

Job:
Type:
Location:
Notes:

Date:

ROADWAY POLES

P1

(3mm & 5mm) octagonal tapered single & double davit steel

The shaft is fabricated using hollow structural steel conforming to CSA G40.21-13 50W. The anchor base flange is fabricated from structural steel conforming to G40.21-44W and is circumferentially welded inside and out to the pole shaft. The hand hole, 12" from the flange plate to the centre of 5" x 7" geometry. One grounding stud is welded inside the pole shaft on centre across from the hand hole opening. The standard finish is paint compiled by 2-Component polyurethane applied over a cured epoxy primer. All poles include anchor rods, nut covers, hand hole, ground stud and a top cap (if applicable).



If you are aware of the project requirements, please fill out as best you can the above boxes to configure the pole geometry, required finish and interface/fixtures mount options.

PREFIX	HEIGHT	SECTION	MATERIAL	DRILL/ TENON		
CE 258SD	8m / 25'	7.5"	3mm/0.120"	T2H	2" Tenon x 9" Lg. (2.375" O.D.)	Loc "C"
CE 308SD	9m / 30'	7.5"	3mm/0.120"	T2H2	2" Tenon x 9" Lg. (2.375" O.D.)	Loc "B" & "D"
CE 438SD	13m / 43'	9"	5mm/0.188"	TC	Custom diameter & length	
CE 508SD	15m / 50'	9"	5mm/0.188"			
CE 258DD	8m / 25'	7.5"	3mm/0.120"			
CE 308DD	9m / 30'	7.5"	3mm/0.120"			
CE 438DD	13m / 43'	9"	5mm/0.188"			
CE 508DD	15m / 50'	9"	5mm/0.188"			
CE 5012SD	15m / 50'	9"	5mm/0.188"	(3.5m/ 12' arm reach)		
CE 5012DD	15m / 50'	9"	5mm/0.188"	(3.5m/ 12' dual arm reach)		

FINISH	OPTIONS
--------	---------

PP	Prime Paint Only	B/C	2piece Base Cover, Steel	D/R 3' up from base, Loc. "C"
BLP	Black Paint	D/R/B	Duplex Receptacle Base	D/R 1' down after bend, Loc. "A"
BRP	Bronze Paint	D/R/T	Duplex Receptacle Top	(please specify location)
DBRP	Dark Bronze Paint	A/H/H	Additional Hand Hole Top	(please specify location)
WP	White Paint	CPL500	1/2" 3000lb Coupling	(please specify location)
IMSP	Intermix Metallic Silver Paint	CPL750	3/4" 3000lb Coupling	(please specify location)
GP	Grey Paint	CPL100	1" 3000lb Coupling	(please specify location)
CP	Custom Paint (RAL or Paint Chip req.)	CPL125	1-1/4" 3000lb Coupling	(please specify location)
HDG	Hot Dipped Galvanized Only	CCTV	3/4" Drill hole de-burred	(please specify location)
FPHDG	Finish Paint over HDG	B/A	Set of Banner Arms	(please specify location)
		CEB-1-90°	Single bullhorn bracket, mounts to T2	
		CEB-2-180°	2 bullhorn bracket, mounts to T2	
		F/B	Frangible Safety Base	

CE PTA

(Require a post top bracket adaptor only? Please describe existing pole geometry with a quick sketch).



MODEL	SECTION/ MATERIAL	OVERTURNING MOMENT & MAX ALLOWABLE E.P.A.	SHEAR
CE 258SD	8" X .120" X 25"	6 kN m/ 5 sq.ft.	3 kN
CE 308SD	8" X .120" X 30"	9 kN m/ 5 sq.ft.	4 kN

The AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) identify Special Wind Regions that suggest that classic regional wind values may need to be increased when considering the pole geometry for your specific project. Flat open terrain, foothills and mountain passes where a funnel effect may be created, would all be considered Special Wind Regions.

