lumenpulse™

Pole Guide
AASHTO Standards

IN THIS GUIDE

Let us help you meet your area needs by taking into account the natural elements for each geological region.

The Area Pole Guide: AASHTO Standards is an industry reference tool that will help you choose your area poles, pole arms, accessories, and luminaries that best suit your project and EPA requirements.

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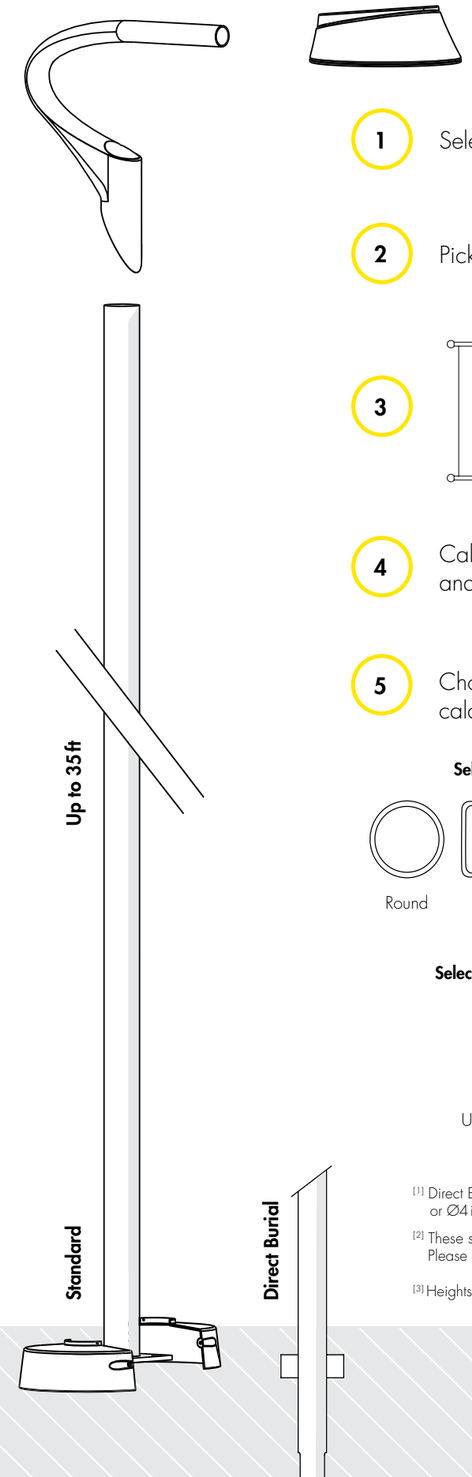
Configuring Your Builds

There are several factors to consider when choosing the right area products for your projects. Once you have chosen a variant of the components shown on the opposite page, you can use this guide to help you calculate if the area modules you have decided on are the safest fit for your region and design.

THIS GUIDE IS FOR REFERENCE PURPOSES ONLY. ALL AREA COMPONENT INSTALLATIONS NEED TO BE VALIDATED BY A QUALIFIED ENGINEER.



1. Select your Lumenpulse outdoor **area luminaire**.
2. Pick a **decorative arm** that suits your project's design needs.
3. Add **accessories** and choose **options** to make your project stand out.
4. Calculate the EPA for your luminaire, decorative arm, and accessories.
5. Choose the right pole that meets or exceeds the EPA calculations done in Step 4.

Select Shape

Round | Square | Flutted

Select Material

AL — Aluminium

STL — Steel

Select Pole Height

Up to 35 ft

Select Installation Type

Standard | Semi-Buried | Direct Burial

[1] Direct Burial is available for Straight Poles only. Maximum height of 16ft for Ø4in and Ø5in aluminum poles or Ø4in steel poles. Maximum height of 26ft for Ø6in aluminum poles or Ø5in and Ø6in steel poles.

[2] These steps are suggestions only. Each variant can affect total EPA. Please verify with a qualified engineer before installation.

[3] Heights of 25 to 31ft limited to Tapered Poles.

Junction Compatibilty Diagram

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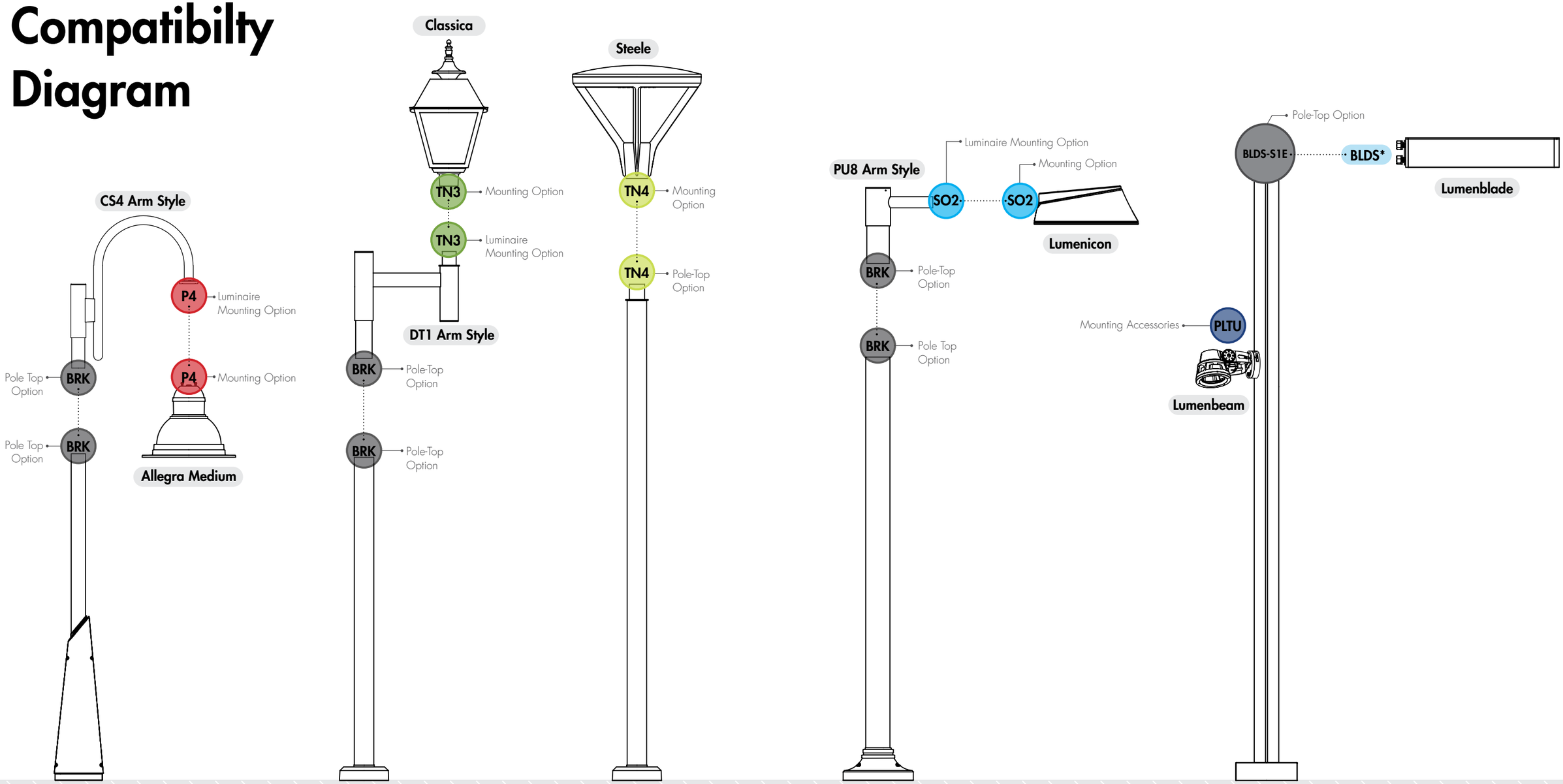

Ø4" Straight Round Pole

Pendant-Mount Luminaires

Pendant-Mount Luminaires always need a Decorative Arm to be mounted on a Decorative Pole.

Ø5" Straight Round Pole

Top-Mount Luminaires

Top-Mount luminaires are mounted on Decorative Arms.

Ø5" Straight Round Pole

Post-Top-Mount Luminaires

Post-Top Mount luminaires are mounted directly on Decorative Poles.

Ø6" Straight Round Pole

6" Lumentech Smart Pole Square

Side-Mount Luminaires

Side-Mount luminaires can be mounted on Decorative Arms or directly onto Decoratives Poles.

*SPA6T A Pole Mounting Adaptor is required for Lumenblade Small when conbined with a Lumentech Smart Pole 6" Square.

Product Code Alignment

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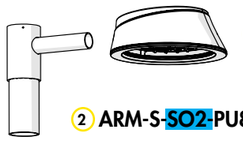
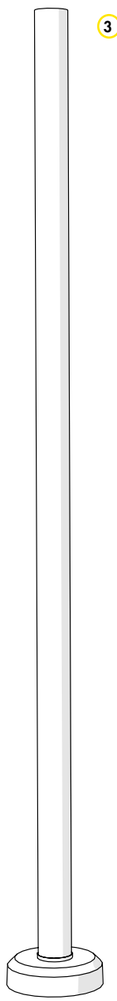


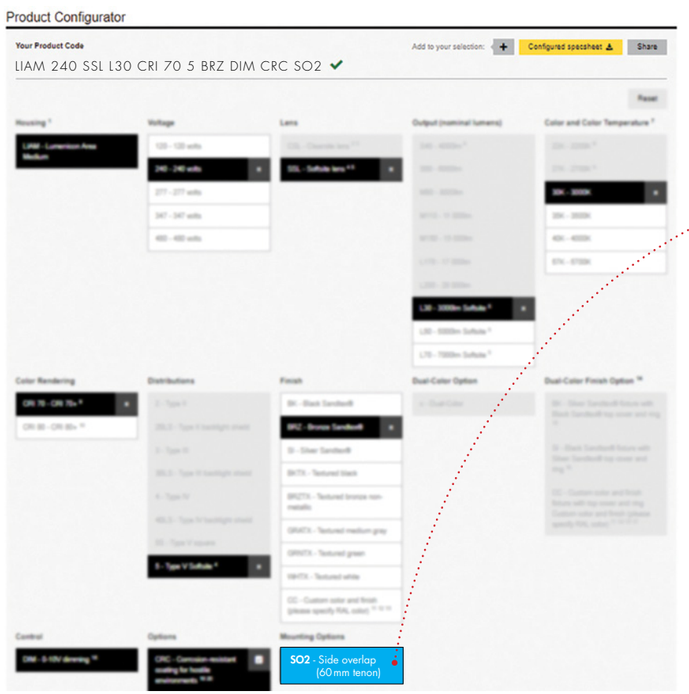
① LIAM-240-SSL-L30-30K-CRI 70-5-BRZ-DIM-CRC-SO2

② ARM-S-SO2-PU8-S1E-4-R-L-BRK-BRZ-CRC

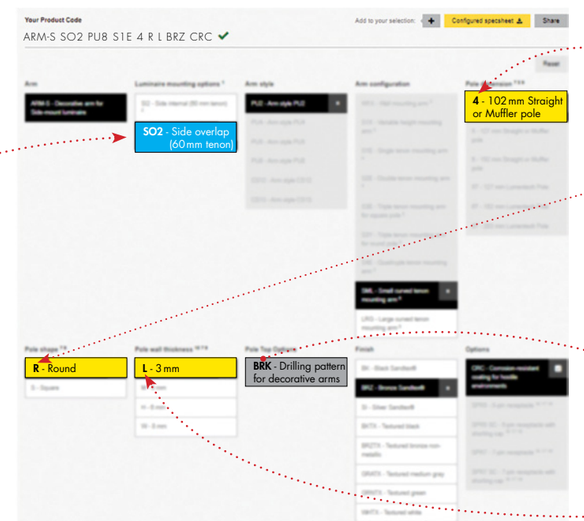


③ PL-S-4-AL-R-16-L-BRZ-WO-BRK-DRG-AB

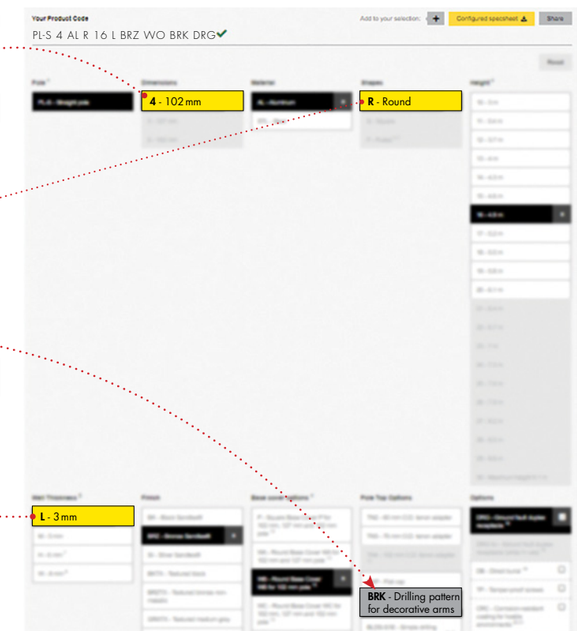
① Configure your area luminaire and take note of your **Mounting Option Code**: **SO2**.



② Match the **Side-Mount Decorative Arm** with the luminaire's **Mounting Option Code**: **SO2**.



③ Configure the **Decorative Pole** for your project and make sure that the **Decorative Arm** is properly configured (**4** Pole Dimensions/**R** Shape/**L** Wall Thickness).



COMPATIBILITY

LUMINAIRE, ARM AND POLE

Luminaire and Decorative Arm

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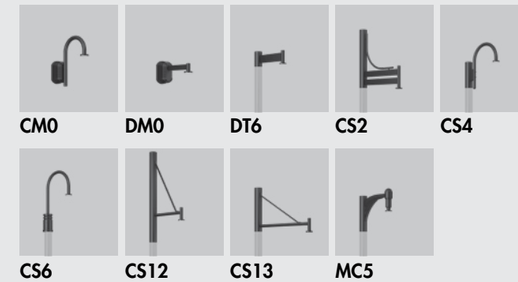
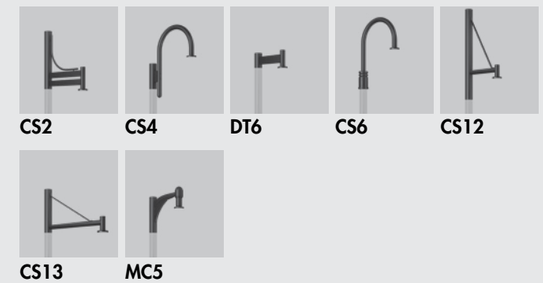
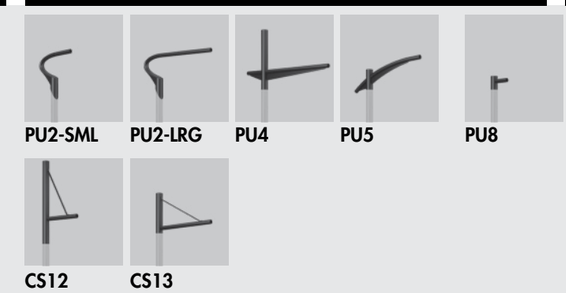
Pendant-Mount Fixture	Arm Style	Mounting Options
Allegra Small	 CM0, DM0, DT6, CS2, CS4, CS6, CS12, CS13, MC5	P3 Pendant Small 3 Bolts
Allegra Medium	 CS2, CS4, DT6, CS6, CS12, CS13, MC5	P4 Pendant Medium 4 Bolts

Side-Mount Fixture	Arm Style	Mounting Options
Pure100	 PU2-SML, PU2-LRG, PU4, PU5, PU8, CS12, CS13	SI2 Side Internal 2 3/8in
Allegra Medium*	PU2-LRG, PU4, PU5, CS12, CS13	SI2 Side Internal 2 3/8in

* SI2 Tenon Adaptor included with Allegra Medium SI2 mounting option.

Luminaire and Decorative Pole

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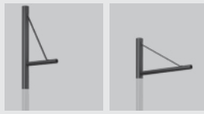
Side-Mount Fixture / Arm Style / Mounting Options

Lumenicon Area Medium

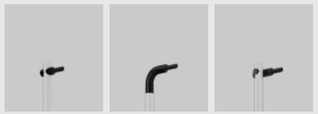
PU2-SML PU2-LRG PU4 PU5 PU8



CS12 CS13

SO2
Side Overlap
2⅜ in

Lumenspoke Small



SPKS4 SPKR4 SPKH4

SO2
Side Overlap
2⅜ in
6 in min.

SO2N
Side Overlap
2⅜ in
3 7⁄16 in min.

Top-Mount Fixture / Arm Style / Mounting Options

Prestigia

Classica

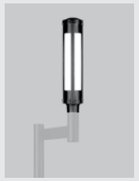
DT1* DT6 MC1*

TN3
Tenon 3 in

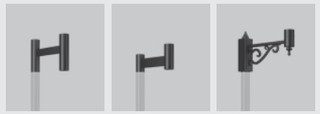
TN4
Tenon 4 in**

* Some limitations may apply. ** Apply to Classica fixture only.

Pure T-V-Y



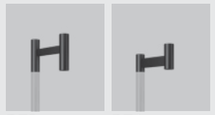
Element Post-Top



DT1 DT6 MC1

TN4
Tenon 4 in

Steele



DT1 DT6

TN4
Tenon 4 in

Post-Top-Mount Luminaire / Mounting Option / Pole-Top Option

Classica

Prestigia

Decorative Pole Compatibility

Pole	Round				Square				Fluted	
	Ø4"	Ø5"	Ø6"	Ø8"	4"	5"	6"	8"	Ø4"	Ø5"
PL-S	TN3			N/A	TN3			N/A	TN3	
PL-M										
PL-T										

TN3
Tenon 3 in

Classica

Pure T-V-Y

Decorative Pole Compatibility

Pole	Round				Square				Fluted	
	Ø4"*	Ø5"	Ø6"	Ø8"	4"	5"	6"	8"	Ø4"	Ø5"
PL-S	TN4			N/A	TN4			N/A	TN4	
PL-M										
PL-T										

TN4 *
Tenon 4 in

Steele

Element Post-Top

*TN4 pole-top option not required with 4" round pole.

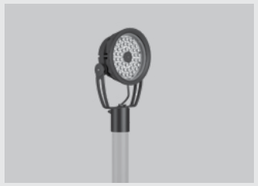
Lumenquad Family

Decorative Pole Compatibility

Pole	Round				Square				Fluted	
	Ø4"	Ø5"	Ø6"	Ø8"	4"	5"	6"	8"	Ø4"	Ø5"
PL-S	TN4			N/A	TN4			N/A	TN4	
PL-M										
PL-T										

TN4
Tenon 4 in

Post-Top-Mount Luminaire / Mounting Accessories (Order separately) / Pole-Top Option



Lumenbeam Family

Decorative Pole Compatibility

Pole	Round				Square				Fluted	
	Ø4"	Ø5"	Ø6"	Ø8"	4"	5"	6"	8"	Ø4"	Ø5"
PL-S	LBSTN4			N/A	LBSTN4			N/A	LBSTN4	
PL-M	LBMTN4				LBMTN4				LBMTN4	
PL-T	LBLTN4				LBLTN4				LBLTN4	
	LBGTN4				LBGTN4				LBGTN4	

TN4
Tenon 4 in

Side-Mount Luminaire	Mounting Option	Pole-Top Option

Pure100

Decorative Poles Compatibility

Pole	Round				Square				Fluted	
	Ø4"	Ø5"	Ø6"	Ø8"	4"	5"	6"	8"	Ø4"	Ø5"
PL-S	PU1-S1X-4R PU1-S1E-4R PU1-S2E-4R	PU1-S1X-5R PU1-S1E-5R PU1-S2E-5R	N/A		N/A				PU1-S1X-4R PU1-S1E-4R PU1-S2E-4R	PU1-S1X-5R PU1-S1E-5R PU1-S2E-5R
PL-M										
PL-T	N/A				N/A				N/A	

N/A

No pole-top option required

Lumenblade Small

Decorative Pole Compatibility

Pole	Round				Square			
	Ø4"	Ø5"	Ø6"	Ø8"	4"	5"	6"	8"
PL-S	RPA4S	RPA5S	RPA6S	N/A	SPA4	SPA5	SPA6	N/A
PL-M								
PL-T	N/A	RPA5TS	RPA6TS		N/A	N/A	SPA6T	

BLDS-S1E

Simple drilling pattern for Lumenblade Small

BLDS-S2E

Double drilling pattern for Lumenblade Small

Lumenblade Medium

Decorative Pole Compatibility

Pole	Round				Square			
	Ø4"	Ø5"	Ø6"	Ø8"	4"	5"	6"	8"
PL-S	N/A	N/A	RPA6M	N/A	N/A	N/A	SPA6	N/A
PL-M			RPA6M					
PL-T			RPA6TM				SPA6T	

BLDM-S1E

Simple drilling pattern for Lumenblade Medium

BLDM-S2E

Double drilling pattern for Lumenblade Medium

Lumenblade Nano

Decorative Pole Compatibility

Pole	Round				Square			
	Ø4"	Ø5"	Ø6"	Ø8"	4"	5"	6"	8"
PL-S	N/A	N/A	RPA6M	RPA8N	N/A	N/A	SPA6	SPA8N
PL-M			RPA6M					
PL-T			RPA6TM	RPA8TN			SPA6T	SPA8TN

BLDN-S1E

Simple drilling pattern for Lumenblade Nano

BLDN-S2E

Double drilling pattern for Lumenblade Nano

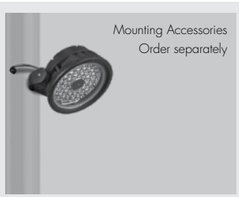
Lumenquad Family

Decorative Pole Compatibility

Pole	Round				Square				Fluted	
	Ø4"	Ø5"	Ø6"	Ø8"	4"	5"	6"	8"	Ø4"	Ø5"
PL-S	PM4-1 PM4-2 PLTU	PM5-1 PM5-2 PLTU	N/A PLTU	N/A	N/A PLTU			N/A	PM4-1 PM4-2 N/A	PM5-1 PM5-2
PL-M	PM4-1 PM4-2 PLTU	PM5-1 PM5-2 PLTU	N/A PLTU	N/A	N/A PLTU			N/A	PM4-1 PM4-2 N/A	PM5-1 PM5-2
PL-T	N/A	PLTU	PLTU		N/A	PLTU			N/A	

N/A

No pole-top option required



Lumenbeam Family

Decorative Pole Compatibility

Pole	Round				Square				Fluted	
	Ø4"	Ø5"	Ø6"	Ø8"	4"	5"	6"	8"	Ø4"	Ø5"
PL-S	PM4-1 PM4-2 PLTU	PM5-1 PM5-2 PLTU	N/A PLTU	N/A	N/A PLTU			N/A	PM4-1 PM4-2 N/A	PM5-1 PM5-2
PL-M	PM4-1 PM4-2 PLTU	PM5-1 PM5-2 PLTU	N/A PLTU	N/A	N/A PLTU			N/A	PM4-1 PM4-2 N/A	PM5-1 PM5-2
PL-T	N/A	PLTU	PLTU		N/A	PLTU			N/A	

N/A

No pole-top option required

Decorative Arm and Decorative Pole

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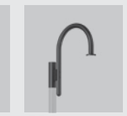
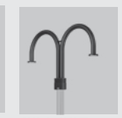
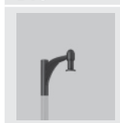
Pendant-Mount Arm Style	Decorative Pole Compatibility			Pole-Top Option
	4" Pole	5" Pole	6" Pole	
CS2	○□	○□	○□	BRK
 CS4				
CS6-S1E	○	○	N/A	BRK No pole-top option required with S1E 4" pole
 CS6-S2E				
CS12	○□	○□	○□	BRK
CS13				
DT6	○□	○□	○□	BRK
 MC5	○□	○□	○□	BRK

Top-Mount Arm Style	Decorative Pole Compatibility			Pole-Top Option
	4" Pole	5" Pole	6" Pole	
DT1	○□	○□	○□	BRK
DT6				
MC1	○□	○□	○□	TNMC1

○ Round Pole □ Square Pole

Side-Mount Arm Style	Decorative Pole Compatibility			Pole-Top Option
	4" Pole	5" Pole	6" Pole	
PU2-SML PU2-LRG	○	N/A	N/A	N/A No pole-top option required
PU4 PU5 PU8	○ □	○ □	○ □	BRK
CS12 CS13	○ □	○ □	○ □	BRK
SPKS4	○ □	○ □	○ □	SPKS S1E/S2E S3E/S3Y/S4E SPK S1X
SPKR4	○	N/A	N/A	BRK-VRN
SPKH4	○ □	○ □	○ □	SPKH S1E SPK S1X

○ Round Pole □ Square Pole

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EPA Pole Guide

Built to Withstand the Elements

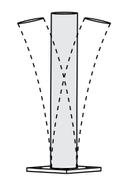
Designed to resist the elements, such as wind, ice, and extreme locations, our poles are engineered to support luminaires through most types of weather.

To ensure their success, the appropriate Effective Projected Area (EPA) calculation helps make the installation of area lighting safe and to increase the longevity of a lighting installation.

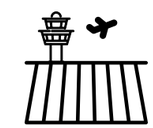
The EPA is a coefficient that determines how much force a luminaire can apply to its mounting brackets or pole at a given wind velocity. This value is used in combination with a luminaire's weight to determine the mounting requirements for a particular application.

Special Considerations

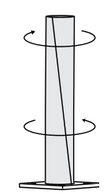
Lumenpulse offers a number of solutions that tackle special considerations and conditions not included in standard EPA calculations. To learn more, please consult a Lumenpulse representative. Some additional factors that influence the stability of a pole installation:



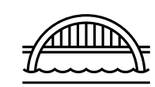
Vibration



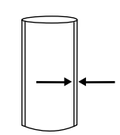
Flat and Open Spaces



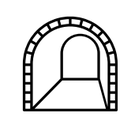
Torsion



Height of Installation Above Ground



Wall Thickness



Tunnel Effect

NOTE: As per ANSI C136.30 standard for Pole Vibration, it is recommended to add a Vibration Dampener for a pole taller than 25ft. with low attachment EPA (less than 2 sq.ft. Special considerations should also be given to determine the need for a Vibration Dampener based on site conditions, regardless of selected pole height and EPA. Lumenpulse is not responsible for determining vibration dampener requirements on a project.

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Pole Basics

ALUMINUM vs STEEL

WHY CHOOSE ONE OVER ANOTHER?

AL
Aluminum

Aluminum Poles

- Light weight
- Ease of machining
- Ease of manufacturing
- Superb corrosion resistance
- Highly recyclable

STL
Steel

Steel Poles

- Recommended for high/extreme wind situations
- Recommended for taller heights
- Greater load-bearing capacity
- Greater vibration resistance

Anchorage Details

Anchor Bolts

Anchor bolts are used to secure poles into concrete foundations. The listed EPAs are calculated using the Lumenpulse Anchor Bolts supplied with each pole product. The use of anchor bolts outside to those provided by Lumenpulse can alter the EPA and compromise the stability of a pole's installation. The nuts of each anchor bolt must be tightened to the listed torque requirement.

Template

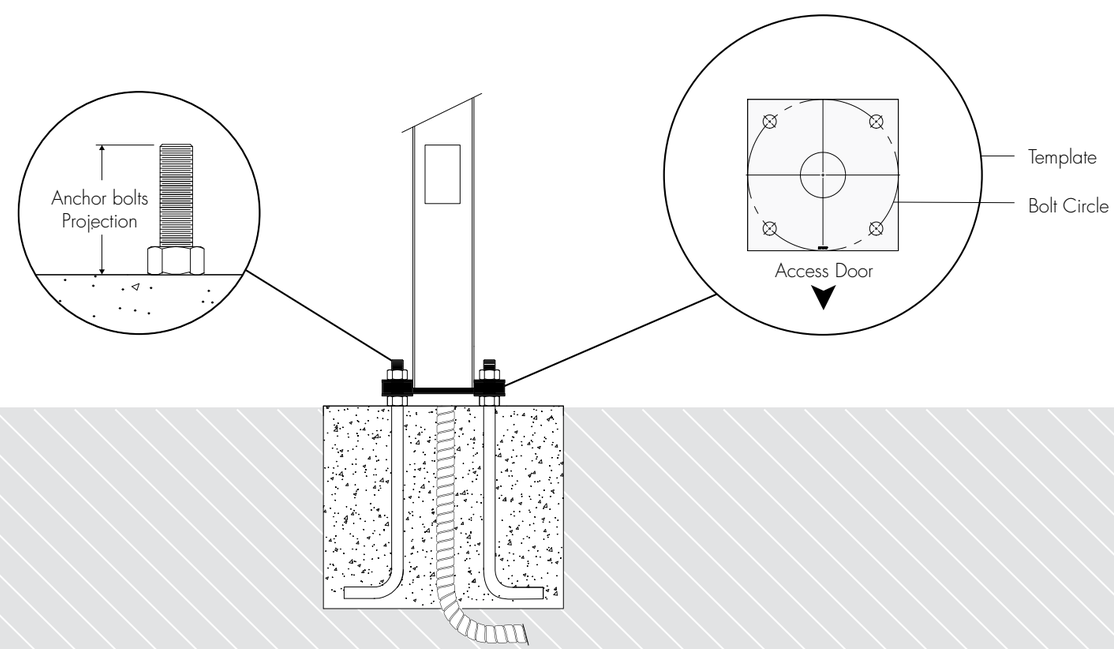
An Anchor Bolt Template is included with each set of five poles. This template is needed to install anchor bolts that will coincide with the pole base layout. The template must be removed prior to pole installation. Special attention must be paid when using the template so as to account for the orientation of the pole's access door.

Anchor Bolt Projection

An anchor bolt's overall projection is an important consideration when securing a pole. Anchor bolts with a short projection can leave insufficient space to properly secure the pole base. An anchor bolt with too much projection can cause bending stress and can prevent the proper installation of the base cover.

Bolt Circle Diameter

The position of the bolt cut-outs on the lazer-cut template need to be confirmed before pouring concrete. This is to ensure that the template coincides with the pole base layout.



How to Calculate EPA

The geographic location of the project will determine your maximum EPA. To determine your maximum EPA, please consult the American Association of State Highway Transportation Officials (AASHTO) Wind Map to help find the maximum EPA in various regions throughout the United States.

Calculate the EPA for each combination of luminaire, pole, decorative arm, and accessory using the method shown (the EPA of all our products can also be found in the product's specification sheet).

Correlate each pole's dimensions (height, material, shape, and thickness) with the acceptable EPA accordingly to the AASHTO Wind Map.

Factors That Influence Maximum EPA Load

Dimensions: Available in 4, 5, 6, and 8 in diameters (maximum height can vary).

Shapes: Available in round, square, and fluted.

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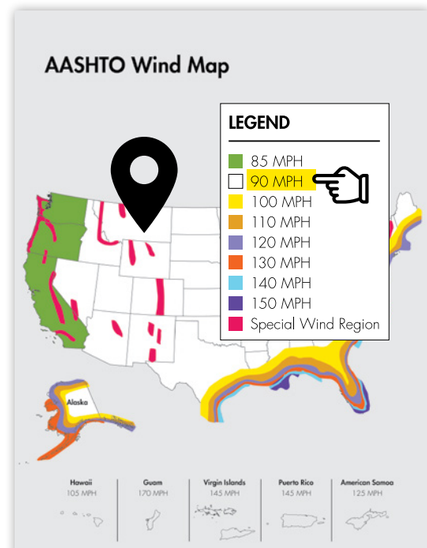
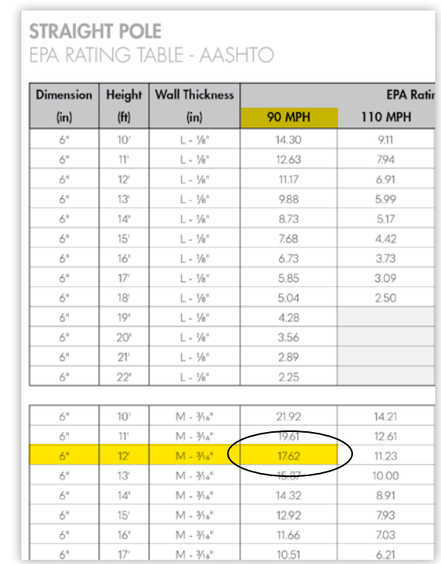
1 Find the total EPA of your luminaire including all components such as decorative arm, banners, flowerpots, cameras, etc.

