

The Standing Seam Metal Roof that Generates Clean, Renewable Electric Energy

# ATA-SOLAR™

## ATA-Solar Minimum Roof Size Requirements

Minimum width requirement includes 2 extra panels for Fireman's walkway  
**PVL 68 9 foot 4 inches long**

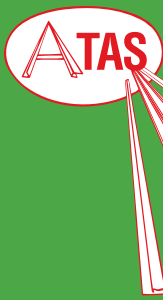
### FLM165 16.5" x 1.5"H Standing Seam Panels

Nominal System Output (kW DC)	No. of PVL-68 Modules	Minimum Required Southern Exposure Roof Area (SQ. FT.)	Required Minimum Roof Width (in feet) for Various Roof Panel Lengths		
			11' Long Roof Panels	21' Long Roof Panels	30' Long Roof Panels
			1 Module per Roof Panel	2 Modules per Roof Panel	3 Modules per Roof Panel
1.5	24	396	36	20	14
3.0	48	759	69	36	25
5.0	80	1243	113	58	40
10.0	160	2453	223	113	77
15.0	216	3300	300	152	102
30.0	432	6567	597	300	201
60.0	864	13101	1191	597	399
125.0	1840	27863	2533	1268	847

### FLS180 18" x 2.375"H Standing Seam Panels

Nominal System Output (kW DC)	No. of PVL-68 Modules	Minimum Required Southern Exposure Roof Area (SQ. FT.)	Required Minimum Roof Width (in feet) for Various Roof Panel Lengths		
			11' Long Roof Panels	21' Long Roof Panels	30' Long Roof Panels
			1 Module per Roof Panel	2 Modules per Roof Panel	3 Modules per Roof Panel
1.5	24	429	39	21	15
3.0	48	825	75	39	27
5.0	80	1353	123	63	43
10.0	160	2673	243	123	83
15.0	216	3597	327	165	111
30.0	432	7161	651	327	219
60.0	864	14289	1299	327	435
125.0	1840	303939	2763	651	923

**NOTE:** Minimum roof areas shown above are based on "clean" roofs with no penetrations, parapets, etc. Any potential shading from adjacent buildings, trees, rooftop equipment, etc. will increase the required roof area.



The Standing Seam Metal Roof that Generates Clean, Renewable Electric Energy

# ATA-SOLAR™

## ATA-Solar Minimum Roof Size Requirements

Minimum width requirement includes 2 extra panels for Fireman's walkway  
**PVL 68 9 foot 4 inches long**

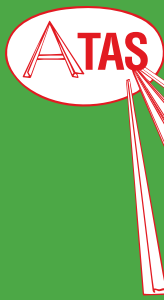
### MRD194 19.25 x 1.5"H Standing Seam Panels

Nominal System Output (kW DC)	No. of PVL-68 Modules	Minimum Required Southern Exposure Roof Area (SQ. FT.)	Required Minimum Roof Width (in feet) for Various Roof Panel Lengths		
			11' Long Roof Panels	21' Long Roof Panels	30' Long Roof Panels
			1 Module per Roof Panel	2 Modules per Roof Panel	3 Modules per Roof Panel
1.5	24	462	42	23	16
3.0	48	891	81	42	29
5.0	80	1452	132	68	46
10.0	160	2860	260	132	89
15.0	216	3850	350	177	119
30.0	432	7667	697	350	235
60.0	864	15290	1390	697	466
125.0	1840	32615	2955	1480	988

### FLL 217 21.75 x 1"H Standing Seam Panels

Nominal System Output (kW DC)	No. of PVL-68 Modules	Minimum Required Southern Exposure Roof Area (SQ. FT.)	Required Minimum Roof Width (in feet) for Various Roof Panel Lengths		
			11' Long Roof Panels	21' Long Roof Panels	30' Long Roof Panels
			1 Module per Roof Panel	2 Modules per Roof Panel	3 Modules per Roof Panel
1.5	24	528	48	26	19
3.0	48	1001	91	48	33
5.0	80	1639	149	77	52
10.0	160	3234	294	149	101
15.0	216	4356	396	200	135
30.0	432	8657	787	396	265
60.0	864	17270	1570	787	526
125.0	1840	36729	3339	1672	1116

**NOTE:** Minimum roof areas shown above are based on "clean" roofs with no penetrations, parapets, etc. Any potential shading from adjacent buildings, trees, rooftop equipment, etc. will increase the required roof area.



