

Straight Rack Common 2 x 4 Board Length Design Tables

This table is designed to utilize commonly found stock 2 x 4 lengths that may require 1 cut to cut a board in half or no cuts at all. With this design there will be no waste or scrap.

Number of Bikes to be Parked	Length of Wood Base Inches	Wood Base Total Inches To Purchase	Total Feet To Purchase	What 2 x 4 To Purchase	# of Cuts	Bike Spacing Inches	Wall Space Required Inches
2	24	48	4.00	1 at 4 foot	1	14-20	38-48
3	36	72	6.00	1 at 6 foot	1	16.0	56
4	52	104	8.67	1 Stud at 104 1/4	1	16.0	72.0
5	72	144	12.00	1 at 12 or 2 at 6	1 or 0	17.0	92
6	84	168	14.00	1 at 14	1	16.0	104
7	96	192	16.00	1 at 16 or 2 at 8	1 or 0	15.3	116
8	120	240	20.00	1 at 20 or 2 at 10	1 or 0	16.6	140
9	120	240	20.00	1 at 20 or 2 at 10	1 or 0	14.5	140
10	144	288	24.00	2 at 12	0	15.6	164



Angled Rack Common 2 x 4 Board Length Design Tables

This table is designed to utilize commonly found stock 2 x 4 lengths that may require 1 cut to cut a board in half or no cuts at all. With this design there will be no waste or scrap.

Number of Bikes to be Parked	Length of Wood Base Inches	Wood Base Total Inches To Purchase	Total Feet To Purchase	What 2 x 4 To Purchase	# of Cuts	Bike Spacing Inches	Wall Space Required Inches
2	30	60	5.00	1 at 5 foot	1		38-48
3	52	104	8.67	1 Stud at 104 5/8	1	24.0	106
4	72	144	12.00	1 at 12 or 2 at 6	1 or 0	22.7	126
5	96	192	16.00	1 at 16 or 2 at 8	1 or 0	23.0	150
6	120	240	20.00	2 at 10	0	23.2	174
7	144	288	24.00	2 at 12	0	23.3	198
8	168	336	28.00	2 at 14	0	23.4	222
9	192	384	32.00	2 at 16	0	23.5	246
10	216	432	36.00	2 at 18	0	23.6	270



Angled Rack at 30 degrees