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# Energy Management Service

**Ver. 1**

## Residential Wire Sizing Report

Worksheet Checklist		Calculations		Notes	Do not fill in any blanks.	
Step 1	Complete	OK		<i>Transformerless inverter selected.</i>		
Step 2	Complete	OK				
Step 3	Complete	OK				
Step 4	Complete					
Step 5	Complete					
Step 6	Complete					
Step 7	Complete					
<b>Array Source Circuit Results</b>		Minimum Conductor Gauge			Ground Wire (EGC) Minimum Gauge/Type	
Conductor Wire Type						
PV Wire or USE-2		12		6 Bare Copper		
<i>Wire Length</i>	Pos.	140 ft.	Neg.	30 ft.	EGC	15 ft.
<b>PV Output Circuit Results</b>		Minimum Conductor Gauge			Ground Wire (EGC) Minimum Gauge/Type	
Conductor Wire Type						
THWN-2		12		10 THWN-2		
<i>Wire Length</i>	Pos.	750 ft.	Neg.	750 ft.	EGC	100 ft.
<b>Note: Wire calculations take into account two hot conductors in the Inverter Out circuit.</b>						
<b>Inverter Out Circuit Results</b>		<i>Ask a PV contractor, electrician, or inspector to verify your wire sizes and types before buying any material.</i>				
Conductor Wire Type		Minimum Conductor Gauge			Ground Wire Gauge/Type	
THWN-2		10		10 THWN-2		
<i>Wire Length</i>	Hot	50 ft.	Neu.	25 ft.	EGC	30 ft.
<b>Wire Totals</b>		Use the list below when preparing a purchase order.				
PV Wire or USE-2		Pos./Neg.		170 feet	Gauge	12
Bare Copper		EGC/Ground		15 feet	Gauge	6
THWN-2	Pos./Hot	750 ft.	Neg./Neutral	750 ft.	Gauge	12
THWN-2	Hot	50 ft.	Neutral	25 ft.	Gauge	10
THWN-2	Ground/EGC 1		130 ft.		Gauge	10
	Ground/EGC 2				Gauge	
<b>Modules:</b>	Acme QJJ55555555			<b>Inverter:</b>	Acme 6000	
<b>Job Name:</b>	14555 Gorthian Road Alameda CA 95555					