The Standing Seam Metal Roof that Generates Clean, Renewable Electric Energy

# ATA-SOLAR™

## ATA-Solar Minimum Roof Size Requirements

Minimum width requirement includes 2 extra panels for Fireman's walkway  
**PVL 136 18 foot long**

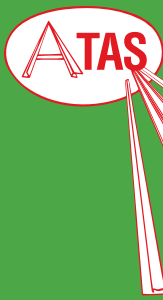
### FLM165 16.5" x 1.5"H Standing Seam Panels

Nominal System Output (kW DC)	No. of PVL-136 Modules	Minimum Required Southern Exposure Roof Area (SQ. FT.)	Required Minimum Roof Width (in feet) for Various Roof Panel Lengths		
			21' Long Roof Panels	40' Long Roof Panels	60' Long Roof Panels
			1 Module per Roof Panel	2 Modules per Roof Panel	3 Modules per Roof Panel
1.5	12	420	20	11	9
3.0	24	756	36	20	14
5.0	40	1218	58	31	22
10.0	80	2373	113	58	40
15.0	108	3192	152	77	53
30.0	216	6300	300	152	102
60.0	432	12537	597	300	201
125.0	920	26628	1268	636	425

### FLS180 18" x 2.375"H Standing Seam Panels

Nominal System Output (kW DC)	No. of PVL-136 Modules	Minimum Required Southern Exposure Roof Area (SQ. FT.)	Required Minimum Roof Width (in feet) for Various Roof Panel Lengths		
			21' Long Roof Panels	40' Long Roof Panels	60' Long Roof Panels
			1 Module per Roof Panel	2 Modules per Roof Panel	3 Modules per Roof Panel
1.5	12	441	21	12	9
3.0	24	819	39	21	15
5.0	40	1323	63	33	23
10.0	80	2583	123	63	43
15.0	108	3465	165	84	57
30.0	216	6867	327	165	111
60.0	432	13671	651	327	219
125.0	920	29043	1383	693	463

**NOTE:** Minimum roof areas shown above are based on "clean" roofs with no penetrations, parapets, etc. Any potential shading from adjacent buildings, trees, rooftop equipment, etc. will increase the required roof area.



The Standing Seam Metal Roof that Generates Clean, Renewable Electric Energy

# ATA-SOLAR™

## ATA-Solar Minimum Roof Size Requirements

Minimum width requirement includes 2 extra panels for Fireman's walkway  
**PVL 136 18 foot long**

### MRD194 19.25 x 1.5"H Standing Seam Panels

Nominal System Output (kW DC)	No. of PVL-136 Modules	Minimum Required Southern Exposure Roof Area (SQ. FT.)	Required Minimum Roof Width (in feet) for Various Roof Panel Lengths		
			21' Long Roof Panels	40' Long Roof Panels	60' Long Roof Panels
			1 Module per Roof Panel	2 Modules per Roof Panel	3 Modules per Roof Panel
1.5	12	504	24	14	10
3.0	24	881	42	23	17
5.0	40	142	68	36	25
10.0	80	2772	132	68	46
15.0	108	3717	177	90	61
30.0	216	7350	350	177	119
60.0	432	14637	697	350	235
125.0	920	31080	1480	742	496

### FLL217 21.75 x 1"H Standing Seam Panels

Nominal System Output (kW DC)	No. of PVL-136 Modules	Minimum Required Southern Exposure Roof Area (SQ. FT.)	Required Minimum Roof Width (in feet) for Various Roof Panel Lengths		
			21' Long Roof Panels	40' Long Roof Panels	60' Long Roof Panels
			1 Module per Roof Panel	2 Modules per Roof Panel	3 Modules per Roof Panel
1.5	12	546	26	15	11
3.0	24	1008	48	26	19
5.0	40	1617	77	40	28
10.0	80	3129	149	77	52
15.0	108	4200	200	102	69
30.0	216	8316	396	200	135
60.0	432	16527	787	396	265
125.0	920	35112	1672	838	560

**NOTE:** Minimum roof areas shown above are based on "clean" roofs with no penetrations, parapets, etc. Any potential shading from adjacent buildings, trees, rooftop equipment, etc. will increase the required roof area.