



RAPID RESPONSE

Engineered Class Poles
Including Steel SWR, SW, V-Series

Expanded Standard Poles:
Structure designs to 140' heights
and 20,000 lbs. tip load

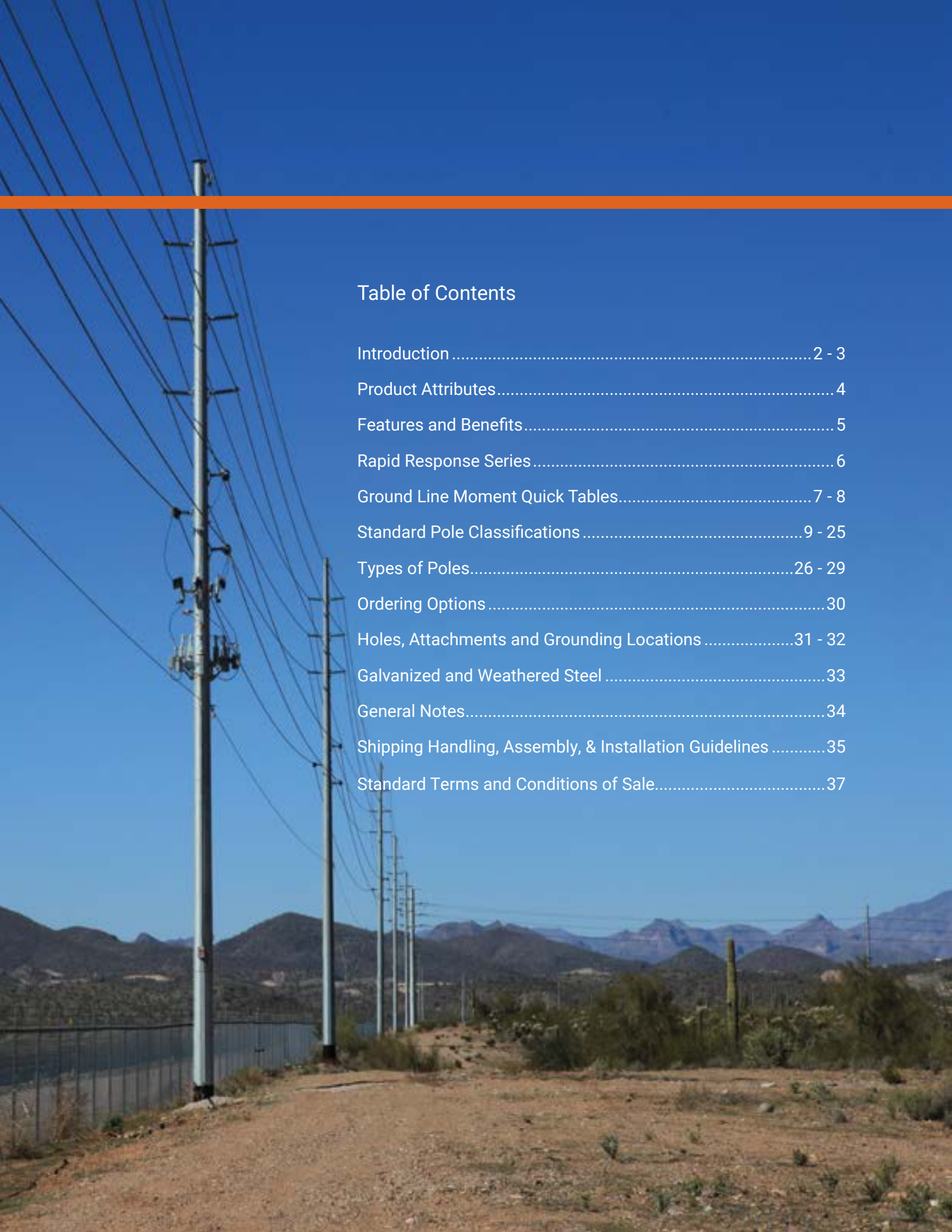


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Why Valmont Utility?

As the need for wood alternative poles increases, now more than ever is the time to switch to Valmont Utility steel, concrete and hybrid poles.

