

Rack Measurement Worksheet

Use the video instructions provided on your CD-ROM to help you measure the cage box and enter the box measurements in lines 1 – 5. Decide how many boxes you want in one rack level and enter that value in line 6. Once lines 1–6 are completed, continue through the worksheet to line 23 (lines 24 & 25 will be completed later in the building process). Calculate as directed in each line, using the calculator provided on your CD-ROM if you need help with the math.

Your CD-ROM instructions will refer to the lines in this worksheet so be as accurate as possible with your measurements.

Box Measurements

Line #		Measurement
1	Box Length (front to back)	
2	Box Width (side to side)	
3	Box Height (including feet)	
4	Box Lip Height	
5	Box Lip Width	
6	Desired Number of boxes per rack level	

Box Rail Calculations

Line #	Measurement	Instructions	Total Measure
7	Total Number of box rails per rack level	Add 1 to the total in line #6	
8	Total Length of box rails	Equals measurement in line #1	
9	Sum of box rail widths	Multiply line #7 with 1 7/16 inches	
10	Channel Height	Add 1/16 inch to measurement in line #4	
11	Channel Depth	Add 1/8 inch to line #5	

Cross-Rail Calculations

Line #	Measurement	Instructions	Total Measure
12	Sum of box widths	Multiply line #2 by line #6	
13	Total Length of Cross Rails	Add total line #9 + total line #12 + 4 inches	
14	Depth of cross rail peg board groove	Constant Value	1/4 inch

Side Rail Calculations

Line #	Measurement	Instructions	Total Measure
15	Total length of side rails	Subtract 6 7/8 inches from total in line #1	
16	Distance from top edge of side rail 2x4 to top edge of peg board panel groove	Constant Value	1 3/16 inches
17	Depth of side rail routed groove	Constant Value	1/4 inch

Support Feet Calculations

Line #	Measurement	Instructions	Total Measure
18	Total length of support feet	Add 1/2 inch to total in line #3	

Heat Tape Supports

Line #	Measurement	Instructions	Total Measure
19	Number of Heat Tape Supports per rack level	Equals number of box rails (line number 7)	
20	Heat Tape Support Length	Subtract 5 inches from total in line number 1	
21	Heat Tape Support Width	Constant Value	1 1/2 inches

Base Rails

<i>Line #</i>	<i>Measurement</i>	<i>Instructions</i>	<i>Total Measure</i>
22	Number of Base Rails per rack system (not level)	Constant Value	2
23	Base Rail Length	Equals cross rail length (line #13)	

Peg Board Panel Calculations – Not determined by box measurement

<i>Line #</i>	<i>Measurement</i>	<i>Instructions</i>	<i>Total Measure</i>
24	Peg Board Panel Length	Add 1/2 inch to rack level internal length measurement – see peg board panel section	
25	Peg Board Panel Width	Add 1/2 inch to rack level internal width measurement – see peg board panel section	