SPARTAN SPORTS LIGHTING

SPUN CONCRETE POLE

At the heart of the Spartan Sports Lighting Assembly is a prestressed, spun concrete pole, providing a clean look that is easy to install and requires zero maintenance.

Manufactured by StressCrete®, this highly durable, lifetime warrantied solution delivers superior quality for decades of athletes, spectators, and families to enjoy.

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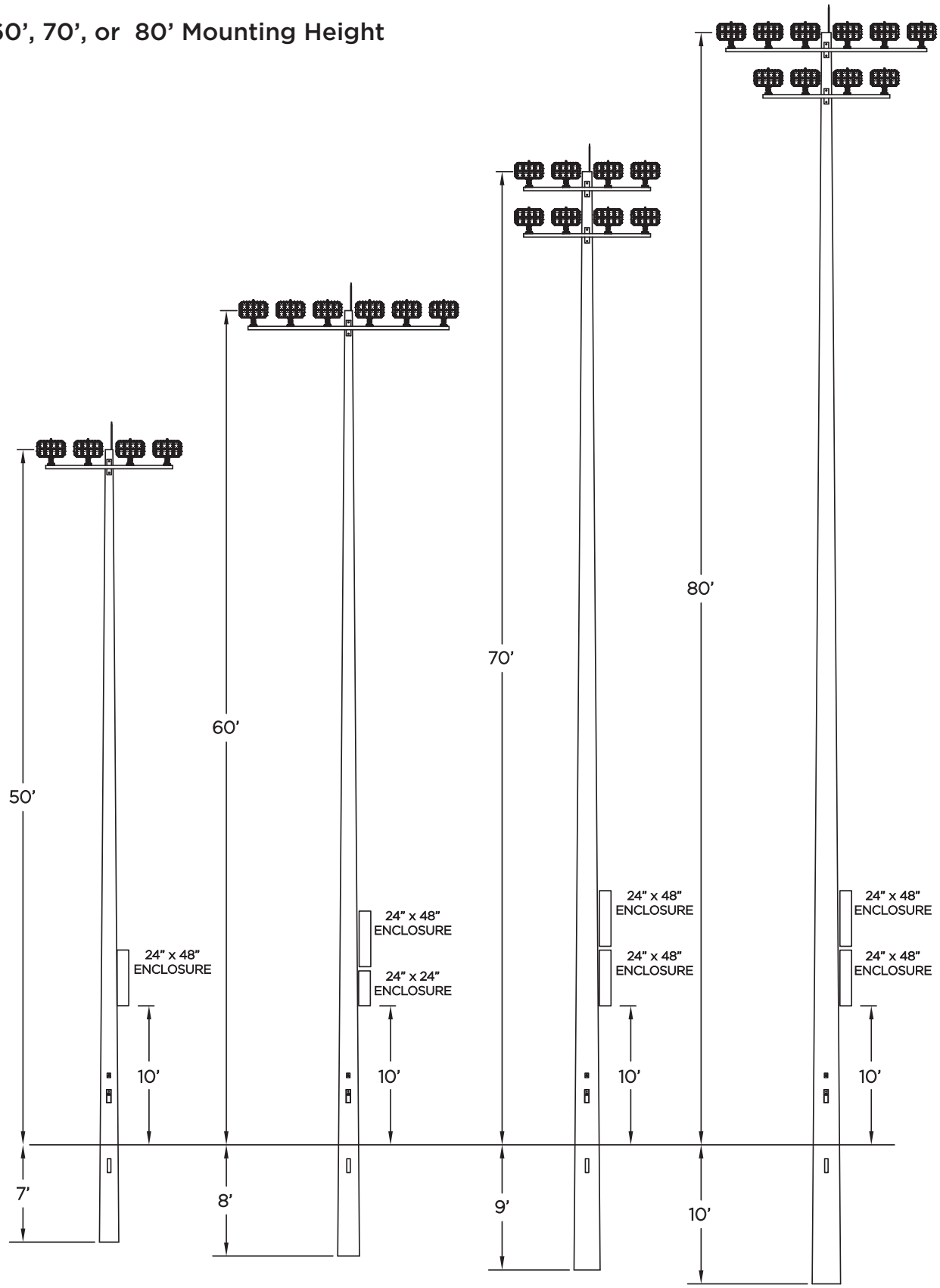
LIMITED LIFETIME WARRANTY

PRODUCT FEATURES

- Direct buried embedment for quick, easy, and cost-effective installation
- Raceway used to conceal wiring harnesses
- Mounting heights available up to 100 feet
- Zero maintenance
- Does not lose strength over time
- Resistant to:
  - Fatigue Cracking
  - Corrosion and Rot
  - Extreme Weather Events
- Adheres to CSA, ANSI, AASHTO, and ASTM Standards
- Lifetime Warranty

RECOMMENDED CONFIGURATIONS

50’, 60’, 70’, or 80’ Mounting Height



Note: Above information details represents our standard pole options.
Other heights and strengths are available at **SpartanSL.com** under “**Resources**” or by contacting Spartan Sports lighting.