Type	Model	Qts.	EPA	Weight	Total EPA	Total Weight
Luminaire	LIAM	2	0.43 sq. ft.	32 lbs.	0.86 sq. ft.	64 lbs.
Decorative Arm	PU4-S2E	1	5.08 sq. ft.	28 lbs.	5.08 sq. ft.	28 lbs.
Accessories	Banner Arms	2	0.11 sq. ft.	4.13 lbs.	0.22 sq. ft.	8.26 lbs.
Others	18in x36in Banner (by others)	1	5.40 sq. ft.	TBD	5.40 sq. ft.	TBD
				*Total:	11.56 sq.ft.	100.26 lbs.*

*Banner weight must be added.





STRAIGHT POLE
EPA RATING TABLE - AASHTO

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Ratir 90 MPH	110 MPH
6"	10'	L - 1/8"	14.30	9.11
6"	11'	L - 1/8"	12.63	7.94
6"	12'	L - 1/8"	11.17	6.91
6"	13'	L - 1/8"	9.88	5.99
6"	14'	L - 1/8"	8.73	5.17
6"	15'	L - 1/8"	7.68	4.42
6"	16'	L - 1/8"	6.73	3.73
6"	17'	L - 1/8"	5.85	3.09
6"	18'	L - 1/8"	5.04	2.50
6"	19'	L - 1/8"	4.28	
6"	20'	L - 1/8"	3.56	
6"	21'	L - 1/8"	2.89	
6"	22'	L - 1/8"	2.25	
6"	10'	M - 3/16"	21.92	14.21
6"	11'	M - 3/16"	19.61	12.61
6"	12'	M - 3/16"	17.62	11.23
6"	13'	M - 3/16"	15.87	10.00
6"	14'	M - 3/16"	14.32	8.91
6"	15'	M - 3/16"	12.92	7.93
6"	16'	M - 3/16"	11.66	7.03
6"	17'	M - 3/16"	10.51	6.21

2 Select your location on the AASHTO Wind Map and find the right EPA.

3 Round up the Location EPA Data and confirm your choice of pole with the EPA Table Pages. Compare your results depending on height, thickness, or material.

*This guide is intended as a reference only. Please consult a qualified engineer.

Luminaire EPA Tables

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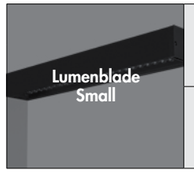


		S40/S60	M80/M100	L120/L140
EPA	Without Motion Detector	0.59 sq. ft.	0.88 sq. ft.	1.25 sq. ft.
	With Motion Detector	0.79 sq. ft.	1.07 sq. ft.	1.45 sq. ft.
Weight	Without Motion Detector	10 lbs.	12.5 lbs.	15 lbs.
	With Motion Detector	12 lbs.	14.5 lbs.	17 lbs.

		S40/S60	M80/M100	L120/L140/L160	XL180/XL200
EPA	Without Motion Detector	0.69 sq. ft.	1.03 sq. ft.	1.46 sq. ft.	1.90 sq. ft.
	With Motion Detector	0.92 sq. ft.	1.25 sq. ft.	1.69 sq. ft.	2.13 sq. ft.
Weight	Without Motion Detector	12.5 lbs.	16 lbs.	21 lbs.	25 lbs.
	With Motion Detector	15 lbs.	18.5 lbs.	23.5 lbs.	27.5 lbs.

		N10/N15	XS20/XS25/XS30	S40/S60	M80/M100	L120/L140
EPA	Without Motion Detector	0.77 sq. ft.	1.07 sq. ft.	1.4 sq. ft.	1.71 sq. ft.	2.11 sq. ft.
	With Motion Detector	0.94 sq. ft.	1.24 sq. ft.	1.6 sq. ft.	1.89 sq. ft.	2.29 sq. ft.
Weight	Without Motion Detector	7.15 lbs.	11 lbs.	16.1 lbs.	19 lbs.	23.25 lbs.
	With Motion Detector	9.15 lbs.	13 lbs.	18.1 lbs.	21 lbs.	25.25 lbs.

EPA	0.43 sq. ft.
Weight	32 lbs.

		SI2 Adaptor (luminaire only)	PU1-S1X (4R+5R)*	PU1-S1E (4R+5R)*	PU1-S2E (4R+5R)*
EPA		0.43 sq. ft.	0.86 sq. ft.	1.16 sq. ft.	1.46 sq. ft.
Weight		30 lbs.	33.5 lbs.	37.3 lbs.	71 lbs.

		Pure T	Pure V	Pure Y
EPA		Up to 1.33 sq. ft.	Up to 1.37 sq. ft.	Up to 1.31 sq. ft.
Weight		Up to 40 lbs.	Up to 40 lbs.	Up to 40.5 lbs.

		Small	Medium
EPA		0.5 sq. ft.	1.13 sq. ft.
Weight		Up to 14 lbs.	Up to 35 lbs.

*Luminaire included.

EPA	2.57 sq. ft.
Weight	41 lbs.

EPA	3.06 sq. ft.
Weight	45 lbs.

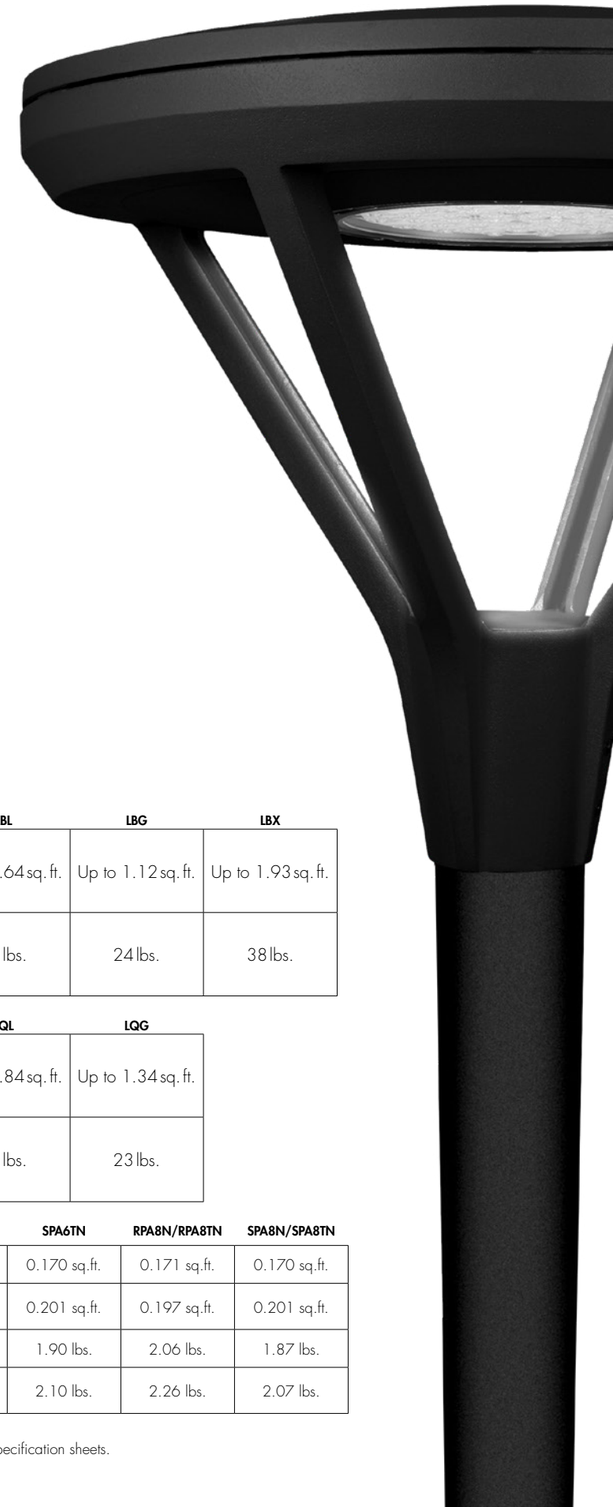
EPA	1.19 sq. ft.
Weight	60 lbs.

		LBS	LBM	LBL	LBG	LBX
EPA**		Up to 0.19 sq. ft.	Up to 0.44 sq. ft.	Up to 0.64 sq. ft.	Up to 1.12 sq. ft.	Up to 1.93 sq. ft.
Weight		5.2 lbs.	6.7 lbs.	12 lbs.	24 lbs.	38 lbs.

		LQS	LQM	LQL	LQG
EPA*		Up to 0.43 sq. ft.	Up to 0.58 sq. ft.	Up to 0.84 sq. ft.	Up to 1.34 sq. ft.
Weight		6.7 lbs.	8.6 lbs.	15 lbs.	23 lbs.

		RPA6N/RPA6TN	SPA6N	SPA6TN	RPA8N/RPA8TN	SPA8N/SPA8TN
EPA	4 LEDs board	0.171 sq.ft.	0.170 sq.ft.	0.170 sq.ft.	0.171 sq.ft.	0.170 sq.ft.
	8 LEDs board	0.197 sq.ft.	0.201 sq.ft.	0.201 sq.ft.	0.197 sq.ft.	0.201 sq.ft.
Weight	4 LEDs board	2.22 lbs.	1.87 lbs.	1.90 lbs.	2.06 lbs.	1.87 lbs.
	8 LEDs board	2.42 lbs.	2.07 lbs.	2.10 lbs.	2.26 lbs.	2.07 lbs.

**For EPA calculations regarding luminaires with accessories (snoots, visors, etc), please refer to specification sheets.



DECORATIVE ARM AND BANNER ARM

EPA TABLES

Round Poles

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ARM-P Decorative Arms for Pendant-Mount Luminaires

P3 - Pendant Small (3 bolts)					
Arm Style		**Arm Configurations**			
		W1X	**S1X**	**S1E**	**S2E**
CM0	EPA	0.81 sq. ft.	N/A		
	Weight	5.23 lbs.			
DM0	EPA	0.73 sq. ft.			
	Weight	5.63 lbs.			
DT6	EPA	0.52 sq. ft.	0.52 sq. ft.	0.51 sq. ft.	1.03 sq. ft.
	Weight	5.1 lbs.	5.1 lbs.	8.1 lbs.	12.1 lbs.
CS2	EPA	1.8 sq. ft.	1.8 sq. ft.	2.87 sq. ft.	4.9 sq. ft.
	Weight	7.39 lbs.	7.39 lbs.	21.04 lbs.	31.65 lbs.
CS4	EPA	0.87 sq. ft.	0.87 sq. ft.	1.08 sq. ft.	1.97 sq. ft.
	Weight	9.03 lbs.	9.03 lbs.	14.88 lbs.	23.36 lbs.
CS6	EPA	N/A	N/A	0.93 sq. ft.	1.43 sq. ft.
	Weight			16.23 lbs.	25.88 lbs.
CS12	EPA	0.43 sq. ft.	0.43 sq. ft.	1.61 sq. ft.	2.08 sq. ft.
	Weight	8.44 lbs.	8.44 lbs.	35.2 lbs.	43.04 lbs.
CS13	EPA	0.69 sq. ft.	0.69 sq. ft.	1.98 sq. ft.	2.23 sq. ft.
	Weight	10 lbs.	10 lbs.	16 lbs.	23 lbs.
MC5	EPA	1.84 sq. ft.	1.84 sq. ft.	2.07 sq. ft.	3.23 sq. ft.
	Weight	15.2 lbs.	15.2 lbs.	16.25 lbs.	27.13 lbs.

P4 - Pendant Medium (4 bolts)					
Arm Style		**Arm Configurations**			
		W1X	**S1X**	**S1E**	**S2E**
DT6	EPA	1.12 sq. ft.	1.12 sq. ft.	1.13 sq. ft.	2.10 sq. ft.
	Weight	5.1 lbs.	5.1 lbs.	8.1 lbs.	12.1 lbs.
CS2	EPA	1.83 sq. ft.	1.83 sq. ft.	3.02 sq. ft.	6.04 sq. ft.
	Weight	7.39 lbs.	7.39 lbs.	21.04 lbs.	31.65 lbs.
CS4	EPA	1.33 sq. ft.	1.33 sq. ft.	2.11 sq. ft.	3.53 sq. ft.
	Weight	9.03 lbs.	9.03 lbs.	14.88 lbs.	23.36 lbs.
CS6	EPA	N/A	N/A	1.52 sq. ft.	2.79 sq. ft.
	Weight			16.23 lbs.	25.88 lbs.
CS12	EPA	0.38 sq. ft.	0.38 sq. ft.	1.95 sq. ft.	2.39 sq. ft.
	Weight	5.17 lbs.	5.17 lbs.	35.2 lbs.	43.04 lbs.
CS13	EPA	1.05 sq. ft.	1.05 sq. ft.	1.84 sq. ft.	2.81 sq. ft.
	Weight	11 lbs.	11 lbs.	16 lbs.	23 lbs.
MC5	EPA	1.84 sq. ft.	1.84 sq. ft.	1.84 sq. ft.	3.68 sq. ft.
	Weight	15.2 lbs.	15.2 lbs.	16.25 lbs.	27.13 lbs .

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Square Poles

ARM-T - Decorative Arms for Post-Top Mount Luminaires

TN3 - Tenon 3in and TN4 - Tenon 4in

Arm Style		Arm Configurations W1X	S1X	S1E	S2E
DT1	EPA	1.21 sq. ft.	1.21 sq. ft.	1.42 sq. ft.	2.42 sq. ft.
	Weight	8.88 lbs.	8.88 lbs.	14.32 lbs.	19.28 lbs.
DT6	EPA	1.12 sq. ft.	1.12 sq. ft.	1.13 sq. ft.	2.10 sq. ft.
	Weight	5.1 lbs.	5.1 lbs.	8.1 lbs.	12.1 lbs.
MC1	EPA	0.70 sq. ft.	0.70 sq. ft.	1.77 sq. ft.	2.57 sq. ft.
	Weight	8.20 lbs.	8.20 lbs.	16.95 lbs.	24.20 lbs.

ARM-S - Decorative Arms for Side-Mount Luminaires

SI2 - Side Internal 2-3/8 in and SO2 - Side Overlap 2-3/8 in

Arm Style		Arm Configurations SML	LRG
PU2	EPA	1.08 sq. ft.	1.67 sq. ft.
	Weight	12.09 lbs.	14.87 lbs.

Arm Style		Arm Configurations W1X	S1X	S1E	S2E	S3Y	S3E	S4E
PU4	EPA	N/A		3.13 sq. ft.	5.08 sq. ft.	N/A		
	Weight			24 lbs.	28 lbs.			
PU5	EPA			2.17 sq. ft.	2.88 sq. ft.			
	Weight			12.57 lbs.	18 lbs.			
PU8	EPA	0.19 sq. ft.	0.19 sq. ft.	0.42 sq. ft.	0.65 sq. ft.	0.75 sq. ft.	0.86 sq. ft.	1.08 sq. ft.
	Weight	2.2 lbs.	2.2 lbs.	6.52 lbs.	8.09 lbs.	9 lbs.	9 lbs.	9.9 lbs.
CS12	EPA	0.38 sq. ft.	0.38 sq. ft.	1.95 sq. ft.	2.39 sq. ft.	N/A		
	Weight	5.17 lbs.	5.17 lbs.	35.2 lbs.	43.04 lbs.			
CS13	EPA	1.05 sq. ft.	1.05 sq. ft.	1.84 sq. ft.	2.81 sq. ft.			
	Weight	11 lbs.	11 lbs.	16 lbs.	23 lbs.			
SPKS4	EPA	N/A	0.1 sq. ft.	0.1 sq. ft.	0.1 sq. ft.	0.24 sq. ft.	0.27 sq. ft.	0.33 sq. ft.
	Weight		5.47 lbs.	5.47 lbs.	6.85 lbs.	10.27 lbs.	10.27 lbs.	13.69 lbs.
SPKH4	EPA		0.47 sq. ft.	0.47 sq. ft.	N/A			
	Weight		7.86 lbs.	7.86 lbs.				
SPKR4	EPA		N/A	0.59 sq. ft.	0.84 sq. ft.	1.41 sq. ft.	1.57 sq. ft.	1.96 sq. ft.
	Weight			10.74 lbs.	17.1 lbs.	22 lbs.	21.48 lbs.	25.9 lbs.

ARM-P Decorative Arms for Pendant-Mount Luminaires

P3 - Pendant Small (3 bolts)

Arm Style		Arm Configurations W1X	S1X	S1E	S2E
CM0	EPA	0.81 sq. ft.	N/A		
	Weight	5.23 lbs.			
DM0	EPA	0.73 sq. ft.			
	Weight	5.63 lbs.			
DT6	EPA	0.52 sq. ft.	0.52 sq. ft.	1.25 sq. ft.	1.88 sq. ft.
	Weight	5.1 lbs.	5.1 lbs.	8.1 lbs.	12.1 lbs.
CS2	EPA	1.8 sq. ft.	1.8 sq. ft.	4.4 sq. ft.	6.23 sq. ft.
	Weight	7.39 lbs.	7.39 lbs.	21.04 lbs.	31.65 lbs.
CS4	EPA	0.87 sq. ft.	0.87 sq. ft.	1.68 sq. ft.	2.25 sq. ft.
	Weight	9.03 lbs.	9.03 lbs.	14.88 lbs.	23.36 lbs.
CS12	EPA	0.43 sq. ft.	0.43 sq. ft.	4.31 sq. ft.	4.65 sq. ft.
	Weight	8.44 lbs.	8.44 lbs.	35.2 lbs.	43.04 lbs.
CS13	EPA	0.69 sq. ft.	0.69 sq. ft.	2.5 sq. ft.	3.1 sq. ft.
	Weight	10 lbs.	10 lbs.	16 lbs.	23 lbs.
MC5	EPA	1.84 sq. ft.	1.84 sq. ft.	2.41 sq. ft.	3.26 sq. ft.
	Weight	15.2 lbs.	15.2 lbs.	16.25 lbs.	27.13 lbs.

P4 - Pendant Medium (4 bolts)

Arm Style		Arm Configurations W1X	S1X	S1E	S2E
DT6	EPA	1.12 sq. ft.	1.12 sq. ft.	1.71 sq. ft.	2.78 sq. ft.
	Weight	5.1 lbs.	5.1 lbs.	8.1 lbs.	12.1 lbs.
CS2	EPA	1.83 sq. ft.	1.83 sq. ft.	5.1 sq. ft.	7.4 sq. ft.
	Weight	7.39 lbs.	7.39 lbs.	21.04 lbs.	31.65 lbs.
CS4	EPA	1.33 sq. ft.	1.33 sq. ft.	2.95 sq. ft.	4.78 sq. ft.
	Weight	9.03 lbs.	9.03 lbs.	14.88 lbs.	23.36 lbs.
CS12	EPA	0.38 sq. ft.	0.38 sq. ft.	4.44 sq. ft.	4.93 sq. ft.
	Weight	5.17 lbs.	5.17 lbs.	35.2 lbs.	43.04 lbs.
CS13	EPA	1.05 sq. ft.	1.05 sq. ft.	2.64 sq. ft.	3.36 sq. ft.
	Weight	11 lbs.	11 lbs.	16 lbs.	23 lbs.
MC5	EPA	1.84 sq. ft.	1.84 sq. ft.	2.67 sq. ft.	3.8 sq. ft.
	Weight	15.2 lbs.	15.2 lbs.	16.25 lbs.	27.13 lbs.

ARM-T - Decorative Arms for Post-Top Mount Luminaires

TN3 - Tenon 3in and TN4 - Tenon 4in					
Arm Style		**Arm Configurations**			
		W1X	**S1X**	**S1E**	**S2E**
DT1	EPA	1.21 sq. ft.	1.21 sq. ft.	2.17 sq. ft.	3.17 sq. ft.
	Weight	8.88 lbs.	8.88 lbs.	14.32 lbs.	19.28 lbs.
DT6	EPA	1.12 sq. ft.	1.12 sq. ft.	1.71 sq. ft.	2.78 sq. ft.
	Weight	5.1 lbs.	5.1 lbs.	8.1 lbs.	12.1 lbs.
MC1	EPA	0.70 sq. ft.	0.70 sq. ft.	1.77 sq. ft.	2.57 sq. ft.
	Weight	8.20 lbs.	8.20 lbs.	16.95 lbs.	24.20 lbs.

ARM-S - Decorative Arms for Side-Mount Luminaires

SI2 - Side Internal 2-3/8 in and SO2 - Side Overlap 2-3/8 in							
Arm Style		**Arm Configurations**					
		W1X	**S1X**	**S1E**	**S2E**	**S3E**	**S4E**
PU4	EPA	N/A		5.5 sq. ft.	7.1 sq. ft.	N/A	
	Weight			24 lbs.	28 lbs.		
PU5	EPA			2.71 sq. ft.	3.6 sq. ft.		
	Weight			12.57 lbs.	18 lbs.		
PU8	EPA	0.19 sq. ft.	0.19 sq. ft.	0.83 sq. ft.	1.03 sq. ft.	1.23 sq. ft.	1.42 sq. ft.
	Weight	2.2 lbs.	2.2 lbs.	6.52 lbs.	8.09 lbs.	9 lbs.	9.9 lbs.
CS12	EPA	0.38 sq. ft.	0.38 sq. ft.	4.44 sq. ft.	4.93 sq. ft.	N/A	
	Weight	5.17 lbs.	5.17 lbs.	35.2 lbs.	43.04 lbs.		
CS13	EPA	1.05 sq. ft.	1.05 sq. ft.	2.64 sq. ft.	3.36 sq. ft.		
	Weight	11 lbs.	11 lbs.	16 lbs.	23 lbs.		
SPKS4	EPA	N/A	0.1 sq. ft.	0.1 sq. ft.	0.1 sq. ft.	0.27 sq. ft.	0.33 sq. ft.
	Weight		5.47 lbs.	5.47 lbs.	6.85 lbs.	10.27 lbs.	13.69 lbs.
SPKH4	EPA		0.47 sq. ft.	0.47 sq. ft.	N/A		
	Weight		7.86 lbs.	7.86 lbs.			

Accessories

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SSH - Street Sign Holder

Street Sign Holder EPA	
Panel Size	EPA
6" x 12"	0.6 sq. ft.
6" x 18"	0.9 sq. ft.

*Consult factory for other panel sizes.
Panels provided by others.

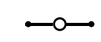
NDL - Spiked Needle
NDL-BV - Beveled Needle

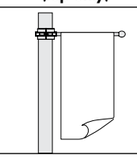
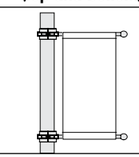
Needles EPA	
	EPA
NDL	1.5 sq. ft.
NDL-BV	0.9 sq. ft.

PLTU - Universal Yoke Mounting

Universal Yoke EPA	
	EPA
PLTU	0.035 sq. ft.

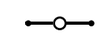
BA - Banner Arm

Banner Arm EPA		
Configuration	**S1X** **BA-1**	**S2X**  **BA-1**
EPA	0.01 sq. ft.	0.02 sq. ft.
Weight	4.13 lbs.	7.03 lbs.

	Banner (by others) EPA*	
	BA-1 (top only)	**BA-2 (top and bottom)**
Hanging Type		
18"x24" Banner	1.80 sq. ft.	3.60 sq. ft.
18"x36" Banner	2.70 sq. ft.	5.40 sq. ft.
18"x48" Banner	3.60 sq. ft.	7.20 sq. ft.

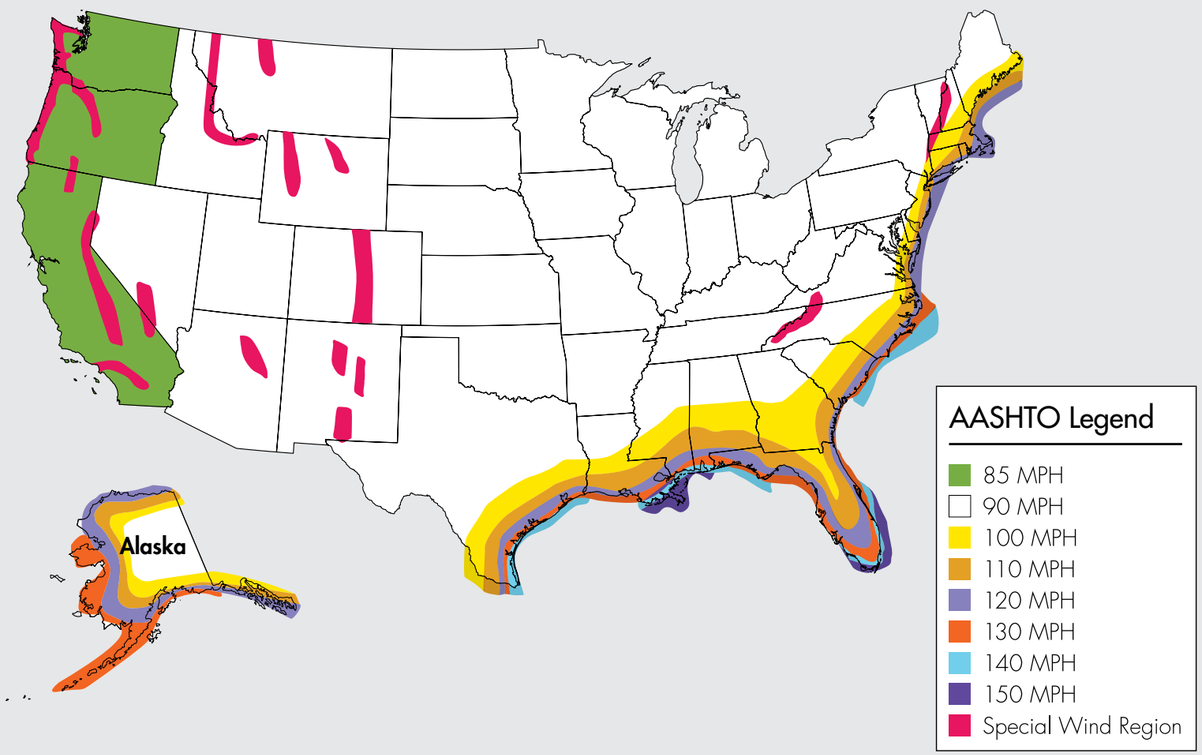
*EPA values are for the Banner only. Refer to the table on the left for the EPA values of the Banner Arms.
Consult factory for other Banner Arms dimensions and Plant Holder Arm accessory EPA.

PH - Plant Holder

Plant Holder EPA		
Configuration	**S1X**	**S2X** 
EPA	0.01 sq. ft.	0.02 sq. ft.
Weight	4.13 lbs.	7.03 lbs.

AASHTO[1] 85mph - 150mph Wind Map

The recommendations in this guide are meant to assist you with your projects. All pole installations need to be verified by a qualified engineer.



Hawaii
105 MPH

Guam
170MPH

Virgin Islands
145 MPH

Puerto Rico
145 MPH

American Samoa
125 MPH

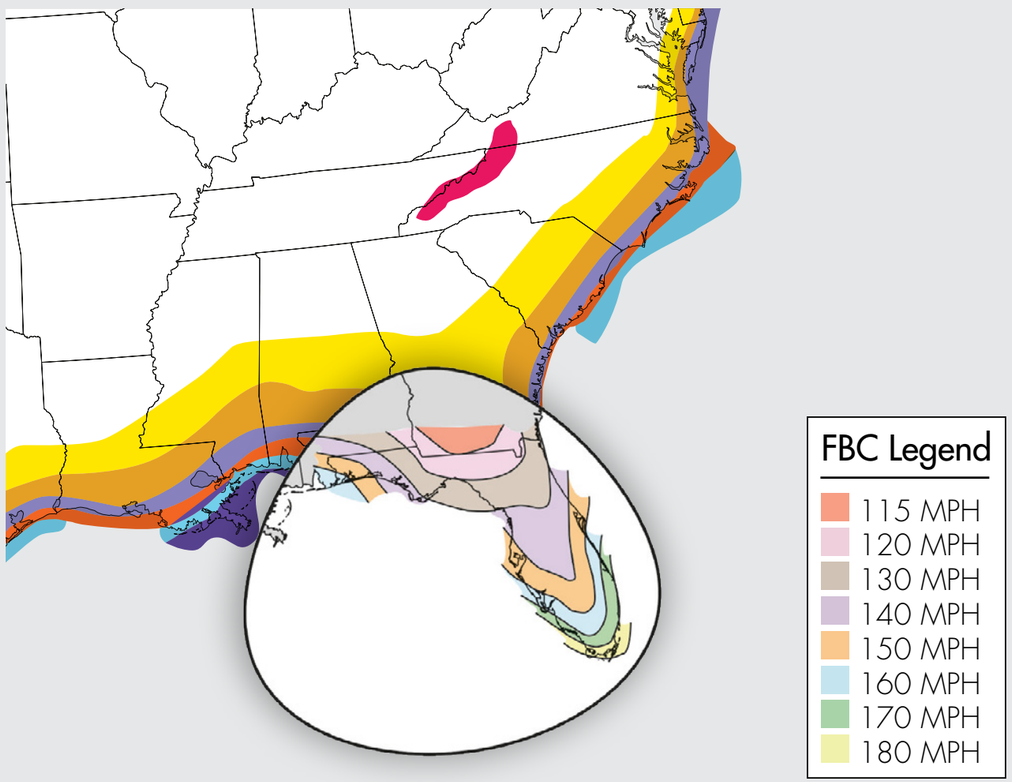
The AASHTO Wind Map is needed to determine the wind velocity for your specific region. Wind speed values are based on peak mean hourly wind speeds for a 50-year return period, 32.8 feet above the ground. This is stated in the AASHTO Standards Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic signals.

When using this map, caution is advised when using the wind velocity contours in special wind areas such as mountains, great lakes, and coastal regions. The higher velocity should be used if you are located between two different velocity isotach lines. This map is intended as a general guide; more localized analysis may be required. Please consult the factory and a qualified engineer.

Lumenpulse's fixtures and arms have an EPA value (Effective Projected Area), defined as the maximum two-dimensional area multiplied by the drag coefficient (Cd) designated by AASHTO. The sum of the fixture, arm, and accessories EPA must not exceed the maximum allowable pole EPA at the selected design wind speed.

1. Based on information from *Standard Specifications for Highway Signs, Luminaires, and Traffic Signals*, 2013, by the American Association of State Highway and Transportation Officials, Washington, D.C., U.S.A. Used with permission.

FBC[2] 115mph - 180mph Wind Map



The recommendations in this guide are meant to assist you with your projects. All pole installations need to be verified by a qualified engineer.

The AASHTO Wind Map is needed to determine the wind velocity for your specific region. Wind speed values are based on peak mean hourly wind speeds for a 50-year return period, 32.8 feet above the ground. This is stated in the AASHTO Standards Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic signals.

The information for Florida is derived from the 2023 Florida Building Code, and the 50-year return period mentioned above is also accurate in this case. It's essential to note that the Florida map is utilized in conjunction with the AASHTO LRFD LTS-1 design equations, meaning that while the wind map originates from the FBC, the calculations follow AASHTO guidelines.

When using this map, caution is advised when using the wind velocity contours in special wind areas such as mountains, great lakes, and coastal regions. The higher velocity should be used if you are located between two different velocity isotach lines. This map is intended as a general guide; more localized analysis may be required. Please consult the factory and a qualified engineer.

Lumenpulse's fixtures and arms have an EPA value (Effective Projected Area), defined as the maximum two-dimensional area multiplied by the drag coefficient (Cd) designated by AASHTO. The sum of the fixture, arm, and accessories EPA must not exceed the maximum allowable pole EPA at the selected design wind speed.

