

Suggested Freestall Dimensions for Dairy Cows

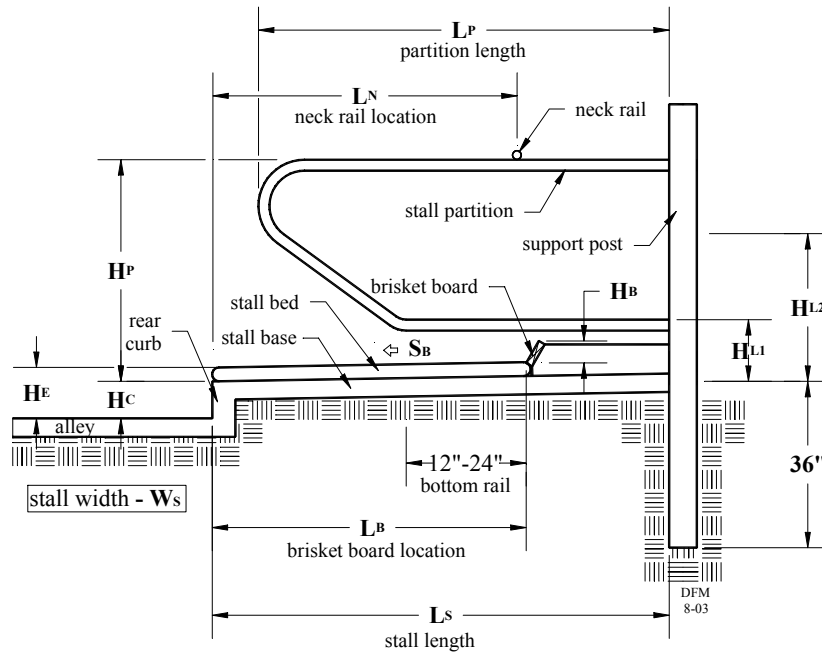


Figure 1: Cross Section Closed Front Freestall with Mattress Stall Bed

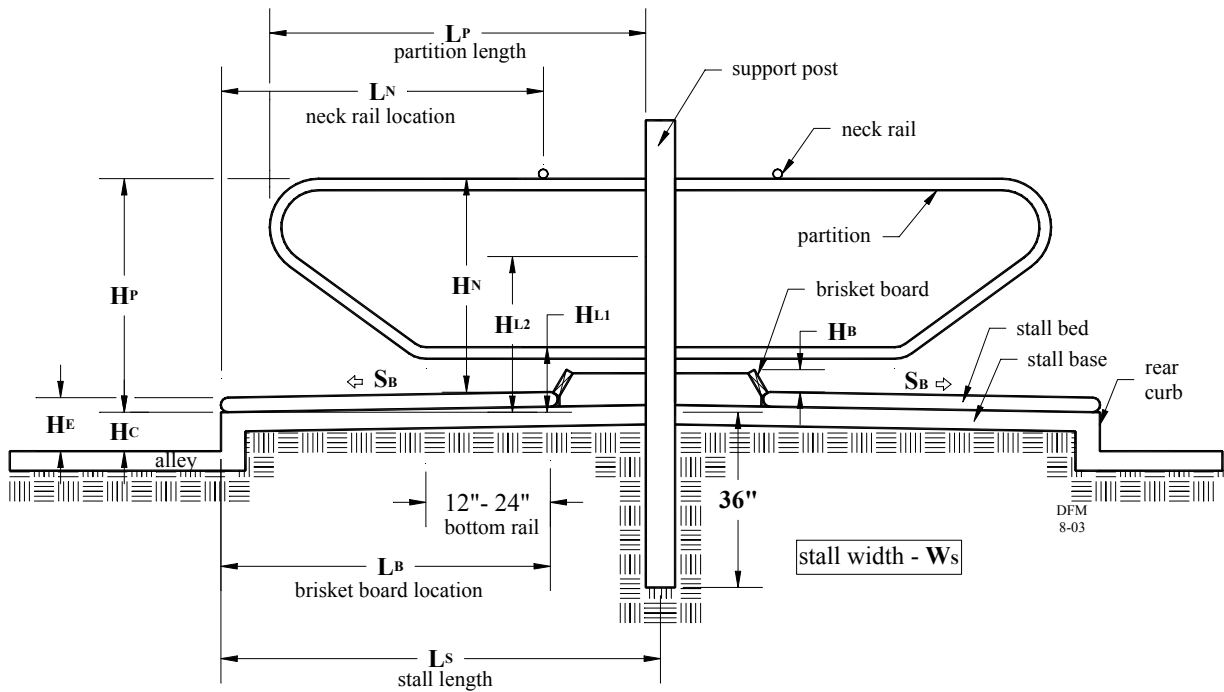


Figure 2: Cross Section Head-to-Head Open Front Freestall with Mattress Stall Bed