POLES

P2

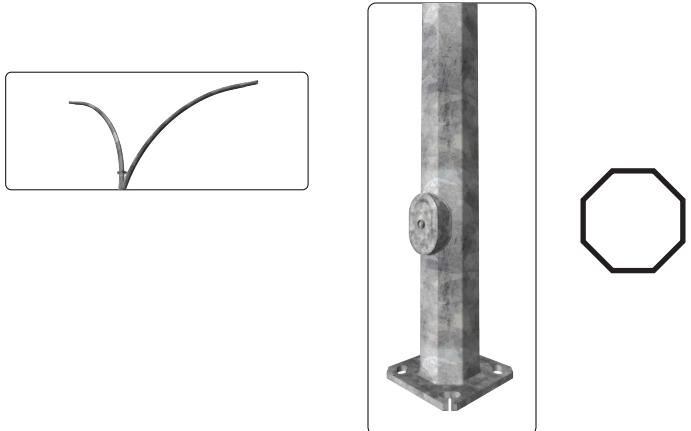
(3mm & 5mm) octagonal tapered single & double davit steel

CECO POLES & STRUCTURES INC. is not responsible for site preparation & footings. The information here below provides general guidelines for data in calculating a proper footing size considering variables such as the specific fixture E.P.A., effective projected area, number of fixtures per specified light pole for your project.

For moment calculations on your specific project please contact us via email or telephone, info@cecopoles.ca and at 403 279 0530.

Installation Procedure for Anchor Rods:

- 1). Prepare footing area as required by local code.
- 2). Apply steel template in accordance to the anchor rod template illustration provided.
- 3). Install anchor rods with flatwasher and nut to accommodate the projection illustrated in your provided anchor rod template.
- 4). CECO POLES & STRUCTURES light standards are designed for this method of installation. All other methods of light standard installation must be approved by CECO POLES & STRUCTURES INC..



Anchor Rod Layout

ie: Configuration for CE 308DD, 8" double davit steel pole.

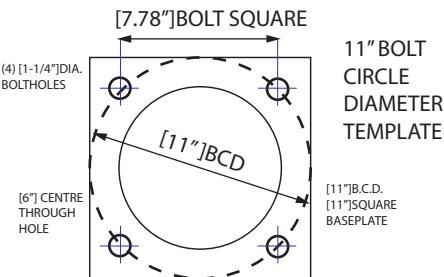
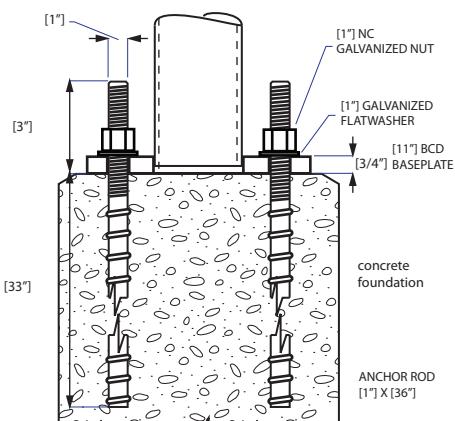


Figure 01oct

REMEMBER, AS INSTALLER OF THIS LIGHT STANDARD:
Recheck the torque of the anchor bolts as the nut connections may loosen slightly after the pole has been subjected to wind loading.

1" UNC 8tpi plain - dry condition sae j429 Gr.2 125 Ft. Lb

Glossary

Bolt Circle Diameter, B.C.D.

When measuring an array of bolt holes located on a given diameter where each bolt hole is equally distant from centre of the circle generating a diameter.

Anchor Rod/ Anchor Bolt, A/R

A structural bolt made from temper-quenched steel or high-tensile strength re-bar of a determined length with a national coarse thread for a nut application. This item is coated in hot zinc, H.D.G or hot dipped galvanize.

Base Template

A 14 gage laser cut pattern matching the specific bolt circle diameter for your project, and used to properly space and set (4) anchor rods into the rebar cage where concrete will be poured to achieve a level footing with properly projecting anchor rods as well as a conduit run to bring power up to the pre-determined light standard.

Projection

The defined distance of threaded anchor rod exposed out of the concrete to properly receive the pre-determined light standard.

