

**ANCHOR BOLTS**

Anchor Bolts are fabricated from carbon steel bar conforming to AASHTO M314 Grade-55 or ASTM F1554 Grade-55. Bolts have an "L" bend on one end and are galvanized a minimum of 12 inches on the threaded end. Either three (DS200) or four (DS202) anchor bolts are provided per pole. Each anchor bolt is furnished with two hex nuts and two flat washers.

**POLE SHAFT**

The pole shaft conforms to ASTM A595 Grade-A and is supplied in 11 gauge (0.1196") thickness. The pole is of one-piece construction with a full length longitudinal high frequency electric resistance weld and is round in cross-section having a uniform taper of approximately 0.14 inches per foot of length.

**POLE TOP**

The pole top is held to a 3" O.D. ( $\pm 0.13"$ ) for an external luminaire or bracket slip fit requirement. For internal slip fit requirements, please consult the factory before ordering.

**ANCHOR BASE (DS200 ONLY)**

The anchor base (base plate) is provided on the DS200 series only. It is fabricated from structural quality hot rolled carbon steel plate conforming to ASTM A36. The base plate telescopes the pole shaft and is circumferentially welded top and bottom. Please refer to the charted bolt circle and detail drawing for information regarding bolt hole accommodations.

**HANDHOLE (DS200 ONLY)**

A reinforcing handhole rim is provided on the DS200 series only and is made of a rectangular shaped tubing material with a nominal 3" x 5" opening. It is provided with a steel attachment bar, steel cover, and one round head machine screw. The handhole is welded in the pole shaft and is located 1'-6" above the base.

**ELECTRICAL GROUND (DS200 ONLY)**

A nut holder is provided near the handhole and includes a 0.5"-13 UNC hex head bolt and nut.

**UNDERGROUND WIRING ACCESS (DS201 ONLY)**

A 1" diameter hole is provided in the pole shaft for wiring access on the DS201 series only. The hole is located 2'-6" below the ground line.

**PEDESTAL BASE (DS202 ONLY)**

The pedestal base is provided on the DS202 series only. It is fabricated from structural quality hot rolled carbon steel plate conforming to ASTM A36. The pedestal base is circumferentially butt welded to the pole shaft and is provided complete with two access doors.

**ELECTRICAL GROUND (DS202 ONLY)**

A nut holder is provided inside the pedestal base and includes a 0.5"-13 UNC hex head bolt and nut.

**STANDARD FINISH**

Standard finishes available are galvanized, prime coat (powder), and finish coat (powder). For information regarding the scope and application of these coatings please refer to page 5.

**FASTENING HARDWARE**

All structural fasteners are galvanized high strength carbon steel. All other fasteners are galvanized or zinc plated carbon steel or stainless steel.

**DESIGN**

The standards shown in this section are designed to withstand dead loads and theoretical dynamic loads developed by variable wind speeds, as charted, with an appropriate gust factor under the following conditions:

The luminaire(s) and/or mounting bracket(s) center of gravity, or centroid, is assumed to be located a maximum of 2'-0" above the pole top. For purposes of design, effective projected area (EPA) is considered to be the product of the actual projected area and the drag coefficient.