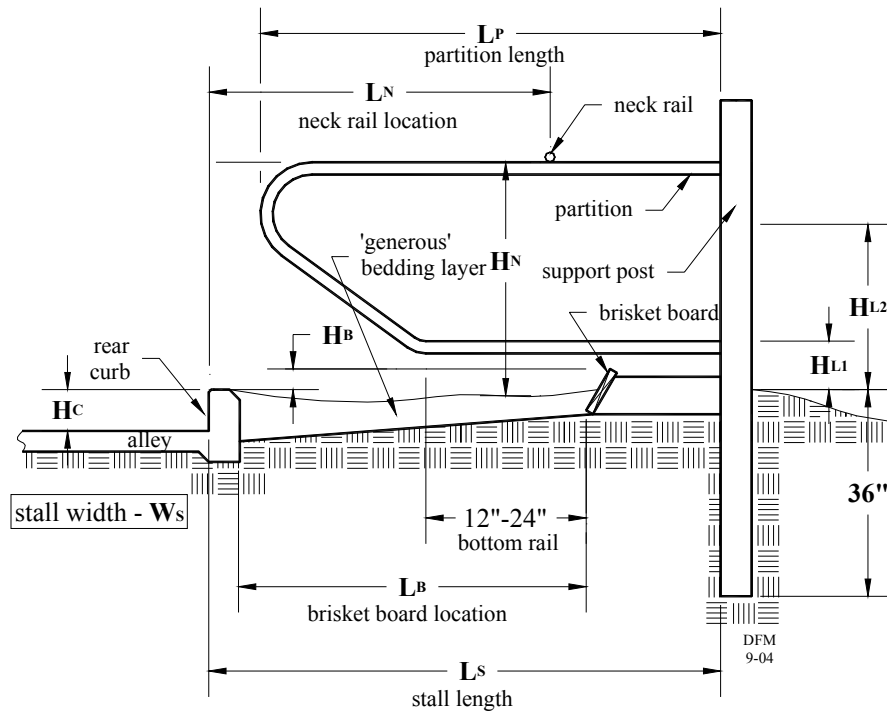


Figure 3: Cross Section Close Front Freestall with Generous Bedding Layer

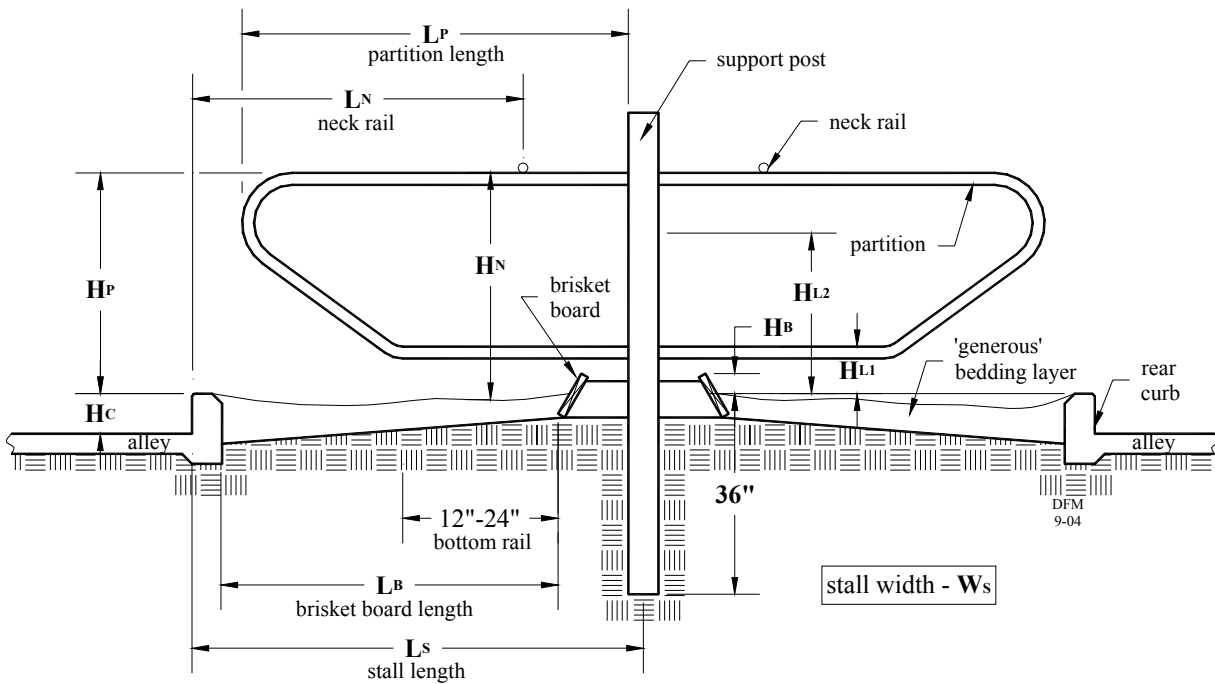


Figure 4: Cross Section Head-to-Head Open Front Freestall with Generous Bedding Layer

Table1. Suggested Freestall Dimensions for Various Size Cows (adapted from ASAE 2001).

Dimension ¹	Cow mass (lb)		
	1210	1430	1650
L _S =total stall length ² (in)	OF: 80 - 86 CF: 92 - 98	OF: 84 - 90 CF: 96 - 102	OF: 90 - 98 CF: 102 - 108
L _H =head space length (in)	17	18	19
L _L =lunge space length (in)	14	15	16
L _N =length to neck rail (in)	62 - 64	66 - 68	70 - 72
L _B =length to brisket board (in)	62 - 64	66 - 68	70 - 72
L _P =stall partition length (in)	(L _S - 14) to L _S	(L _S - 14) to L _S	(L _S - 14) to L _S
H _N =height from stall bed to neck rail (in)	40 - 45	42 - 47	44 - 49
H _P =stall partition height (in)	42 - 46	44 - 48	46 - 50
H _B =brisket board height (in)	4 - 6	4 - 6	4 - 6
H _C =stall curb height (in)	6 - 10	6 - 10	6 - 10
H _E =stall entry height, (in)	6 - 12	6 - 12	6 - 12
H _{L1} =lunge clearance, lower (in, max)	11	11	11
H _{L2} =lunge clearance, upper (in, min)	32	32	32
W _S =stall width (in) center to center	43 - 45	45 - 48	48 - 52
S _B =stall base slope (%)	1-4	1-4	1-4

¹ top alley edge of curb is used as primary reference line.

² OF = open front type; CF = closed front type

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