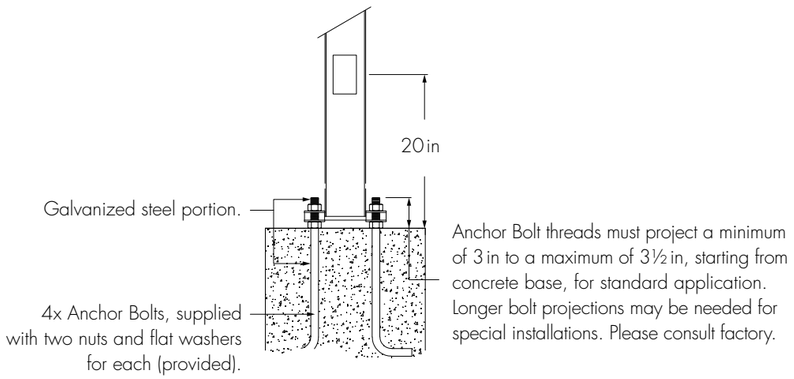
2. Based on Florida Building Code, Building, 8th Edition (2023), "FIGURE 1609.3(1) ULTIMATE DESIGN WIND SPEEDS FOR RISK CATEGORY II BUILDINGS AND OTHER STRUCTURES.

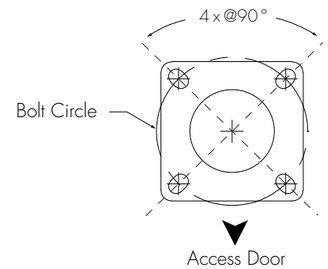
STRAIGHT POLE

TECHNICAL INFORMATION

Straight Pole

Technical Information



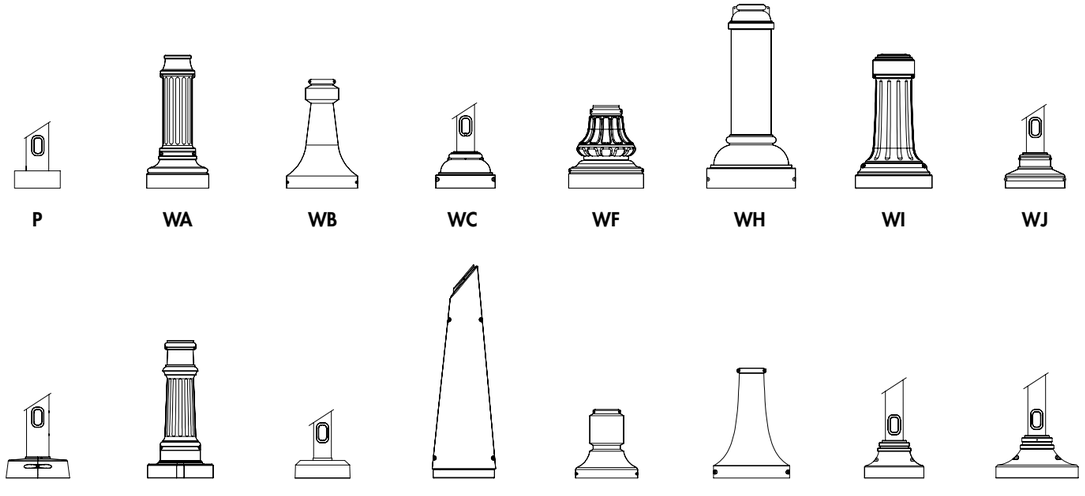


		Round Shapes		
		Ø4 in.	Ø5 in.	Ø6 in.
Wall Thickness*	Aluminium	L - M - H - W	L - M - H - W	L - M - H
	Steel	L - M - H - W	L - M - H - W	L - M - H - W
Maximum Height	Aluminium	Up to 20 ft.		Up to 30 ft.
	Steel	Up to 20 ft.	Up to 30 ft.	
Compatible Base Cover Options	Up to 20 ft.	P, WA, WB, WC, WF, WH, WI, WJ, WL, WM, WO, WP, WR, WS, WY, WYX	P, WA, WC, WF, WH, WI, WJ, WL, WM, WO, WP, WR, WS, WY, WYX	P, WC, WI, WJ, WL, WO, WY, WYX
	21 ft. to 30 ft.	N/A	P, WF, WH, WI, WL, WM, WO, WR, WS, WYX	P, WO
Compatible Accessories		PLTU, BA, PH, NDL, NDL-BV	PLTU, BA, PH, NDL, NDL-BV	PLTU, NDL, NDL-BV
Anchor Bolts	Up to 20 ft.	Ø3/4 in. x 26 in.		
	21 ft. to 30 ft.	Ø1 in. x 36 in.		
Bolt Circle	Up to 20 ft.	Ø8.5 in.	Ø10 in.	
	21 ft. to 30 ft.	N/A	Ø11.5 in.	Ø14 in.

		Square Shapes			Fluted Shapes	
		4 in.	5 in.	6 in.	Ø4 in.	Ø5 in.
Wall Thickness*	Aluminium	L - M - H	L - M - H	M	M	M
	Steel	L - M - W	L - M - H - W	M - H	N/A	N/A
Maximum Height	Aluminium	Up to 20 ft.			Up to 20 ft.	
	Steel	Up to 24 ft.	Up to 30 ft.		N/A	
Compatible Base Cover Options	Up to 20 ft.	P			P, WA, WB, WC, WF, WH, WI, WJ, WL, WM, WO, WP, WR, WS, WY, WYX	P, WA, WC, WF, WH, WI, WJ, WL, WM, WO, WP, WR, WS, WY, WYX
	21 ft. to 30 ft.				N/A	
Compatible Accessories		PLTU			BA, PH	BA, PH
Anchor Bolts	Up to 20 ft.	Ø3/4 in. x 26 in.			Ø3/4 in. x 26 in.	
	21 ft. to 30 ft.	Ø1 in. x 36 in.			Ø1 in. x 36 in.	
Bolt Circle	Up to 20 ft.	Ø8.5 in.	Ø10 in.	Ø11.5 in.	Ø8.5 in.	Ø10 in.
	21 ft. to 30 ft.	Ø10 in.	Ø11.5 in.	Ø14 in.	N/A	

*For maximum wall thickness and height limitations, please consult the Straight Pole EPA Rating Table.

Base Cover Options

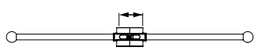


Banner Arm Accessories

Ø4in, 5in

BA-X-CLMP-18-S1X

Ø4in, 5in



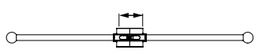
BA-X-CLMP-18-S2X

Plant Holder Arm Accessories

Ø4in, 5in

PH-CLMP-18-S1X

Ø4in, 5in



PH-CLMP-18-S2X

Accessories

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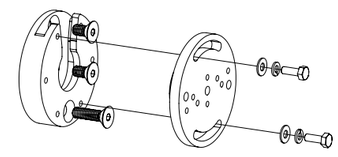
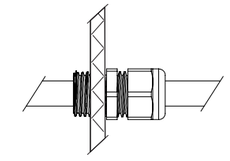
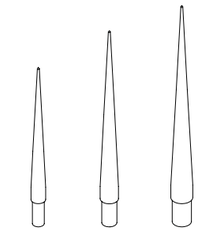


PLTU



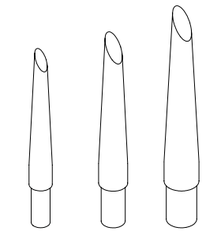
PG

Ø4″ Ø5″ Ø6″



NDL

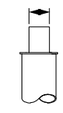
Ø4″ Ø5″ Ø6″



NDL-BV

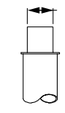
Pole-Top Options *Refer to specification sheets for pole drilling pattern details.

Ø2 ¾ in



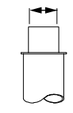
TN2

Ø3 in



TN3

Ø4 in



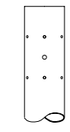
TN4

CAP

Ø3 in

TNMC1

BRK



BRK-VRN

BLDS-S1E
BLDS-S2E
BLDS-S1E-3GV
BLDS-S2E-3GV

BLDM-S1E
BLDM-S2E

BLDM-S1E-3GV
BLDM-S2E-3GV

BLDN-RPA8N-S1E
BLDN-RPA8N-S2E

BLDN-RPA6N-S1E
BLDN-RPA6N-S2E

BLDN-S1E-RPA6
BLDN-S2E-RPA6
BLDN-S1E-RPA8
BLDN-S2E-RPA8
BLDN-S1E-SPA6
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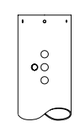
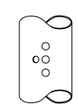
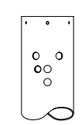
BLDN-S1E-SPA8
BLDN-S2E-SPA8



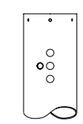
SPK-S1E



SPK-S1X

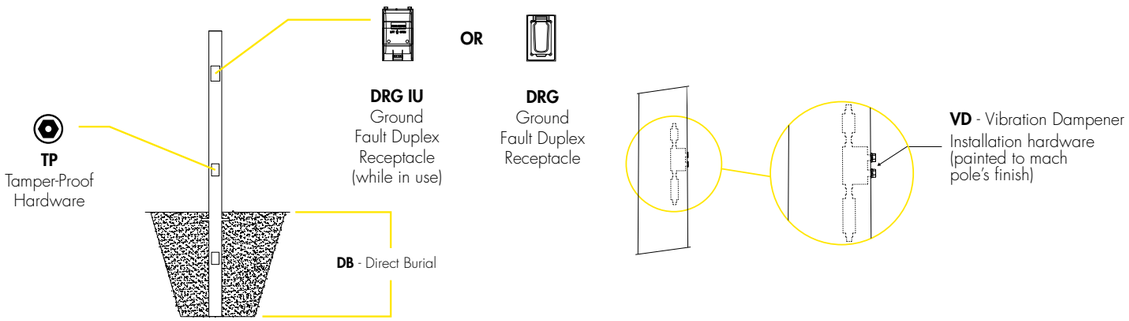


SPKS-S2E
SPKS-S3E
SPKS-S3Y
SPKS-S4E



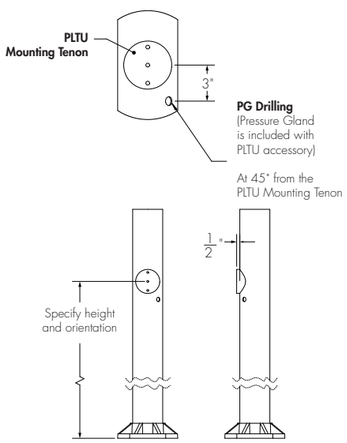
SPKH-S1E

Other Options

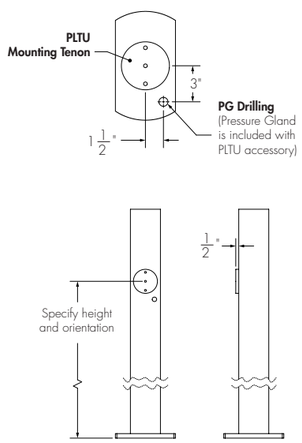


PLTU - Drilling Pattern

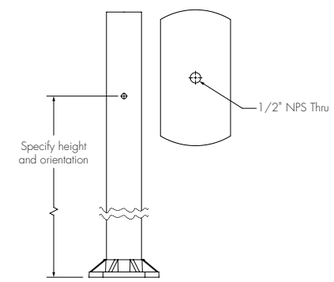
Round Pole Shape



Square Pole Shape



PG - Drilling Pattern



Finish Options

CRC

CRC- Corrosion-Resistant Coating for Hostile Environments [1]

GALV

GALV- Galvanized Steel [2]

[1] Automatically included when a steel pole is specified.
[2] Only available for steel poles with textured finish (immersion marks may occur).

STRAIGHT POLE

EPA RATING TABLE - AASHTO

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Aluminium Round Shape

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90 MPH	110 MPH	120 MPH	150 MPH	160 MPH	170 MPH	180 MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	L - 1/8"	5.57	3.18	2.41					Ø3/4" x 26"	Ø8½"
4"	11'	L - 1/8"	4.79	2.59						Ø3/4" x 26"	Ø8½"
4"	12'	L - 1/8"	4.09	2.07						Ø3/4" x 26"	Ø8½"
4"	13'	L - 1/8"	3.47							Ø3/4" x 26"	Ø8½"
4"	14'	L - 1/8"	2.91							Ø3/4" x 26"	Ø8½"
4"	15'	L - 1/8"	2.40							Ø3/4" x 26"	Ø8½"
4"	10'	M - 3/16"	8.69	5.26	4.16	2.11				Ø3/4" x 26"	Ø8½"
4"	11'	M - 3/16"	7.64	4.50	3.49					Ø3/4" x 26"	Ø8½"
4"	12'	M - 3/16"	6.73	3.83	2.90					Ø3/4" x 26"	Ø8½"
4"	13'	M - 3/16"	5.92	3.23	2.36					Ø3/4" x 26"	Ø8½"
4"	14'	M - 3/16"	5.20	2.69						Ø3/4" x 26"	Ø8½"
4"	15'	M - 3/16"	4.54	2.19						Ø3/4" x 26"	Ø8½"
4"	16'	M - 3/16"	3.94							Ø3/4" x 26"	Ø8½"
4"	17'	M - 3/16"	3.38							Ø3/4" x 26"	Ø8½"
4"	18'	M - 3/16"	2.87							Ø3/4" x 26"	Ø8½"
4"	19'	M - 3/16"	2.38							Ø3/4" x 26"	Ø8½"
4"	10'	H - 1/4"	11.49	7.14	5.74	3.12	2.68	2.32	2.02	Ø3/4" x 26"	Ø8½"
4"	11'	H - 1/4"	10.22	6.23	4.94	2.55	2.17	1.86	1.60	Ø3/4" x 26"	Ø8½"
4"	12'	H - 1/4"	9.11	5.42	4.23	2.04	1.71	1.45	1.23	Ø3/4" x 26"	Ø8½"
4"	13'	H - 1/4"	8.13	4.71	3.60		1.30	1.08	0.89	Ø3/4" x 26"	Ø8½"
4"	14'	H - 1/4"	7.26	4.07	3.03		0.92	0.73	0.58	Ø3/4" x 26"	Ø8½"
4"	15'	H - 1/4"	6.47	3.48	2.51		0.56	0.41	0.29	Ø3/4" x 26"	Ø8½"
4"	16'	H - 1/4"	5.76	2.94	2.03		0.23	0.11		Ø3/4" x 26"	Ø8½"
4"	17'	H - 1/4"	5.10	2.44						Ø3/4" x 26"	Ø8½"
4"	18'	H - 1/4"	4.49							Ø3/4" x 26"	Ø8½"
4"	19'	H - 1/4"	3.93							Ø3/4" x 26"	Ø8½"
4"	20'	H - 1/4"	3.40							Ø3/4" x 26"	Ø8½"
4"	10'	W - 5/16"	14.03	8.84	7.16	4.03	3.48	3.03	2.65	Ø3/4" x 26"	Ø8½"
4"	11'	W - 5/16"	12.54	7.78	6.24	3.39	2.90	2.51	2.18	Ø3/4" x 26"	Ø8½"
4"	12'	W - 5/16"	11.25	6.86	5.44	2.81	2.39	2.05	1.77	Ø3/4" x 26"	Ø8½"
4"	13'	W - 5/16"	10.12	6.04	4.72	2.29	1.93	1.63	1.39	Ø3/4" x 26"	Ø8½"
4"	14'	W - 5/16"	9.11	5.31	4.08		1.51	1.25	1.04	Ø3/4" x 26"	Ø8½"
4"	15'	W - 5/16"	8.21	4.64	3.49		1.12	0.90	0.73	Ø3/4" x 26"	Ø8½"
4"	16'	W - 5/16"	7.39	4.04	2.95		0.75	0.57	0.43	Ø3/4" x 26"	Ø8½"
4"	17'	W - 5/16"	6.65	3.48	2.45		0.41	0.26	0.15	Ø3/4" x 26"	Ø8½"
4"	18'	W - 5/16"	5.96	2.96						Ø3/4" x 26"	Ø8½"
4"	19'	W - 5/16"	5.32	2.47						Ø3/4" x 26"	Ø8½"
4"	20'	W - 5/16"	4.73	2.01						Ø3/4" x 26"	Ø8½"

Consult factory for internal reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Aluminium Round Shape

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Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90 MPH	110 MPH	120 MPH	150 MPH	160 MPH	170 MPH	180 MPH	Anchor Bolts (in)	Bolt Circle (in)
5"	10'	L - 1/8"	9.44	5.63	4.46	2.64	2.26	1.94	1.69	Ø3/4" x 26"	Ø10"
5"	11'	L - 1/8"	8.25	4.76	3.70	2.13	1.80	1.54	1.32	Ø3/4" x 26"	Ø10"
5"	12'	L - 1/8"	7.21	3.99	3.02		1.39	1.17	0.98	Ø3/4" x 26"	Ø10"
5"	13'	L - 1/8"	6.29	3.29	2.41		1.02	0.83	0.68	Ø3/4" x 26"	Ø10"
5"	14'	L - 1/8"	5.45	2.66			0.68	0.52	0.40	Ø3/4" x 26"	Ø10"
5"	15'	L - 1/8"	4.70	2.08			0.36	0.23	0.14	Ø3/4" x 26"	Ø10"
5"	16'	L - 1/8"	4.00							Ø3/4" x 26"	Ø10"
5"	17'	L - 1/8"	3.36							Ø3/4" x 26"	Ø10"
5"	18'	L - 1/8"	2.76							Ø3/4" x 26"	Ø10"
5"	19'	L - 1/8"	2.20							Ø3/4" x 26"	Ø10"
5"	10'	M - 3/16"	14.56	9.06	7.34	4.48	3.88	3.38	2.97	Ø3/4" x 26"	Ø10"
5"	11'	M - 3/16"	12.95	7.90	6.34	3.82	3.29	2.85	2.49	Ø3/4" x 26"	Ø10"
5"	12'	M - 3/16"	11.54	6.89	5.46	3.23	2.76	2.38	2.07	Ø3/4" x 26"	Ø10"
5"	13'	M - 3/16"	10.31	5.99	4.67	2.70	2.29	1.96	1.69	Ø3/4" x 26"	Ø10"
5"	14'	M - 3/16"	9.21	5.18	3.96	2.22	1.86	1.58	1.34	Ø3/4" x 26"	Ø10"
5"	15'	M - 3/16"	8.22	4.44	3.31		1.47	1.22	1.02	Ø3/4" x 26"	Ø10"
5"	16'	M - 3/16"	7.32	3.76	2.71		1.11	0.89	0.72	Ø3/4" x 26"	Ø10"
5"	17'	M - 3/16"	6.49	3.13	2.15		0.76	0.58	0.44	Ø3/4" x 26"	Ø10"
5"	18'	M - 3/16"	5.73	2.54			0.44	0.29	0.17	Ø3/4" x 26"	Ø10"
5"	19'	M - 3/16"	5.02				0.14			Ø3/4" x 26"	Ø10"
5"	20'	M - 3/16"	4.35							Ø3/4" x 26"	Ø10"
5"	10'	H - 1/4"	19.28	12.22	10.00	6.18	5.37	4.70	4.14	Ø3/4" x 26"	Ø10"
5"	11'	H - 1/4"	17.27	10.80	8.77	5.37	4.65	4.06	3.57	Ø3/4" x 26"	Ø10"
5"	12'	H - 1/4"	15.54	9.56	7.71	4.67	4.03	3.50	3.07	Ø3/4" x 26"	Ø10"
5"	13'	H - 1/4"	14.02	8.47	6.76	4.04	3.47	3.00	2.61	Ø3/4" x 26"	Ø10"
5"	14'	H - 1/4"	12.67	7.49	5.91	3.47	2.96	2.54	2.20	Ø3/4" x 26"	Ø10"
5"	15'	H - 1/4"	11.46	6.61	5.14	2.95	2.50	2.13	1.83	Ø3/4" x 26"	Ø10"
5"	16'	H - 1/4"	10.37	5.80	4.43	2.47	2.07	1.75	1.48	Ø3/4" x 26"	Ø10"
5"	17'	H - 1/4"	9.37	5.06	3.78	2.03	1.68	1.39	1.16	Ø3/4" x 26"	Ø10"
5"	18'	H - 1/4"	8.46	4.37	3.17		1.31	1.06	0.86	Ø3/4" x 26"	Ø10"
5"	19'	H - 1/4"	7.61	3.73	2.60		0.96	0.74	0.57	Ø3/4" x 26"	Ø10"
5"	20'	H - 1/4"	6.82	3.13	2.06		0.63	0.45	0.30	Ø3/4" x 26"	Ø10"
5"	10'	W - 5/16"	23.63	15.13	12.44	7.75	6.75	5.92	5.24	Ø3/4" x 26"	Ø10"
5"	11'	W - 5/16"	21.26	13.47	11.02	6.81	5.92	5.18	4.57	Ø3/4" x 26"	Ø10"
5"	12'	W - 5/16"	19.22	12.03	9.78	5.99	5.19	4.53	3.99	Ø3/4" x 26"	Ø10"
5"	13'	W - 5/16"	17.44	10.76	8.68	5.27	4.55	3.96	3.47	Ø3/4" x 26"	Ø10"
5"	14'	W - 5/16"	15.86	9.63	7.70	4.62	3.97	3.44	3.00	Ø3/4" x 26"	Ø10"
5"	15'	W - 5/16"	14.46	8.61	6.82	4.03	3.44	2.97	2.58	Ø3/4" x 26"	Ø10"
5"	16'	W - 5/16"	13.19	7.69	6.01	3.49	2.96	2.54	2.18	Ø3/4" x 26"	Ø10"
5"	17'	W - 5/16"	12.04	6.84	5.27	2.99	2.52	2.14	1.82	Ø3/4" x 26"	Ø10"
5"	18'	W - 5/16"	10.98	6.06	4.59	2.52	2.10	1.76	1.49	Ø3/4" x 26"	Ø10"
5"	19'	W - 5/16"	10.01	5.33	3.95	2.09	1.72	1.41	1.17	Ø3/4" x 26"	Ø10"
5"	20'	W - 5/16"	9.10	4.65	3.34		1.35	1.08	0.87	Ø3/4" x 26"	Ø10"

Consult factory for internal reinforcement solutions for higher EPA ratings.

STRAIGHT POLE EPA RATING TABLE - AASHTO

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Aluminium Round Shape

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90 MPH	110 MPH	120 MPH	150 MPH	160 MPH	170 MPH	180 MPH	Anchor Bolts (in)	Bolt Circle (in)
6"	10'	L - 1/8"	14.30	9.11	7.54	4.62	4.00	3.49	3.07	Ø3/4" x 26"	Ø10"
6"	11'	L - 1/8"	12.63	7.94	6.54	3.96	3.41	2.97	2.60	Ø3/4" x 26"	Ø10"
6"	12'	L - 1/8"	11.17	6.91	5.67	3.38	2.90	2.50	2.18	Ø3/4" x 26"	Ø10"
6"	13'	L - 1/8"	9.88	5.99	4.89	2.85	2.43	2.09	1.80	Ø3/4" x 26"	Ø10"
6"	14'	L - 1/8"	8.73	5.17	4.18	2.38	2.01	1.71	1.46	Ø3/4" x 26"	Ø10"
6"	15'	L - 1/8"	7.68	4.42	3.54		1.62	1.36	1.14	Ø3/4" x 26"	Ø10"
6"	16'	L - 1/8"	6.73	3.73	2.95		1.26	1.03	0.85	Ø3/4" x 26"	Ø10"
6"	17'	L - 1/8"	5.85	3.09	2.40		0.93	0.73	0.57	Ø3/4" x 26"	Ø10"
6"	18'	L - 1/8"	5.04	2.50			0.61	0.45	0.31	Ø3/4" x 26"	Ø10"
6"	19'	L - 1/8"	4.28				0.31	0.18		Ø3/4" x 26"	Ø10"
6"	20'	L - 1/8"	3.56							Ø3/4" x 26"	Ø10"
6"	21'	L - 1/8"	2.89							Ø1" x 36"	Ø14"
6"	22'	L - 1/8"	2.25							Ø1" x 36"	Ø14"
6"	10'	M - 3/16"	21.92	14.21	11.83	7.36	6.41	5.63	4.98	Ø3/4" x 26"	Ø10"
6"	11'	M - 3/16"	19.61	12.61	10.47	6.47	5.62	4.93	4.34	Ø3/4" x 26"	Ø10"
6"	12'	M - 3/16"	17.62	11.23	9.29	5.70	4.94	4.31	3.79	Ø3/4" x 26"	Ø10"
6"	13'	M - 3/16"	15.87	10.00	8.26	5.01	4.32	3.76	3.30	Ø3/4" x 26"	Ø10"
6"	14'	M - 3/16"	14.32	8.91	7.33	4.39	3.78	3.27	2.86	Ø3/4" x 26"	Ø10"
6"	15'	M - 3/16"	12.92	7.93	6.49	3.83	3.28	2.83	2.45	Ø3/4" x 26"	Ø10"
6"	16'	M - 3/16"	11.66	7.03	5.72	3.32	2.82	2.42	2.08	Ø3/4" x 26"	Ø10"
6"	17'	M - 3/16"	10.51	6.21	5.02	2.85	2.40	2.04	1.74	Ø3/4" x 26"	Ø10"
6"	18'	M - 3/16"	9.45	5.45	4.37	2.41	2.01	1.68	1.42	Ø3/4" x 26"	Ø10"
6"	19'	M - 3/16"	8.47	4.74	3.76		1.64	1.35	1.12	Ø3/4" x 26"	Ø10"
6"	20'	M - 3/16"	7.55	4.08	3.19		1.29	1.04	0.83	Ø3/4" x 26"	Ø10"
6"	21'	M - 3/16"	6.70	3.45	2.65		0.96	0.74	0.56	Ø1" x 36"	Ø14"
6"	22'	M - 3/16"	5.89	2.86	2.14		0.65	0.46	0.31	Ø1" x 36"	Ø14"
6"	23'	M - 3/16"	5.13	2.30			0.35	0.19		Ø1" x 36"	Ø14"
6"	24'	M - 3/16"	4.41							Ø1" x 36"	Ø14"
6"	25'	M - 3/16"	3.72							Ø1" x 36"	Ø14"
6"	26'	M - 3/16"	3.06							Ø1" x 36"	Ø14"
6"	27'	M - 3/16"	2.43							Ø1" x 36"	Ø14"

Consult factory for internal reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Aluminium Round Shape

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Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90 MPH	110 MPH	120 MPH	150 MPH	160 MPH	170 MPH	180 MPH	Anchor Bolts (in)	Bolt Circle (in)
6"	10'	H - 1/4"	29.05	18.98	15.84	9.93	8.67	7.63	6.76	Ø3/4" x 26"	Ø10"
6"	11'	H - 1/4"	26.15	16.99	14.15	8.83	7.69	6.76	5.98	Ø3/4" x 26"	Ø10"
6"	12'	H - 1/4"	23.65	15.26	12.69	7.87	6.84	6.00	5.30	Ø3/4" x 26"	Ø10"
6"	13'	H - 1/4"	21.47	13.75	11.41	7.02	6.10	5.33	4.70	Ø3/4" x 26"	Ø10"
6"	14'	H - 1/4"	19.54	12.41	10.27	6.27	5.43	4.74	4.16	Ø3/4" x 26"	Ø10"
6"	15'	H - 1/4"	17.82	11.21	9.24	5.60	4.83	4.20	3.68	Ø3/4" x 26"	Ø10"
6"	16'	H - 1/4"	16.27	10.12	8.32	4.98	4.28	3.71	3.23	Ø3/4" x 26"	Ø10"
6"	17'	H - 1/4"	14.87	9.13	7.47	4.41	3.78	3.26	2.83	Ø3/4" x 26"	Ø10"
6"	18'	H - 1/4"	13.58	8.21	6.69	3.89	3.31	2.84	2.45	Ø3/4" x 26"	Ø10"
6"	19'	H - 1/4"	12.39	7.37	5.96	3.41	2.88	2.45	2.10	Ø3/4" x 26"	Ø10"
6"	20'	H - 1/4"	11.29	6.58	5.29	2.95	2.47	2.08	1.77	Ø3/4" x 26"	Ø10"
6"	21'	H - 1/4"	10.26	5.84	4.66	2.52	2.09	1.74	1.46	Ø1" x 36"	Ø14"
6"	22'	H - 1/4"	9.30	5.15	4.06	2.12	1.73	1.41	1.16	Ø1" x 36"	Ø14"
6"	23'	H - 1/4"	8.40	4.49	3.50		1.39	1.11	0.88	Ø1" x 36"	Ø14"
6"	24'	H - 1/4"	7.55	3.87	2.96		1.06	0.81	0.61	Ø1" x 36"	Ø14"
6"	25'	H - 1/4"	6.74	3.27	2.45		0.75	0.53	0.35	Ø1" x 36"	Ø14"
6"	26'	H - 1/4"	5.97	2.71			0.44	0.25	0.10	Ø1" x 36"	Ø14"
6"	27'	H - 1/4"	5.24	2.17			0.15			Ø1" x 36"	Ø14"
6"	28'	H - 1/4"	4.53							Ø1" x 36"	Ø14"
6"	29'	H - 1/4"	3.86							Ø1" x 36"	Ø14"
6"	30'	H - 1/4"	3.21							Ø1" x 36"	Ø14"

Consult factory for internal reinforcement solutions for higher EPA ratings.