TECHNICAL DATA

Note: The following chart represents our standard pole options. Other heights and strengths are available at **SpartanSL.com** under "**Resources**" or by contacting Spartan Sports lighting.

Pole Catalog Number	Overall Pole Length (ft.) *	Pole Tip Diameter (Inches)	Pole Butt Diameter (Inches)	Nominal Pole Weight (lbs.)	Maximum EPA (sq. ft.)							Maximum Weight of Attachments
					90 mph	100 mph	110 mph	120 mph	130 mph	140 mph	150 mph	
50' Mounting Height *												
E-570-DPR-G	57' 0"	6.5	16.76	5318	27	21	16	12	9	7	5	600
E-570-EPR-G	57' 0"	6.5	16.76	5372	37	29	23	18	14	11	9	600
E-570-FPR-G	57' 0"	6.5	16.76	5414	50	39	31	25	20	16	13	600
E-570-GPR-G	57' 0"	8.25	18.51	6801	65	51	41	33	26	21	17	600
E-570-HPR-G	57' 0"	8.25	18.51	6847	83	65	52	42	35	29	24	600
E-570-JPR-G	57' 0"	8.25	18.51	6934	103	82	66	54	44	37	31	600
60' Mounting Height *												
E-680-DPR-G	68' 0"	6.5	18.74	7044	23	17	13	9	6	4	2	1000
E-680-EPR-G	68' 0"	6.5	18.74	7123	33	25	19	15	11	8	6	1000
E-680-FPR-G	68' 0"	6.5	18.74	7164	44	34	27	21	17	13	10	1000
E-680-GPR-G	68' 0"	8.25	20.49	8873	59	46	36	28	22	17	14	1000
E-680-HPR-G	68' 0"	8.25	20.49	8943	76	60	47	38	30	24	20	1000
E-680-JPR-G	68' 0"	8.25	20.49	9060	96	75	60	49	40	32	27	1000
E-680-KPR-G	68' 0"	9.5	21.74	10236	117	92	74	60	49	40	33	1000
70' Mounting Height *												
E-790-GPR-G	79' 0"	8.25	22.47	11190	54	41	32	24	18	14	10	1200
E-790-HPR-G	79' 0"	8.25	22.47	11288	70	54	42	33	26	20	16	1200
E-790-JPR-G	79' 0"	8.25	22.47	11429	89	69	55	44	35	28	23	1200
E-790-KPR-G	79' 0"	9.5	23.72	12811	110	86	68	55	44	36	29	1200
E-790-LPR-G	79' 0"	9.5	23.72	12961	133	105	84	68	55	45	37	1200
E-790-MPR-G	79' 0"	11.25	25.47	14579	159	126	101	82	68	56	47	1200
E-790-NPR-G	79' 0"	13	27.22	16124	186	147	118	95	78	65	54	1200
80' Mounting Height *												
E-900-GPR-G	90' 0"	8.25	24.45	13753	49	37	27	20	14	10	6	1200
E-900-HPR-G	90' 0"	8.25	24.45	13876	65	49	38	29	22	17	12	1200
E-900-JPR-G	90' 0"	8.25	24.45	14044	83	64	50	39	31	24	19	1200
E-900-KPR-G	90' 0"	9.5	25.7	15637	103	80	62	49	39	31	25	1200
E-900-LPR-G	90' 0"	9.5	25.7	15811	125	98	78	62	50	40	33	1200
E-900-MPR-G	90' 0"	11.25	27.45	17677	150	117	93	75	60	49	40	1200
E-900-NPR-G	90' 0"	13	29.2	19430	176	138	110	88	72	59	48	1200

* Poles are generally buried 10% of the mounting height plus 2 ft. in good soil conditions. For medium to poor soil conditions, embedment depths are assumed at 10% of the mounting height plus 4 ft.; however, it is recommended that, in locations with high pole loadings/poor soil conditions, a structural engineer determines adequate bearing strength. Please contact Spartan Sports Lighting for additional information. Footings are dependent upon soil strengths and must be sized to withstand the applied pole loadings.

