wind up-lift on solar equipment (PSF)

Figured for 40-sf collector

WZ	V^2	PZ-1 .00256*V^2	PZ-2	PZ-3	bolt loading in PZ-1 4 bolts	PZ-1 6 bolts	PZ-2 4 bolts	PZ-2 6 bolts
110	12100	30.976	49.5616	71.2448	309.76	206.6099	495.616	330.5759
120	14400	36.864	58.9824	84.7872	368.64	245.8829	589.824	393.4126
130	16900	43.264	69.2224	99.5072	432.64	288.5709	692.224	461.7134
140	19600	50.176	80.2816	115.4048	501.76	334.6739	802.816	535.4783
150	22500	57.6	92.16	132.48	576	384.192	921.6	614.7072
160	25600	65.536	104.8576	150.7328	655.36	437.1251	1048.576	699.4002

allowable lag bolt loading per inch of embedment

WL= 1800 * SG^3/2 * dia^3/4

Southern yellow pine SG = 0.55

dia		allow	3-inch embedment
3/8 inch	0.375	351.8358	1055.507
1/2 inch	0.5	436.5601	1309.68

WZ	PZ-3 8 bolts	PZ-3 10 bolts
110	356.224	284.9792
120	423.936	339.1488
130	497.536	398.0288
140	577.024	461.6192
150	662.4	529.92
160	753.664	602.9312