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Aluminum Fluted Shape

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	M - 3/16"	8.00	4.81	3.77		Ø¾" x 26"	Ø8½"
4"	11'	M - 3/16"	7.01	4.08	3.14		Ø¾" x 26"	Ø8½"
4"	12'	M - 3/16"	6.15	3.45	2.57		Ø¾" x 26"	Ø8½"
4"	13'	M - 3/16"	5.38	2.87	2.06		Ø¾" x 26"	Ø8½"
4"	14'	M - 3/16"	4.69	2.35			Ø¾" x 26"	Ø8½"
4"	15'	M - 3/16"	4.07				Ø¾" x 26"	Ø8½"
4"	16'	M - 3/16"	3.50				Ø¾" x 26"	Ø8½"
4"	17'	M - 3/16"	2.96				Ø¾" x 26"	Ø8½"
4"	18'	M - 3/16"	2.47				Ø¾" x 26"	Ø8½"
4"	19'	M - 3/16"	2.01				Ø¾" x 26"	Ø8½"
5"	10'	M - 3/16"	17.05	10.73	8.74	5.38	Ø¾" x 26"	Ø10"
5"	11'	M - 3/16"	15.23	9.43	7.63	4.64	Ø¾" x 26"	Ø10"
5"	12'	M - 3/16"	13.65	8.30	6.65	3.99	Ø¾" x 26"	Ø10"
5"	13'	M - 3/16"	12.27	7.30	5.77	3.41	Ø¾" x 26"	Ø10"
5"	14'	M - 3/16"	11.04	6.40	4.99	2.88	Ø¾" x 26"	Ø10"
5"	15'	M - 3/16"	9.93	5.58	4.28	2.40	Ø¾" x 26"	Ø10"
5"	16'	M - 3/16"	8.93	4.84	3.62		Ø¾" x 26"	Ø10"
5"	17'	M - 3/16"	8.01	4.15	3.01		Ø¾" x 26"	Ø10"
5"	18'	M - 3/16"	7.17	3.51	2.44		Ø¾" x 26"	Ø10"
5"	19'	M - 3/16"	6.39	2.91			Ø¾" x 26"	Ø10"
5"	20'	M - 3/16"	5.66	2.34			Ø¾" x 26"	Ø10"

Consult factory for internal reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Steel Round Shape

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160 MPH	170 MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	L - 1/8"	15.03	9.60	7.85	4.56	3.95	3.46	3.04	Ø¾" x 26"	Ø8½"
4"	11'	L - 1/8"	13.25	8.35	6.76	3.81	3.29	2.86	2.50	Ø¾" x 26"	Ø8½"
4"	12'	L - 1/8"	11.74	7.28	5.84	3.16	2.70	2.34	2.03	Ø¾" x 26"	Ø8½"
4"	13'	L - 1/8"	10.44	6.35	5.02	2.58	2.19	1.87	1.61	Ø¾" x 26"	Ø8½"
4"	14'	L - 1/8"	9.30	5.52	4.30	2.05	1.72	1.45	1.23	Ø¾" x 26"	Ø8½"
4"	15'	L - 1/8"	8.28	4.78	3.65		1.30	1.07	0.88	Ø¾" x 26"	Ø8½"
4"	16'	L - 1/8"	7.37	4.11	3.06		0.90	0.71	0.56	Ø¾" x 26"	Ø8½"
4"	17'	L - 1/8"	6.54	3.49	2.51		0.53	0.38	0.26	Ø¾" x 26"	Ø8½"
4"	18'	L - 1/8"	5.77	2.92	2.00		0.19			Ø¾" x 26"	Ø8½"
4"	19'	L - 1/8"	5.07	2.39						Ø¾" x 26"	Ø8½"
4"	20'	L - 1/8"	4.41							Ø¾" x 26"	Ø8½"
4"	10'	M - 3/16"	21.82	14.15	11.66	7.01	6.10	5.36	4.74	Ø¾" x 26"	Ø8½"
4"	11'	M - 3/16"	19.38	12.46	10.21	6.02	5.23	4.58	4.03	Ø¾" x 26"	Ø8½"
4"	12'	M - 3/16"	17.33	11.02	8.98	5.17	4.47	3.90	3.43	Ø¾" x 26"	Ø8½"
4"	13'	M - 3/16"	15.57	9.78	7.91	4.42	3.81	3.31	2.89	Ø¾" x 26"	Ø8½"
4"	14'	M - 3/16"	14.03	8.69	6.97	3.76	3.22	2.78	2.42	Ø¾" x 26"	Ø8½"
4"	15'	M - 3/16"	12.68	7.73	6.12	3.16	2.96	2.30	1.98	Ø¾" x 26"	Ø8½"
4"	16'	M - 3/16"	11.47	6.85	5.36	2.61	2.20	1.86	1.59	Ø¾" x 26"	Ø8½"
4"	17'	M - 3/16"	10.37	6.06	4.66	2.11	1.75	1.46	1.22	Ø¾" x 26"	Ø8½"
4"	18'	M - 3/16"	9.37	5.33	4.02		1.32	1.08	0.87	Ø¾" x 26"	Ø8½"
4"	19'	M - 3/16"	8.45	4.65	3.43		0.93	0.72	0.55	Ø¾" x 26"	Ø8½"
4"	20'	M - 3/16"	7.60	4.02	2.87		0.55	0.38	0.24	Ø¾" x 26"	Ø8½"
4"	10'	H - 1/4"	27.83	18.17	15.05	9.17	8.00	7.04	6.24	Ø¾" x 26"	Ø8½"
4"	11'	H - 1/4"	24.81	16.09	13.27	7.97	6.95	6.10	5.39	Ø¾" x 26"	Ø8½"
4"	12'	H - 1/4"	22.28	14.33	11.76	6.95	6.04	5.29	4.66	Ø¾" x 26"	Ø8½"
4"	13'	H - 1/4"	20.11	12.82	10.46	6.06	5.25	4.58	4.03	Ø¾" x 26"	Ø8½"
4"	14'	H - 1/4"	18.23	11.50	9.32	5.27	4.55	3.95	3.46	Ø¾" x 26"	Ø8½"
4"	15'	H - 1/4"	16.57	10.33	8.31	4.56	3.92	3.39	2.96	Ø¾" x 26"	Ø8½"
4"	16'	H - 1/4"	15.09	9.28	7.40	3.92	3.34	2.88	2.49	Ø¾" x 26"	Ø8½"
4"	17'	H - 1/4"	13.76	8.33	6.57	3.33	2.82	2.40	2.06	Ø¾" x 26"	Ø8½"
4"	18'	H - 1/4"	12.55	7.46	5.81	2.78	2.33	1.97	1.67	Ø¾" x 26"	Ø8½"
4"	19'	H - 1/4"	11.44	6.65	5.11	2.27	1.87	1.56	1.30	Ø¾" x 26"	Ø8½"
4"	20'	H - 1/4"	10.41	5.91	4.45		1.44	1.17	0.95	Ø¾" x 26"	Ø8½"
4"	10'	W - 5/16"	32.97	21.61	17.93	11.02	9.63	8.48	7.52	Ø¾" x 26"	Ø8½"
4"	11'	W - 5/16"	29.45	19.19	15.88	9.64	8.41	7.40	6.55	Ø¾" x 26"	Ø8½"
4"	12'	W - 5/16"	26.50	17.16	14.14	8.47	7.38	6.47	5.72	Ø¾" x 26"	Ø8½"
4"	13'	W - 5/16"	23.99	15.42	12.64	7.45	6.47	5.67	5.00	Ø¾" x 26"	Ø8½"
4"	14'	W - 5/16"	21.80	13.89	11.34	6.56	5.68	4.96	4.36	Ø¾" x 26"	Ø8½"
4"	15'	W - 5/16"	19.88	12.55	10.18	5.75	4.97	4.32	3.78	Ø¾" x 26"	Ø8½"
4"	16'	W - 5/16"	18.18	11.35	9.14	5.03	4.32	3.74	3.26	Ø¾" x 26"	Ø8½"
4"	17'	W - 5/16"	16.64	10.26	8.19	4.36	3.73	3.21	2.79	Ø¾" x 26"	Ø8½"
4"	18'	W - 5/16"	15.25	9.27	7.33	3.75	3.19	2.72	2.34	Ø¾" x 26"	Ø8½"
4"	19'	W - 5/16"	13.98	8.36	6.54	3.18	2.68	2.27	1.93	Ø¾" x 26"	Ø8½"
4"	20'	W - 5/16"	12.81	7.51	5.80	2.65	2.20	1.84	1.55	Ø¾" x 26"	Ø8½"

STRAIGHT POLE EPA RATING TABLE - AASHTO

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Steel
Round Shape

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160 MPH	170 MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
5"	10'	L - 1/8"	28.59	18.56	15.37	9.65	8.43	7.43	6.59	Ø3/4" x 26"	Ø10"
5"	11'	L - 1/8"	25.44	16.38	13.51	8.44	7.36	6.47	5.72	Ø3/4" x 26"	Ø10"
5"	12'	L - 1/8"	22.79	14.53	11.92	7.40	6.44	5.65	4.99	Ø3/4" x 26"	Ø10"
5"	13'	L - 1/8"	20.52	12.94	10.56	6.50	5.64	4.94	4.35	Ø3/4" x 26"	Ø10"
5"	14'	L - 1/8"	18.55	11.54	9.35	5.71	4.94	4.31	3.78	Ø3/4" x 26"	Ø10"
5"	15'	L - 1/8"	16.81	10.30	8.28	5.00	4.31	3.74	3.27	Ø3/4" x 26"	Ø10"
5"	16'	L - 1/8"	15.26	9.19	7.32	4.36	3.74	3.23	2.81	Ø3/4" x 26"	Ø10"
5"	17'	L - 1/8"	13.87	8.18	6.44	3.77	3.22	2.77	2.39	Ø3/4" x 26"	Ø10"
5"	18'	L - 1/8"	12.60	7.26	5.64	3.23	2.74	2.33	2.00	Ø3/4" x 26"	Ø10"
5"	19'	L - 1/8"	11.44	6.40	4.89	2.73	2.29	1.93	1.64	Ø3/4" x 26"	Ø10"
5"	20'	L - 1/8"	10.37	5.61	4.19	2.26	1.87	1.55	1.30	Ø3/4" x 26"	Ø10"
5"	21'	L - 1/8"	9.37	4.87	3.54		1.47	1.20	0.97	Ø1" x 36"	Ø11.5"
5"	22'	L - 1/8"	8.44	4.17	2.93		1.10	0.86	0.67	Ø1" x 36"	Ø11.5"
5"	23'	L - 1/8"	7.57	3.51	2.34		0.74	0.54	0.37	Ø1" x 36"	Ø11.5"
5"	24'	L - 1/8"	6.74	2.88			0.40	0.23		Ø1" x 36"	Ø11.5"
5"	25'	L - 1/8"	5.96	2.28						Ø1" x 36"	Ø11.5"
5"	26'	L - 1/8"	5.22							Ø1" x 36"	Ø11.5"
5"	27'	L - 1/8"	4.50							Ø1" x 36"	Ø11.5"
5"	28'	L - 1/8"	3.82							Ø1" x 36"	Ø11.5"
5"	29'	L - 1/8"	3.16							Ø1" x 36"	Ø11.5"
5"	30'	L - 1/8"	2.53							Ø1" x 36"	Ø11.5"

5"	10'	M - 3/16"	40.00	27.40	22.80	14.41	12.61	11.13	9.89	Ø3/4" x 26"	Ø10"
5"	11'	M - 3/16"	37.38	24.37	20.22	12.74	11.14	9.81	8.71	Ø3/4" x 26"	Ø10"
5"	12'	M - 3/16"	33.68	21.82	18.05	11.32	9.89	8.70	7.71	Ø3/4" x 26"	Ø10"
5"	13'	M - 3/16"	30.53	19.63	16.18	10.10	8.81	7.74	6.85	Ø3/4" x 26"	Ø10"
5"	14'	M - 3/16"	27.80	17.73	14.56	9.04	7.87	6.90	6.09	Ø3/4" x 26"	Ø10"
5"	15'	M - 3/16"	25.41	16.06	13.12	8.09	7.03	6.15	5.42	Ø3/4" x 26"	Ø10"
5"	16'	M - 3/16"	23.29	14.56	11.83	7.25	6.28	5.48	4.82	Ø3/4" x 26"	Ø10"
5"	17'	M - 3/16"	21.39	13.21	10.67	6.48	5.60	4.87	4.27	Ø3/4" x 26"	Ø10"
5"	18'	M - 3/16"	19.67	11.99	9.61	5.78	4.97	4.31	3.77	Ø3/4" x 26"	Ø10"
5"	19'	M - 3/16"	18.10	10.86	8.64	5.13	4.40	3.80	3.30	Ø3/4" x 26"	Ø10"
5"	20'	M - 3/16"	16.67	9.83	7.74	4.53	3.86	3.32	2.87	Ø3/4" x 26"	Ø10"
5"	21'	M - 3/16"	15.34	8.86	6.90	3.97	3.36	2.87	2.46	Ø1" x 36"	Ø11.5"
5"	22'	M - 3/16"	14.11	7.96	6.11	3.44	2.89	2.45	2.08	Ø1" x 36"	Ø11.5"
5"	23'	M - 3/16"	12.95	7.11	5.37	2.94	2.45	2.05	1.72	Ø1" x 36"	Ø11.5"
5"	24'	M - 3/16"	11.87	6.31	4.67	2.47	2.03	1.67	1.38	Ø1" x 36"	Ø11.5"
5"	25'	M - 3/16"	10.85	5.56	4.00	2.02	1.62	1.30	1.05	Ø1" x 36"	Ø11.5"
5"	26'	M - 3/16"	9.88	4.83	3.36		1.24	0.96	0.73	Ø1" x 36"	Ø11.5"
5"	27'	M - 3/16"	8.96	4.14	2.75		0.86	0.62	0.43	Ø1" x 36"	Ø11.5"
5"	28'	M - 3/16"	8.08	3.48	2.16		0.51	0.30	0.13	Ø1" x 36"	Ø11.5"
5"	29'	M - 3/16"	7.24	2.84			0.16			Ø1" x 36"	Ø11.5"
5"	30'	M - 3/16"	6.43	2.22						Ø1" x 36"	Ø11.5"

Consult factory for reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer. Consult factory for EPA ratings for wind speed over 150MPH.

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Steel
Round Shape

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Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
5"	10'	H - 1/4"	40.00	35.41	29.53	18.72				Ø3/4" x 26"	Ø10"
5"	11'	H - 1/4"	40.00	31.61	26.31	16.63				Ø3/4" x 26"	Ø10"
5"	12'	H - 1/4"	40.00	28.42	23.60	14.87				Ø3/4" x 26"	Ø10"
5"	13'	H - 1/4"	39.59	25.70	21.28	13.37				Ø3/4" x 26"	Ø10"
5"	14'	H - 1/4"	36.17	23.34	19.27	12.05				Ø3/4" x 26"	Ø10"
5"	15'	H - 1/4"	33.19	21.27	17.50	10.90				Ø3/4" x 26"	Ø10"
5"	16'	H - 1/4"	30.55	19.42	15.92	9.86				Ø3/4" x 26"	Ø10"
5"	17'	H - 1/4"	28.19	17.77	14.50	8.93				Ø3/4" x 26"	Ø10"
5"	18'	H - 1/4"	26.07	16.27	13.21	8.08				Ø3/4" x 26"	Ø10"
5"	19'	H - 1/4"	24.13	14.90	12.03	7.30				Ø3/4" x 26"	Ø10"
5"	20'	H - 1/4"	22.37	13.64	10.94	6.58				Ø3/4" x 26"	Ø10"
5"	21'	H - 1/4"	20.74	12.48	9.94	5.91	5.07	4.38	3.81	Ø1" x 36"	Ø11.5"
5"	22'	H - 1/4"	19.23	11.39	8.99	5.29	4.51	3.88	3.36	Ø1" x 36"	Ø11.5"
5"	23'	H - 1/4"	17.82	10.37	8.11	4.70	3.99	3.41	2.94	Ø1" x 36"	Ø11.5"
5"	24'	H - 1/4"	16.50	9.42	7.27	4.14	3.49	2.97	2.54	Ø1" x 36"	Ø11.5"
5"	25'	H - 1/4"	15.27	8.51	6.48	3.61	3.02	2.54	2.15	Ø1" x 36"	Ø11.5"
5"	26'	H - 1/4"	14.09	7.65	5.73	3.10	2.57	2.14	1.79	Ø1" x 36"	Ø11.5"
5"	27'	H - 1/4"	12.98	6.83	5.02	2.62	2.14	1.75	1.43	Ø1" x 36"	Ø11.5"
5"	28'	H - 1/4"	11.93	6.05	4.33	2.16	1.72	1.38	1.10	Ø1" x 36"	Ø11.5"
5"	29'	H - 1/4"	10.92	5.30	3.67		1.32	1.02	0.77	Ø1" x 36"	Ø11.5"
5"	30'	H - 1/4"	9.95	4.57	3.03		0.94	0.67	0.45	Ø1" x 36"	Ø11.5"

5"	10'	W - 5/16"	40.00	40.00	35.65	22.63				Ø3/4" x 26"	Ø10"
5"	11'	W - 5/16"	40.00	38.19	31.83	20.17				Ø3/4" x 26"	Ø10"
5"	12'	W - 5/16"	40.00	34.42	28.64	18.10				Ø3/4" x 26"	Ø10"
5"	13'	W - 5/16"	40.00	31.21	25.91	16.33				Ø3/4" x 26"	Ø10"
5"	14'	W - 5/16"	40.00	28.43	23.55	14.79				Ø3/4" x 26"	Ø10"
5"	15'	W - 5/16"	40.26	26.00	21.47	13.44				Ø3/4" x 26"	Ø10"
5"	16'	W - 5/16"	37.15	23.84	19.63	12.24				Ø3/4" x 26"	Ø10"
5"	17'	W - 5/16"	34.37	21.91	17.98	11.15				Ø3/4" x 26"	Ø10"
5"	18'	W - 5/16"	31.87	20.16	16.48	10.17				Ø3/4" x 26"	Ø10"
5"	19'	W - 5/16"	29.61	18.57	15.11	9.27				Ø3/4" x 26"	Ø10"
5"	20'	W - 5/16"	27.54	17.10	13.85	8.44				Ø3/4" x 26"	Ø10"
5"	21'	W - 5/16"	25.63	15.75	12.69	7.67	6.62	5.76	5.04	Ø1" x 36"	Ø11.5"
5"	22'	W - 5/16"	23.87	14.50	11.61	6.96	5.98	5.19	4.52	Ø1" x 36"	Ø11.5"
5"	23'	W - 5/16"	22.23	13.33	10.59	6.28	5.38	4.65	4.04	Ø1" x 36"	Ø11.5"
5"	24'	W - 5/16"	20.70	12.23	9.64	5.65	4.82	4.14	3.58	Ø1" x 36"	Ø11.5"
5"	25'	W - 5/16"	19.26	11.19	8.73	5.05	4.28	3.66	3.15	Ø1" x 36"	Ø11.5"
5"	26'	W - 5/16"	17.91	10.20	7.88	4.48	3.77	3.21	2.74	Ø1" x 36"	Ø11.5"
5"	27'	W - 5/16"	16.62	9.27	7.06	3.93	3.29	2.77	2.34	Ø1" x 36"	Ø11.5"
5"	28'	W - 5/16"	15.40	8.37	6.28	3.41	2.82	2.35	1.96	Ø1" x 36"	Ø11.5"
5"	29'	W - 5/16"	14.23	7.52	5.53	2.90	2.37	1.95	1.60	Ø1" x 36"	Ø11.5"
5"	30'	W - 5/16"	13.12	6.70	4.81	2.42	1.94	1.56	1.25	Ø1" x 36"	Ø11.5"

Consult factory for reinforcement solutions for higher EPA ratings.

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Steel
Round Shape

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
6"	10'	L - 1/8"	26.51	17.35	14.49	9.10	7.95	7.00	6.21	Ø3/4" x 26"	Ø10"
6"	11'	L - 1/8"	23.49	15.28	12.73	7.95	6.94	6.10	5.40	Ø3/4" x 26"	Ø10"
6"	12'	L - 1/8"	20.94	13.52	11.25	6.98	6.07	5.33	4.70	Ø3/4" x 26"	Ø10"
6"	13'	L - 1/8"	18.75	12.01	9.96	6.13	5.32	4.66	4.10	Ø3/4" x 26"	Ø10"
6"	14'	L - 1/8"	16.84	10.68	8.83	5.39	4.66	4.06	3.57	Ø3/4" x 26"	Ø10"
6"	15'	L - 1/8"	15.16	9.50	7.83	4.72	4.07	3.54	3.09	Ø3/4" x 26"	Ø10"
6"	16'	L - 1/8"	13.65	8.44	6.92	4.12	3.53	3.06	2.66	Ø3/4" x 26"	Ø10"
6"	17'	L - 1/8"	12.28	7.47	6.10	3.57	3.05	2.62	2.26	Ø3/4" x 26"	Ø10"
6"	18'	L - 1/8"	11.04	6.59	5.34	3.07	2.59	2.21	1.90	Ø3/4" x 26"	Ø10"
6"	19'	L - 1/8"	9.89	5.77	4.64	2.60	2.17	1.83	1.56	Ø3/4" x 26"	Ø10"
6"	20'	L - 1/8"	8.83	5.01	3.99	2.16	1.78	1.48	1.24	Ø3/4" x 26"	Ø10"
6"	21'	L - 1/8"	7.85	4.30	3.38		1.41	1.15	0.93	Ø1" x 36"	Ø14"
6"	22'	L - 1/8"	6.92	3.63	2.81		1.06	0.83	0.65	Ø1" x 36"	Ø14"
6"	23'	L - 1/8"	6.05	2.99	2.26		0.73	0.53	0.37	Ø1" x 36"	Ø14"
6"	24'	L - 1/8"	5.22	2.39			0.41	0.24	0.11	Ø1" x 36"	Ø14"
6"	25'	L - 1/8"	4.44				0.10			Ø1" x 36"	Ø14"
6"	26'	L - 1/8"	3.69							Ø1" x 36"	Ø14"
6"	27'	L - 1/8"	2.97							Ø1" x 36"	Ø14"
6"	28'	L - 1/8"	2.28							Ø1" x 36"	Ø14"

6"	10'	M - 3/16"	40.43	26.68	22.32	14.11	12.35	10.90	9.69	Ø3/4" x 26"	Ø10"
6"	11'	M - 3/16"	36.08	23.71	19.82	12.49	10.92	9.62	8.54	Ø3/4" x 26"	Ø10"
6"	12'	M - 3/16"	32.43	21.21	17.71	11.11	9.71	8.54	7.58	Ø3/4" x 26"	Ø10"
6"	13'	M - 3/16"	29.31	19.07	15.90	9.93	8.66	7.61	6.74	Ø3/4" x 26"	Ø10"
6"	14'	M - 3/16"	26.60	17.21	14.32	8.90	7.75	6.80	6.01	Ø3/4" x 26"	Ø10"
6"	15'	M - 3/16"	24.23	15.57	12.93	7.99	6.94	6.08	5.36	Ø3/4" x 26"	Ø10"
6"	16'	M - 3/16"	22.12	14.11	11.69	7.17	6.22	5.43	4.78	Ø3/4" x 26"	Ø10"
6"	17'	M - 3/16"	20.23	12.79	10.57	6.43	5.56	4.84	4.25	Ø3/4" x 26"	Ø10"
6"	18'	M - 3/16"	18.51	11.59	9.55	5.76	4.96	4.31	3.77	Ø3/4" x 26"	Ø10"
6"	19'	M - 3/16"	16.95	10.49	8.61	5.13	4.41	3.81	3.32	Ø3/4" x 26"	Ø10"
6"	20'	M - 3/16"	15.51	9.48	7.75	4.56	3.89	3.35	2.90	Ø3/4" x 26"	Ø10"
6"	21'	M - 3/16"	14.17	8.53	6.94	4.02	3.41	2.92	2.52	Ø1" x 36"	Ø14"
6"	22'	M - 3/16"	12.93	7.65	6.19	3.51	2.96	2.52	2.15	Ø1" x 36"	Ø14"
6"	23'	M - 3/16"	11.77	6.82	5.48	3.04	2.54	2.14	1.80	Ø1" x 36"	Ø14"
6"	24'	M - 3/16"	10.68	6.04	4.81	2.59	2.14	1.77	1.48	Ø1" x 36"	Ø14"
6"	25'	M - 3/16"	9.65	5.30	4.17	2.16	1.75	1.43	1.16	Ø1" x 36"	Ø14"
6"	26'	M - 3/16"	8.67	4.59	3.57		1.39	1.10	0.86	Ø1" x 36"	Ø14"
6"	27'	M - 3/16"	7.74	3.92	2.99		1.03	0.78	0.57	Ø1" x 36"	Ø14"
6"	28'	M - 3/16"	6.85	3.27	2.43		0.69	0.47	0.30	Ø1" x 36"	Ø14"
6"	29'	M - 3/16"	5.99	2.65			0.37	0.18		Ø1" x 36"	Ø14"
6"	30'	M - 3/16"	5.17	2.05						Ø1" x 36"	Ø14"

Consult factory for reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

STRAIGHT POLE EPA RATING TABLE - AASHTO

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Steel
Round Shape

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Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
6"	10'	H - 1/4"	40.00	34.44	28.85	18.29				Ø3/4" x 26"	Ø10"
6"	11'	H - 1/4"	40.00	30.73	25.72	16.26				Ø3/4" x 26"	Ø10"
6"	12'	H - 1/4"	40.00	27.62	23.09	14.56				Ø3/4" x 26"	Ø10"
6"	13'	H - 1/4"	38.10	24.96	20.84	13.10				Ø3/4" x 26"	Ø10"
6"	14'	H - 1/4"	34.74	22.66	18.89	11.83				Ø3/4" x 26"	Ø10"
6"	15'	H - 1/4"	31.79	20.63	17.18	10.71				Ø3/4" x 26"	Ø10"
6"	16'	H - 1/4"	29.18	18.83	15.66	9.71				Ø3/4" x 26"	Ø10"
6"	17'	H - 1/4"	26.84	17.22	14.29	8.81				Ø3/4" x 26"	Ø10"
6"	18'	H - 1/4"	24.74	15.76	13.05	8.00				Ø3/4" x 26"	Ø10"
6"	19'	H - 1/4"	22.82	14.42	11.91	7.25				Ø3/4" x 26"	Ø10"
6"	20'	H - 1/4"	21.06	13.20	10.87	6.56				Ø3/4" x 26"	Ø10"
6"	21'	H - 1/4"	19.44	12.06	9.90	5.92	5.08	4.40	3.83	Ø1" x 36"	Ø14"
6"	22'	H - 1/4"	17.93	11.00	9.00	5.32	4.55	3.92	3.40	Ø1" x 36"	Ø14"
6"	23'	H - 1/4"	16.53	10.01	8.16	4.75	4.05	3.47	2.99	Ø1" x 36"	Ø14"
6"	24'	H - 1/4"	15.22	9.08	7.36	4.22	3.57	3.04	2.61	Ø1" x 36"	Ø14"
6"	25'	H - 1/4"	13.98	8.20	6.61	3.72	3.12	2.64	2.25	Ø1" x 36"	Ø14"
6"	26'	H - 1/4"	12.81	7.36	5.89	3.24	2.69	2.26	1.90	Ø1" x 36"	Ø14"
6"	27'	H - 1/4"	11.70	6.57	5.21	2.78	2.28	1.89	1.56	Ø1" x 36"	Ø14"
6"	28'	H - 1/4"	10.64	5.81	4.56	2.34	1.89	1.53	1.24	Ø1" x 36"	Ø14"
6"	29'	H - 1/4"	9.62	5.08	3.94		1.51	1.19	0.94	Ø1" x 36"	Ø14"
6"	30'	H - 1/4"	8.65	4.38	3.34		1.15	0.87	0.64	Ø1" x 36"	Ø14"

6"	10'	W - 5/16"	40.00	40.00	34.71	22.04				Ø3/4" x 26"	Ø10"
6"	11'	W - 5/16"	40.00	37.04	31.02	19.66				Ø3/4" x 26"	Ø10"
6"	12'	W - 5/16"	40.00	33.37	27.92	17.65				Ø3/4" x 26"	Ø10"
6"	13'	W - 5/16"	40.00	30.25	25.29	15.94				Ø3/4" x 26"	Ø10"
6"	14'	W - 5/16"	40.00	27.55	23.00	14.46				Ø3/4" x 26"	Ø10"
6"	15'	W - 5/16"	38.58	25.18	21.00	13.16				Ø3/4" x 26"	Ø10"
6"	16'	W - 5/16"	35.52	23.08	19.22	12.00				Ø3/4" x 26"	Ø10"
6"	17'	W - 5/16"	32.79	21.20	17.63	10.95				Ø3/4" x 26"	Ø10"
6"	18'	W - 5/16"	30.33	19.50	16.19	10.01				Ø3/4" x 26"	Ø10"
6"	19'	W - 5/16"	28.09	17.95	14.88	9.15				Ø3/4" x 26"	Ø10"
6"	20'	W - 5/16"	26.05	16.53	13.67	8.35				Ø3/4" x 26"	Ø10"
6"	21'	W - 5/16"	24.17	15.22	12.56	7.62	10.35	9.06	7.99	Ø1" x 36"	Ø14"
6"	22'	W - 5/16"	22.42	14.01	11.53	6.93	9.55	8.35	7.35	Ø1" x 36"	Ø14"
6"	23'	W - 5/16"	20.80	12.87	10.56	6.29	8.81	7.69	6.76	Ø1" x 36"	Ø14"
6"	24'	W - 5/16"	19.29	11.80	9.65	5.69	7.45	7.06	6.19	Ø1" x 36"	Ø14"
6"	25'	W - 5/16"	17.86	10.80	8.79	5.11	6.83	6.47	5.67	Ø1" x 36"	Ø14"
6"	26'	W - 5/16"	16.52	9.85	7.98	4.57	6.24	5.92	5.17	Ø1" x 36"	Ø14"
6"	27'	W - 5/16"	15.24	8.94	7.21	4.05	5.92	5.39	4.69	Ø1" x 36"	Ø14"
6"	28'	W - 5/16"	14.03	8.08	6.47	3.56	5.68	4.89	4.24	Ø1" x 36"	Ø14"
6"	29'	W - 5/16"	12.87	7.25	5.76	3.09	5.14	4.41	3.80	Ø1" x 36"	Ø14"
6"	30'	W - 5/16"	11.77	6.46	5.09	2.63	4.63	3.95	3.39	Ø1" x 36"	Ø14"

Consult factory for reinforcement solutions for higher EPA ratings.

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Aluminium Square Shape

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	L - 1/8"	4.30							Ø¾" x 26"	Ø8½"
4"	11'	L - 1/8"	3.14							Ø¾" x 26"	Ø8½"
4"	12'	L - 1/8"	2.08							Ø¾" x 26"	Ø8½"
4"	10'	M - 3/16"	8.38	4.27	2.93					Ø¾" x 26"	Ø8½"
4"	11'	M - 3/16"	6.86	3.10						Ø¾" x 26"	Ø8½"
4"	12'	M - 3/16"	5.51	2.05						Ø¾" x 26"	Ø8½"
4"	13'	M - 3/16"	4.29							Ø¾" x 26"	Ø8½"
4"	14'	M - 3/16"	3.17							Ø¾" x 26"	Ø8½"
4"	15'	M - 3/16"	2.14							Ø¾" x 26"	Ø8½"
4"	10'	H - 1/4"	11.73	6.51	4.82					Ø¾" x 26"	Ø8½"
4"	11'	H - 1/4"	9.92	5.15	3.61					Ø¾" x 26"	Ø8½"
4"	12'	H - 1/4"	8.33	3.93	2.51					Ø¾" x 26"	Ø8½"
4"	13'	H - 1/4"	6.89	2.83						Ø¾" x 26"	Ø8½"
4"	14'	H - 1/4"	5.60							Ø¾" x 26"	Ø8½"
4"	15'	H - 1/4"	4.40							Ø¾" x 26"	Ø8½"
4"	16'	H - 1/4"	3.30							Ø¾" x 26"	Ø8½"
4"	17'	H - 1/4"	2.27							Ø¾" x 26"	Ø8½"
5"	10'	L - 1/8"	7.97	3.65	2.26					Ø¾" x 26"	Ø10"
5"	11'	L - 1/8"	6.29	2.35						Ø¾" x 26"	Ø10"
5"	12'	L - 1/8"	4.79							Ø¾" x 26"	Ø10"
5"	13'	L - 1/8"	3.42							Ø¾" x 26"	Ø10"
5"	14'	L - 1/8"	2.16							Ø¾" x 26"	Ø10"
5"	10'	M - 3/16"	14.29	7.88	5.81					Ø¾" x 26"	Ø10"
5"	11'	M - 3/16"	12.07	6.21	4.32					Ø¾" x 26"	Ø10"
5"	12'	M - 3/16"	10.10	4.71	2.97					Ø¾" x 26"	Ø10"
5"	13'	M - 3/16"	8.34	3.35						Ø¾" x 26"	Ø10"
5"	14'	M - 3/16"	6.74	2.09						Ø¾" x 26"	Ø10"
5"	15'	M - 3/16"	5.27							Ø¾" x 26"	Ø10"
5"	16'	M - 3/16"	3.91							Ø¾" x 26"	Ø10"
5"	17'	M - 3/16"	2.64							Ø¾" x 26"	Ø10"
5"	10'	H - 1/4"	19.33	11.26	8.65	3.70	2.90	1.93	1.12	Ø¾" x 26"	Ø10"
5"	11'	H - 1/4"	16.68	9.30	6.91	2.39	1.55	0.67		Ø¾" x 26"	Ø10"
5"	12'	H - 1/4"	14.35	7.55	5.36		0.33			Ø¾" x 26"	Ø10"
5"	13'	H - 1/4"	12.27	5.98	3.95					Ø¾" x 26"	Ø10"
5"	14'	H - 1/4"	10.40	4.54	2.65					Ø¾" x 26"	Ø10"
5"	15'	H - 1/4"	8.70	3.22						Ø¾" x 26"	Ø10"
5"	16'	H - 1/4"	7.13							Ø¾" x 26"	Ø10"
5"	17'	H - 1/4"	5.67							Ø¾" x 26"	Ø10"
5"	18'	H - 1/4"	4.31							Ø¾" x 26"	Ø10"
5"	19'	H - 1/4"	3.03							Ø¾" x 26"	Ø10"

This guide is intended as a reference source only. Please refer to a qualified engineer.

