

# **46" PENETRATOR™**

ALUMINUM GROUND ANCHOR

356 ALUMINUM ALLOY TO HEAT TREATED



### **ULTIMATE PULLOUT CAPACITY - 14,000 LBS.**

- · Available in hex, flat or hex 8" head version
- · Aircraft-quality cast aluminum 356 Alloy No Corrosion
- Install with 2"or 51 mm socket
- Weighs 10.5lb (4.6 kg)
- Permanent or Removable/Reusable
- Can also replace concrete footings



46" (1.2m)

**Fabric Structures** 



**Towers** 



**Playground Zip Line** 



TV / Radio Antenna Masts



**Duck Blind in Mud** 





24" Irrigation Pipe Filter for Golf Course





# PE46-GUY SPECIFICATIONS



3.5" : (89mm)

Neck Diameter 13/4": (45mm)

Flight Diameter 3": (77mm)



**Socket Size 2"** 



Slot for cable or other attachment up to 1/2" (13mm)



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

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VERTICAL PULL		1	1		1		8	
Ultimate Load Capacity	***************************************	# # # # # # # # # # # # # # # # # # #	THANK!	II	T T			
Vertical pullout strength flight fully embedded	PE9 9"	PE10 10"	PE14 14"	PE18 18"	PE26 26"	PE36 36"	PE46 46"	
Hardpan or Asphalt	<b>400lb</b> 1.78 kN	<b>1,000lb</b> 4.45 kN	<b>2,500lb</b> 11.1 kN	<b>2,500lb</b> 11.1 kN	<b>4,500lb</b> 20.0 kN	<b>8,400lb</b> 37.4 kN	<b>14,000lb</b> 62.3 kN	
Soil Class 1 Hard clays, Hard compact sand / gravel	<b>200lb</b> 0.89 kN	<b>700lb</b> 3.11 kN	<b>1,700lb</b> 7.56 kN	<b>1,700lb</b> 7.56 kN	<b>3,100lb</b> 13.8 kN	<b>6,000lb</b> 26.7 kN	<b>9,500lb</b> 42.3 kN	
Soil Class 2 Medium clays, Medium sandy gravel	<b>100lb</b> 0.44 kN	<b>350lb</b> 1.56 kN	<b>600lb</b> 2.67 kN	<b>600lb</b> 2.67 kN	<b>1,100lb</b> 4.89 kN	<b>2,100lb</b> 9.34 kN	<b>3,300lb</b> 14.7 kN	
Soil Class 3 Loose medium to fine sand with minimal clay	<100lb 0.44 kN	<b>200lb</b> 0.89 kN	<b>350lb</b> 1.56 kN	<b>350lb</b> 1.56 kN	<b>630lb</b> 2.80 kN	<b>1,000lb</b> 4.45 kN	<b>2,000lb</b> 8.90 kN	
Soil Class 4 Loose fine un- compacted sand	<b>&lt;100lb</b> 0.44 kN	<b>100lb</b> 0.44 kN	<b>200lb</b> 0.89 kN	<b>200lb</b> 0.89 kN	<b>350lb</b> 1.56 kN	<b>550lb</b> 2.45 kN	<b>750lb</b> 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°			Instal	led 30° / Pul	lout 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-GUY INSTALLATION METHODS**USE 2" 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-GUY APPLICATIONS**



**Duck Blind in Mud** 



**Giant Kites** 



**Fabric Shelter in Canada** 



**Construction Trailer** 



**Burning Man Festival** 



**Conservation Floating Islands** 



24" Irrigation Pipe Filter for Golf Course





**Playground Zip Line** 

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