

RAL-675-8 LOAD TABLE

MAXIMUM ALLOWABLE LOADING ROOF ANCHOR - RAL-675-8								
ENGINEER OF RECORD TO VERIFY REQUIRED STRENGTH OF ROOF ANCHOR – RAL-675-8 DOES NOT EXCEED THE FOLLOWING AVAILABLE STRENGTH						ASD LEVEL	STRENGTH LEVEL	
						AVAILABLE STRENGTH IN SHEAR P	13324 lb	21318 lb
						AVAILABLE STRENGTH IN BENDING M	6107. lb-ft	9771. lb-ft
RESULTANT OF UNIFORM WIND PRESSURE P h / 2 4.00 ft SECTION PLAN VIEW MAXIMUM SCREEN HEIGHT h 8.00 ft RAL-675-8 SPACING S RAL-675-8 TRIBUTARY WIDTH =S LOAD CONVERSION FACTOR α (STRENGTH LEVEL / ASD LEVEL) = 1.6 MINIMUM ALLOWABLE UNIFORM IND PRESSURE (ASD) = 18 psf								
THE FOLLOWING TABLE IS TO HELP EOR PRELIMINARY DESIGN IF CONDITIONS OF THE ASSUMPTIONS AND SKETCH ABOVE MATCH PROJECT CONDITIONS. FINAL DESIGN MUST VERIFY REQUIRED STRENGTH DOES NOT EXCEED AVAILABLE STRENGTH GIVEN ABOVE.								
MAXIMUM ALLOWABLE SCREEN HEIGHT	RAL-675-8 SPACINGS	RAL-675-8 TRIBUTARY AREA A	ALLOWABLE UNIFORM WIND PRESSURE w FOR SHEAR	ALLOWABLE UNIFORM WIND PRESSURE w FOR MOMENT	ALLOWABLE UNIFORM WIND PRESSURE (ASD)	ALLOWABLE UNIFORM WIND PRESSURE w		
						ASD LEVEL	STRENGTH LEVEL	
4.00 ft	2.00 ft	8.00 sq.ft.	1665.4 psf	381.7 psf	381.7 psf	382 psf	611 psf	
4.00 ft	4.00 ft	16.00 sq.ft.	832.7 psf	190.8 psf	190.8 psf	191 psf	305 psf	
4.00 ft	6.00 ft	24.00 sq.ft.	555.1 psf	127.2 psf	127.2 psf	127 psf	204 psf	
4.00 ft	8.00 ft	32.00 sq.ft.	416.4 psf	95.4 psf	95.4 psf	95 psf	153 psf	
4.00 ft	10.00 ft	40.00 sq.ft.	333.1 psf	76.3 psf	76.3 psf	76 psf	122 psf	
4.00 ft	11.00 ft	44.00 sq.ft.	302.8 psf	69.4 psf	69.4 psf	69 psf	111 psf	
4.00 ft	12.00 ft	48.00 sq.ft.	277.6 psf	63.6 psf	63.6 psf	64 psf	102 psf	

RAL-675-8 LOAD TABLE – cont.

MAXIMUM ALLOWABLE SCREEN HEIGHT	RAL-675-8 SPACING S	RAL-675-8 TRIBUTARY AREA A	ALLOWABLE UNIFORM WIND PRESSURE w FOR SHEAR	ALLOWABLE UNIFORM WIND PRESSURE w FOR MOMENT	ALLOWABLE UNIFORM WIND PRESSURE (ASD)	ALLOWABLE UNIFORM WIND PRESSURE w	
						ASD LEVEL	STRENGTH LEVEL
5.00 ft	2.00 ft	10.00 sq.ft.	1332.4 psf	244.3 psf	244.3 psf	244 psf	391 psf
5.00 ft	4.00 ft	20.00 sq.ft.	666.2 psf	122.1 psf	122.1 psf	122 psf	195 psf
5.00 ft	6.00 ft	30.00 sq.ft.	444.1 psf	81.4 psf	81.4 psf	81 psf	130 psf
5.00 ft	8.00 ft	40.00 sq.ft.	333.1 psf	61.1 psf	61.1 psf	61 psf	98 psf
5.00 ft	10.00 ft	50.00 sq.ft.	266.5 psf	48.9 psf	48.9 psf	49 psf	78 psf
5.00 ft	11.00 ft	55.00 sq.ft.	242.2 psf	44.4 psf	44.4 psf	44 psf	71 psf
5.00 ft	12.00 ft	60.00 sq.ft.	222.1 psf	40.7 psf	40.7 psf	41 psf	65 psf
6.00 ft	2.00 ft	12.00 sq.ft.	1110.3 psf	169.6 psf	169.6 psf	170 psf	271 psf
6.00 ft	4.00 ft	24.00 sq.ft.	555.1 psf	84.8 psf	84.8 psf	85 psf	136 psf
6.00 ft	6.00 ft	36.00 sq.ft.	370.1 psf	56.5 psf	56.5 psf	57 psf	90 psf
6.00 ft	8.00 ft	48.00 sq.ft.	277.6 psf	42.4 psf	42.4 psf	42 psf	68 psf
6.00 ft	10.00 ft	60.00 sq.ft.	222.1 psf	33.9 psf	33.9 psf	34 psf	54 psf
6.00 ft	11.00 ft	66.00 sq.ft.	201.9 psf	30.8 psf	30.8 psf	31 psf	49 psf
6.00 ft	12.00 ft	72.00 sq.ft.	185.0 psf	28.3 psf	28.3 psf	28 psf	45 psf
7.00 ft	2.00 ft	14.00 sq.ft.	951.7 psf	124.6 psf	124.6 psf	125 psf	199 psf
7.00 ft	4.00 ft	28.00 sq.ft.	475.8 psf	62.3 psf	62.3 psf	62 psf	100 psf
7.00 ft	6.00 ft	42.00 sq.ft.	317.2 psf	41.5 psf	41.5 psf	42 psf	66 psf
7.00 ft	8.00 ft	56.00 sq.ft.	237.9 psf	31.2 psf	31.2 psf	31 psf	50 psf
7.00 ft	10.00 ft	70.00 sq.ft.	190.3 psf	24.9 psf	24.9 psf	25 psf	40 psf
7.00 ft	11.00 ft	77.00 sq.ft.	173.0 psf	22.7 psf	22.7 psf	23 psf	36 psf
7.00 ft	12.00 ft	84.00 sq.ft.	158.6 psf	20.8 psf	20.8 psf	21 psf	33 psf
8.00 ft	2.00 ft	16.00 sq.ft.	832.7 psf	95.4 psf	95.4 psf	95 psf	153 psf
8.00 ft	4.00 ft	32.00 sq.ft.	416.4 psf	47.7 psf	47.7 psf	48 psf	76 psf
8.00 ft	6.00 ft	48.00 sq.ft.	277.6 psf	31.8 psf	31.8 psf	32 psf	51 psf
8.00 ft	8.00 ft	64.00 sq.ft.	208.2 psf	23.9 psf	23.9 psf	24 psf	38 psf
8.00 ft	10.00 ft	80.00 sq.ft.	166.5 psf	19.1 psf	19.1 psf	19 psf	31 psf
8.00 ft	11.00 ft	88.00 sq.ft.	151.4 psf	17.3 psf	17.3 psf	N/P	N/P
8.00 ft	12.00 ft	96.00 sq.ft.	138.8 psf	15.9 psf	15.9 psf	N/P	N/P