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Aluminium Square Shape

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Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
6"	10'	M - 3/16"	23.63	13.80	10.62	4.60	3.15	2.02	1.08	Ø¾" x 26"	Ø11.5"
6"	11'	M - 3/16"	20.42	11.43	8.52	3.02	1.55	0.53		Ø¾" x 26"	Ø11.5"
6"	12'	M - 3/16"	17.60	9.32	6.64		0.12			Ø¾" x 26"	Ø11.5"
6"	13'	M - 3/16"	15.08	7.42	4.94					Ø¾" x 26"	Ø11.5"
6"	14'	M - 3/16"	12.82	5.68	3.37					Ø¾" x 26"	Ø11.5"
6"	15'	M - 3/16"	10.75	4.08						Ø¾" x 26"	Ø11.5"
6"	16'	M - 3/16"	8.86	2.58						Ø¾" x 26"	Ø11.5"
6"	17'	M - 3/16"	7.09							Ø¾" x 26"	Ø11.5"
6"	18'	M - 3/16"	5.45							Ø¾" x 26"	Ø11.5"
6"	19'	M - 3/16"	3.90							Ø¾" x 26"	Ø11.5"
6"	20'	M - 3/16"	2.44							Ø¾" x 26"	Ø11.5"

Consult factory for reinforcement solutions for higher EPA ratings.

STRAIGHT POLE EPA RATING TABLE - AASHTO

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Steel
Square Shape

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	L - 1/8"	20.81	12.81	10.22	5.31	4.26	3.38	2.65	Ø3/4" x 26"	Ø8½"
4"	11'	L - 1/8"	18.06	10.82	8.48	4.04	3.08	2.29	1.63	Ø3/4" x 26"	Ø8½"
4"	12'	L - 1/8"	15.71	9.10	6.96	2.91	2.04	1.31	0.71	Ø3/4" x 26"	Ø8½"
4"	13'	L - 1/8"	13.67	7.58	5.62		1.09	0.42		Ø3/4" x 26"	Ø8½"
4"	14'	L - 1/8"	11.86	6.23	4.40		0.21			Ø3/4" x 26"	Ø8½"
4"	15'	L - 1/8"	10.24	4.99	3.30					Ø3/4" x 26"	Ø8½"
4"	16'	L - 1/8"	8.77	3.86	2.28					Ø3/4" x 26"	Ø8½"
4"	17'	L - 1/8"	7.42	2.81						Ø3/4" x 26"	Ø8½"
4"	18'	L - 1/8"	6.18							Ø3/4" x 26"	Ø8½"
4"	19'	L - 1/8"	5.02							Ø1" x 36"	Ø10"
4"	20'	L - 1/8"	3.94							Ø1" x 36"	Ø10"
4"	21'	L - 1/8"	2.92							Ø1" x 36"	Ø10"
4"	10'	M - 3/16"	31.02	19.64	15.96	8.99	7.49	6.24	5.20	Ø3/4" x 26"	Ø8½"
4"	11'	M - 3/16"	27.30	17.00	13.67	7.37	6.01	4.88	3.94	Ø3/4" x 26"	Ø8½"
4"	12'	M - 3/16"	24.15	14.75	11.71	5.95	4.71	3.68	2.82	Ø3/4" x 26"	Ø8½"
4"	13'	M - 3/16"	21.43	12.78	9.98	4.68	3.54	2.60	1.80	Ø3/4" x 26"	Ø8½"
4"	14'	M - 3/16"	19.05	11.04	8.45	3.54	2.48	1.61	0.87	Ø3/4" x 26"	Ø8½"
4"	15'	M - 3/16"	16.93	9.47	7.06	2.49	1.51	0.69		Ø3/4" x 26"	Ø8½"
4"	16'	M - 3/16"	15.03	8.05	5.80		0.60			Ø3/4" x 26"	Ø8½"
4"	17'	M - 3/16"	13.30	6.75	4.63					Ø3/4" x 26"	Ø8½"
4"	18'	M - 3/16"	11.72	5.55	3.55					Ø3/4" x 26"	Ø8½"
4"	19'	M - 3/16"	10.27	4.42	2.53					Ø3/4" x 26"	Ø8½"
4"	20'	M - 3/16"	8.91	3.37						Ø3/4" x 26"	Ø8½"
4"	21'	M - 3/16"	7.65	2.37						Ø1" x 36"	Ø10"
4"	22'	M - 3/16"	6.46							Ø1" x 36"	Ø10"
4"	23'	M - 3/16"	5.34							Ø1" x 36"	Ø10"
4"	24'	M - 3/16"	4.27							Ø1" x 36"	Ø10"
4"	10'	W - 5/16"	40.00	31.12	25.61	15.16				Ø3/4" x 26"	Ø8½"
4"	11'	W - 5/16"	40.00	27.39	22.40	12.95				Ø3/4" x 26"	Ø8½"
4"	12'	W - 5/16"	38.32	24.23	19.67	11.05				Ø3/4" x 26"	Ø8½"
4"	13'	W - 5/16"	34.46	21.50	17.31	9.37				Ø3/4" x 26"	Ø8½"
4"	14'	W - 5/16"	31.11	19.12	15.23	7.88				Ø3/4" x 26"	Ø8½"
4"	15'	W - 5/16"	28.17	16.99	13.38	6.54				Ø3/4" x 26"	Ø8½"
4"	16'	W - 5/16"	25.54	15.09	11.71	5.31				Ø3/4" x 26"	Ø8½"
4"	17'	W - 5/16"	23.18	13.36	10.18	4.17				Ø3/4" x 26"	Ø8½"
4"	18'	W - 5/16"	21.03	11.78	8.78	3.11				Ø3/4" x 26"	Ø8½"
4"	19'	W - 5/16"	19.07	10.32	7.49	2.12				Ø3/4" x 26"	Ø8½"
4"	20'	W - 5/16"	17.27	8.96	6.28					Ø3/4" x 26"	Ø8½"
4"	21'	W - 5/16"	15.60	7.69	5.14					Ø1" x 36"	Ø10"
4"	22'	W - 5/16"	14.04	6.50	4.07					Ø1" x 36"	Ø10"
4"	23'	W - 5/16"	12.58	5.38	3.05					Ø1" x 36"	Ø10"
4"	24'	W - 5/16"	11.20	4.31	2.08					Ø1" x 36"	Ø10"

Consult factory for reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Steel
Square Shape

TABLE OF CONTENTS

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
5"	10'	L - 1/8"	28.40	17.60	14.11	7.50	6.07	4.90	3.91	Ø3/4" x 26"	Ø10"
5"	11'	L - 1/8"	24.73	14.97	11.81	5.83	4.53	3.47	2.57	Ø3/4" x 26"	Ø10"
5"	12'	L - 1/8"	21.61	12.69	9.81	4.34	3.16	2.19	1.38	Ø3/4" x 26"	Ø10"
5"	13'	L - 1/8"	18.90	10.69	8.04	3.01	1.93	1.03	0.28	Ø3/4" x 26"	Ø10"
5"	14'	L - 1/8"	16.50	8.90	6.45		0.79			Ø3/4" x 26"	Ø10"
5"	15'	L - 1/8"	14.36	7.29	5.00					Ø3/4" x 26"	Ø10"
5"	16'	L - 1/8"	12.42	5.81	3.67					Ø3/4" x 26"	Ø10"
5"	17'	L - 1/8"	10.65	4.44	2.43					Ø3/4" x 26"	Ø10"
5"	18'	L - 1/8"	9.02	3.16						Ø3/4" x 26"	Ø10"
5"	19'	L - 1/8"	7.50							Ø3/4" x 26"	Ø10"
5"	20'	L - 1/8"	6.08							Ø3/4" x 26"	Ø10"
5"	21'	L - 1/8"	4.75							Ø1" x 36"	Ø11.5"
5"	22'	L - 1/8"	3.49							Ø1" x 36"	Ø11.5"
5"	23'	L - 1/8"	2.29							Ø1" x 36"	Ø11.5"
5"	10'	M - 3/16"	40.00	33.71	27.64	16.16	13.69	11.64	9.92	Ø3/4" x 26"	Ø10"
5"	11'	M - 3/16"	40.00	29.54	24.05	13.66	11.42	9.57	8.02	Ø3/4" x 26"	Ø10"
5"	12'	M - 3/16"	40.00	26.00	20.99	11.50	9.46	7.76	6.35	Ø3/4" x 26"	Ø10"
5"	13'	M - 3/16"	37.18	22.93	18.32	9.59	7.72	6.16	4.85	Ø3/4" x 26"	Ø10"
5"	14'	M - 3/16"	33.43	20.24	15.97	7.89	6.15	4.71	3.50	Ø3/4" x 26"	Ø10"
5"	15'	M - 3/16"	30.12	17.84	13.86	6.34	4.72	3.38	2.25	Ø3/4" x 26"	Ø10"
5"	16'	M - 3/16"	27.17	15.68	11.96	4.92	3.40	2.15	1.10	Ø3/4" x 26"	Ø10"
5"	17'	M - 3/16"	24.50	13.71	10.22	3.60	2.18	1.00		Ø3/4" x 26"	Ø10"
5"	18'	M - 3/16"	22.08	11.90	8.61	2.37	1.03			Ø3/4" x 26"	Ø10"
5"	19'	M - 3/16"	19.86	10.23	7.11					Ø3/4" x 26"	Ø10"
5"	20'	M - 3/16"	17.80	8.67	5.72					Ø3/4" x 26"	Ø10"
5"	21'	M - 3/16"	15.90	7.21	4.40					Ø1" x 36"	Ø11.5"
5"	22'	M - 3/16"	14.12	5.83	3.15					Ø1" x 36"	Ø11.5"
5"	23'	M - 3/16"	12.44	4.53						Ø1" x 36"	Ø11.5"
5"	24'	M - 3/16"	10.87	3.29						Ø1" x 36"	Ø11.5"
5"	25'	M - 3/16"	9.37	2.10						Ø1" x 36"	Ø11.5"
5"	26'	M - 3/16"	7.95							Ø1" x 36"	Ø11.5"
5"	27'	M - 3/16"	6.59							Ø1" x 36"	Ø11.5"
5"	28'	M - 3/16"	5.30							Ø1" x 36"	Ø11.5"
5"	29'	M - 3/16"	4.05							Ø1" x 36"	Ø11.5"
5"	30'	M - 3/16"	2.85							Ø1" x 36"	Ø11.5"

Consult factory for reinforcement solutions for higher EPA ratings.

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Steel
Square Shape

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
5"	10'	H - ¼"	40.00	40.00	35.66	21.29				Ø¾" x 26"	Ø10"
5"	11'	H - ¼"	40.00	38.16	31.30	18.30				Ø¾" x 26"	Ø10"
5"	12'	H - ¼"	40.00	33.87	27.60	15.74				Ø¾" x 26"	Ø10"
5"	13'	H - ¼"	40.00	30.18	24.41	13.49				Ø¾" x 26"	Ø10"
5"	14'	H - ¼"	40.00	26.95	21.61	11.50				Ø¾" x 26"	Ø10"
5"	15'	H - ¼"	39.45	24.08	19.11	9.70				Ø¾" x 26"	Ø10"
5"	16'	H - ¼"	35.90	21.52	16.87	8.06				Ø¾" x 26"	Ø10"
5"	17'	H - ¼"	32.70	19.20	14.83	6.56				Ø¾" x 26"	Ø10"
5"	18'	H - ¼"	29.81	17.08	12.96	5.16				Ø¾" x 26"	Ø10"
5"	19'	H - ¼"	27.17	15.12	11.23	3.85				Ø¾" x 26"	Ø10"
5"	20'	H - ¼"	24.74	13.32	9.62	2.62				Ø¾" x 26"	Ø10"
5"	21'	H - ¼"	22.50	11.63	8.11					Ø1" x 36"	Ø11.5"
5"	22'	H - ¼"	20.41	10.05	6.69					Ø1" x 36"	Ø11.5"
5"	23'	H - ¼"	18.46	8.55	5.35					Ø1" x 36"	Ø11.5"
5"	24'	H - ¼"	16.63	7.14	4.08					Ø1" x 36"	Ø11.5"
5"	25'	H - ¼"	14.90	5.80	2.86					Ø1" x 36"	Ø11.5"
5"	26'	H - ¼"	13.26	4.52						Ø1" x 36"	Ø11.5"
5"	27'	H - ¼"	11.70	3.29						Ø1" x 36"	Ø11.5"
5"	28'	H - ¼"	10.22	2.11						Ø1" x 36"	Ø11.5"
5"	29'	H - ¼"	8.80							Ø1" x 36"	Ø11.5"
5"	30'	H - ¼"	7.44							Ø1" x 36"	Ø11.5"
5"	10'	W - 5/16"	40.00	40.00	40.00	31.67				Ø¾" x 26"	Ø10"
5"	11'	W - 5/16"	40.00	40.00	40.00	27.70				Ø¾" x 26"	Ø10"
5"	12'	W - 5/16"	40.00	40.00	40.00	24.32				Ø¾" x 26"	Ø10"
5"	13'	W - 5/16"	40.00	40.00	36.75	21.39				Ø¾" x 26"	Ø10"
5"	14'	W - 5/16"	40.00	40.54	33.03	18.81				Ø¾" x 26"	Ø10"
5"	15'	W - 5/16"	40.00	36.74	29.75	16.51				Ø¾" x 26"	Ø10"
5"	16'	W - 5/16"	40.00	33.36	26.82	14.43				Ø¾" x 26"	Ø10"
5"	17'	W - 5/16"	40.00	30.32	24.17	12.54				Ø¾" x 26"	Ø10"
5"	18'	W - 5/16"	40.00	27.56	21.77	10.80				Ø¾" x 26"	Ø10"
5"	19'	W - 5/16"	40.00	25.04	19.56	9.18				Ø¾" x 26"	Ø10"
5"	20'	W - 5/16"	38.80	22.73	17.53	7.68				Ø¾" x 26"	Ø10"
5"	21'	W - 5/16"	35.87	20.58	15.63	6.27	4.25	2.58	1.18	Ø1" x 36"	Ø11.5"
5"	22'	W - 5/16"	33.16	18.58	13.87	4.93	3.01	1.42		Ø1" x 36"	Ø11.5"
5"	23'	W - 5/16"	30.64	16.71	12.20	3.67	1.83	0.31		Ø1" x 36"	Ø11.5"
5"	24'	W - 5/16"	28.29	14.95	10.64	2.47	0.71			Ø1" x 36"	Ø11.5"
5"	25'	W - 5/16"	26.08	13.29	9.15					Ø1" x 36"	Ø11.5"
5"	26'	W - 5/16"	24.01	11.71	7.74					Ø1" x 36"	Ø11.5"
5"	27'	W - 5/16"	22.04	10.22	6.39					Ø1" x 36"	Ø11.5"
5"	28'	W - 5/16"	20.18	8.79	5.10					Ø1" x 36"	Ø11.5"
5"	29'	W - 5/16"	18.42	7.42	3.86					Ø1" x 36"	Ø11.5"
5"	30'	W - 5/16"	16.73	6.10	2.67					Ø1" x 36"	Ø11.5"

Consult factory for reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

STRAIGHT POLE EPA RATING TABLE - AASHTO

STRAIGHT POLE
EPA RATING TABLE - AASHTO

Steel
Square Shape

TABLE OF CONTENTS

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
6"	10'	M - 3/16"	40.00	40.00	40.00	27.76	19.70	16.87	14.50	Ø¾" x 26"	Ø11.5"
6"	11'	M - 3/16"	40.00	40.00	40.69	23.96	16.68	14.11	11.96	Ø¾" x 26"	Ø11.5"
6"	12'	M - 3/16"	40.00	40.00	35.98	20.71	14.06	11.72	9.76	Ø¾" x 26"	Ø11.5"
6"	13'	M - 3/16"	40.00	39.34	31.92	17.87	11.75	9.60	7.79	Ø¾" x 26"	Ø11.5"
6"	14'	M - 3/16"	40.00	35.23	28.36	15.35	9.69	7.69	6.02	Ø¾" x 26"	Ø11.5"
6"	15'	M - 3/16"	40.00	31.60	25.20	13.09	7.81	5.96	4.40	Ø¾" x 26"	Ø11.5"
6"	16'	M - 3/16"	40.00	28.34	22.36	11.03	6.10	4.36	2.90	Ø¾" x 26"	Ø11.5"
6"	17'	M - 3/16"	40.00	25.41	19.79	9.14	4.50	2.87	1.51	Ø¾" x 26"	Ø11.5"
6"	18'	M - 3/16"	39.11	22.72	17.43	7.39	3.02	1.48	0.19	Ø¾" x 26"	Ø11.5"
6"	19'	M - 3/16"	35.76	20.26	15.25	5.76	1.62	0.17		Ø¾" x 26"	Ø11.5"
6"	20'	M - 3/16"	32.69	17.98	13.23	4.22	0.30			Ø¾" x 26"	Ø11.5"
6"	21'	M - 3/16"	29.85	15.86	11.34	2.77				Ø1" x 36"	Ø14"
6"	22'	M - 3/16"	27.21	13.87	9.56					Ø1" x 36"	Ø14"
6"	23'	M - 3/16"	24.74	12.00	7.88					Ø1" x 36"	Ø14"
6"	24'	M - 3/16"	22.43	10.23	6.29					Ø1" x 36"	Ø14"
6"	25'	M - 3/16"	20.26	8.55	4.77					Ø1" x 36"	Ø14"
6"	26'	M - 3/16"	18.20	6.96	3.32					Ø1" x 36"	Ø14"
6"	27'	M - 3/16"	16.24	5.43						Ø1" x 36"	Ø14"
6"	28'	M - 3/16"	14.38	3.96						Ø1" x 36"	Ø14"
6"	29'	M - 3/16"	12.61	2.55						Ø1" x 36"	Ø14"
6"	30'	M - 3/16"	10.90							Ø1" x 36"	Ø14"
6"	10'	H - ¼"	40.00	40.00	40.00	37.15				Ø¾" x 26"	Ø11.5"
6"	11'	H - ¼"	40.00	40.00	40.00	32.46				Ø¾" x 26"	Ø11.5"
6"	12'	H - ¼"	40.00	40.00	40.00	28.47				Ø¾" x 26"	Ø11.5"
6"	13'	H - ¼"	40.00	40.00	40.00	25.01				Ø¾" x 26"	Ø11.5"
6"	14'	H - ¼"	40.00	40.00	38.69	21.96				Ø¾" x 26"	Ø11.5"
6"	15'	H - ¼"	40.00	40.00	34.82	19.24				Ø¾" x 26"	Ø11.5"
6"	16'	H - ¼"	40.00	39.05	31.36	16.79				Ø¾" x 26"	Ø11.5"
6"	17'	H - ¼"	40.00	35.46	28.24	14.55				Ø¾" x 26"	Ø11.5"
6"	18'	H - ¼"	40.00	32.21	25.39	12.49				Ø¾" x 26"	Ø11.5"
6"	19'	H - ¼"	40.00	29.23	22.79	10.58				Ø¾" x 26"	Ø11.5"
6"	20'	H - ¼"	40.00	26.49	20.38	8.80				Ø¾" x 26"	Ø11.5"
6"	21'	H - ¼"	40.00	23.96	18.14	7.12	4.75	2.79	1.14	Ø1" x 36"	Ø14"
6"	22'	H - ¼"	38.74	21.59	16.05	5.54	3.28	1.41		Ø1" x 36"	Ø14"
6"	23'	H - ¼"	35.76	19.38	14.08	4.04	1.88			Ø1" x 36"	Ø14"
6"	24'	H - ¼"	32.98	17.30	12.22	2.61	0.54			Ø1" x 36"	Ø14"
6"	25'	H - ¼"	30.38	15.33	10.46					Ø1" x 36"	Ø14"
6"	26'	H - ¼"	27.92	13.46	8.79					Ø1" x 36"	Ø14"
6"	27'	H - ¼"	25.60	11.69	7.19					Ø1" x 36"	Ø14"
6"	28'	H - ¼"	23.40	9.99	5.66					Ø1" x 36"	Ø14"
6"	29'	H - ¼"	21.30	8.37	4.19					Ø1" x 36"	Ø14"
6"	30'	H - ¼"	19.31	6.81	2.77					Ø1" x 36"	Ø14"

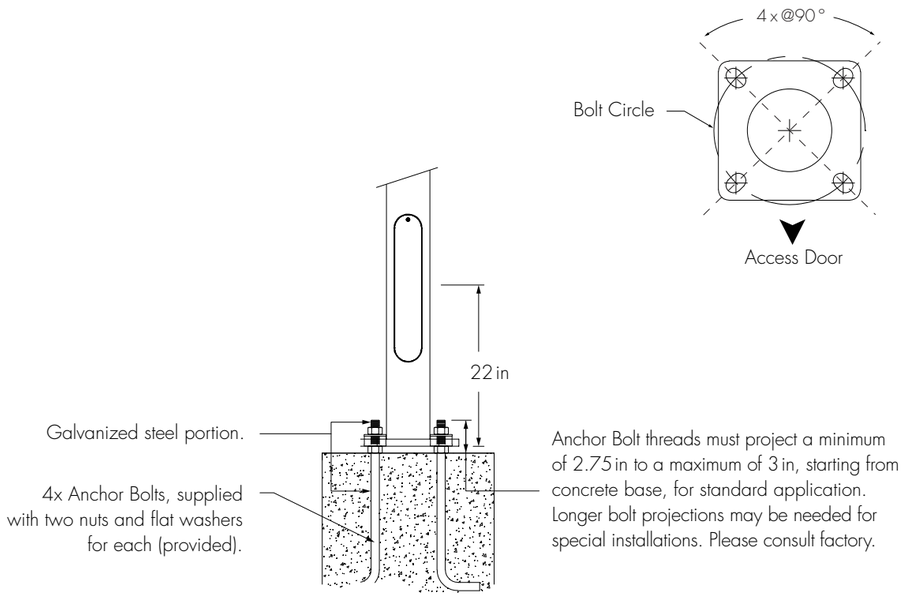
Consult factory for reinforcement solutions for higher EPA ratings.

TAPERED POLE

TECHNICAL INFORMATION

Tapered Pole

Technical Information



	Round Shapes	
Tapering Diameter	Ø6in to Ø4in	Ø8in to Ø6in
Compatible Base Cover Options	WY, WL, WYX, WLX, N/A	
Compatible Accessories	PLTU, NDL, NDL-BV	
Anchor Bolts	Ø3/4 in. x 26 in.	Ø1 in. x 36 in.
Bolt Circle	Ø10 in	Ø11.5 in

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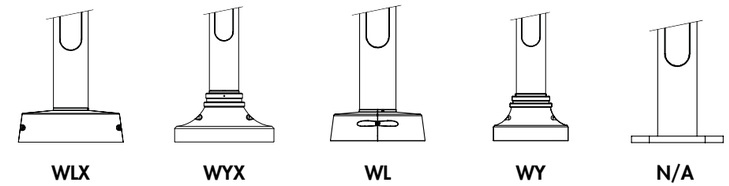
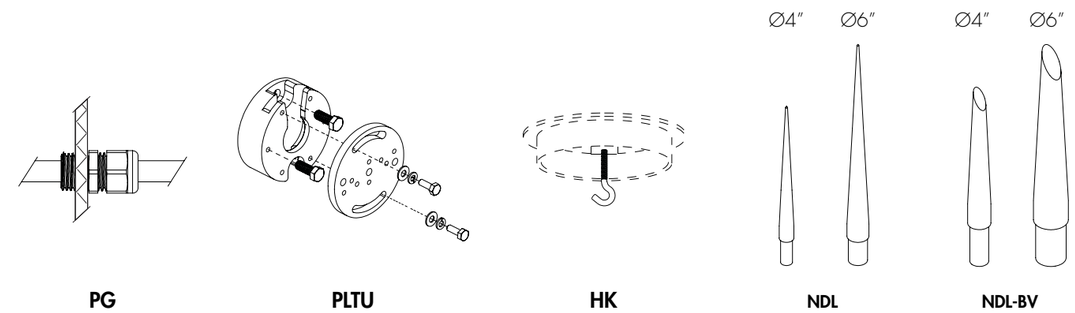
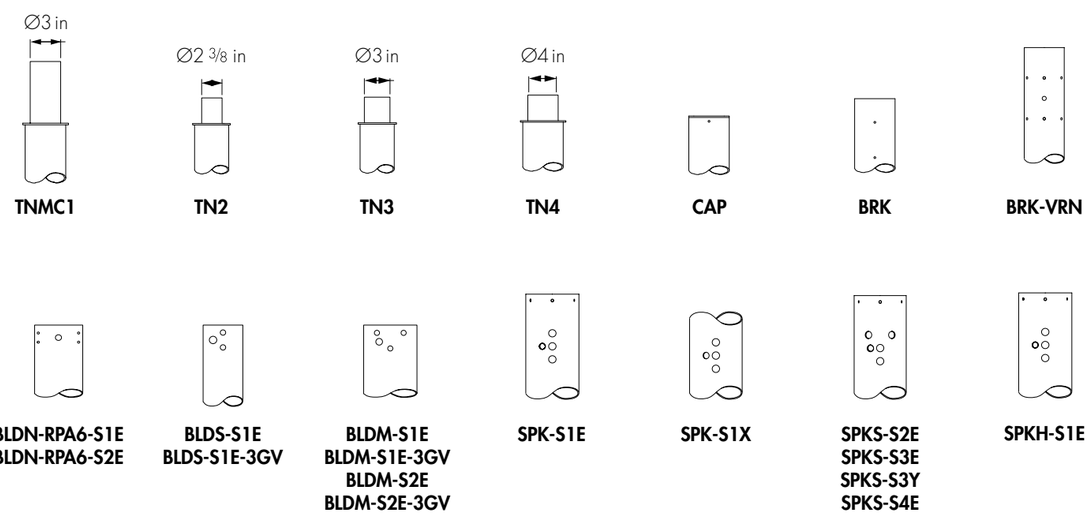
Base Cover Options



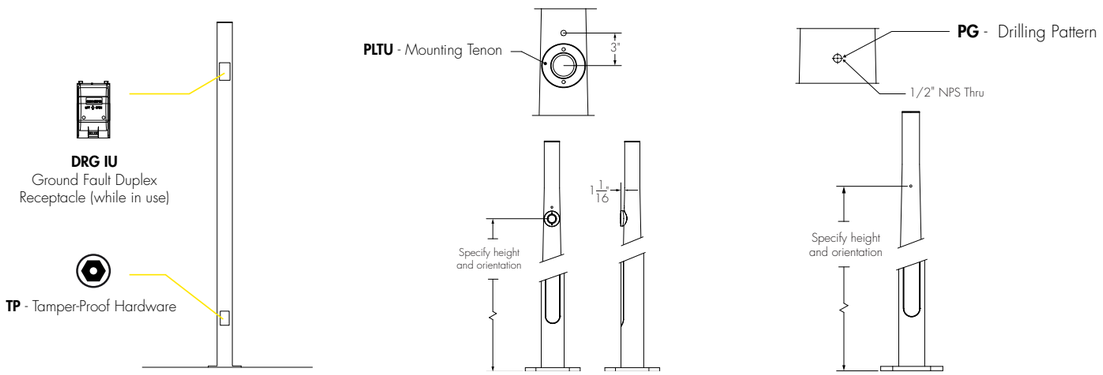
Accessories

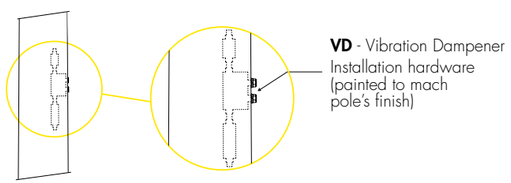


Pole-Top Options



Other Options





Finish Option

CRC

CRC- Corrosion-Resistant
Coating for Hostile Environments [1]

[1] Automatically included when a steel pole is specified.

TAPERED POLE

EPA RATING TABLE - AASHTO

TAPERED POLE
EPA RATING TABLE - AASHTO

Dimension (in)	Height (ft)	EPA Rating (sq.ft.) 90 MPH	110 MPH	120 MPH	150 MPH	160 MPH	170 MPH	180 MPH	Anchor Bolts (in)	Bolt Circle (in)
6" to 4"	10'	41.20	27.16	22.72	14.36	12.57	11.09	9.85	Ø¾" x 26"	Ø10"
6" to 4"	11'	36.65	24.07	20.12	12.67	11.08	9.77	8.67	Ø¾" x 26"	Ø10"
6" to 4"	12'	32.88	21.51	17.96	11.27	9.84	8.67	7.68	Ø¾" x 26"	Ø10"
6" to 4"	13'	29.70	19.34	16.12	10.08	8.79	7.73	6.84	Ø¾" x 26"	Ø10"
6" to 4"	14'	26.98	17.48	14.55	9.05	7.89	6.92	6.12	Ø¾" x 26"	Ø10"
6" to 4"	15'	24.61	15.85	13.17	8.15	7.09	6.21	5.48	Ø¾" x 26"	Ø10"
6" to 4"	16'	22.53	14.42	11.95	7.36	6.38	5.58	4.92	Ø¾" x 26"	Ø10"
6" to 4"	17'	20.68	13.14	10.87	6.64	5.75	5.02	4.41	Ø¾" x 26"	Ø10"
6" to 4"	18'	19.02	11.98	9.89	6.00	5.18	4.51	3.95	Ø¾" x 26"	Ø10"
6" to 4"	19'	17.51	10.94	9.00	5.41	4.66	4.04	3.53	Ø¾" x 26"	Ø10"
6" to 4"	20'	16.15	9.98	8.19	4.87	4.18	3.61	3.14	Ø¾" x 26"	Ø10"
6" to 4"	21'	14.89	9.10	7.44	4.37	3.74	3.21	2.78	Ø¾" x 26"	Ø10"
6" to 4"	22'	13.74	8.28	6.74	3.91	3.32	2.84	2.45	Ø¾" x 26"	Ø10"
6" to 4"	23'	12.67	7.52	6.09	3.48	2.94	2.50	2.14	Ø¾" x 26"	Ø10"
6" to 4"	24'	11.67	6.81	5.48	3.07	2.57	2.17	1.84	Ø¾" x 26"	Ø10"
6" to 4"	25'	10.73	6.15	4.91	2.68	2.23	1.86	1.56	Ø¾" x 26"	Ø10"
8" to 6"	20'	33.94	22.11	18.35	11.33	9.84	8.61	7.59	Ø1" x 36"	Ø11.5"
8" to 6"	21'	31.65	20.55	17.03	10.46	9.07	7.92	6.97	Ø1" x 36"	Ø11.5"
8" to 6"	22'	29.56	19.12	15.81	9.66	8.36	7.29	6.40	Ø1" x 36"	Ø11.5"
8" to 6"	23'	27.62	17.80	14.69	8.92	7.70	6.70	5.88	Ø1" x 36"	Ø11.5"
8" to 6"	24'	25.84	16.57	13.65	8.23	7.09	6.16	5.38	Ø1" x 36"	Ø11.5"
8" to 6"	25'	24.18	15.43	12.68	7.59	6.52	5.65	4.92	Ø1" x 36"	Ø11.5"
8" to 6"	26'	22.63	14.36	11.77	6.98	5.98	5.17	4.49	Ø1" x 36"	Ø11.5"
8" to 6"	27'	21.17	13.36	10.91	6.42	5.48	4.71	4.08	Ø1" x 36"	Ø11.5"
8" to 6"	28'	19.81	12.42	10.11	5.88	5.00	4.28	3.70	Ø1" x 36"	Ø11.5"
8" to 6"	29'	18.52	11.52	9.35	5.37	4.55	3.88	3.33	Ø1" x 36"	Ø11.5"
8" to 6"	30'	17.30	10.68	8.63	4.89	4.12	3.49	2.98	Ø1" x 36"	Ø11.5"
8" to 6"	31'	16.14	9.88	7.94	4.42	3.70	3.12	2.64	Ø1" x 36"	Ø11.5"
8" to 6"	32'	15.04	9.11	7.28	3.98	3.31	2.77	2.32	Ø1" x 36"	Ø11.5"
8" to 6"	33'	13.99	8.38	6.66	3.56	2.93	2.43	2.01	Ø1" x 36"	Ø11.5"
8" to 6"	34'	12.99	7.68	6.06	3.15	2.57	2.10	1.72	Ø1" x 36"	Ø11.5"
8" to 6"	35'	12.03	7.00	5.48	2.76	2.22	1.78	1.43	Ø1" x 36"	Ø11.5"

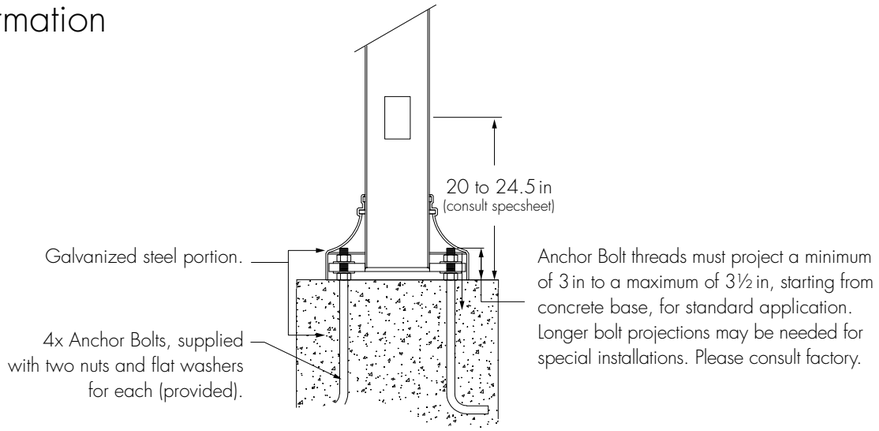
This guide is intended as a reference source only. Please refer to a qualified engineer.

