

Engineering Data

Calculating anodizing rack surface area

T & J Industries engineering staff has computed the total external surface area, including edge surfaces, of our product line.

Using the T & J surface area tables effective surface area, that is, the surfaces of the anodizing rack which are exposed to and affected by solutions and electric current in the anodizing process may be reasonably accurately calculated.

When an angle bar and a panel are attached to each other, the surface area of BOTH parts is reduced. To simplify this table, two values are provided for surface area for angle bars and panels intended as three point contact rack panels. The first value is the surface area modified to reflect the area covered up on BOTH items. The second value is the total surface area of the item.

Use the first value with panel attached, or panels in tandem.

Use the second value column with used separately.

Add up the total square inches of the items in the rack assembly then divide the total by 144 to obtain the total square foot surface area.

Item #	Description	Area sq. in.	Item #	Description	Area sq. in.
1	Utility rack, 24"	127.44	1-36	Utility rack, 36"	191.18
3	HD utility rack, 24"	107.25	3-36	HD utility rack, 36"	160.9
7	Panel, 24"	265.66	7-36	Panel, 36"	398.49
11	Panel, 24" tandem	121.18	11-11	Panel, 24"	179.18
11-36	Panel, 36" tandem	181.77	11-36	Panel, 36"	268.77
13	Panel, 24"	222.57	13-36	Panel, 36"	333.88
15	Panel, 24"	187.2	16	Panel, 24" all forms	176.04
21	Panel, 24" all forms	193.70	26	Panel, 24" all forms	266.86
27	Panel, 24" tandem	117.54	36	Panel, 24" all forms	200.85
42	Panel, 24" all forms	198.47	48	Panel, 24" all forms	266.32
49	Panel, 24" tandem	124.8	80	Fishbone rack	362.60
81	Fishbone rack	362.6	82	Fishbone rack	362.60
100	Hanger, 36"	54.16	103	Hanger, 36"	91.13
105	Hanger, 36"	68.59	109	Hanger, 36"	82.01
113	Angle bar, 24"	130.99	115	Cross member, 12"	30.09
120	Hanger, 36"	69.02	130	Hanger, 36"	77.28
150	Disk clamp	5.65	320	Clip	17.07
321	Clip	13.28	322	Clip	13.28
323	Clip	13.28	324	Clip	12.98
325	Clip	12.98	326	Clip	5.35
327	Clip	10.53	328	Clip	15.71

Item #	Description	Area sq. in.	Item #	Description	Area sq. in.
329	Clip	17.5	330	Clip	17.5
331	Clip	17.5	332	Clip	17.5
333	Clip	15.3	334	Clip	15.3
335	Clip	15.3	336	Clip	15.3
337	Clip	19.56	338	Clip	19.56
339	Clip	19.56	340	Clip	19.56
341	Clip	17.5	342	Clip	19.56
343	Clip	17.5	344	Clip	17.05
345	Clip	17.05	346	Clip	6.71
347	Clip	6.71	348	Clip	17.05
349	Clip	17.05	350	Clip	17.05
351	Clip	17.05	352	Clip	17.05