

		created	JM
		checked	JL
Tech. Bulletin	Rev. Nr.	PoleLock - 45 deg. angle	
	1.0		

INTRODUCTION

The current PoleLock range has been designed to be installed at an angle of between 25 – 35 degrees and is compliant to AS/NZS 1170.2.2011 when installed to the following specifications.

1 Panel Frame:

90 DN DuraGal pole (101.6mm outer diameter / 4mm wall thickness)

250 MPa

3200mm pole length

2 Panel Frame:

100 DN DuraGal pole (114.3mm outer diameter / 4.5mm wall thickness)

250 MPa

3200-3600mm pole length

3 / 4 Panel Frame:

125 DN DuraGal pole (141.3mm outer diameter / 5mm wall thickness)

250 MPa

3400-3600mm pole length

1. Ensure location is suitable for pole mounted solar installation.

2. Ensure no building / trees are shading the modules.

3. Dig holes in undisturbed, natural ground with a soil friction angle of 22 degrees or greater.

1 Panel Frame:

450mm diameter pier - 1200mm depth

2 Panel Frame:

450mm diameter pier - 1400mm depth

600mm diameter pier - 1200mm depth

3 Panel Frame:

450mm diameter pier - 1500mm depth

600mm diameter pier - 1300mm depth

4 Panel Frame:

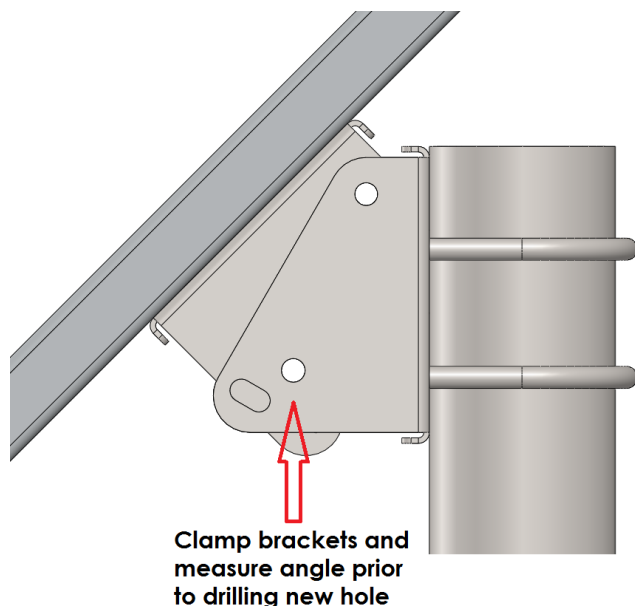
450mm diameter pier - 1600mm depth

600mm diameter pier - 1400mm depth

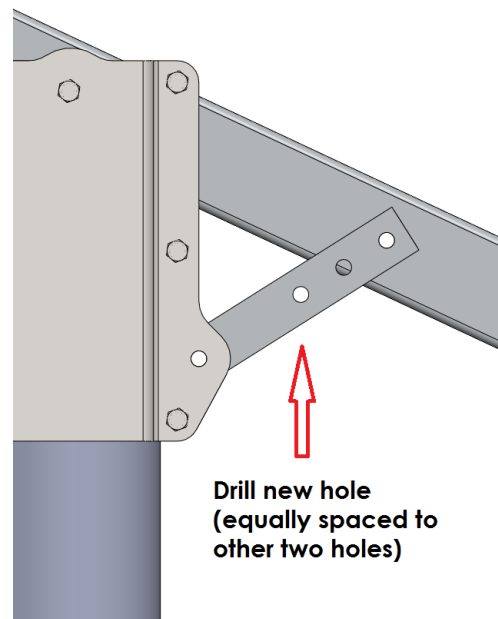
EXTRA CERTIFICATION - 45 DEG. ANGLE

Partridge Partners have now certified that the PoleLock system can be installed up to angles of 45 degrees in wind region A and still retain AS/NZS 1170.2.2011 certification as long as the system is installed within the existing guidelines.

FRAME MODIFICATION - 45 DEG. ANGLE



SLP01
(Installed at 45 deg.)



SLP02 / SLP03 / SLP04
(Installed at 45 deg.)

AS/NZS 1170.2:2011 CERTIFICATION

August 28th 2013



Energy Matters Pty Ltd
359-361 City Road
Southbank VIC 3006

Attention: Mr James Mumford

STRUCTURAL DESIGN CERTIFICATE

**Project Description: PoleLock Pole Mounted Solar Panel Mounting System
1-Panel, 2-Panel, 3-Panel and 4-Panel
Region A – 45 degree tilt**

We, Partridge Structural Pty Limited, being Professional Structural Engineers within the meaning of the Building Code of Australia, hereby certify that we have reviewed the structural design of the 1/2/3/4-Panel PoleLock Solar Panel Mounting System and associated footings as detailed in the PoleLock Installation Manual Version 3.1, dated November 2012, by Energy Matters Pty Ltd for adequacy to be used in Region A only with a 45 degree panel inclination, and that this work is in accordance with the relevant provisions of the Standard Building Codes and in accordance with accepted engineering practice and principles.

This certification is subject to the limitations imposed on the system as detailed in the Manual. This document does not constitute certification of the adequacy of the ground or soil in which the footings are placed.

This certificate shall not be construed as relieving any other party of their responsibilities, liabilities or contractual obligations.

Assumptions and limitations:

- Wind Region A only
- Panel inclination 45 degrees
- Other assumption and limitations as per the above referenced version of the PoleLock Installation Manual

A handwritten signature in black ink, appearing to read 'Rob Smith', is written over a light purple background graphic.

BE(Hons) MIEAust CPEng NPER(Structural) RPEQ
For and on behalf of:

Partridge Structural Pty Ltd

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FURTHER INFORMATION

For further information contact Apollo Energy on 1300 855 484 or sunlock@apolloenergy.com.au.

