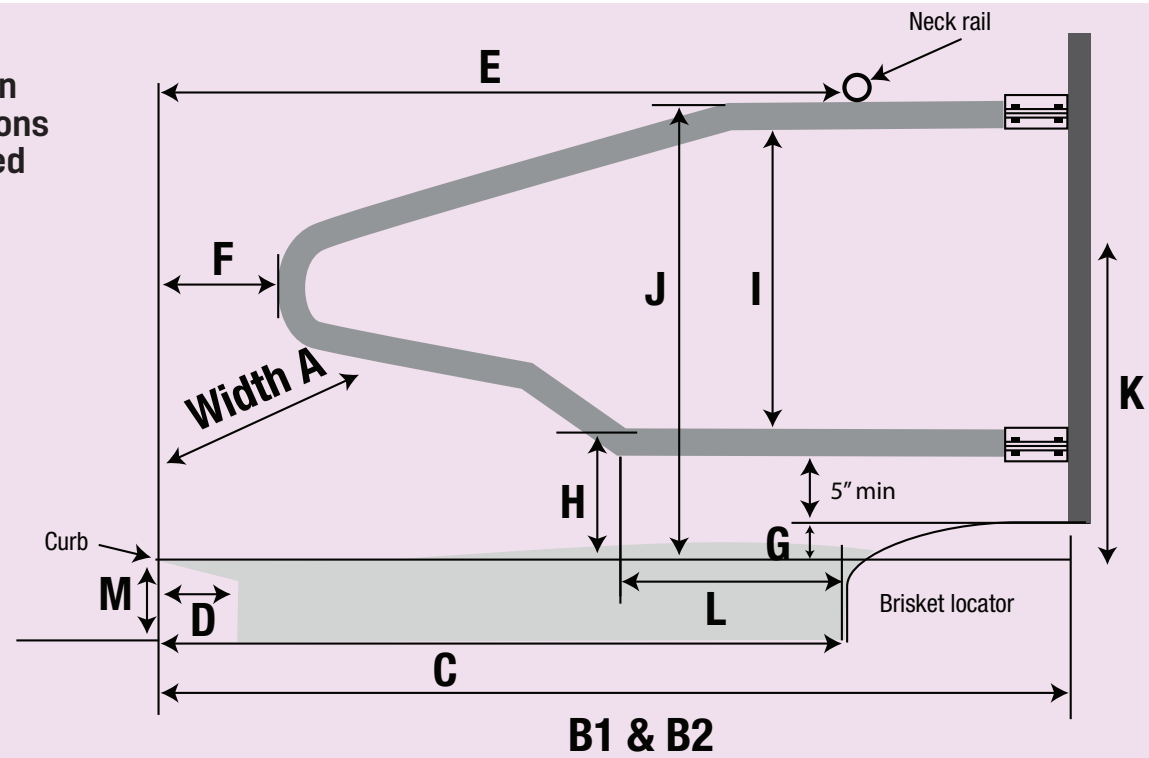
Freestall design recommendations for sand-bedded stalls

(Source: Dairyland Initiative)



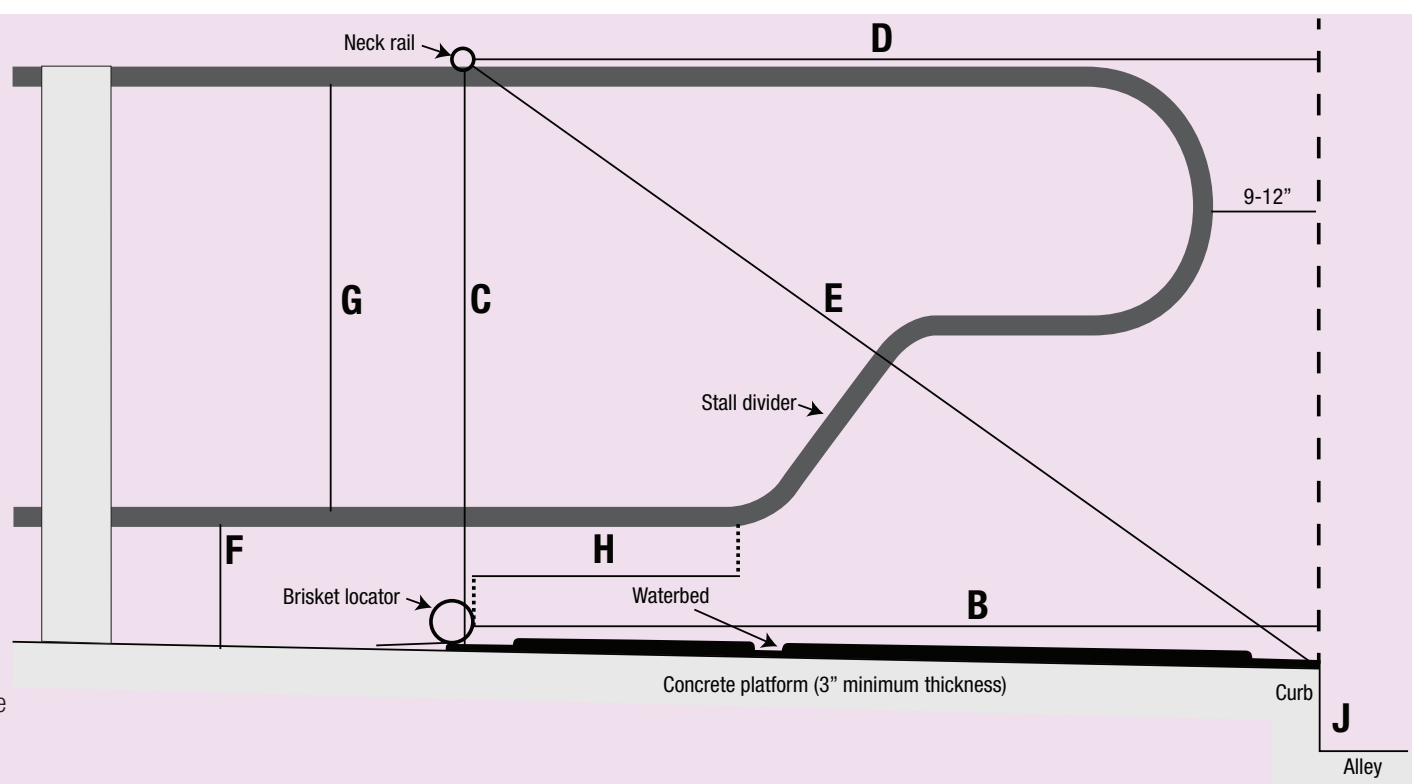
Target stall dimensions (inches) for cows of different bodyweight estimates

