

## Project Report



### Project Details

<b>Name</b> Thraikill 30 <b>Module</b> Solarworld: Plus SW 275 MONO (31mm) <b>Dimensions</b> 39.4" x 65.9" x 1.2" <b>Tilt</b> 30°	<b>Date</b> 2016-03-09 <b>Total Modules</b> 60 <b>Total Watts</b> 16,500
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### Load Assumptions

**Wind Exposure C**  
**Wind Speed** 120 mph  
**Snow Load** 30 psf

### Foundation Requirements

**Type** Concrete  
**Hole Diameter** 16"  
**Min. Hole Depth** 78"

### SubArray Requirements

**Pipe Size** 3"  
**Diagonal Bracing** No

### Foundation Loads

**Shear** 1,532  
**Moment** 3,830  
**Uplift** -1,428

### Project Layout

#### SUBARRAY DETAILS

SUB ARRAY	CONFIG	REPEATS	PIERS	MODULES / PIER	CANTIL.	EDGE CLEAR.	EW PIER SPAN	NS PIER SPAN	AREA
1	4x5	1	8	2.50		1' 7" / 1' 4"	8' 1"	7' 6"	13' 2" x 27' 6"
2	4x5	1	8	2.50		1' 7" / 1' 4"	8' 1"	7' 6"	13' 2" x 27' 6"
3	4x5	1	8	2.50		1' 7" / 1' 4"	8' 1"	7' 6"	13' 2" x 27' 6"
			<b>TOTAL PIERS</b>	24			<b>TOTAL AREA</b>	13' 2" x 82' 5"	

#### SUBSTRUCTURE

SUB ARRAY	REPEATS	SOUTH PIERS	SOUTH PIER PIPE [ABOVE/BELOW]	NORTH PIERS	NORTH PIER PIPE [ABOVE/BELOW]	CROSS PIPES	CROSS PIPE LENGTH	TOTAL PIPE LENGTH
1	1	4	6' 10" [ 2' 6" / 4' 4" ]	4	11' 2" [ 6' 10" / 4' 4" ]	2	27' 6"	126' 11"
2	1	4	6' 10" [ 2' 6" / 4' 4" ]	4	11' 2" [ 6' 10" / 4' 4" ]	2	27' 6"	126' 11"
3	1	4	6' 10" [ 2' 6" / 4' 4" ]	4	11' 2" [ 6' 10" / 4' 4" ]	2	27' 6"	126' 11"
<b>TOTALS</b>		12		12		6		380' 10"

#### CONCRETE

VOL/PIER	NO. PIERS	TOTAL VOL
0.34 yd <sup>3</sup>	x 24	8.07 yd <sup>3</sup>

### 3rd Party Substructure Materials

Subarray	Repeats	Piers	South Piers	North Piers	Cross Rails	Total
1	1	8	4 x 6' 10" (27' 4")	4 x 11' 2" (44' 8")	2 x 27' 6" (54' 11")	126' 11"
2	1	8	4 x 6' 10" (27' 4")	4 x 11' 2" (44' 8")	2 x 27' 6" (54' 11")	126' 11"
3	1	8	4 x 6' 10" (27' 4")	4 x 11' 2" (44' 8")	2 x 27' 6" (54' 11")	126' 11"
					<b>Total Pipe</b>	<b>380' 10"</b>

## Bill of Materials

Part No.	Description	Spares	Qty.	MSRP Ea	Price
XR-1000-168A	XR1000, Rail 168" (14 Feet) Clear	0 <a href="#">Edit</a>	30 ✓	\$100.80	\$3,024.00
70-0300-SGA	SGA Top Cap at 3"	0 <a href="#">Edit</a>	24 ✓	\$65.00	\$1,560.00
29-7001-000	SGA Rail Connector at 3"	0 <a href="#">Edit</a>	60 ✓	\$18.00	\$1,080.00
29-4000-002	WEEB Grounding Lug (WEEB-LUG-6.7)	0 <a href="#">Edit</a>	30 ✓	\$10.00	\$300.00
29-7000-105	4-pack, Mid Clamp (I) 2.0", Mill	0 <a href="#">Edit</a>	23 ✓	\$9.00	\$207.00
29-7000-125	4-pack, End Clamp (I) 1.25", Mill	0 <a href="#">Edit</a>	15 ✓	\$12.00	\$180.00
29-4000-001	WEEB Compression Clip (WEEB-DMC)	0 <a href="#">Edit</a>	60 ✓	\$2.10	\$126.00
29-4000-077	Wire Clips, Molded PVC Black, Polybag 20	0 <a href="#">Edit</a>	6 ✓	\$14.00	\$84.00
XR-1000-CAP	Kit, End Cap XR1000 (10 sets per bag)	0 <a href="#">Edit</a>	3 ✓	\$15.00	\$45.00
Total Price Ext					<b>\$6,606.00</b>
Price/ Watt					<b>\$0.40</b>
Total Weight					<b>663 lbs</b>

US prices only

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