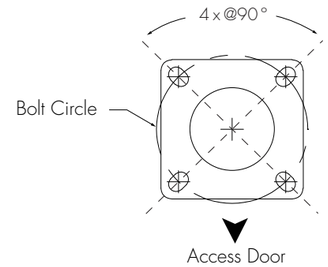
MUFFLER POLE

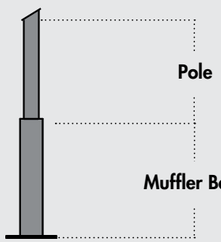
TECHNICAL INFORMATION

Muffler Pole

Technical Information





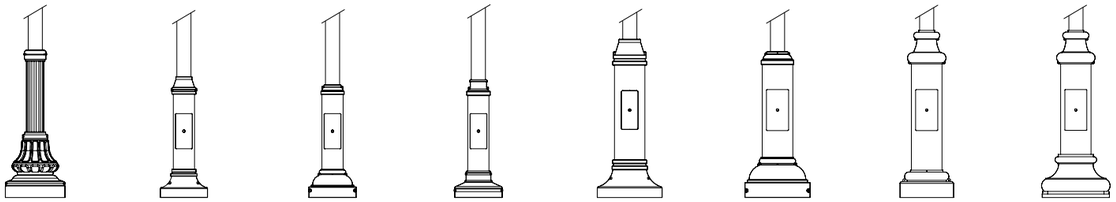


		Round Shapes			
		Ø4 in.	Ø4 in.	Ø4 in.	Ø5 in.
		Q5F [Ø5 in.]	Q6 [Ø6 in.]	Q8 [Ø8 in.]	Q8 [Ø8 in.]
Wall Thickness*	Aluminium	L - M - H - W	L - M - H - W	L - M - H - W	L - M - H - W
	Steel	L - M - H - W	L - M - H - W	L - M - H - W	L - M - H - W
Maximum Height	Aluminium	Up to 20 ft.	Up to 22 ft.		
	Steel	N/A	Up to 22 ft.		Up to 30 ft.
Compatible Base Cover Options		QF	QB6, QC6, QJ6	QB8, QC8, QM8, QT8	
Compatible Accessories		PLTU, BA, PH, NDL, NDL-BV			PLTU, BA, PH, NDL, NDL-BV
Anchor Bolts	Up to 22 ft.	Ø3/4 in. x 26 in.			Ø3/4 in. x 26 in. Ø1 in. x 36 in. (steel only)
	23 ft. to 30 ft.	N/A			Ø1 in. x 36 in. (steel only)
Bolt Circle	Up to 22 ft.	Ø10 in.		Ø11.5 in.	
	23 ft. to 30 ft.	N/A			Ø11.5 in.

Fluted Shapes			
Ø4 in.	Ø4 in.	Ø4 in.	Ø5 in.
Q5F [Ø5 in.]	Q6 [Ø6 in.]	Q8 [Ø8 in.]	Q8 [Ø8 in.]
M	M	M	M
N/A	N/A	N/A	N/A
Up to 20 ft.	Up to 22 ft.		
N/A			
QF	QB6, QC6, QJ6	QB8, QC8, QM8, QT8	
BA, PH			BA, PH
Ø3/4 in. x 26 in.			
N/A			
Ø10 in.		Ø11.5 in.	
N/A			

*For maximum wall thickness and height limitations, please consult the Muffler Pole EPA Rating Table.

Base Cover Options



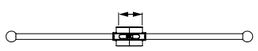
QF **QB6** **QC6** **QJ6** **QB8** **QC8** **QM8** **QT8**

Banner Arm Accessories

Ø4in, 5in

BA-X-CLMP-18-S1X

Ø4in, 5in



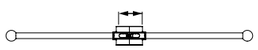
BA-X-CLMP-18-S2X

Plant Holder Arm Accessories

Ø4in, 5in

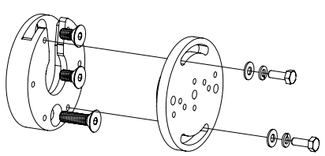
PH-CLMP-18-S1X

Ø4in, 5in

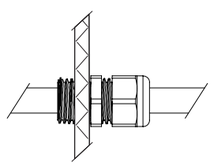


PH-CLMP-18-S2X

Accessories



PLTU

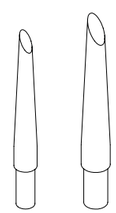


PG

Ø4″ Ø5″

NDL

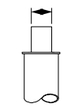
Ø4″ Ø5″



NDL-BV

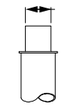
Pole-Top Options

Ø2 ¾ in



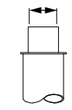
TN2

Ø3 in



TN3

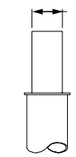
Ø4 in



TN4

CAP

Ø3 in



TNMC1

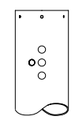
BLDS-S1E
BLDS-S2E
BLDS-S1E-3GV
BLDS-S2E-3GV

BLDN-RPA6N-S1E
BLDN-RPA6N-S2E

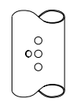
BLDN-SPA6N-S1E
BLDN-SPA6N-S2E
BLDN-SPA8N-S1E
BLDN-SPA8N-S2E

BLDN-RPA8N-S1E
BLDN-RPA8N-S2E

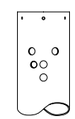
BRK



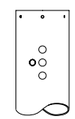
SPK-S1E



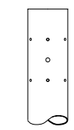
SPK-S1X



SPKS-S2E
SPKS-S3E
SPKS-S3Y
SPKS-S4E



SPKH-S1E



BRK-VRN

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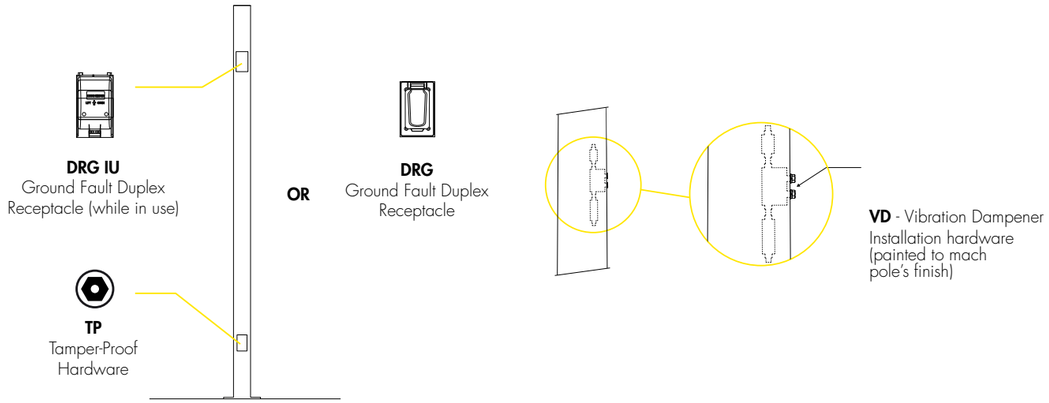
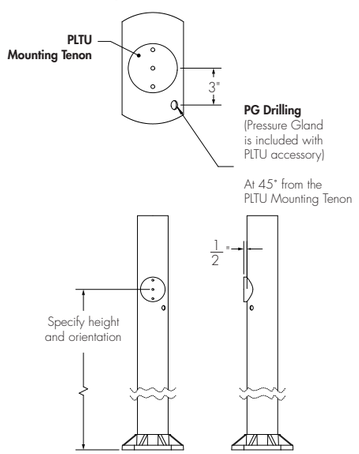
Other Options

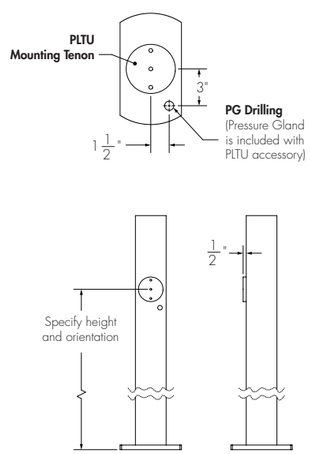


PLTU - Drilling Pattern

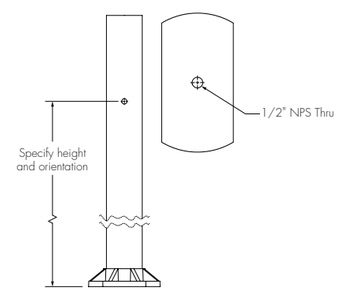
Round Pole Shape



Square Pole Shape



PG - Drilling Pattern



Finish Options

CRC

CRC- Corrosion-Resistant Coating for Hostile Environments [1]

GALV

GALV- Galvanized Steel [2]

[1] Automatically included when a steel pole is specified.
[2] Only available for steel poles with textured finish (immersion marks may occur).

MUFFLER POLE

EPA RATING TABLE - AASHTO

MUFFLER POLE
EPA RATING TABLE - AASHTO

Aluminium
Round Shape - Q5F Muffler Base

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	L - 1/8"	9.32	5.89	4.81	2.97	2.34	2.04	1.78	Ø3/4" x 26"	Ø10"
4"	11'	L - 1/8"	7.94	4.91	3.96	2.41	1.80	1.55	1.35	Ø3/4" x 26"	Ø10"
4"	12'	L - 1/8"	6.81	4.09	3.25		1.34	1.14	0.97	Ø3/4" x 26"	Ø10"
4"	13'	L - 1/8"	5.86	3.39	2.64		0.93	0.77	0.64	Ø3/4" x 26"	Ø10"
4"	14'	L - 1/8"	5.04	2.78	2.11		0.57	0.44	0.34	Ø3/4" x 26"	Ø10"
4"	15'	L - 1/8"	4.32	2.24			0.23	0.14		Ø3/4" x 26"	Ø10"
4"	16'	L - 1/8"	3.67							Ø3/4" x 26"	Ø10"
4"	17'	L - 1/8"	3.09							Ø3/4" x 26"	Ø10"
4"	18'	L - 1/8"	2.57							Ø3/4" x 26"	Ø10"
4"	19'	L - 1/8"	2.08							Ø3/4" x 26"	Ø10"
4"	10'	M - 3/16"	13.79	8.88	7.32	4.58	3.75	3.29	2.90	Ø3/4" x 26"	Ø10"
4"	11'	M - 3/16"	11.90	7.55	6.19	3.83	3.05	2.66	2.33	Ø3/4" x 26"	Ø10"
4"	12'	M - 3/16"	10.35	6.46	5.24	3.21	2.46	2.13	1.86	Ø3/4" x 26"	Ø10"
4"	13'	M - 3/16"	9.07	5.54	4.45	2.68	1.95	1.67	1.44	Ø3/4" x 26"	Ø10"
4"	14'	M - 3/16"	7.97	4.75	3.76	2.22	1.49	1.26	1.07	Ø3/4" x 26"	Ø10"
4"	15'	M - 3/16"	7.02	4.05	3.15		1.09	0.90	0.74	Ø3/4" x 26"	Ø10"
4"	16'	M - 3/16"	6.18	3.43	2.60		0.72	0.56	0.44	Ø3/4" x 26"	Ø10"
4"	17'	M - 3/16"	5.43	2.86	2.10		0.38	0.25	0.16	Ø3/4" x 26"	Ø10"
4"	18'	M - 3/16"	4.75	2.35						Ø3/4" x 26"	Ø10"
4"	19'	M - 3/16"	4.13							Ø3/4" x 26"	Ø10"
4"	20'	M - 3/16"	3.56							Ø3/4" x 26"	Ø10"
4"	21'	M - 3/16"	3.03							Ø3/4" x 26"	Ø10"
4"	22'	M - 3/16"	2.54							Ø3/4" x 26"	Ø10"
4"	10'	H - 1/4"	17.33	11.00	9.01	5.58	4.85	4.25	3.75	Ø3/4" x 26"	Ø10"
4"	11'	H - 1/4"	15.46	9.75	7.94	4.87	4.18	3.66	3.23	Ø3/4" x 26"	Ø10"
4"	12'	H - 1/4"	13.55	8.60	7.00	4.25	3.47	3.02	2.65	Ø3/4" x 26"	Ø10"
4"	13'	H - 1/4"	11.97	7.48	6.08	3.70	2.86	2.48	2.16	Ø3/4" x 26"	Ø10"
4"	14'	H - 1/4"	10.62	6.52	5.25	3.17	2.33	2.00	1.73	Ø3/4" x 26"	Ø10"
4"	15'	H - 1/4"	9.46	5.68	4.52	2.69	1.86	1.58	1.35	Ø3/4" x 26"	Ø10"
4"	16'	H - 1/4"	8.44	4.94	3.87	2.25	1.43	1.20	1.00	Ø3/4" x 26"	Ø10"
4"	17'	H - 1/4"	7.54	4.27	3.29		1.04	0.84	0.68	Ø3/4" x 26"	Ø10"
4"	18'	H - 1/4"	6.72	3.67	2.76		0.68	0.52	0.38	Ø3/4" x 26"	Ø10"
4"	19'	H - 1/4"	5.99	3.11	2.27		0.34	0.21	0.11	Ø3/4" x 26"	Ø10"
4"	20'	H - 1/4"	5.31	2.60						Ø3/4" x 26"	Ø10"
4"	21'	H - 1/4"	4.69	2.13						Ø3/4" x 26"	Ø10"
4"	22'	H - 1/4"	4.11							Ø3/4" x 26"	Ø10"

Consult factory for reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

MUFFLER POLE
EPA RATING TABLE - AASHTO

Aluminium
Round Shape - Q5F Muffler Base

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	W - 5/16"	17.33	11.00	9.01	5.58	4.85	4.25	3.75	Ø3/4" x 26"	Ø10"
4"	11'	W - 5/16"	15.55	9.75	7.94	4.87	4.22	3.69	3.25	Ø3/4" x 26"	Ø10"
4"	12'	W - 5/16"	14.02	8.67	7.00	4.25	3.67	3.20	2.80	Ø3/4" x 26"	Ø10"
4"	13'	W - 5/16"	12.68	7.71	6.17	3.70	3.19	2.76	2.41	Ø3/4" x 26"	Ø10"
4"	14'	W - 5/16"	11.49	6.85	5.43	3.21	2.75	2.37	2.06	Ø3/4" x 26"	Ø10"
4"	15'	W - 5/16"	10.43	6.08	4.76	2.76	2.35	2.01	1.73	Ø3/4" x 26"	Ø10"
4"	16'	W - 5/16"	9.48	5.38	4.15	2.35	1.98	1.68	1.43	Ø3/4" x 26"	Ø10"
4"	17'	W - 5/16"	8.61	4.74	3.58		1.64	1.37	1.16	Ø3/4" x 26"	Ø10"
4"	18'	W - 5/16"	7.81	4.14	3.06		1.24	1.01	0.83	Ø3/4" x 26"	Ø10"
4"	19'	W - 5/16"	7.07	3.59	2.57		0.87	0.68	0.52	Ø3/4" x 26"	Ø10"
4"	20'	W - 5/16"	6.39	3.07	2.11		0.52	0.36	0.24	Ø3/4" x 26"	Ø10"
4"	21'	W - 5/16"	5.75	2.58			0.19			Ø3/4" x 26"	Ø10"
4"	22'	W - 5/16"	5.15	2.12						Ø3/4" x 26"	Ø10"

MUFFLER POLE
EPA RATING TABLE - AASHTO

Aluminium
Fluted Shape - Q5F Muffler Base

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	M - 3/16"	12.81	8.22	6.74	3.96	Ø3/4" x 26"	Ø10"
4"	11'	M - 3/16"	11.03	6.97	5.66	3.21	Ø3/4" x 26"	Ø10"
4"	12'	M - 3/16"	9.58	5.94	4.76	2.58	Ø3/4" x 26"	Ø10"
4"	13'	M - 3/16"	8.36	5.07	4.00	2.03	Ø3/4" x 26"	Ø10"
4"	14'	M - 3/16"	7.33	4.31	3.34		Ø3/4" x 26"	Ø10"
4"	15'	M - 3/16"	6.43	3.65	2.75		Ø3/4" x 26"	Ø10"
4"	16'	M - 3/16"	5.63	3.06	2.22		Ø3/4" x 26"	Ø10"
4"	17'	M - 3/16"	4.92	2.52			Ø3/4" x 26"	Ø10"
4"	18'	M - 3/16"	4.27	2.03			Ø3/4" x 26"	Ø10"
4"	19'	M - 3/16"	3.68				Ø3/4" x 26"	Ø10"
4"	20'	M - 3/16"	3.14				Ø3/4" x 26"	Ø10"
4"	21'	M - 3/16"	2.63				Ø3/4" x 26"	Ø10"
4"	21'	M - 3/16"	2.16				Ø3/4" x 26"	Ø10"

Consult factory for reinforcement solutions for higher EPA ratings.

MUFFLER POLE EPA RATING TABLE - AASHTO

MUFFLER POLE
EPA RATING TABLE - AASHTO

Aluminium
Round Shape - Q6 Muffler Base

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	L - 1/8"	9.32	6.04	5.03	3.13	2.34	2.04	1.78	Ø3/4" x 26"	Ø10"
4"	11'	L - 1/8"	7.94	5.09	4.22	2.60	1.80	1.55	1.35	Ø3/4" x 26"	Ø10"
4"	12'	L - 1/8"	6.81	4.29	3.54	2.15	1.34	1.14	0.97	Ø3/4" x 26"	Ø10"
4"	13'	L - 1/8"	5.86	3.62	2.97		0.93	0.77	0.64	Ø3/4" x 26"	Ø10"
4"	14'	L - 1/8"	5.04	3.04	2.47		0.57	0.44	0.34	Ø3/4" x 26"	Ø10"
4"	15'	L - 1/8"	4.32	2.52	2.03		0.23	0.14		Ø3/4" x 26"	Ø10"
4"	16'	L - 1/8"	3.67	2.06						Ø3/4" x 26"	Ø10"
4"	17'	L - 1/8"	3.09							Ø3/4" x 26"	Ø10"
4"	18'	L - 1/8"	2.57							Ø3/4" x 26"	Ø10"
4"	19'	L - 1/8"	2.08							Ø3/4" x 26"	Ø10"
4"	10'	M - 3/16"	13.79	9.03	7.54	4.74	3.75	3.29	2.90	Ø3/4" x 26"	Ø10"
4"	11'	M - 3/16"	11.90	7.73	6.44	4.02	3.05	2.66	2.33	Ø3/4" x 26"	Ø10"
4"	12'	M - 3/16"	10.35	6.67	5.54	3.43	2.46	2.13	1.86	Ø3/4" x 26"	Ø10"
4"	13'	M - 3/16"	9.07	5.77	4.78	2.92	1.95	1.67	1.44	Ø3/4" x 26"	Ø10"
4"	14'	M - 3/16"	7.97	5.00	4.12	2.49	1.49	1.26	1.07	Ø3/4" x 26"	Ø10"
4"	15'	M - 3/16"	7.02	4.33	3.55	2.11	1.09	0.90	0.74	Ø3/4" x 26"	Ø10"
4"	16'	M - 3/16"	6.18	3.73	3.04		0.72	0.56	0.44	Ø3/4" x 26"	Ø10"
4"	17'	M - 3/16"	5.43	3.20	2.58		0.38	0.25	0.16	Ø3/4" x 26"	Ø10"
4"	18'	M - 3/16"	4.75	2.71	2.16					Ø3/4" x 26"	Ø10"
4"	19'	M - 3/16"	4.13	2.26						Ø3/4" x 26"	Ø10"
4"	20'	M - 3/16"	3.56							Ø3/4" x 26"	Ø10"
4"	21'	M - 3/16"	3.03							Ø3/4" x 26"	Ø10"
4"	22'	M - 3/16"	2.54							Ø3/4" x 26"	Ø10"
4"	10'	H - 1/4"	14.86	9.58	7.96	4.94	4.29	3.76	3.32	Ø3/4" x 26"	Ø10"
4"	11'	H - 1/4"	13.27	8.49	7.04	4.33	3.75	3.28	2.89	Ø3/4" x 26"	Ø10"
4"	12'	H - 1/4"	11.91	7.54	6.23	3.79	3.28	2.86	2.51	Ø3/4" x 26"	Ø10"
4"	13'	H - 1/4"	10.71	6.70	5.52	3.32	2.86	2.48	2.16	Ø3/4" x 26"	Ø10"
4"	14'	H - 1/4"	9.64	5.95	4.88	2.90	2.33	2.00	1.73	Ø3/4" x 26"	Ø10"
4"	15'	H - 1/4"	8.69	5.28	4.31	2.52	1.86	1.58	1.35	Ø3/4" x 26"	Ø10"
4"	16'	H - 1/4"	7.82	4.67	3.78	2.17	1.43	1.20	1.00	Ø3/4" x 26"	Ø10"
4"	17'	H - 1/4"	7.04	4.11	3.30		1.04	0.84	0.68	Ø3/4" x 26"	Ø10"
4"	18'	H - 1/4"	6.31	3.59	2.86		0.68	0.52	0.38	Ø3/4" x 26"	Ø10"
4"	19'	H - 1/4"	5.64	3.10	2.45		0.34	0.21	0.11	Ø3/4" x 26"	Ø10"
4"	20'	H - 1/4"	5.02	2.65	2.06					Ø3/4" x 26"	Ø10"
4"	21'	H - 1/4"	4.43	2.23						Ø3/4" x 26"	Ø10"
4"	22'	H - 1/4"	3.89							Ø3/4" x 26"	Ø10"

Consult factory for reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

MUFFLER POLE EPA RATING TABLE - AASHTO

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MUFFLER POLE
EPA RATING TABLE - AASHTO

Aluminium
Round Shape - Q6 Muffler Base

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	W - 5/16"	14.86	9.58	7.96	4.94	4.29	3.76	3.32	Ø3/4" x 26"	Ø10"
4"	11'	W - 5/16"	13.27	8.49	7.04	4.33	3.75	3.28	2.89	Ø3/4" x 26"	Ø10"
4"	12'	W - 5/16"	11.91	7.54	6.23	3.79	3.28	2.86	2.51	Ø3/4" x 26"	Ø10"
4"	13'	W - 5/16"	10.71	6.70	5.52	3.32	2.86	2.49	2.17	Ø3/4" x 26"	Ø10"
4"	14'	W - 5/16"	9.64	5.95	4.88	2.90	2.49	2.15	1.87	Ø3/4" x 26"	Ø10"
4"	15'	W - 5/16"	8.69	5.28	4.31	2.52	2.15	1.84	1.59	Ø3/4" x 26"	Ø10"
4"	16'	W - 5/16"	7.82	4.67	3.78	2.17	1.84	1.56	1.34	Ø3/4" x 26"	Ø10"
4"	17'	W - 5/16"	7.04	4.11	3.30		1.55	1.31	1.11	Ø3/4" x 26"	Ø10"
4"	18'	W - 5/16"	6.31	3.59	2.86		1.24	1.01	0.83	Ø3/4" x 26"	Ø10"
4"	19'	W - 5/16"	5.64	3.10	2.45		0.87	0.68	0.52	Ø3/4" x 26"	Ø10"
4"	20'	W - 5/16"	5.02	2.65	2.06		0.52	0.36	0.24	Ø3/4" x 26"	Ø10"
4"	21'	W - 5/16"	4.43	2.23			0.19			Ø3/4" x 26"	Ø10"
4"	22'	W - 5/16"	3.89							Ø3/4" x 26"	Ø10"

MUFFLER POLE
EPA RATING TABLE - AASHTO

Aluminium
Fluted Shape - Q6 Muffler Base

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	M - 3/16"	12.81	8.22	6.74	3.96	Ø3/4" x 26"	Ø10"
4"	11'	M - 3/16"	11.03	6.97	5.66	3.21	Ø3/4" x 26"	Ø10"
4"	12'	M - 3/16"	9.58	5.94	4.76	2.58	Ø3/4" x 26"	Ø10"
4"	13'	M - 3/16"	8.36	5.07	4.00	2.03	Ø3/4" x 26"	Ø10"
4"	14'	M - 3/16"	7.33	4.31	3.34		Ø3/4" x 26"	Ø10"
4"	15'	M - 3/16"	6.43	3.65	2.75		Ø3/4" x 26"	Ø10"
4"	16'	M - 3/16"	5.63	3.06	2.22		Ø3/4" x 26"	Ø10"
4"	17'	M - 3/16"	4.92	2.52			Ø3/4" x 26"	Ø10"
4"	18'	M - 3/16"	4.27	2.03			Ø3/4" x 26"	Ø10"
4"	19'	M - 3/16"	3.68				Ø3/4" x 26"	Ø10"
4"	20'	M - 3/16"	3.14				Ø3/4" x 26"	Ø10"
4"	21'	M - 3/16"	2.63				Ø3/4" x 26"	Ø10"
4"	22'	M - 3/16"	2.16				Ø3/4" x 26"	Ø10"

Consult factory for reinforcement solutions for higher EPA ratings.

MUFFLER POLE EPA RATING TABLE - AASHTO

MUFFLER POLE
EPA RATING TABLE - AASHTO

Aluminium
Round Shape - Q8 Muffler Base

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	L - 1/8"	9.32	5.89	4.78	2.71	2.34	2.04	1.78	Ø3/4" x 26"	Ø11.5"
4"	11'	L - 1/8"	7.94	4.91	3.92	2.10	1.80	1.55	1.35	Ø3/4" x 26"	Ø11.5"
4"	12'	L - 1/8"	6.81	4.09	3.21		1.34	1.14	0.97	Ø3/4" x 26"	Ø11.5"
4"	13'	L - 1/8"	5.86	3.39	2.59		0.93	0.77	0.64	Ø3/4" x 26"	Ø11.5"
4"	14'	L - 1/8"	5.04	2.78	2.05		0.57	0.44	0.34	Ø3/4" x 26"	Ø11.5"
4"	15'	L - 1/8"	4.32	2.24			0.23	0.14		Ø3/4" x 26"	Ø11.5"
4"	16'	L - 1/8"	3.67							Ø3/4" x 26"	Ø11.5"
4"	17'	L - 1/8"	3.09							Ø3/4" x 26"	Ø11.5"
4"	18'	L - 1/8"	2.57							Ø3/4" x 26"	Ø11.5"
4"	19'	L - 1/8"	2.08							Ø3/4" x 26"	Ø11.5"
4"	10'	M - 3/16"	13.79	8.88	7.29	4.32	3.75	3.29	2.90	Ø3/4" x 26"	Ø11.5"
4"	11'	M - 3/16"	11.90	7.55	6.15	3.52	3.05	2.66	2.33	Ø3/4" x 26"	Ø11.5"
4"	12'	M - 3/16"	10.35	6.46	5.20	2.86	2.46	2.13	1.86	Ø3/4" x 26"	Ø11.5"
4"	13'	M - 3/16"	9.07	5.54	4.40	2.29	1.95	1.67	1.44	Ø3/4" x 26"	Ø11.5"
4"	14'	M - 3/16"	7.97	4.75	3.70		1.49	1.26	1.07	Ø3/4" x 26"	Ø11.5"
4"	15'	M - 3/16"	7.02	4.05	3.09		1.09	0.90	0.74	Ø3/4" x 26"	Ø11.5"
4"	16'	M - 3/16"	6.18	3.43	2.53		0.72	0.56	0.44	Ø3/4" x 26"	Ø11.5"
4"	17'	M - 3/16"	5.43	2.86	2.03		0.38	0.25	0.16	Ø3/4" x 26"	Ø11.5"
4"	18'	M - 3/16"	4.75	2.35						Ø3/4" x 26"	Ø11.5"
4"	19'	M - 3/16"	4.13							Ø3/4" x 26"	Ø11.5"
4"	20'	M - 3/16"	3.56							Ø3/4" x 26"	Ø11.5"
4"	21'	M - 3/16"	3.03							Ø3/4" x 26"	Ø11.5"
4"	22'	M - 3/16"	2.54							Ø3/4" x 26"	Ø11.5"
4"	10'	H - 1/4"	17.82	11.58	9.56	5.77	5.03	4.42	3.91	Ø3/4" x 26"	Ø11.5"
4"	11'	H - 1/4"	15.46	9.94	8.15	4.81	4.18	3.66	3.23	Ø3/4" x 26"	Ø11.5"
4"	12'	H - 1/4"	13.55	8.60	7.00	4.01	3.47	3.02	2.65	Ø3/4" x 26"	Ø11.5"
4"	13'	H - 1/4"	11.97	7.48	6.03	3.33	2.86	2.48	2.16	Ø3/4" x 26"	Ø11.5"
4"	14'	H - 1/4"	10.62	6.52	5.19	2.73	2.33	2.00	1.73	Ø3/4" x 26"	Ø11.5"
4"	15'	H - 1/4"	9.46	5.68	4.46	2.20	1.86	1.58	1.35	Ø3/4" x 26"	Ø11.5"
4"	16'	H - 1/4"	8.44	4.94	3.81		1.43	1.20	1.00	Ø3/4" x 26"	Ø11.5"
4"	17'	H - 1/4"	7.54	4.27	3.22		1.04	0.84	0.68	Ø3/4" x 26"	Ø11.5"
4"	18'	H - 1/4"	6.72	3.67	2.68		0.68	0.52	0.38	Ø3/4" x 26"	Ø11.5"
4"	19'	H - 1/4"	5.99	3.11	2.19		0.34	0.21	0.11	Ø3/4" x 26"	Ø11.5"
4"	20'	H - 1/4"	5.31	2.60						Ø3/4" x 26"	Ø11.5"
4"	21'	H - 1/4"	4.69	2.13						Ø3/4" x 26"	Ø11.5"
4"	22'	H - 1/4"	4.11							Ø3/4" x 26"	Ø11.5"

