



Structural Engineering Certification

July 25, 2017

Light Pole Systems, Inc.
1057 E Imperial Hwy. #155
Placentia CA, 92870
(714) 786-8983 www.LightPoleSystems.com

Anchor Bolt Adapter (ABA)

Description and Application

The Anchor Bolt Adapter (typically a set of 4 pieces) corrects the anchor bolt alignment problems (ABA.75:4.4 inches max, ABA1:5 inches max). It is used when the existing anchor bolts do not line up with (match) the bolt holes in the light pole base plate. The anchor bolt adapters are threaded onto the existing anchor bolts and can adjust the bolt circle diameter. Then the pole base plate is bolted to the Anchor Bolt Adapter.

Analysis and Certification

The engineering free-body force diagram of the Anchor Bolt Adapter shows static equilibrium without rotation. The rotation force is translated to anchor bolt pull-out tension. And the tension clamping force (from the anchor bolts) of the concrete pedestal and the pole base plate prevents rotation.

Therefore: The Anchor Bolt Adapter Set (ABA) is certified by this Engineer for:
3/4" Anchor Bolt Adapter (ABA.75): 25' pole, 150 lbs. fixture weight, 100 mph, 11 EPA max using the center hole and 5 EPA max using the outside hole.
1" Anchor Bolt Adapter (ABA1): 40' pole, 550 lbs. fixture weight, 100 mph, 12 EPA max using the center hole and 5 EPA max using the outside hole.

Sincerely,



Paul W. Gregory, P.E. (C30450)
4507 Delancy Dr.
Yorba Linda, Ca. 92886

The Anchor Bolt Adaptor 1" allows an increase or decrease of a bolt circle by up to 2.5", and movement of bolt square by 5" For instructions, see Instillation Guide.

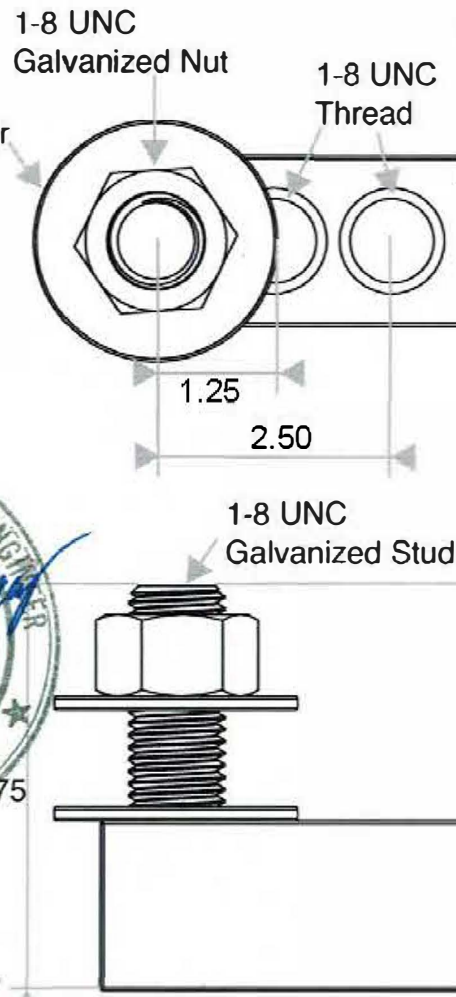
With all blocks in this configuration, the bolt circle is decreased by up to 5".

With all blocks in this configuration, the bolt circle is decreased by up to 2.5".

