

46" PENETRATOR™

ALUMINUM GROUND ANCHOR

356 ALUMINUM ALLOY TO HEAT TREATED

ULTIMATE PULLOUT CAPACITY - 14,000 LBS.

- Available in guy, hex, flat or hex 8" head version
- · Aircraft-quality cast aluminum 356 Alloy No Corrosion
- Install with 1¾" or 45 mm socket
- Weighs 12lb (5.4 kg)
- Permanent or Removable/Reusable
- Can also replace concrete footings & downloads



46" (1.2m)

Hex8 Solar Installation



Solar Array



2" Schedule 40 Pipe



Solar Mount on Slope





PE46-HEX8

SPECIFICATIONS



13/4" (47mm)

Extension Length 6" (152mm) Extension Diameter 2" (51mm)

Flange Diameter 4" : (102mm) Neck Diameter 13/4" (45mm)

Flight Diameter 3": (77mm)





(m)

6-point socket (instead of 12-point socket) will minimize wear and rounding of hex head for repeated installation/removal

VERTICAL PULL							
Ultimate Load Capacity Vertical pullout strength flight fully embedded	PE9 9"	PE10 10"	PE14 14"	PE18 18"	PE26 26"	PE36 36"	PE46 46"
Hardpan or Asphalt	400lb 1.78 kN	1,000lb 4.45 kN	2,500lb 11.1 kN	2,500lb 11.1 kN	4,500lb 20.0 kN	8,400lb 37.4 kN	14,000lb 62.3 kN
Soil Class 1 Hard clays, Hard compact sand / gravel	200lb 0.89 kN	700lb 3.11 kN	1,700lb 7.56 kN	1,700lb 7.56 kN	3,100lb 13.8 kN	6,000lb 26.7 kN	9,500lb 42.3 kN
Soil Class 2 Medium clays, Medium sandy gravel	100lb 0.44 kN	350lb 1.56 kN	600lb 2.67 kN	600lb 2.67 kN	1,100lb 4.89 kN	2,100lb 9.34 kN	3,300lb 14.7 kN
Soil Class 3 Loose medium to fine sand with minimal clay	<100lb 0.44 kN	200lb 0.89 kN	350lb 1.56 kN	350lb 1.56 kN	630lb 2.80 kN	1,000lb 4.45 kN	2,000lb 8.90 kN
Soil Class 4 Loose fine un- compacted sand	<100lb 0.44 kN	100lb 0.44 kN	200lb 0.89 kN	200lb 0.89 kN	350lb 1.56 kN	550lb 2.45 kN	750lb 3.34 kN

» Commercial

» Residential

» Permanent

» Temporary

» Military

Soil classification per ASTM D-2487/2488. Install with impact socket.

ANGLE INSTALLATION											
Soil Type	Installed 15° / Pullout 15°			Installed 30° / Pullout 30°			Installed 45° / Pullout 45°				
	PE26"	PE36"	PE46"	PE26"	PE36"	PE46"	PE26"	PE36"	PE46"		
Hardpan or Asphalt	4,265lb	7,980lb	13,300lb	4,050lb	7,560lb	12,600lb	3,600lb	6,720lb	11,200lb		
Soil Class 1 Hard clays, Hard compact sand / gravel	2,945lb	5,700lb	9,025lb	2,790lb	5,400lb	8,550lb	2,480lb	4,800lb	7,600lb		
Soil Class 2 Medium clays, Medium sandy gravel	1,045lb	1,995lb	3,135lb	990lb	1,890lb	2,970lb	880lb	1,680lb	2,640lb		
Soil Class 3 Loose medium to fine sand with minimal clay	598lb	950lb	1,900lb	567lb	900lb	1,800lb	504lb	800lb	1,600lb		
Soil Class 4 Loose fine un- compacted sand	332lb	475lb	712lb	315lb	450lb	675lb	280lb	400lb	600lb		

- » Underwater
- » Soil / Sand
- » Asphalt





PE46-HEX8 INSTALLATION METHODS USE 13/4" 6-POINT SOCKET

Install the anchor at the same angle the load is pulling - it's the flights of the anchor that hold the anchor in the ground.

▶ Electric Impact Driver - Suggested minimum of 750ft lbs of torque in hard soil







▶ **Air Impact Driver -** 1/2 - 3/4" Impact Driver On Average Needs 70-90 PSI At 10 CFM. 3/4 - 1" Impact Driver On Average Needs 70-90 PSI At 20 CFM



▶ Power Take Off (PTO) - Tractor, Bobcat, Skid Steer, etc. - Make sure the PTO or Power Head is always in line with the anchor. After the anchor is 50% installed move the PTO so it is again aligned with the anchor. The anchor can bow and fail if not installed properly.



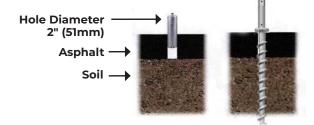




▶ **Manual-** Ratchet with appropriate socket. Add Steel Pipe (Cheater Bar) for leverage. If you are having a tough time getting the last few installation inches in the ground with an impact tool.



▶ **Pre-Drill -** Pre-drilling is necessary when installing penetrators in asphalt, frozen, hard or rocky soil. Takes stress off the anchor and installer and will tell you if any rocks, roots or obstacles are in the way. Use a 2" auger bit (no larger) so anchor can still bite into soil.





2" Auger Bit with 1"sq drive (PE-Auger-2) available at americanea.com



PE46-HEX8 REPLACES CONCRETE FOOTINGS - USE WITH SCHEDULE 40 PIPE



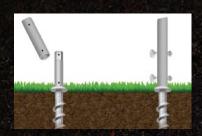
















2" Schedule 40 Pipe attaches to head

WE MAKE CUSTOM BRACKETS, BASE PLATES AND CABLES FOR MOST APPLICATIONS. CALL OR EMAIL US WITH YOUR DESIGN, SKETCH OR IDEA.