Levelling Shim

A 3mm thick u-shaped steel plate specifically designed to straddle the anchor rod diameter and used between the bottom of the pole baseplate and top of the concrete footing when installing and levelling the pole. *note: Any gap present beyond 3mm between bottom of baseplate to the top of the concrete footing must be grouted. Do not apply more than one levelling shim per corner.

APPENDIX A.

This glossary functions as an example of common terminology used in the installation of structural items in or part of a construction site. For any clarification on terms or symbols used on this installation guide call 403 279 0530 for technical assistance or write to info@cecopoles.ca.

APPENDIX B.

Bolt torque provides only an indirect approximation of material stress. It is estimated that only about 10% of the tightening torque actually results in useful bolt tensioning. A common rule-of-thumb is to provide a minimum length of thread engagement equal to the diameter of the anchor. A more conservative rule-of-thumb is to use a thread engagement length of 1-1/2 times the diameter.

MODEL	SECTION/ MATERIAL	OVERTURNING MOMENT & MAX ALLOWABLE E.P.A.	SHEAR
CE 438SD	9" X .120" X 43"	18 kN m/ 5 sq.ft.	6 kN
CE 438DD	9" X .120" X 43"	25 kN m/ 5 sq.ft.	7 kN

The AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) identify Special Wind Regions that suggest that classic regional wind values may need to be increased when considering the pole geometry for your specific project. Flat open terrain, foothills and mountain passes where a funnel effect may be created, would all be considered Special Wind Regions.

13m[43'] POLES

P3

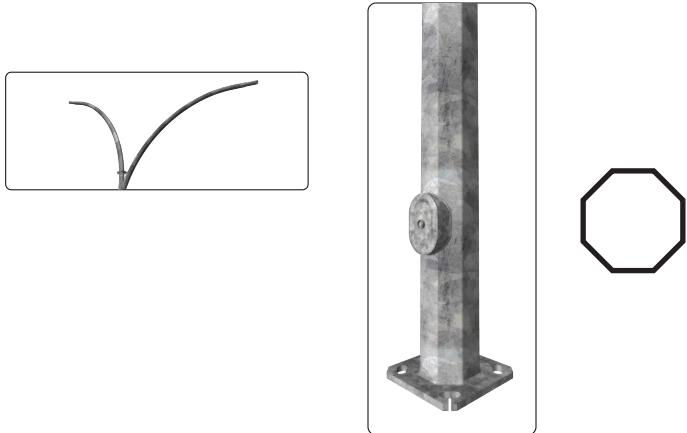
(3mm & 5mm) octagonal tapered single & double davit steel

CECO POLES & STRUCTURES INC. is not responsible for site preparation & footings. The information here below provides general guidelines for data in calculating a proper footing size considering variables such as the specific fixture E.P.A., effective projected area, number of fixtures per specified light pole for your project.

For moment calculations on your specific project please contact us via email or telephone, info@cecopoles.ca and at 403 279 0530.

Installation Procedure for Anchor Rods:

- 1). Prepare footing area as required by local code.
- 2). Apply steel template in accordance to the anchor rod template illustration provided.
- 3). Install anchor rods with flatwasher and nut to accommodate the projection illustrated in your provided anchor rod template.
- 4). CECO POLES & STRUCTURES light standards are designed for this method of installation. All other methods of light standard installation must be approved by CECO POLES & STRUCTURES INC..



Anchor Rod Layout

ie: Configuration for CE 438SD, traditional foundation. If mounting to a safety base please contact safety base manufacturer or Ceco Poles for additional info.

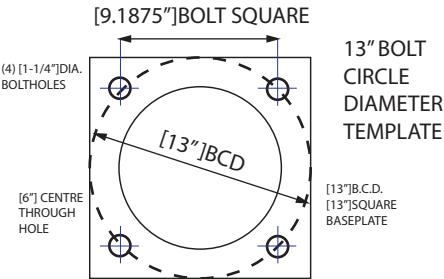
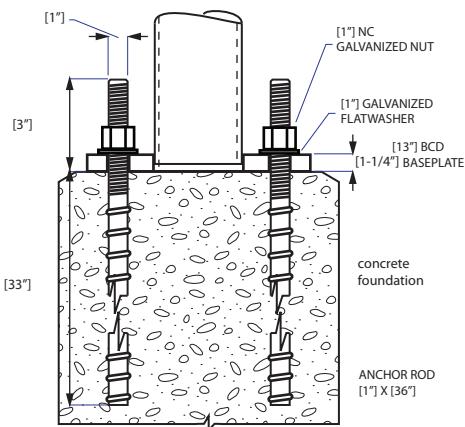


Figure 02 oct

REMEMBER, AS INSTALLER OF THIS LIGHT STANDARD:
Recheck the torque of the anchor bolts as the nut connections may loosen slightly after the pole has been subjected to wind loading.