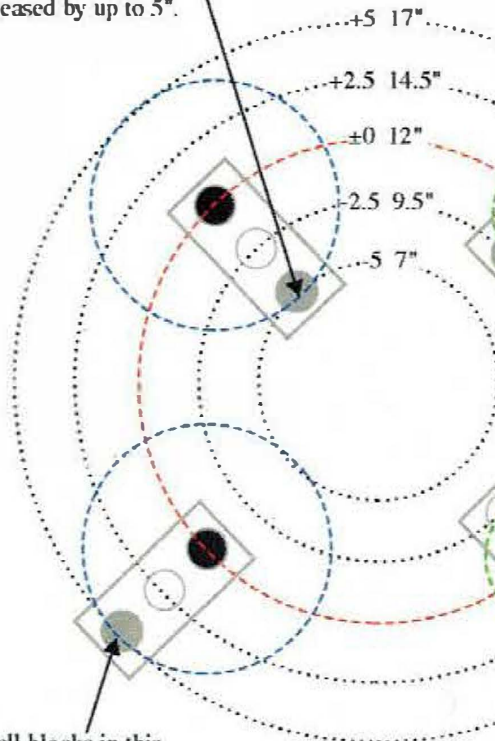
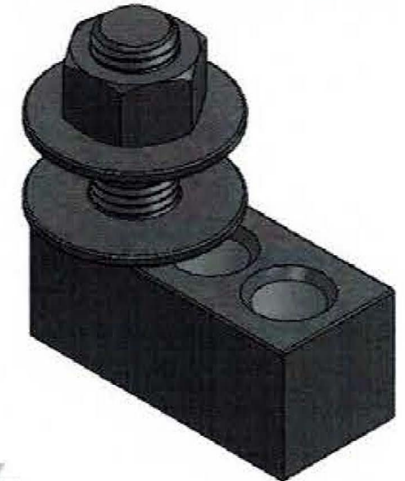
With all blocks in this configuration, the bolt circle is increased by up to 5".

Pole may rotate slightly based on your exact needed adjustment and pole base plate

With all blocks in this configuration, the bolt circle is increased by up to 2.5".



ABA1 is sold in sets of 4 blocks.



ABA1: 40' MAX POLE, 550 LBS. MAX FIXTURE WEIGHT, 100MPH MAX: EPA 15 USING CENTER HOLE. EPA 5 USING OUTSIDE HOLE.

Max EPA in 100MPH windzone
550lbs Fixture Weight

Pole Height	ABA1	
	Center Hole	Outside Hole
15	<20	12
20	<20	9
25	20	7
30	15	6
35	13	5
40	12	5



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UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL:
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ± .005
THREE PLACE DECIMAL ± .005

INTERPRET GEOMETRIC TOLERANCING PER MATERIAL
1018 STEEL

FINISH
HOT DIP GALVANIZED

DO NOT SCALE DRAWING

NAME	DATE
EB	08/31/17

DRAWN
CHECKED
ENG APPR.
MFG APPR.
Q.A.
COMMENTS:

PART#: ABA1

TITLE:
ANCHOR BOLT ADAPTER, 1"

SIZE DWG. NO.

A

REV
2.1
10/4/17

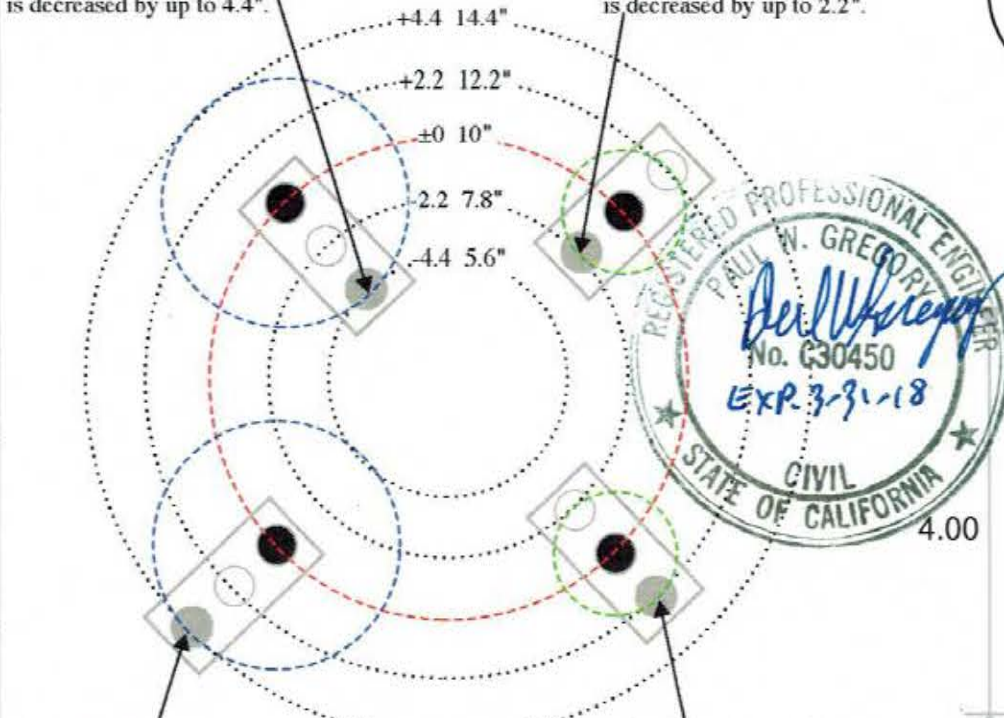
SCALE: 1:2 WEIGHT: 16lbs.