Stall dimensions (inches)	Bodyweight estimate (lbs)					
	1,000	1,200	1,400	1,600	1,800	2,000
Center-to-center stall divider placement (stall width) **(A)**	42	45	48	50	54	57
Total stall length facing a wall **(B1)**	96	108	108	120	120	126
Outside curb to outside curb distance for head-to-head platform **(B2)**	180	192	192	204	204	216
Distance from rear curb to rear of brisket locator **(C)**	64	66	68	70	72	75
Width of rear curb **(D)**	6-8	6-8	6-8	6-8	6-8	6-8
Horizontal distance between rear edge of neck rail and rear edge of curb for *mattress stalls* **(E)**	64	66	68	70	72	75
Horizontal distance between rear edge of neck rail and rear edge of curb for *deep bedded stalls* **(E)***	58	60	62	64	66	69
Distance from rear edge of divider loop to point of curb **(F)**	9	9	9	9	9	9
Height of brisket locator above top of curb (loose bedded stall or mat/mattress surface) **(G)**	3	3	4	4	4	4
Height of upper edge of bottom stall divider rail above top of curb (loose bedded stall or mat/mattress surface) **(H)**	10	10	12	12	13	14
Interior diameter of the stall divider loop **(I)**	30	33	33	36	36	36
Height of neck rail above top of curb (loose bedded stall or mat/mattress surface) **(J)**	42	45	48	50	52	54
Obstruction height **(K)**	5-35	5-35	5-35	5-35	5-35	5-35
Horizontal distance from brisket locator to loop angle **(L)**	20-22	20-22	20-22	20-22	20-22	20-22
Rear curb height **(M)**	8	8	8	8	8	8

Freestall design recommendations for concrete-base stalls*

(Source: DCC)

* Every dairy is different, and these measurements may not be possible at every farm. When working with unique or difficult situations, contact your building company representative for recommendations to modify or renovate stalls to best suit the cows and ensure optimal comfort and performance. If your rep can't answer questions about stall design, you're not getting the expertise your cows deserve.



Target stall dimensions (inches) for cows of different bodyweight estimates

	Bodyweight estimate (lbs)	500	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,800+
	Width recommendation (in inches)	34	36	38	42	44	45	46	47	48	50	51	54
A	Total stall length (facing a wall)	72	80	90	96	96	108	108	108	114	120	120	120
A+	Total stall length (head to head)	144	160	180	192	192	204	204	210	210	216	216	216
B	Horizontal distance rear curb to brisket locator	60	60	64	65	66	66	66	68	68	70	70	72
C	Vertical height neck rail to stall surface	36	38	40	42	42	44	46	48	48	49	50	54
D	Horizontal distance neck rail to curb	60	60	64	65	66	66	66	68	68	70	70	72
E	Diagonal distance neck rail to curb	70	71	76	77	78	80	81	83	85	86	86	89
F	Vertical height upper edge of bottom divider rail above stall surface	8	8	8	9	11	11	11	11	12	12	12	12
G	Vertical height diameter inside stall divider loop	29	30	32	32	33	33	34	34	35	35	36	36
H	Horizontal distance brisket locator to stall divider curve	16	18	18	18	20	20	20	20	22	22	22	22
J	Rear curb height	6	6	6	6	8	8	8	8	8	8	8	8