
6. Locate the upper edge of the lower divider rail loop no higher than 12 inches above the lowest level of the bed (the inner height of the curb), and leave a 5 inch space between the top of the brisket locator and the lower edge of the lower divider rail.
7. The divider loop should be wide enough to locate the neck rail at 48-50 inches above the bed.
8. With the correct divider, the upturn of the lower divider rail will be 20 inches behind the brisket locator and NO NEARER the rear lip of the curb
9. Do not fill behind the brisket locator with concrete and make sure that any transverse mounting bars for dividers (if used) are no higher than the level of the stall surface.

10. To prevent cows lunging through an open front stall, use a deterrent wire 40 inches above the stall surface, covered with a 1 inch PVC pipe across the front of the stall at the furthest point of the front lunge.
11. Lastly, locate the neck rail above the brisket locator, then move it back toward the curb a distance equivalent to the width of the rear curb.

A Typical Sand Stall



Where $C=A-D$