Consult factory for reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

MUFFLER POLE
EPA RATING TABLE - AASHTO

Aluminium
Round Shape - Q8 Muffler Base

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Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	W - 5/16"	21.45	14.01	11.60	7.07	6.18	5.43	4.82	Ø3/4" x 26"	Ø11.5"
4"	11'	W - 5/16"	18.67	12.09	9.96	5.96	5.19	4.56	4.03	Ø3/4" x 26"	Ø11.5"
4"	12'	W - 5/16"	16.43	10.53	8.62	5.05	4.38	3.83	3.37	Ø3/4" x 26"	Ø11.5"
4"	13'	W - 5/16"	14.58	9.23	7.50	4.27	3.69	3.21	2.82	Ø3/4" x 26"	Ø11.5"
4"	14'	W - 5/16"	13.01	8.12	6.53	3.59	3.09	2.67	2.33	Ø3/4" x 26"	Ø11.5"
4"	15'	W - 5/16"	11.66	7.15	5.70	3.00	2.56	2.20	1.90	Ø3/4" x 26"	Ø11.5"
4"	16'	W - 5/16"	10.48	6.30	4.95	2.46	2.08	1.77	1.51	Ø3/4" x 26"	Ø11.5"
4"	17'	W - 5/16"	9.43	5.54	4.29		1.64	1.38	1.16	Ø3/4" x 26"	Ø11.5"
4"	18'	W - 5/16"	8.50	4.86	3.68		1.24	1.01	0.83	Ø3/4" x 26"	Ø11.5"
4"	19'	W - 5/16"	7.66	4.23	3.13		0.87	0.68	0.52	Ø3/4" x 26"	Ø11.5"
4"	20'	W - 5/16"	6.89	3.66	2.61		0.52	0.36	0.24	Ø3/4" x 26"	Ø11.5"
4"	21'	W - 5/16"	6.18	3.12	2.14		0.19			Ø3/4" x 26"	Ø11.5"
4"	22'	W - 5/16"	5.53	2.63						Ø3/4" x 26"	Ø11.5"
5"	10'	L - 1/8"	15.20	9.74	8.01	4.99	4.34	3.81	3.37	Ø3/4" x 26"	Ø11.5"
5"	11'	L - 1/8"	13.07	8.23	6.72	4.14	3.59	3.14	2.77	Ø3/4" x 26"	Ø11.5"
5"	12'	L - 1/8"	11.33	7.00	5.65	3.43	2.96	2.58	2.26	Ø3/4" x 26"	Ø11.5"
5"	13'	L - 1/8"	9.87	5.95	4.74	2.82	2.42	2.09	1.82	Ø3/4" x 26"	Ø11.5"
5"	14'	L - 1/8"	8.63	5.04	3.94	2.29	1.95	1.67	1.44	Ø3/4" x 26"	Ø11.5"
5"	15'	L - 1/8"	7.54	4.24	3.24		1.52	1.29	1.09	Ø3/4" x 26"	Ø11.5"
5"	16'	L - 1/8"	6.58	3.52	2.61		1.14	0.94	0.78	Ø3/4" x 26"	Ø11.5"
5"	17'	L - 1/8"	5.72	2.87	2.03		0.79	0.62	0.49	Ø3/4" x 26"	Ø11.5"
5"	18'	L - 1/8"	4.94	2.27			0.46	0.33	0.22	Ø3/4" x 26"	Ø11.5"
5"	19'	L - 1/8"	4.23				0.16			Ø3/4" x 26"	Ø11.5"
5"	20'	L - 1/8"	3.57							Ø3/4" x 26"	Ø11.5"
5"	21'	L - 1/8"	2.96							Ø3/4" x 26"	Ø11.5"
5"	22'	L - 1/8"	2.38							Ø3/4" x 26"	Ø11.5"
5"	10'	M - 3/16"	22.55	14.66	12.14	7.63	6.67	5.87	5.21	Ø3/4" x 26"	Ø11.5"
5"	11'	M - 3/16"	19.57	12.59	10.38	6.48	5.65	4.96	4.39	Ø3/4" x 26"	Ø11.5"
5"	12'	M - 3/16"	17.16	10.90	8.93	5.53	4.80	4.21	3.72	Ø3/4" x 26"	Ø11.5"
5"	13'	M - 3/16"	15.16	9.48	7.71	4.72	4.09	3.57	3.14	Ø3/4" x 26"	Ø11.5"
5"	14'	M - 3/16"	13.46	8.27	6.66	4.03	3.47	3.02	2.64	Ø3/4" x 26"	Ø11.5"
5"	15'	M - 3/16"	11.99	7.21	5.74	3.42	2.93	2.53	2.20	Ø3/4" x 26"	Ø11.5"
5"	16'	M - 3/16"	10.71	6.28	4.93	2.87	2.44	2.10	1.81	Ø3/4" x 26"	Ø11.5"
5"	17'	M - 3/16"	9.56	5.44	4.19	2.38	2.00	1.70	1.45	Ø3/4" x 26"	Ø11.5"
5"	18'	M - 3/16"	8.54	4.68	3.52		1.60	1.34	1.12	Ø3/4" x 26"	Ø11.5"
5"	19'	M - 3/16"	7.61	3.98	2.91		1.22	1.00	0.81	Ø3/4" x 26"	Ø11.5"
5"	20'	M - 3/16"	6.76	3.33	2.34		0.88	0.68	0.53	Ø3/4" x 26"	Ø11.5"
5"	21'	M - 3/16"	5.98	2.73			0.55	0.39	0.26	Ø3/4" x 26"	Ø11.5"
5"	22'	M - 3/16"	5.25	2.17			0.24	0.11		Ø3/4" x 26"	Ø11.5"

Consult factory for reinforcement solutions for higher EPA ratings.

MUFFLER POLE EPA RATING TABLE - AASHTO

MUFFLER POLE
EPA RATING TABLE - AASHTO

Aluminium
Round Shape - Q8 Muffler Base

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
5"	10'	H - ¼"	29.32	19.19	15.95	10.07	8.81	7.77	6.90	Ø¾" x 26"	Ø11.5"
5"	11'	H - ¼"	25.56	16.60	13.74	8.63	7.54	6.64	5.89	Ø¾" x 26"	Ø11.5"
5"	12'	H - ¼"	22.53	14.49	11.95	7.46	6.50	5.72	5.06	Ø¾" x 26"	Ø11.5"
5"	13'	H - ¼"	20.02	12.74	10.45	6.47	5.63	4.94	4.36	Ø¾" x 26"	Ø11.5"
5"	14'	H - ¼"	17.91	11.25	9.16	5.63	4.88	4.27	3.76	Ø¾" x 26"	Ø11.5"
5"	15'	H - ¼"	16.09	9.96	8.05	4.89	4.23	3.68	3.23	Ø¾" x 26"	Ø11.5"
5"	16'	H - ¼"	14.50	8.82	7.06	4.24	3.65	3.16	2.76	Ø¾" x 26"	Ø11.5"
5"	17'	H - ¼"	13.10	7.81	6.18	3.65	3.12	2.69	2.34	Ø¾" x 26"	Ø11.5"
5"	18'	H - ¼"	11.85	6.89	5.39	3.12	2.65	2.26	1.95	Ø¾" x 26"	Ø11.5"
5"	19'	H - ¼"	10.72	6.06	4.66	2.63	2.21	1.87	1.59	Ø¾" x 26"	Ø11.5"
5"	20'	H - ¼"	9.70	5.30	3.99	2.17	1.81	1.51	1.26	Ø¾" x 26"	Ø11.5"
5"	21'	H - ¼"	8.76	4.59	3.37		1.43	1.17	0.95	Ø¾" x 26"	Ø11.5"
5"	22'	H - ¼"	7.89	3.94	2.78		1.07	0.85	0.66	Ø¾" x 26"	Ø11.5"
5"	10'	W - 5/16"	35.57	23.37	19.47	12.32	10.79	9.52	8.46	Ø¾" x 26"	Ø11.5"
5"	11'	W - 5/16"	31.08	20.29	16.85	10.62	9.29	8.19	7.27	Ø¾" x 26"	Ø11.5"
5"	12'	W - 5/16"	27.48	17.81	14.73	9.24	8.07	7.10	6.30	Ø¾" x 26"	Ø11.5"
5"	13'	W - 5/16"	24.51	15.74	12.97	8.09	7.05	6.19	5.48	Ø¾" x 26"	Ø11.5"
5"	14'	W - 5/16"	22.01	14.00	11.47	7.11	6.18	5.42	4.78	Ø¾" x 26"	Ø11.5"
5"	15'	W - 5/16"	19.87	12.49	10.17	6.25	5.42	4.74	4.17	Ø¾" x 26"	Ø11.5"
5"	16'	W - 5/16"	18.01	11.16	9.03	5.50	4.75	4.14	3.63	Ø¾" x 26"	Ø11.5"
5"	17'	W - 5/16"	16.37	9.99	8.02	4.83	4.16	3.61	3.15	Ø¾" x 26"	Ø11.5"
5"	18'	W - 5/16"	14.91	8.94	7.11	4.22	3.61	3.12	2.71	Ø¾" x 26"	Ø11.5"
5"	19'	W - 5/16"	13.60	7.99	6.27	3.66	3.12	2.68	2.31	Ø¾" x 26"	Ø11.5"
5"	20'	W - 5/16"	12.41	7.11	5.51	3.15	2.66	2.27	1.94	Ø¾" x 26"	Ø11.5"
5"	21'	W - 5/16"	11.32	6.31	4.81	2.68	2.24	1.89	1.60	Ø¾" x 26"	Ø11.5"
5"	22'	W - 5/16"	10.32	5.57	4.15	2.23	1.84	1.53	1.27	Ø¾" x 26"	Ø11.5"

Consult factory for reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

MUFFLER POLE
EPA RATING TABLE - AASHTO

Aluminium
Fluted Shape - Q8 Muffler Base

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	M - 3/16"	12.81	8.22	6.74	3.96	3.44	3.01	2.66	Ø¾" x 26"	Ø11.5"
4"	11'	M - 3/16"	11.03	6.97	5.66	3.21	2.77	2.42	2.12	Ø¾" x 26"	Ø11.5"
4"	12'	M - 3/16"	9.58	5.94	4.76	2.58	2.21	1.91	1.66	Ø¾" x 26"	Ø11.5"
4"	13'	M - 3/16"	8.36	5.07	4.00	2.03	1.72	1.47	1.26	Ø¾" x 26"	Ø11.5"
4"	14'	M - 3/16"	7.33	4.31	3.34		1.29	1.08	0.91	Ø¾" x 26"	Ø11.5"
4"	15'	M - 3/16"	6.43	3.65	2.75		0.90	0.73	0.59	Ø¾" x 26"	Ø11.5"
4"	16'	M - 3/16"	5.63	3.06	2.22		0.54	0.41	0.30	Ø¾" x 26"	Ø11.5"
4"	17'	M - 3/16"	4.92	2.52			0.21	0.11		Ø¾" x 26"	Ø11.5"
4"	18'	M - 3/16"	4.27	2.03						Ø¾" x 26"	Ø11.5"
4"	19'	M - 3/16"	3.68							Ø¾" x 26"	Ø11.5"
4"	20'	M - 3/16"	3.14							Ø¾" x 26"	Ø11.5"
4"	21'	M - 3/16"	2.63							Ø¾" x 26"	Ø11.5"
4"	22'	M - 3/16"	2.16							Ø¾" x 26"	Ø11.5"
5"	10'	M - 3/16"	26.12	17.05	14.15	8.92	7.80	6.88	6.10	Ø¾" x 26"	Ø11.5"
5"	11'	M - 3/16"	22.73	14.70	12.15	7.62	6.65	5.85	5.18	Ø¾" x 26"	Ø11.5"
5"	12'	M - 3/16"	19.99	12.79	10.52	6.55	5.70	5.00	4.42	Ø¾" x 26"	Ø11.5"
5"	13'	M - 3/16"	17.72	11.20	9.15	5.65	4.90	4.29	3.78	Ø¾" x 26"	Ø11.5"
5"	14'	M - 3/16"	15.81	9.84	7.98	4.87	4.22	3.68	3.23	Ø¾" x 26"	Ø11.5"
5"	15'	M - 3/16"	14.15	8.66	6.96	4.20	3.62	3.14	2.74	Ø¾" x 26"	Ø11.5"
5"	16'	M - 3/16"	12.71	7.62	6.05	3.59	3.08	2.66	2.31	Ø¾" x 26"	Ø11.5"
5"	17'	M - 3/16"	11.43	6.69	5.24	3.05	2.59	2.22	1.92	Ø¾" x 26"	Ø11.5"
5"	18'	M - 3/16"	10.29	5.85	4.51	2.55	2.15	1.83	1.56	Ø¾" x 26"	Ø11.5"
5"	19'	M - 3/16"	9.25	5.08	3.83	2.10	1.74	1.46	1.23	Ø¾" x 26"	Ø11.5"
5"	20'	M - 3/16"	8.31	4.37	3.21		1.37	1.12	0.92	Ø¾" x 26"	Ø11.5"
5"	21'	M - 3/16"	7.44	3.72	2.63		1.01	0.80	0.63	Ø¾" x 26"	Ø11.5"
5"	22'	M - 3/16"	6.64	3.10	2.08		0.68	0.50	0.35	Ø¾" x 26"	Ø11.5"

Consult factory for reinforcement solutions for higher EPA ratings.

MUFFLER POLE EPA RATING TABLE - AASHTO

MUFFLER POLE
EPA RATING TABLE - AASHTO

Steel
Round Shape - Q6 Muffler Base

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	L - 1/8"	26.70	17.25	14.19	8.45	7.36	6.45	5.70	Ø3/4" x 26"	Ø10"
4"	11'	L - 1/8"	23.76	15.22	12.45	7.28	6.32	5.53	4.87	Ø3/4" x 26"	Ø10"
4"	12'	L - 1/8"	21.30	13.51	10.99	6.28	5.43	4.73	4.16	Ø3/4" x 26"	Ø10"
4"	13'	L - 1/8"	19.20	12.04	9.73	5.41	4.66	4.04	3.53	Ø3/4" x 26"	Ø10"
4"	14'	L - 1/8"	17.38	10.76	8.62	4.65	3.98	3.43	2.98	Ø3/4" x 26"	Ø10"
4"	15'	L - 1/8"	15.78	9.63	7.64	3.96	3.37	2.88	2.49	Ø3/4" x 26"	Ø10"
4"	16'	L - 1/8"	14.36	8.62	6.76	3.33	2.81	2.39	2.04	Ø3/4" x 26"	Ø10"
4"	17'	L - 1/8"	13.08	7.70	5.96	2.76	2.30	1.93	1.62	Ø3/4" x 26"	Ø10"
4"	18'	L - 1/8"	11.93	6.87	5.23	2.23	1.83	1.50	1.24	Ø3/4" x 26"	Ø10"
4"	19'	L - 1/8"	10.88	6.10	4.56		1.39	1.11	0.88	Ø3/4" x 26"	Ø10"
4"	20'	L - 1/8"	9.91	5.39	3.93		0.98	0.74	0.54	Ø3/4" x 26"	Ø10"
4"	21'	L - 1/8"	9.01	4.73	3.34		0.59	0.38	0.22	Ø3/4" x 26"	Ø10"
4"	22'	L - 1/8"	8.17	4.11	2.79		0.22			Ø3/4" x 26"	Ø10"
4"	10'	M - 3/16"	26.70	17.25	14.19	8.45	7.36	6.45	5.70	Ø3/4" x 26"	Ø10"
4"	11'	M - 3/16"	23.76	15.22	12.45	7.28	6.32	5.53	4.87	Ø3/4" x 26"	Ø10"
4"	12'	M - 3/16"	21.30	13.51	10.99	6.28	5.43	4.73	4.16	Ø3/4" x 26"	Ø10"
4"	13'	M - 3/16"	19.20	12.04	9.73	5.41	4.66	4.04	3.53	Ø3/4" x 26"	Ø10"
4"	14'	M - 3/16"	17.38	10.76	8.62	4.65	3.98	3.43	2.98	Ø3/4" x 26"	Ø10"
4"	15'	M - 3/16"	15.78	9.63	7.64	3.96	3.37	2.88	2.49	Ø3/4" x 26"	Ø10"
4"	16'	M - 3/16"	14.36	8.62	6.76	3.33	2.81	2.39	2.04	Ø3/4" x 26"	Ø10"
4"	17'	M - 3/16"	13.08	7.70	5.96	2.76	2.30	1.93	1.62	Ø3/4" x 26"	Ø10"
4"	18'	M - 3/16"	11.93	6.87	5.23	2.23	1.83	1.50	1.24	Ø3/4" x 26"	Ø10"
4"	19'	M - 3/16"	10.88	6.10	4.56		1.39	1.11	0.88	Ø3/4" x 26"	Ø10"
4"	20'	M - 3/16"	9.91	5.39	3.93		0.98	0.74	0.54	Ø3/4" x 26"	Ø10"
4"	21'	M - 3/16"	9.01	4.73	3.34		0.59	0.38	0.22	Ø3/4" x 26"	Ø10"
4"	22'	M - 3/16"	8.17	4.11	2.79		0.22			Ø3/4" x 26"	Ø10"
4"	10'	H - 1/4"	26.70	17.25	14.19	8.45	7.36	6.45	5.70	Ø3/4" x 26"	Ø10"
4"	11'	H - 1/4"	23.76	15.22	12.45	7.28	6.32	5.53	4.87	Ø3/4" x 26"	Ø10"
4"	12'	H - 1/4"	21.30	13.51	10.99	6.28	5.43	4.73	4.16	Ø3/4" x 26"	Ø10"
4"	13'	H - 1/4"	19.20	12.04	9.73	5.41	4.66	4.04	3.53	Ø3/4" x 26"	Ø10"
4"	14'	H - 1/4"	17.38	10.76	8.62	4.65	3.98	3.43	2.98	Ø3/4" x 26"	Ø10"
4"	15'	H - 1/4"	15.78	9.63	7.64	3.96	3.37	2.88	2.49	Ø3/4" x 26"	Ø10"
4"	16'	H - 1/4"	14.36	8.62	6.76	3.33	2.81	2.39	2.04	Ø3/4" x 26"	Ø10"
4"	17'	H - 1/4"	13.08	7.70	5.96	2.76	2.30	1.93	1.62	Ø3/4" x 26"	Ø10"
4"	18'	H - 1/4"	11.93	6.87	5.23	2.23	1.83	1.50	1.24	Ø3/4" x 26"	Ø10"
4"	19'	H - 1/4"	10.88	6.10	4.56		1.39	1.11	0.88	Ø3/4" x 26"	Ø10"
4"	20'	H - 1/4"	9.91	5.39	3.93		0.98	0.74	0.54	Ø3/4" x 26"	Ø10"
4"	21'	H - 1/4"	9.01	4.73	3.34		0.59	0.38	0.22	Ø3/4" x 26"	Ø10"
4"	22'	H - 1/4"	8.17	4.11	2.79		0.22			Ø3/4" x 26"	Ø10"

Consult factory for reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

MUFFLER POLE EPA RATING TABLE - AASHTO

MUFFLER POLE
EPA RATING TABLE - AASHTO

Steel
Round Shape - Q6 Muffler Base

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Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	W - 5/16"	26.70	17.25	14.19	8.45	7.36	6.45	5.70	Ø3/4" x 26"	Ø10"
4"	11'	W - 5/16"	23.76	15.22	12.45	7.28	6.32	5.53	4.87	Ø3/4" x 26"	Ø10"
4"	12'	W - 5/16"	21.30	13.51	10.99	6.28	5.43	4.73	4.16	Ø3/4" x 26"	Ø10"
4"	13'	W - 5/16"	19.20	12.04	9.73	5.41	4.66	4.04	3.53	Ø3/4" x 26"	Ø10"
4"	14'	W - 5/16"	17.38	10.76	8.62	4.65	3.98	3.43	2.98	Ø3/4" x 26"	Ø10"
4"	15'	W - 5/16"	15.78	9.63	7.64	3.96	3.37	2.88	2.49	Ø3/4" x 26"	Ø10"
4"	16'	W - 5/16"	14.36	8.62	6.76	3.33	2.81	2.39	2.04	Ø3/4" x 26"	Ø10"
4"	17'	W - 5/16"	13.08	7.70	5.96	2.76	2.30	1.93	1.62	Ø3/4" x 26"	Ø10"
4"	18'	W - 5/16"	11.93	6.87	5.23	2.23	1.83	1.50	1.24	Ø3/4" x 26"	Ø10"
4"	19'	W - 5/16"	10.88	6.10	4.56		1.39	1.11	0.88	Ø3/4" x 26"	Ø10"
4"	20'	W - 5/16"	9.91	5.39	3.93		0.98	0.74	0.54	Ø3/4" x 26"	Ø10"
4"	21'	W - 5/16"	9.01	4.73	3.34		0.59	0.38	0.22	Ø3/4" x 26"	Ø10"
4"	22'	W - 5/16"	8.17	4.11	2.79		0.22			Ø3/4" x 26"	Ø10"

Consult factory for reinforcement solutions for higher EPA ratings.

MUFFLER POLE
EPA RATING TABLE - AASHTO

Steel
Round Shape - Q8 Muffler Base

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	L - 1/8"	32.57	21.44	17.84	11.06	9.68	8.53	7.58	Ø1" x 36"	Ø11.5"
4"	11'	L - 1/8"	28.54	18.68	15.50	9.50	8.30	7.31	6.48	Ø1" x 36"	Ø11.5"
4"	12'	L - 1/8"	25.29	16.45	13.59	8.22	7.16	6.30	5.57	Ø1" x 36"	Ø11.5"
4"	13'	L - 1/8"	22.59	14.58	11.99	7.14	6.21	5.44	4.81	Ø1" x 36"	Ø11.5"
4"	14'	L - 1/8"	20.32	13.00	10.63	6.21	5.38	4.71	4.14	Ø1" x 36"	Ø11.5"
4"	15'	L - 1/8"	18.36	11.63	9.45	5.39	4.66	4.06	3.56	Ø1" x 36"	Ø11.5"
4"	16'	L - 1/8"	16.65	10.43	8.41	4.66	4.01	3.48	3.04	Ø1" x 36"	Ø11.5"
4"	17'	L - 1/8"	15.14	9.36	7.48	4.01	3.43	2.96	2.57	Ø1" x 36"	Ø11.5"
4"	18'	L - 1/8"	13.80	8.39	6.65	3.41	2.90	2.48	2.14	Ø1" x 36"	Ø11.5"
4"	19'	L - 1/8"	12.58	7.52	5.88	2.86	2.41	2.04	1.74	Ø1" x 36"	Ø11.5"
4"	20'	L - 1/8"	11.47	6.72	5.18	2.35	1.95	1.63	1.37	Ø1" x 36"	Ø11.5"
4"	21'	L - 1/8"	10.46	5.98	4.53		1.53	1.25	1.02	Ø1" x 36"	Ø11.5"
4"	22'	L - 1/8"	9.52	5.29	3.92		1.13	0.89	0.69	Ø1" x 36"	Ø11.5"
4"	10'	M - 3/16"	40.00	31.15	26.00	16.28	14.26	12.60	11.20	Ø1" x 36"	Ø11.5"
4"	11'	M - 3/16"	40.00	27.29	22.72	14.12	12.36	10.91	9.69	Ø1" x 36"	Ø11.5"
4"	12'	M - 3/16"	36.82	24.17	20.07	12.37	10.81	9.53	8.46	Ø1" x 36"	Ø11.5"
4"	13'	M - 3/16"	33.05	21.58	17.87	10.90	9.52	8.37	7.42	Ø1" x 36"	Ø11.5"
4"	14'	M - 3/16"	29.88	19.40	16.01	9.65	8.41	7.39	6.53	Ø1" x 36"	Ø11.5"
4"	15'	M - 3/16"	27.16	17.52	14.40	8.56	7.44	6.52	5.76	Ø1" x 36"	Ø11.5"
4"	16'	M - 3/16"	24.80	15.88	12.99	7.60	6.59	5.76	5.08	Ø1" x 36"	Ø11.5"
4"	17'	M - 3/16"	22.72	14.43	11.75	6.74	5.83	5.08	4.46	Ø1" x 36"	Ø11.5"
4"	18'	M - 3/16"	20.88	13.13	10.63	5.96	5.14	4.47	3.91	Ø1" x 36"	Ø11.5"
4"	19'	M - 3/16"	19.22	11.96	9.62	5.25	4.51	3.90	3.40	Ø1" x 36"	Ø11.5"
4"	20'	M - 3/16"	17.72	10.90	8.69	4.60	3.93	3.38	2.93	Ø1" x 36"	Ø11.5"
4"	21'	M - 3/16"	16.35	9.92	7.84	4.00	3.39	2.90	2.49	Ø1" x 36"	Ø11.5"
4"	22'	M - 3/16"	15.08	9.01	7.05	3.43	2.89	2.45	2.08	Ø1" x 36"	Ø11.5"
4"	10'	H - 1/4"	40.00	39.91	33.36	20.99	18.40	16.27	14.48	Ø1" x 36"	Ø11.5"
4"	11'	H - 1/4"	40.00	35.05	29.25	18.30	16.03	14.16	12.59	Ø1" x 36"	Ø11.5"
4"	12'	H - 1/4"	40.00	31.13	25.93	16.11	14.11	12.44	11.06	Ø1" x 36"	Ø11.5"
4"	13'	H - 1/4"	40.00	27.90	23.18	14.30	12.50	11.02	9.78	Ø1" x 36"	Ø11.5"
4"	14'	H - 1/4"	38.50	25.17	20.86	12.75	11.14	9.80	8.69	Ø1" x 36"	Ø11.5"
4"	15'	H - 1/4"	35.09	22.83	18.87	11.41	9.95	8.75	7.74	Ø1" x 36"	Ø11.5"
4"	16'	H - 1/4"	32.14	20.80	17.13	10.24	8.92	7.82	6.91	Ø1" x 36"	Ø11.5"
4"	17'	H - 1/4"	29.56	19.00	15.59	9.20	7.99	7.00	6.17	Ø1" x 36"	Ø11.5"
4"	18'	H - 1/4"	27.26	17.41	14.22	8.26	7.16	6.26	5.50	Ø1" x 36"	Ø11.5"
4"	19'	H - 1/4"	25.20	15.97	12.98	7.41	6.40	5.58	4.89	Ø1" x 36"	Ø11.5"
4"	20'	H - 1/4"	23.34	14.66	11.86	6.63	5.71	4.96	4.34	Ø1" x 36"	Ø11.5"
4"	21'	H - 1/4"	21.65	13.47	10.82	5.91	5.07	4.38	4.82	Ø1" x 36"	Ø11.5"
4"	22'	H - 1/4"	20.09	12.37	9.87	5.24	4.47	3.85	3.34	Ø1" x 36"	Ø11.5"

Consult factory for reinforcement solutions for higher EPA ratings.

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MUFFLER POLE EPA RATING TABLE - AASHTO

MUFFLER POLE
EPA RATING TABLE - AASHTO

Steel
Round Shape - Q8 Muffler Base

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Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
4"	10'	W - 5/16"	40.00	40.00	39.99	25.23	22.13	19.57	17.42	Ø1" x 36"	Ø11.5"
4"	11'	W - 5/16"	40.00	40.00	35.12	22.06	19.34	17.08	15.20	Ø1" x 36"	Ø11.5"
4"	12'	W - 5/16"	40.00	37.40	31.20	19.49	17.07	15.07	13.40	Ø1" x 36"	Ø11.5"
4"	13'	W - 5/16"	40.00	33.58	27.96	17.35	15.19	13.40	11.90	Ø1" x 36"	Ø11.5"
4"	14'	W - 5/16"	40.00	30.37	25.23	15.55	13.59	11.98	10.63	Ø1" x 36"	Ø11.5"
4"	15'	W - 5/16"	40.00	27.61	22.88	13.99	12.21	10.75	9.53	Ø1" x 36"	Ø11.5"
4"	16'	W - 5/16"	38.76	25.22	20.85	12.62	11.01	9.68	8.57	Ø1" x 36"	Ø11.5"
4"	17'	W - 5/16"	35.70	23.12	19.05	11.41	9.94	8.72	7.71	Ø1" x 36"	Ø11.5"
4"	18'	W - 5/16"	33.00	21.25	17.45	10.33	8.98	7.86	6.94	Ø1" x 36"	Ø11.5"
4"	19'	W - 5/16"	30.58	19.57	16.01	9.35	8.11	7.09	6.24	Ø1" x 36"	Ø11.5"
4"	20'	W - 5/16"	28.40	18.05	14.70	8.45	7.31	6.38	5.60	Ø1" x 36"	Ø11.5"
4"	21'	W - 5/16"	26.41	16.66	13.50	7.62	6.58	5.72	5.01	Ø1" x 36"	Ø11.5"
4"	22'	W - 5/16"	24.59	15.38	12.40	6.86	5.90	5.11	4.46	Ø1" x 36"	Ø11.5"
5"	10'	L - 1/8"	40.00	34.55	28.85	18.32	16.06	14.19	12.63	Ø1" x 36"	Ø11.5"
5"	11'	L - 1/8"	40.00	30.23	25.20	15.96	13.98	12.34	10.97	Ø1" x 36"	Ø11.5"
5"	12'	L - 1/8"	40.85	26.75	22.24	14.04	12.29	10.84	9.63	Ø1" x 36"	Ø11.5"
5"	13'	L - 1/8"	36.65	23.85	19.78	12.44	10.88	9.58	8.50	Ø1" x 36"	Ø11.5"
5"	14'	L - 1/8"	33.10	21.41	17.70	11.09	9.68	8.51	7.54	Ø1" x 36"	Ø11.5"
5"	15'	L - 1/8"	30.07	19.31	15.90	9.91	8.64	7.59	6.71	Ø1" x 36"	Ø11.5"
5"	16'	L - 1/8"	27.44	17.47	14.33	8.88	7.73	6.77	5.98	Ø1" x 36"	Ø11.5"
5"	17'	L - 1/8"	25.13	15.84	12.93	7.97	6.91	6.05	5.33	Ø1" x 36"	Ø11.5"
5"	18'	L - 1/8"	23.07	14.39	11.68	7.14	6.18	5.40	4.74	Ø1" x 36"	Ø11.5"
5"	19'	L - 1/8"	21.22	13.08	10.55	6.39	5.52	4.80	4.21	Ø1" x 36"	Ø11.5"
5"	20'	L - 1/8"	19.55	11.88	9.51	5.71	4.91	4.25	3.71	Ø1" x 36"	Ø11.5"
5"	21'	L - 1/8"	18.02	10.79	8.56	5.07	4.35	3.75	3.26	Ø1" x 36"	Ø11.5"
5"	22'	L - 1/8"	16.62	9.77	7.68	4.49	3.82	3.28	2.83	Ø1" x 36"	Ø11.5"
5"	23'	L - 1/8"	15.33	8.83	6.86	3.94	3.33	2.84	2.44	Ø1" x 36"	Ø11.5"
5"	24'	L - 1/8"	14.12	7.95	6.09	3.42	2.87	2.43	2.06	Ø1" x 36"	Ø11.5"
5"	25'	L - 1/8"	13.00	7.12	5.36	2.93	2.43	2.03	1.71	Ø1" x 36"	Ø11.5"
5"	26'	L - 1/8"	11.94	6.33	4.68	2.47	2.02	1.66	1.37	Ø1" x 36"	Ø11.5"
5"	27'	L - 1/8"	10.94	5.59	4.02	2.02	1.62	1.30	1.05	Ø1" x 36"	Ø11.5"
5"	28'	L - 1/8"	10.00	4.88	3.40		1.25	0.96	0.74	Ø1" x 36"	Ø11.5"
5"	29'	L - 1/8"	9.10	4.21	2.80		0.88	0.63	0.44	Ø1" x 36"	Ø11.5"
5"	30'	L - 1/8"	8.24	3.56	2.23		0.53	0.32	0.15	Ø1" x 36"	Ø11.5"

Consult factory for reinforcement solutions for higher EPA ratings.