HOW TO ORDER

Footing
E - Direct Embedment

Strength
C - Class C
D - Class D
E - Class E
F - Class F
G - Class G
H - Class H
J - Class J
K - Class K
L - Class L
M - Class M
N - Class N

Cross Section
R - Round

Finish
M00 - Mold Finish
** Other finish options available upon request

Spartan Cross Arm
See Cross Arm Spec Sheet for details

E - [ ] - [ ] P R - G - M00 - C/W - [ ] - [ ]

Pole Length*
460 - 46'
570 - 57'
680 - 68'
700 - 70'
790 - 79'
810 - 81'
900 - 90'
920 - 92'

Prestressed
P - Prestressed Concrete Pole

Grounding
G - Provision for Electrical Grounding

Complete With
To be supplied by Spartan Sports Lighting

Additional Options
LS - Lightning Protection System
PS - Pole Steps
CC - Climbing Cables
QS - Quick Stop

* Pole Length = Mounting Height + Burial Depth
** Other pole lengths available upon request

CERTIFICATION, DESIGN, MATERIALS & MANUFACTURING SPECIFICATIONS

Certifications

These specifications apply to the manufacture of centrifugally spun, prestressed, reinforced concrete poles by StressCrete. This method of manufacturing ensures a minimum compression of concrete, resulting in unsurpassed durability. The manufacturer shall have a minimum of 60 years experience in the design and production of spun concrete poles, and meet the following standards and specifications:

1. The manufacturing company shall be certified by Canadian Standards Association (CSA) to CSAA14 (latest revision).
2. Poles shall be designed to AASHTO-LTS (latest revision) to withstand a 3 second gust wind speed that is determined by geographical area utilizing the AASHTO wind map and by a licensed engineer.
3. Poles shall be designed/manufactured in accordance with:
    a. CSA-A14: Concrete Poles (latest revision)
    b. ASTM-C1089: Standard Specification for Spun Cast Prestressed Concrete Poles (latest revision)

Design

1. Poles shall be designed and constructed with all wiring and grounding concealed within the pole. Any apertures such as handholes, couplings, wiring apertures, etc. shall be cast into the pole during the manufacturing process.
2. All cable entry holes to follow approval drawings and be free from sharp edges for passage of electrical wiring.
    a. 3" x 12" or 4" x 10" conduit opening centered below grade (or as specified).
    b. A 3.5" x 10.5" high density, cast, zinc handhole frame with a flush zinc cover (location as specified).
    c. Wiring aperture for a pre-wired cross arm to be suitable for the diameter of the pole and dependant on the driver location within the assembly design.
    d. Poles to be grounded by #6 stranded copper wire.
3. All poles shall be provided with a fish wire to facilitate cable installation.

Materials

1. Concrete
    a. 28-day compressive strength of 9,500 psi.
    b. TYPE I or TYPE I0 as per ASTM-C150.
    c. Minimum ¾" concrete coverage between reinforcing steel and pole surfaces.
    d. Water reducers, retarders, or accelerating admixtures shall conform to ASTM-C494. Air entrainment and efflorescence control shall also be used.
2. Internal Caging
    a. Deformed Reinforcing Steel- Grade 75 rebar as per ASTM-A615 and CSA G30.12.
    b. Prestressing Steel- Uncoated to ½" 270 k.s.i.-7-wire, stress relieved strand as per ASTM-A416 and CSA G279.
    c. Spiral Reinforcement- Conform to ASTM-B240 and not be less than either 0.128" or 0.148" diameter (depending on the class).

Manufacturing

1. Prestressing steel reinforcement to be stressed to a maximum of 70% ultimate capacity.
2. Molds to be spun 300-350 rpm for 6-15 minutes.
3. Poles manufactured to have a continuous taper of 0.18" per foot of length.
4. A concrete cylinder test shall be performed for each 100 cubic yards of concrete poured.

WARRANTY

Spartan Sports Lighting provides a limited Lifetime Warranty for its spun concrete sports lighting poles to be free of defects in materials and workmanship. This warranty is not transferable and is applicable only to the original purchaser. For full warranty details, please see the Spartan Sports Lighting Pole Warranty document.