	Standard Diagram Small Commercial and Homes 200a Main Brk. Panel 1Ø 240v Line Feed
TAG	DESCRIPTION
1	SOLAR PV MODULE
2	PV ARRAY
3	J-BOX Per NEC
4	COMBINER JOX in the INVERTER Per Mfg.
5	DC DISC. In the INVERTER Per Mfg.
6	DC/AC 1Ø INVERTER Per Mfg.
7	Not used
8	60 AMP AC DISC PANEL / COMBINER
9	SERVICE PANEL Exist. 200a
NOTE: SERVICE PANEL Exist. 200a 240v	

10	Line Feed Wire Standard
11	DEFAULT TO 15 Amps Per Mfg.
12	Modules shall be listed to UL Standards 1703
13	Inverters shall be listed to UL Standards 1741
14	DEFAULT TO 8.9 AMPS. PER. Mfg.
15	90c wire shall be used. And sized at 75c
16	EGC Smaller Than #6 AWG shall be protected NEC 250.120 C
17	USE-2 or type PV WIRE
18	MAX DC VD Shall be <=2% Maximum Distance 100' or less
19	ALL BACK FED BRK. SHALL BE LINE-LINE LISTED

STANDARD ELECTRICAL DIAGRAM

4 STRINGS AND 40 MODULES

10,000 Total Wattage

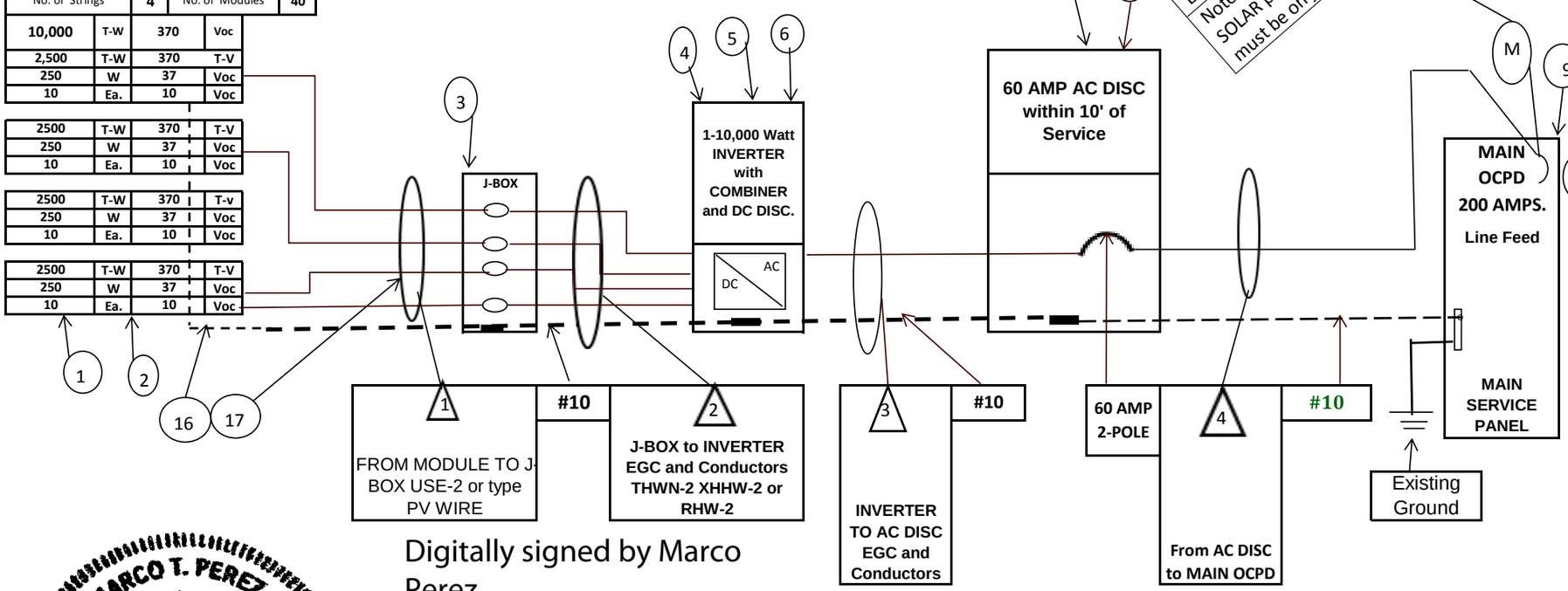
1Ø 240 V

20	NEC 690.45 Size of EGC (A) General.
21	Within sight of INVERTER or lockable

	App. By	Date
Plan Review		
Building		
Electric	NA	03/13/ 2013
	TOM W DEVIER	03/13/ 2013

Note: This plan is invalid unless accompanied by a Go SOLAR permit card and Go SOLAR permit document. Plans must be on job before any inspection will be made.

No. of Strings		4	No. of Modules	40
10,000	T-W	370	Voc	
2,500	T-W	370	T-V	
250	W	37	Voc	
10	Ea.	10	Voc	
2500	T-W	370	T-V	
250	W	37	Voc	
10	Ea.	10	Voc	
2500	T-W	370	T-v	
250	W	37	Voc	
10	Ea.	10	Voc	
2500	T-W	370	T-V	
250	W	37	Voc	
10	Ea.	10	Voc	



FROM MODULE TO J-BOX			
Voltage	300	Wire 90c	15
Wattage Mod Array 1	2,500	#12	
Wattage Mod Array 2	2,500	#12	
Wattage Mod Array 3	2,500	#12	
Wattage Mod Array 4	2,500	#12	
Total Wattage	10,000		

1 FROM MODULE TO J-BOX			
Wire AMP	This is with 1.56		
8.9	13.9	#12	
8.9	13.9	#12	
8.9	13.9	#12	
8.9	13.9	#12	

2 From J-BOX to INVERTER with Combiner Box and DC DISC in the INVERTER			11
Wire AMP	With 2.56 added		STANDARD FUSE
8.9	22.8	#10	15 AMP
8.9	22.8	#10	15 AMP
8.9	22.8	#10	15 AMP
8.9	22.8	#10	15 AMP

3 From Inverter to AC DISC>			
Wire AMP	This is with 1.25 added		STANDARD breaker.
41.7	52	#6	60 Amps

4 From AC DISC to MAIN OCPD		
52	Amps	60 AMPS.
	Line Feed	1Ø 240 V
Wire for Line Feed Delta 4		#6

10

MARCO T. PEREZ
LICENSE
No 45579
Marco T. Perez
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by Marco Perez
DN: c=US, st=Florida, l=Plantation, email=mperez@broward.org, o=Broward County, cn=Marco Perez
Date: 2013.01.22 08:47:51 -05'00'

Marco Perez, P.E.; Phone 954-577-4628
Florida P.E. License # 45579
Broward County
1 N. University Dr., Box B300
Plantation, FL 33324