MUFFLER POLE EPA RATING TABLE - AASHTO

MUFFLER POLE
EPA RATING TABLE - AASHTO

Steel
Round Shape - Q8 Muffler Base

Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
5"	10'	M - 3/16"	40.00	40.00	40.00	26.92	23.62	20.89	18.60	Ø1" x 36"	Ø11.5"
5"	11'	M - 3/16"	40.00	40.00	37.10	23.58	20.68	18.27	16.26	Ø1" x 36"	Ø11.5"
5"	12'	M - 3/16"	40.00	39.46	32.93	20.88	18.30	16.16	14.38	Ø1" x 36"	Ø11.5"
5"	13'	M - 3/16"	40.00	35.39	29.47	18.65	16.33	14.41	12.81	Ø1" x 36"	Ø11.5"
5"	14'	M - 3/16"	40.00	31.96	26.56	16.76	14.67	12.93	11.48	Ø1" x 36"	Ø11.5"
5"	15'	M - 3/16"	40.00	29.02	24.07	15.14	13.23	11.66	10.34	Ø1" x 36"	Ø11.5"
5"	16'	M - 3/16"	40.89	26.47	21.89	13.73	11.98	10.54	9.34	Ø1" x 36"	Ø11.5"
5"	17'	M - 3/16"	37.65	24.23	19.98	12.48	10.88	9.56	8.46	Ø1" x 36"	Ø11.5"
5"	18'	M - 3/16"	34.78	22.23	18.27	11.36	9.89	8.68	7.67	Ø1" x 36"	Ø11.5"
5"	19'	M - 3/16"	32.22	20.44	16.73	10.35	9.00	7.88	6.95	Ø1" x 36"	Ø11.5"
5"	20'	M - 3/16"	29.91	18.82	15.34	9.44	8.19	7.16	6.30	Ø1" x 36"	Ø11.5"
5"	21'	M - 3/16"	27.81	17.34	14.07	8.60	7.44	6.49	5.70	Ø1" x 36"	Ø11.5"
5"	22'	M - 3/16"	25.89	15.97	12.89	7.82	6.75	5.88	5.15	Ø1" x 36"	Ø11.5"
5"	23'	M - 3/16"	24.12	14.71	11.81	7.10	6.11	5.31	4.63	Ø1" x 36"	Ø11.5"
5"	24'	M - 3/16"	22.48	13.54	10.79	6.43	5.52	4.77	4.15	Ø1" x 36"	Ø11.5"
5"	25'	M - 3/16"	20.96	12.45	9.84	5.80	4.95	4.27	3.70	Ø1" x 36"	Ø11.5"
5"	26'	M - 3/16"	19.54	11.42	8.95	5.20	4.42	3.79	3.27	Ø1" x 36"	Ø11.5"
5"	27'	M - 3/16"	18.20	10.45	8.10	4.64	3.92	3.34	2.86	Ø1" x 36"	Ø11.5"
5"	28'	M - 3/16"	16.94	9.53	7.30	4.10	3.44	2.91	2.47	Ø1" x 36"	Ø11.5"
5"	29'	M - 3/16"	15.75	8.66	6.54	3.59	2.98	2.50	2.10	Ø1" x 36"	Ø11.5"
5"	30'	M - 3/16"	14.61	7.82	5.81	3.10	2.55	2.10	1.74	Ø1" x 36"	Ø11.5"

5"	10'	H - 1/4"	40.00	40.00	40.00	31.14	27.30	24.11	21.45	Ø1" x 36"	Ø11.5"
5"	11'	H - 1/4"	40.00	40.00	40.00	27.82	24.37	21.52	19.13	Ø1" x 36"	Ø11.5"
5"	12'	H - 1/4"	40.00	40.00	39.63	25.05	21.93	19.35	17.19	Ø1" x 36"	Ø11.5"
5"	13'	H - 1/4"	40.00	40.00	35.98	22.69	19.85	17.50	15.54	Ø1" x 36"	Ø11.5"
5"	14'	H - 1/4"	40.00	39.61	32.84	20.65	18.05	15.90	14.11	Ø1" x 36"	Ø11.5"
5"	15'	H - 1/4"	40.00	36.39	30.10	18.88	16.48	14.50	12.85	Ø1" x 36"	Ø11.5"
5"	16'	H - 1/4"	40.00	33.54	27.68	17.30	15.09	13.27	11.75	Ø1" x 36"	Ø11.5"
5"	17'	H - 1/4"	40.00	31.01	25.52	15.90	13.85	12.16	10.76	Ø1" x 36"	Ø11.5"
5"	18'	H - 1/4"	40.00	28.74	23.59	14.63	12.73	11.17	9.86	Ø1" x 36"	Ø11.5"
5"	19'	H - 1/4"	40.00	26.69	21.83	13.49	11.72	10.26	9.05	Ø1" x 36"	Ø11.5"
5"	20'	H - 1/4"	39.44	24.82	20.23	12.44	10.79	9.43	8.31	Ø1" x 36"	Ø11.5"
5"	21'	H - 1/4"	36.81	23.11	18.76	11.48	9.94	8.67	7.62	Ø1" x 36"	Ø11.5"
5"	22'	H - 1/4"	34.41	21.53	17.41	10.58	9.15	7.97	6.99	Ø1" x 36"	Ø11.5"
5"	23'	H - 1/4"	32.21	20.07	16.15	9.75	8.41	7.31	6.39	Ø1" x 36"	Ø11.5"
5"	24'	H - 1/4"	30.17	18.69	14.98	8.98	7.72	6.69	5.84	Ø1" x 36"	Ø11.5"
5"	25'	H - 1/4"	28.28	17.35	13.88	8.25	7.08	6.12	5.32	Ø1" x 36"	Ø11.5"
5"	26'	H - 1/4"	26.52	16.10	12.85	7.57	6.47	5.57	4.83	Ø1" x 36"	Ø11.5"
5"	27'	H - 1/4"	24.87	14.92	11.86	6.92	5.89	5.06	4.36	Ø1" x 36"	Ø11.5"
5"	28'	H - 1/4"	23.32	13.80	10.89	6.31	5.35	4.57	3.92	Ø1" x 36"	Ø11.5"
5"	29'	H - 1/4"	21.85	12.74	9.97	5.73	4.83	4.10	3.50	Ø1" x 36"	Ø11.5"
5"	30'	H - 1/4"	20.46	11.74	9.10	5.17	4.33	3.65	3.10	Ø1" x 36"	Ø11.5"

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MUFFLER POLE EPA RATING TABLE - AASHTO

MUFFLER POLE
EPA RATING TABLE - AASHTO

Steel
Round Shape - Q8 Muffler Base

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Dimension (in)	Height (ft)	Wall Thickness (in)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	160MPH	170MPH	180MPH	Anchor Bolts (in)	Bolt Circle (in)
5"	10'	W - 5/16"	40.00	40.00	40.00	31.14	27.30	24.11	21.45	Ø1" x 36"	Ø11.5"
5"	11'	W - 5/16"	40.00	40.00	40.00	27.82	24.37	21.52	19.13	Ø1" x 36"	Ø11.5"
5"	12'	W - 5/16"	40.00	40.00	39.63	25.05	21.93	19.35	17.19	Ø1" x 36"	Ø11.5"
5"	13'	W - 5/16"	40.00	40.00	35.98	22.69	19.85	17.50	15.54	Ø1" x 36"	Ø11.5"
5"	14'	W - 5/16"	40.00	39.61	32.84	20.65	18.05	15.90	14.11	Ø1" x 36"	Ø11.5"
5"	15'	W - 5/16"	40.00	36.39	30.10	18.88	16.48	14.50	12.85	Ø1" x 36"	Ø11.5"
5"	16'	W - 5/16"	40.00	33.54	27.68	17.30	15.09	13.27	11.75	Ø1" x 36"	Ø11.5"
5"	17'	W - 5/16"	40.00	31.01	25.52	15.90	13.85	12.16	10.76	Ø1" x 36"	Ø11.5"
5"	18'	W - 5/16"	40.00	28.74	23.59	14.63	12.73	11.17	9.86	Ø1" x 36"	Ø11.5"
5"	19'	W - 5/16"	40.00	26.69	21.83	13.49	11.72	10.26	9.05	Ø1" x 36"	Ø11.5"
5"	20'	W - 5/16"	39.47	24.82	20.23	12.44	10.79	9.43	8.31	Ø1" x 36"	Ø11.5"
5"	21'	W - 5/16"	37.03	23.11	18.76	11.48	9.94	8.67	7.62	Ø1" x 36"	Ø11.5"
5"	22'	W - 5/16"	34.79	21.53	17.41	10.58	9.15	7.97	6.99	Ø1" x 36"	Ø11.5"
5"	23'	W - 5/16"	32.72	20.07	16.15	9.75	8.41	7.31	6.39	Ø1" x 36"	Ø11.5"
5"	24'	W - 5/16"	30.80	18.71	14.98	8.98	7.72	6.69	5.84	Ø1" x 36"	Ø11.5"
5"	25'	W - 5/16"	29.02	17.44	13.88	8.25	7.08	6.12	5.32	Ø1" x 36"	Ø11.5"
5"	26'	W - 5/16"	27.35	16.25	12.85	7.57	6.47	5.57	4.83	Ø1" x 36"	Ø11.5"
5"	27'	W - 5/16"	25.79	15.13	11.88	6.92	5.89	5.06	4.36	Ø1" x 36"	Ø11.5"
5"	28'	W - 5/16"	24.32	14.07	10.95	6.31	5.35	4.57	3.92	Ø1" x 36"	Ø11.5"
5"	29'	W - 5/16"	22.93	13.06	10.08	5.73	4.83	4.10	3.50	Ø1" x 36"	Ø11.5"
5"	30'	W - 5/16"	21.61	12.10	9.25	5.17	4.33	3.65	3.10	Ø1" x 36"	Ø11.5"

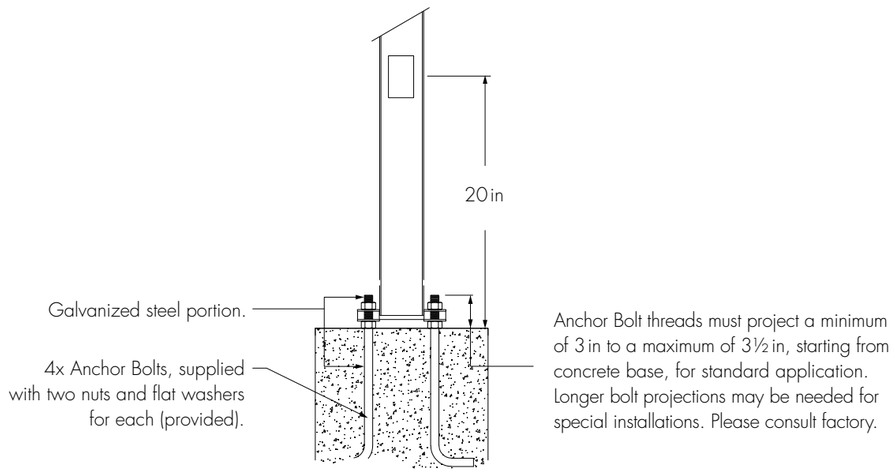
Consult factory for reinforcement solutions for higher EPA ratings.

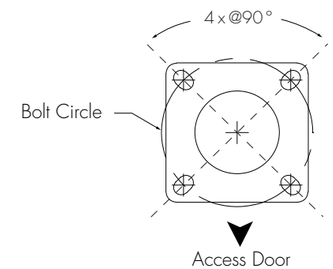
LUMENTECH SMART POLE

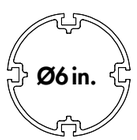
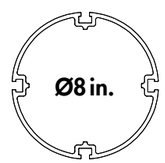
TECHNICAL INFORMATION

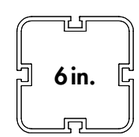
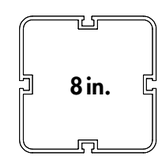
Lumentech Smart Pole

Technical Information

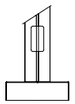




	Round Shapes		
	Ø5 in.	 Ø6 in.	 Ø8 in.
Compatible Base Cover Options	WA, WC, WF, WH, WI, WJ, WL, WM, WO, WP, WR, WS, WY, WYX	SB, WL, WO,	SB, SC
Compatible Accessories	HK, PLTU, SSK, LSK, SSH, BA, PH, NDL, NDL-BV	HK, PLTU, SSK, LSK, SSH, BA, PH, NDL, NDL-BV	HK, PLTU, SSK, LSK, SSH, BA, PH, NDL-BV
Anchor Bolts	Ø3/4 in. x 26 in.	Ø1 in. x 36 in.	
Bolt Circle	Ø10 in.	Ø14 in.	

Square Shapes	
 6 in.	 8 in.
SB	SB, SC
HK, PLTU, SSK, LSK, SSH, BA, PH	
Ø1 in. x 36 in.	
Ø14 in.	

Base Cover Options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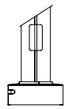
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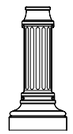
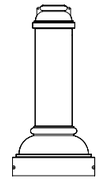

WA

WC

WF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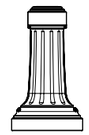
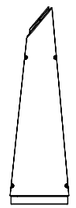

WI

WJ

WL

WM

WO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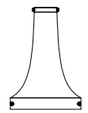
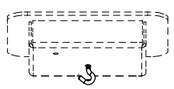

WS

WY

WYX

Accessories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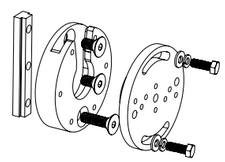
SSK

LSK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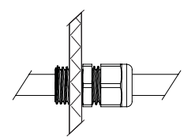
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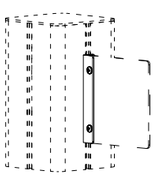
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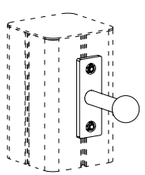
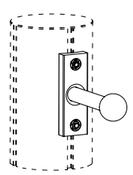

BA-X-PLT-18-S1X/S2X-XT-S
PH-PLT-18-S1X/S2X-XT-S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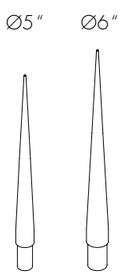
PH-PLT-18-S1X/S2X-XT-R



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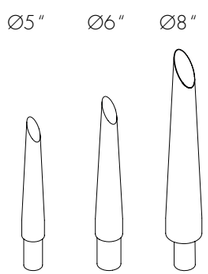


NDL-BV

Pole-Top Options

TABLE OF CONTENTS

BLDS-S1E
BLDS-S2E
BLDS-S1E-3GV
BLDS-S2E-3GV

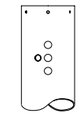
BLDM-S1E
BLDM-S2E

BLDM-S1E-3GV
BLDM-S2E-3GV

BLDN-SPA6TN-S1E
BLDN-SPA6TN-S2E
BLDN-SPA8TN-S1E
BLDN-SPA8TN-S2E

BLDN-RPA6TN-S1E
BLDN-RPA6TN-S2E

BLDN-RPA8TN-S1E
BLDN-RPA8TN-S2E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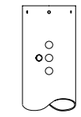
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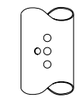
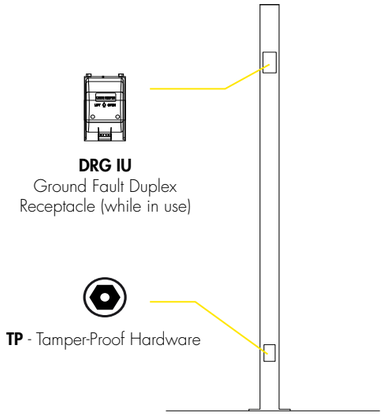

SPK-S1X

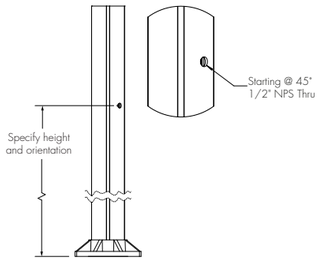
BRK

Other Options

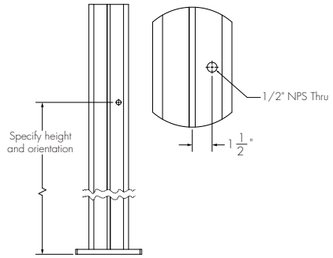


PG - Drilling Pattern

Round Pole Shape

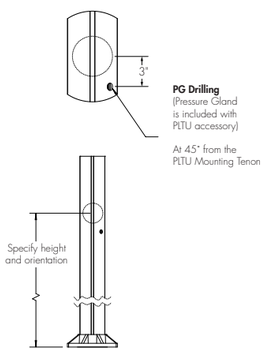


Square Pole Shape

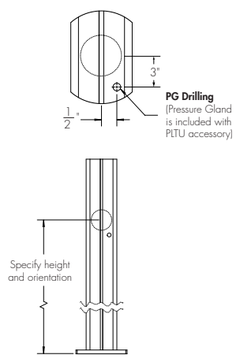


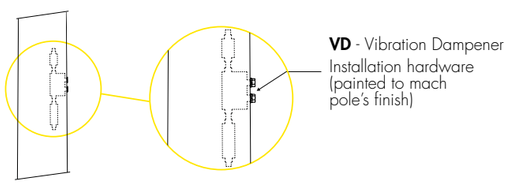
PLTU - Drilling Pattern

Round Pole Shape



Square Pole Shape





Finish Option

CRC

CRC- Corrosion-Resistant
Coating for Hostile Environments [1]

[1] Automatically included when a steel pole is specified.

LUMENTECH SMART POLE

EPA RATING TABLE - AASHTO

LUMENTECH SMART POLE
EPA RATING TABLE - AASHTO

Round Shape

Dimension (in)	Height (ft)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	Anchor Bolts (in)	Bolt Circle (in)
5"	10'	20.89	13.30	10.90	6.76	Ø¾" x 26"	Ø10"
5"	11'	18.75	11.79	9.61	5.91	Ø¾" x 26"	Ø10"
5"	12'	16.90	10.48	8.47	5.16	Ø¾" x 26"	Ø10"
5"	13'	15.29	9.32	7.47	4.49	Ø¾" x 26"	Ø10"
5"	14'	13.85	8.28	6.57	3.89	Ø¾" x 26"	Ø10"
5"	15'	12.57	7.35	5.76	3.35	Ø¾" x 26"	Ø10"
5"	16'	11.42	6.50	5.02	2.85	Ø¾" x 26"	Ø10"
5"	17'	10.36	5.72	4.33	2.39	Ø¾" x 26"	Ø10"
5"	18'	9.39	5.00	3.69		Ø¾" x 26"	Ø10"
5"	19'	8.50	4.32	3.10		Ø¾" x 26"	Ø10"
5"	20'	7.67	3.69	2.54		Ø¾" x 26"	Ø10"
5"	21'	6.89	3.10	2.01		Ø¾" x 26"	Ø10"
5"	22'	6.17	2.53			Ø¾" x 26"	Ø10"
5"	23'	5.48				Ø¾" x 26"	Ø10"
5"	24'	4.83				Ø¾" x 26"	Ø10"
5"	25'	4.21				Ø¾" x 26"	Ø10"
5"	26'	3.62				Ø¾" x 26"	Ø10"
5"	27'	3.06				Ø¾" x 26"	Ø10"
5"	28'	2.52				Ø¾" x 26"	Ø10"
6"	10'	30.34	19.85	16.56	10.39	Ø1" x 36"	Ø14"
6"	11'	27.33	17.78	14.81	9.25	Ø1" x 36"	Ø14"
6"	12'	24.74	15.99	13.30	8.26	Ø1" x 36"	Ø14"
6"	13'	22.49	14.43	11.98	7.39	Ø1" x 36"	Ø14"
6"	14'	20.49	13.05	10.80	6.61	Ø1" x 36"	Ø14"
6"	15'	18.71	11.80	9.74	5.92	Ø1" x 36"	Ø14"
6"	16'	17.11	10.68	8.79	5.28	Ø1" x 36"	Ø14"
6"	17'	15.66	9.65	7.91	4.70	Ø1" x 36"	Ø14"
6"	18'	14.33	8.71	7.11	4.16	Ø1" x 36"	Ø14"
6"	19'	13.10	7.84	6.36	3.66	Ø1" x 36"	Ø14"
6"	20'	11.97	7.03	5.67	3.20	Ø1" x 36"	Ø14"
6"	21'	10.91	6.27	5.02	2.76	Ø1" x 36"	Ø14"
6"	22'	9.92	5.56	4.41	2.34	Ø1" x 36"	Ø14"
6"	23'	8.99	4.89	3.83		Ø1" x 36"	Ø14"
6"	24'	8.12	4.25	3.28		Ø1" x 36"	Ø14"
6"	25'	7.28	3.64	2.76		Ø1" x 36"	Ø14"
6"	26'	6.50	3.06	2.26		Ø1" x 36"	Ø14"
6"	27'	5.74	2.51			Ø1" x 36"	Ø14"
6"	28'	5.02				Ø1" x 36"	Ø14"

Consult factory for internal reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

LUMENTECH POLE EPA RATING TABLE - AASHTO

LUMENTECH SMART POLE
EPA RATING TABLE - AASHTO

Round Shape

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Dimension (in)	Height (ft)	EPA Rating (sq.ft.) 90MPH	110MPH	120MPH	150MPH	Anchor Bolts (in)	Bolt Circle (in)
8"	10'	40.00	35.73	29.92	18.96	Ø1" x 36"	Ø14"
8"	11'	40.00	32.37	27.09	17.13	Ø1" x 36"	Ø14"
8"	12'	40.00	29.50	24.66	15.55	Ø1" x 36"	Ø14"
8"	13'	40.85	27.01	22.56	14.18	Ø1" x 36"	Ø14"
8"	14'	37.63	24.82	20.70	12.98	Ø1" x 36"	Ø14"
8"	15'	34.77	22.88	19.06	11.91	Ø1" x 36"	Ø14"
8"	16'	32.21	21.14	17.59	10.94	Ø1" x 36"	Ø14"
8"	17'	29.91	19.57	16.26	10.07	Ø1" x 36"	Ø14"
8"	18'	27.82	18.14	15.05	9.27	Ø1" x 36"	Ø14"
8"	19'	25.91	16.83	13.94	8.54	Ø1" x 36"	Ø14"
8"	20'	24.15	15.63	12.91	7.87	Ø1" x 36"	Ø14"
8"	21'	22.53	14.52	11.97	7.24	Ø1" x 36"	Ø14"
8"	22'	21.03	13.48	11.09	6.66	Ø1" x 36"	Ø14"
8"	23'	19.63	12.51	10.26	6.11	Ø1" x 36"	Ø14"
8"	24'	18.31	11.61	9.49	5.59	Ø1" x 36"	Ø14"
8"	25'	17.08	10.75	8.76	5.11	Ø1" x 36"	Ø14"
8"	26'	15.92	9.95	8.07	4.64	Ø1" x 36"	Ø14"
8"	27'	14.82	9.18	7.42	4.20	Ø1" x 36"	Ø14"
8"	28'	13.78	8.46	6.80	3.79	Ø1" x 36"	Ø14"

Consult factory for internal reinforcement solutions for higher EPA ratings.

LUMENTECH SMART POLE

EPA RATING TABLE - AASHTO

Square Shape

Dimension (in)	Height (ft)	EPA Rating (sq.ft.) 90 MPH	110 MPH	120 MPH	150 MPH	160 MPH	170 MPH	180 MPH	Anchor Bolts (in)	Bolt Circle (in)
6"	10'	28.32	16.94	13.26	6.29	5.26	3.90	2.75	Ø1" x 36"	Ø14"
6"	11'	24.70	14.29	10.93	4.56	3.47	2.23	1.19	Ø1" x 36"	Ø14"
6"	12'	21.54	11.96	8.86	2.99	1.87	0.74		Ø1" x 36"	Ø14"
6"	13'	18.74	9.86	6.99		0.41			Ø1" x 36"	Ø14"
6"	14'	16.22	7.96	5.28					Ø1" x 36"	Ø14"
6"	15'	13.94	6.21	3.71					Ø1" x 36"	Ø14"
6"	16'	11.84	4.58	2.24					Ø1" x 36"	Ø14"
6"	17'	9.91	3.07						Ø1" x 36"	Ø14"
6"	18'	8.11							Ø1" x 36"	Ø14"
6"	19'	6.43							Ø1" x 36"	Ø14"
6"	20'	4.84							Ø1" x 36"	Ø14"
6"	21'	3.33							Ø1" x 36"	Ø14"
8"	10'	40.00	34.45	27.64	14.76	13.19	10.66	8.54	Ø1" x 36"	Ø14"
8"	11'	40.00	29.92	23.70	11.92	10.23	7.94	6.02	Ø1" x 36"	Ø14"
8"	12'	40.00	25.96	20.23	9.37	7.62	5.53	3.77	Ø1" x 36"	Ø14"
8"	13'	38.86	22.44	17.13	7.07	5.28	3.35	1.73	Ø1" x 36"	Ø14"
8"	14'	34.56	19.27	14.32	4.95	3.14	1.35		Ø1" x 36"	Ø14"
8"	15'	30.69	16.38	11.75	2.99	1.18			Ø1" x 36"	Ø14"
8"	16'	27.18	13.74	9.39					Ø1" x 36"	Ø14"
8"	17'	23.96	11.28	7.18					Ø1" x 36"	Ø14"
8"	18'	20.98	9.00	5.12					Ø1" x 36"	Ø14"
8"	19'	18.22	6.85	3.17					Ø1" x 36"	Ø14"
8"	20'	15.63	4.83						Ø1" x 36"	Ø14"
8"	21'	13.20	2.90						Ø1" x 36"	Ø14"
8"	22'	10.91							Ø1" x 36"	Ø14"
8"	23'	8.73							Ø1" x 36"	Ø14"
8"	24'	6.65							Ø1" x 36"	Ø14"
8"	25'	4.67							Ø1" x 36"	Ø14"
8"	26'	2.77							Ø1" x 36"	Ø14"

Consult factory for internal reinforcement solutions for higher EPA ratings.

This guide is intended as a reference source only. Please refer to a qualified engineer.

Finishes

Our finishes are extremely durable, resistant, exterior polyester powder coatings that meet AAMA 2604-98 requirements (5-year Florida exposure). Corrosion Resistant Coatings (CRC) are available. Pre-finishes are also available to meet ASTM B-117, ASTM D-1654 (salt-spray resistant), and ASTM D-2247 requirements (humidity resistant).

BK Black Sandtex®
BRZ Bronze Sandtex®
SI Silver Sandtex®
BKTX Textured Black
BRZTX Textured Bronze Non-Metallic
GRATX Textured Medium Grey
GRNT Textured Green
WHTX Textured White

CC Custom Colour and Finish [1]
CRC Corrosion-Resistant Coating [2]
GALV Galvanized Steel [3]

Other requirements met by Lumenpulse finishes include:

- ASTM 3359: Paint and varnishes – Cross-cut test
- ASTM D-1005: Paint and varnishes – Determination of film thickness
- ASTM D523-14 & ASTM D2457-13: Paint and varnishes – Determination of specular gloss of non-metallic paint films at 20 degrees, 60 degrees and 85 degrees
- ASTM D7127: Evaluation of blistering degree
- ASTM D4414 - 95: Standard Practice for Measurement of Wet. Film Thickness by Notch Gages
- ASTM D2369 - 10(2015)e1: Standard Test Method for Volatile Content of Coatings

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[1] Specify RAL number followed by "TX" for textured finish (ex: RAL9007TX) or STX for Sandtex finish (ex: RAL9007STX). A textured finish is recommended for optimal surface finish and ease maintenance of poles and base covers. If a finish is not specified with the RAL number (ex: RAL9007), a glossy finish will be provided. Please consult factory for other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary.

[2] Automatically included when a steel pole is specified, recommended near coastal installation.
Steel: Primer + Powder Coating + Clear Coat.
Aluminum: Primer + Powder Coating + Clear Coat.

[3] Only available for steel poles with textured finish (immersion marks may occur). Luminaire cannot be matched to this color.

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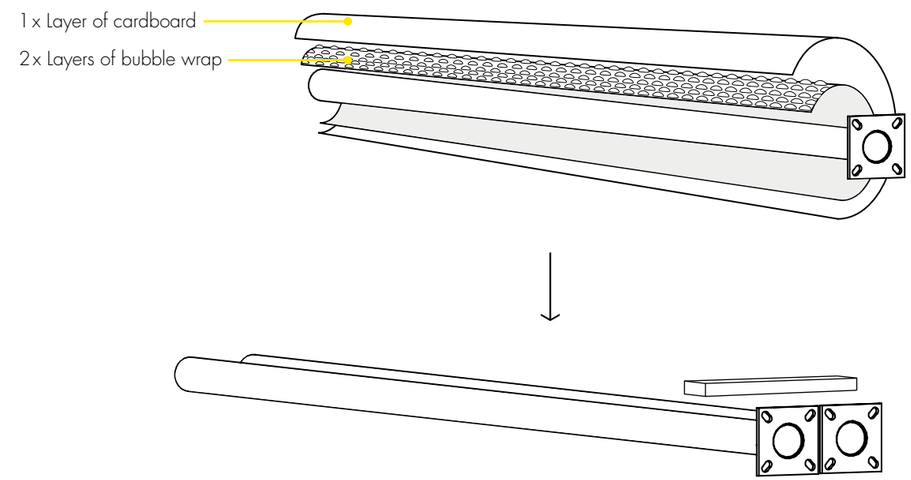
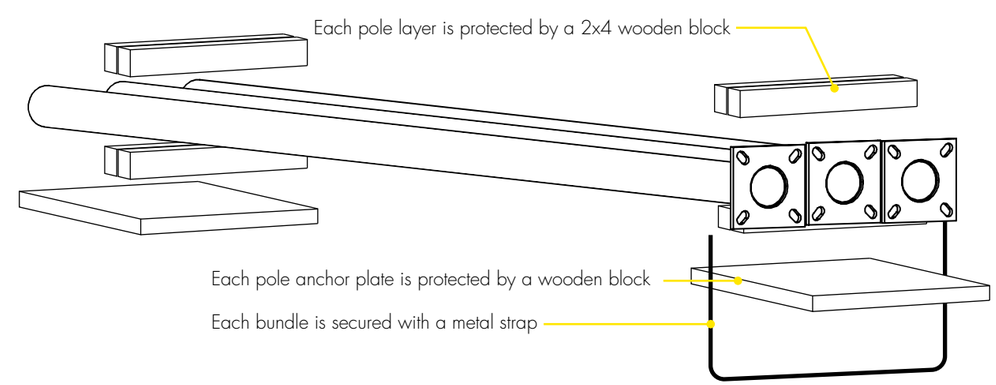
Pole Packaging





kg Each bundle weights a maximum of 2000 lbs (910 kg) and is 4 ft wide.

All our poles come with a touch-up paint pen.

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Conditions

When selecting a pole and luminaire assembly, the stresses put upon the pole from both the dead-weight load in pounds and the total EPA in square feet of the light fixture and any additional attachments to the pole must be professionally assessed by a qualified engineer. No matter where you are installing outdoor light fixtures and pole assemblies, you are required to properly evaluate that specific wind conditions will not compromise the structural integrity of the assembly.

This guide's sole purpose is to help you determine the maximum EPA (sq.ft.) and weight load using Lumenpulse luminaires, poles, some accessories, and arms. It does not consider all bracketry, signs, decorations, overhead wires, or other equipment that might be mounted to the subject pole. Poles that are to be located in areas of known abnormal conditions will require special consideration.

In such cases, please consult a qualified engineer for more information. This guide will help you select the products needed for your project. However, all selections should be approved by a qualified engineer before purchasing.

Lumenpulse does not assume liability or responsibility for any errors or omissions in the content of this guide or for any damages of any kind related to the use or misuse of information provided.

For further information on EPA calculations, please consult a Lumenpulse representative. If there are discrepencies between this document and a Product Spec Sheet, please refer to the Product Spec Sheet.

For further reading, please refer to our white paper series: "EPA and the ABCs of Wind Safety"
www.lumenpulse.com/knowledge/lighting-outdoor-areas-using-epa

References

American Association of State Highway and Transportation Officials (AASHTO) (1994, 2001, & 2009), Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, American Association of State Highway and Transportation Officials, Washington DC.

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