The Anchor Bolt Adaptor 3/4" allows an increase or decrease of a bolt circle by up to 4.4", and movement of bolt square by 2.2" For instructions, see Installation Guide.

ABA.75 is sold in sets of 4 blocks.

With all blocks in this configuration, the bolt circle is decreased by up to 4.4".

With all blocks in this configuration, the bolt circle is decreased by up to 2.2".



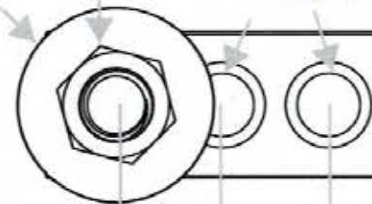
With all blocks in this configuration, the bolt circle is increased by up to 4.4".

Pole may rotate slightly based on your exact needed adjustment and pole base plate

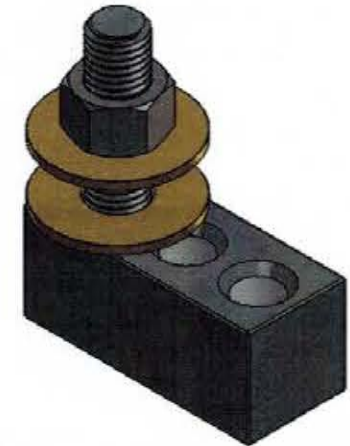
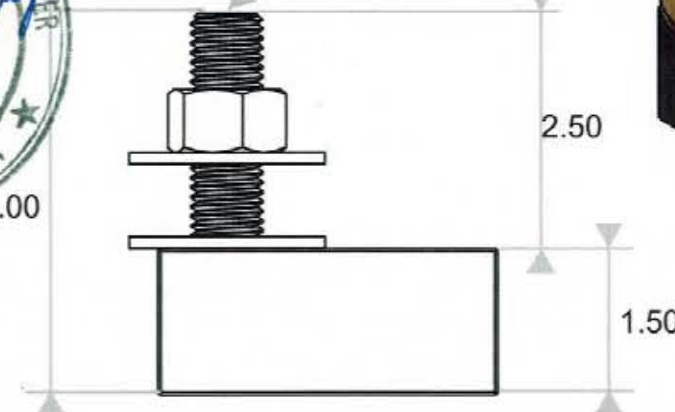
With all blocks in this configuration, the bolt circle is increased by up to 2.2".

3/4-10 UNC Galvanized Nut
3/4-10 UNC Thread

(2) 3/4-2.00 Hardened Washer



3/4-10 UNC Galvanized Stud



ABA.75: 25' MAX POLE, 150 LBS. MAX FIXTURE WEIGHT, 100MPH MAX: EPA 11 USING CENTER HOLE. EPA 5 USING OUTSIDE HOLE.

Max EPA in 100MPH windzone
150lbs Fixture Weight

Pole Height	150lbs Fixture Weight	
	ABA.75 Center Hole	ABA.75 Outside Hole
15	17	7
20	13	5
25	11	5



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1018 STEEL

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DO NOT SCALE DRAWING

NAME DATE
EB 08/31/17

DRAWN
CHECKED
ENG APPR.
MFG APPR.

Q.A.
COMMENTS:

PART#: ABA.75

TITLE:
ANCHOR BOLT ADAPTER, 3/4"

SIZE DWG. NO.

A

REV
2.1
10/4/17

SCALE: 1:2 WEIGHT: 10lbs.