1" UNC 8tpi plain - dry condition sae j429 Gr.2 125 Ft. Lb

Glossary

Bolt Circle Diameter, B.C.D.

When measuring an array of bolt holes located on a given diameter where each bolt hole is equally distant from centre of the circle generating a diameter.

Anchor Rod/ Anchor Bolt, A/R

A structural bolt made from temper-quenched steel or high-tensile strength re-bar of a determined length with a national coarse thread for a nut application. This item is coated in hot zinc, H.D.G or hot dipped galvanize.

Base Template

A 14 gage laser cut pattern matching the specific bolt circle diameter for your project, and used to properly space and set (4) anchor rods into the rebar cage where concrete will be poured to achieve a level footing with properly projecting anchor rods as well as a conduit run to bring power up to the pre-determined light standard.

Projection

The defined distance of threaded anchor rod exposed out of the concrete to properly receive the pre-determined light standard.

Levelling Shim

A 3mm thick u-shaped steel plate specifically designed to straddle the anchor rod diameter and used between the bottom of the pole baseplate and top of the concrete footing when installing and levelling the pole. *note: Any gap present beyond 3mm between bottom of baseplate to the top of the concrete footing must be grouted. Do not apply more than one levelling shim per corner.

APPENDIX A.

This glossary functions as an example of common terminology used in the installation of structural items in or part of a construction site. For any clarification on terms or symbols used on this installation guide call 403 279 0530 for technical assistance or write to info@cecopoles.ca.

APPENDIX B.

Bolt torque provides only an indirect approximation of material stress. It is estimated that only about 10% of the tightening torque actually results in useful bolt tensioning. A common rule-of-thumb is to provide a minimum length of thread engagement equal to the diameter of the anchor. A more conservative rule-of-thumb is to use a thread engagement length of 1-1/2 times the diameter.

MODEL	SECTION/ MATERIAL	OVERTURNING MOMENT & MAX ALLOWABLE E.P.A.	SHEAR
CE 5012SD	10.25" X .188" X 50"	50 kN m/ 5 sq.ft.	16 kN
CE 5012DD	10.25" X .188" X 50"	68 kN m/ 5 sq.ft.	25 kN

The AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) identify Special Wind Regions that suggest that classic regional wind values may need to be increased when considering the pole geometry for your specific project. Flat open terrain, foothills and mountain passes where a funnel effect may be created, would all be considered Special Wind Regions.

P4

(3mm & 5mm) octagonal tapered single & double davit steel

CECO POLES & STRUCTURES INC. is not responsible for site preparation & footings. The information here below provides general guidelines for data in calculating a proper footing size considering variables such as the specific fixture E.P.A., effective projected area, number of fixtures per specified light pole for your project.

For moment calculations on your specific project please contact us via email or telephone, info@cecopoles.ca and at 403 279 0530.

Installation Procedure for Anchor Rods:

- 1). Prepare footing area as required by local code.
- 2). Apply steel template in accordance to the anchor rod template illustration provided.
- 3). Install anchor rods with flatwasher and nut to accommodate the projection illustrated in your provided anchor rod template.
- 4). CECO POLES & STRUCTURES light standards are designed for this method of installation. All other methods of light standard installation must be approved by CECO POLES & STRUCTURES INC..

Anchor Rod Layout

ie: Configuration for CE 5012SD, traditional foundation. If mounting to a safety base please contact safety base manufacturer or Ceco Poles for additional info.