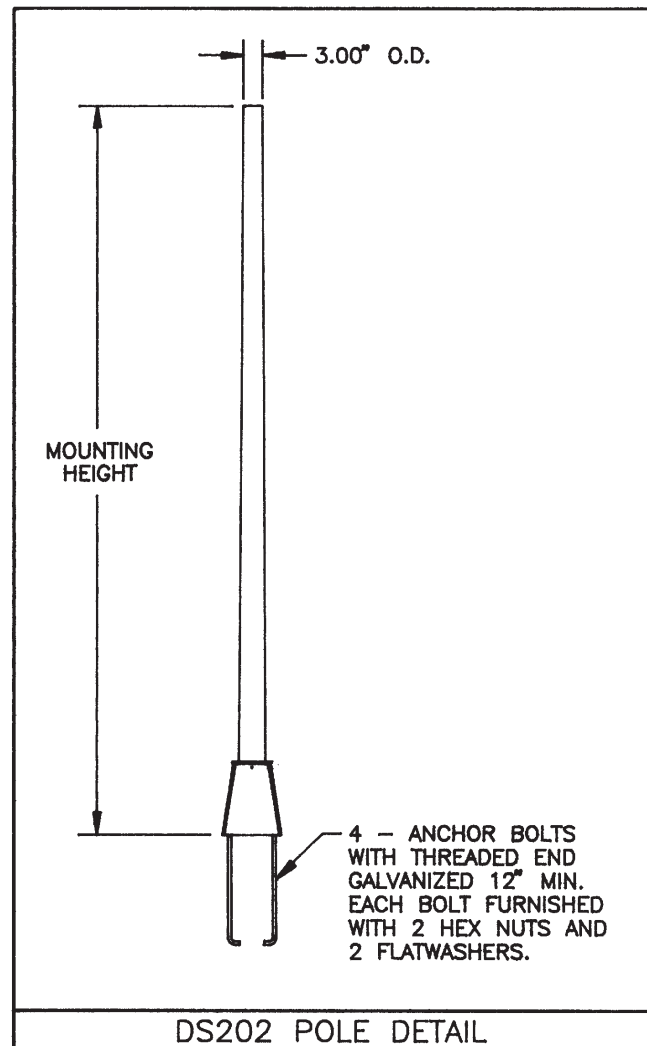
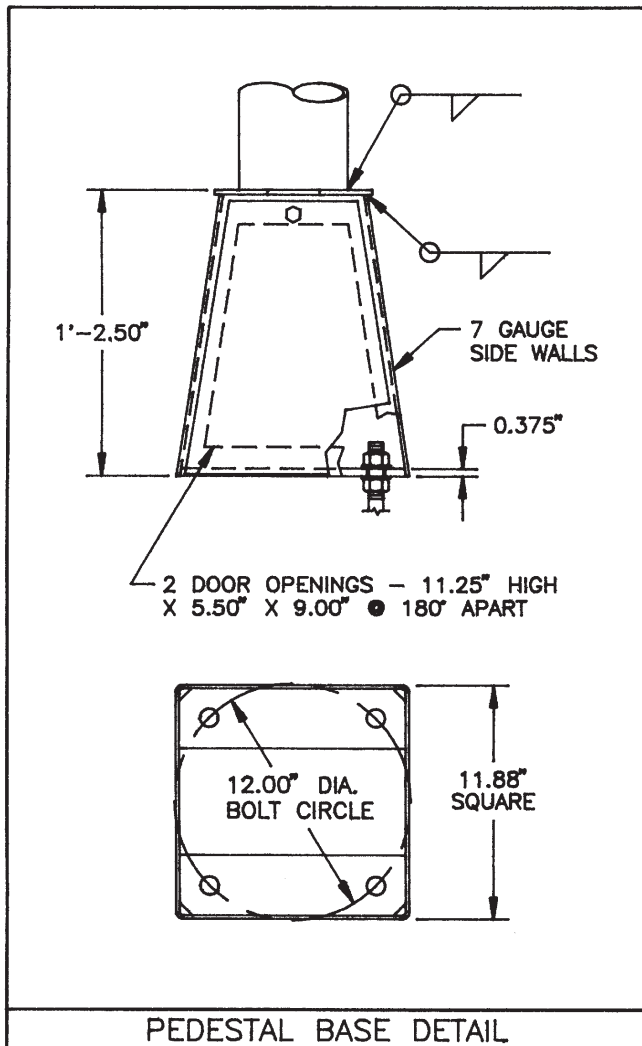
The wind velocities are based on 10 mph increments from 80 mph through 100 mph (reference wind map). Standards to be located in areas of known abnormal conditions may require special consideration. For example: coastal areas, airports, and areas of special winds such as the Chinook type along the eastern slope of the Rocky Mountains.

Standards are designed for ground mounted applications. Standards mounted on structures, such as bridges and buildings, may also necessitate special consideration requiring Valmont's recommendation.

The embedded depth for the DS201 Series was designed using a minimum soil bearing pressure of 2000 psf.

Height correction factors and drag coefficients are applied to the entire structure. An appropriate safety factor is maintained based on the minimum yield strength of the material incorporated in the standard.

Valmont Industries, Inc. reserves the right to install various, engineer approved, material hanging accommodations to facilitate the manufacturing process. If this method is not acceptable, Valmont Industries, Inc. must be notified by the customer prior to manufacturing.



Nominal Mounting Height (ft)	Shaft				80 MPH w/ 1.3 Gust	90MPH w/ 1.3 Gust	100 MPH w/ 1.3 Gust
	Designation Number	Base O.D. (in)	Wall Thk. (ga)	Struct. Weight (lbs)	Max. EPA (ft <sup>2</sup> )	Max. EPA (ft <sup>2</sup> )	Max EPA (ft <sup>2</sup> )
10	426A090	4.26	11	75	26.7	20.9	15.8
12	454A110	4.54	11	85	25.4	19.8	15.8
14	482A130	4.82	11	100	23.7	18.4	14.7
16	510A150	5.10	11	115	22.4	17.3	13.8
18	538A170	5.38	11	130	21.3	16.4	13.1
20	566A190	5.66	11	140	18.9	14.6	11.6

**DS202 NOTES:**

1. All designs utilize 0.75" x 17" x 3" anchor bolts.
2. Structure weight is a nominal value which includes the pole shaft and pedestal base only.
3. Pole pedestal base is the same for all designs. See detail drawing for information
4. Maximum fixture weight for all designs is 125 lbs.
5. Maximum weight and EPA values are based on top mounted luminaires and/or brackets having a centroid 2'-0" above the nominal mounting height.