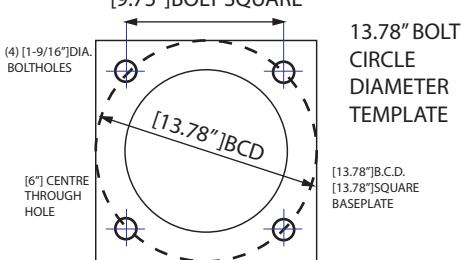
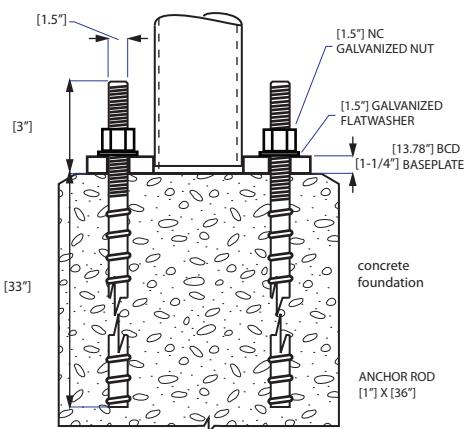
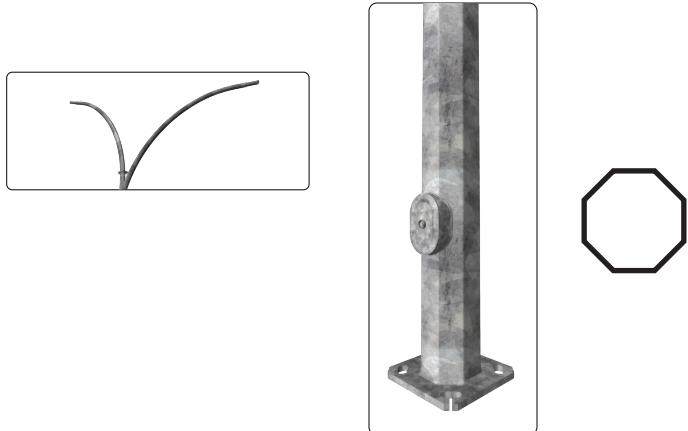


Figure 03 oct

REMEMBER, AS INSTALLER OF THIS LIGHT STANDARD:
Recheck the torque of the anchor bolts as the nut connections may loosen slightly after the pole has been subjected to wind loading.

1.5" UNC 6tpi plain - dry condition sae j429 Gr.2 435 Ft. Lb



Glossary

Bolt Circle Diameter, B.C.D.

When measuring an array of bolt holes located on a given diameter where each bolt hole is equally distant from centre of the circle generating a diameter.

Anchor Rod/ Anchor Bolt, A/R

A structural bolt made from temper-quenched steel or high-tensile strength re-bar of a determined length with a national coarse thread for a nut application. This item is coated in hot zinc, H.D.G or hot dipped galvanize.

Base Template

A 14 gage laser cut pattern matching the specific bolt circle diameter for your project, and used to properly space and set (4) anchor rods into the rebar cage where concrete will be poured to achieve a level footing with properly projecting anchor rods as well as a conduit run to bring power up to the pre-determined light standard.

Projection

The defined distance of threaded anchor rod exposed out of the concrete to properly receive the pre-determined light standard.

Levelling Shim

A 3mm thick u-shaped steel plate specifically designed to straddle the anchor rod diameter and used between the bottom of the pole baseplate and top of the concrete footing when installing and levelling the pole. *note: Any gap present beyond 3mm between bottom of baseplate to the top of the concrete footing must be grouted. Do not apply more than one levelling shim per corner.

APPENDIX A.

This glossary functions as an example of common terminology used in the installation of structural items in or part of a construction site. For any clarification on terms or symbols used on this installation guide call 403 279 0530 for technical assistance or write to info@cecopoles.ca.

APPENDIX B.

Bolt torque provides only an indirect approximation of material stress. It is estimated that only about 10% of the tightening torque actually results in useful bolt tensioning. A common rule-of-thumb is to provide a minimum length of thread engagement equal to the diameter of the anchor. A more conservative rule-of-thumb is to use a thread engagement length of 1-1/2 times the diameter.