Recognized as an industry leader for quality and reliability, Valmont has been supplying utility structures since the 1970's. Dependable structures are a priority and we utilize a proprietary design software, developed in-house and based on extensive testing, for all of our structural designs. We take great care in each step of the design and manufacturing process to ensure that our customers receive the highest quality product and on time delivery.

By sharing manufacturing and engineering practices across our global network, we are better able to leverage our existing products, facilities and processes. As a result, we are the only company in the industry that provides a comprehensive product selection from a single source.





**Valmont—Your one source
for Steel, Concrete and Hybrid
Power Delivery Structures.**

**Look to Valmont for a complete product line and
the expertise to engineer, manufacture and deliver
the right pole to the right place at the right time.**




Valmont knows your power delivery structure needs may not be as easy as specifying one type of pole for the entire project. Terrain, environment and soil conditions are all factors when determining the structure that best fits the need. As the nation's premier provider of spun concrete, tubular steel and hybrid poles, we provide single-source access to a diverse product portfolio. Now you can easily customize line segments with site specific poles, enhancing economics and total line integrity. Valmont Utility will help you choose the most efficient structures to deliver power to your customers.

Valmont, one of the largest suppliers of steel and concrete poles in the world, is a proven leader you can rely on for transmission and distribution poles. Take confidence by hardening your system when you use Valmont Utility poles that increase system reliability:

- Consistent strength
- Uniform dimensions
- Lower lifetime costs
- Light weight
- Reduced installation costs
- Environmentally safe
- Lower maintenance costs
- Fire resistant
- Available stock
- Lower inspection costs
- Coating options - galvanized and weathering
- Custom design self-support

Product Attributes

Product Attributes	Steel	Concrete	Hybrid	Wood	Lam Wood	Fiberglass
Engineered Product	+	+	+	×	+	+
Short Delivery Schedule	+	+	+	+	+	+
Light Weight, Ease of Handling	+	!	!	×	×	+
Factory Drilled and Field Drilled	+	+	+	+	+	+
Ability to Climb	+	+	+	+	+	+
Construction Maintenance (pole shrinkage)	+	+	+	×	×	+
Catastrophic Failures	+	+	+	×	!	!
Fire Resistance	+	+	+	×	×	×
Ground line Protection Required	!	+	+	!	!	!
Not Subject to Deterioration by:						
Fungi	+	+	+	×	×	+
Rot	+	+	+	×	×	+
Insects	+	+	+	×	×	+
Woodpeckers	+	+	+	×	×	+
UV	+	+	+	+	+	!
Impact Resistant	+	+	+	!	!	!
Inspection	!	!	!	!	!	!
Environmental Concerns (Handling, Disposal)	+	+	+	!	!	!
Sustainable Product Cycle	+	+	+	!	!	!
Low Life Cycle Cost	+	+	+	×	×	!

-  High performance expectations to specifications
-  Medium performance expectations to specifications
-  Low performance expectations to specifications

Engineered Product

- Rapid Response Class poles (Steel, Concrete and Hybrid) are designed to **ASCE** and **NESC Standards**.
- Fabrication and quality meet or exceed **AWS** and **ASTM Standards**.
- Uniform size, taper and repetitive pole design characteristics promote efficient manufacturing processes.

Delivery Schedule

- Industry leading turnaround times are supported by onsite inventories of steel coil and concrete batch materials at our numerous dedicated steel and concrete utility sites.
- A supply of concrete and steel finished shafts promote **rapid response** to emergency situations.

Ease of Handling

- Steel poles are at least 50 percent lighter than wood for **lower transportation, handling, and construction costs**.
- The Valmont Utility Hybrid pole reduces the overall weight of the structure by utilizing a steel pole on top of a direct bury concrete pole.

Factory Pre-Drilled and Field Drilled

- Pre-drilled concrete and steel poles result in **less crew time** preparing poles for installation.
- Steel poles offer **Knockout™ holes** that eliminate field drilling operations and pole whistle by utilizing only the holes required for that installation.
- Both concrete and steel poles can be drilled and modified in the field.

Climbing

- Steel and Concrete poles can easily be climbed by adding optional climbing attachments such as ladders or steps to the poles.

Maintenance

- Valmont Utility Poles offer a **low maintenance** alternative to wood.
- **Eliminates the need for excessive retightening** of hardware due to pole shrinkage.
- **No expensive inspection and toxic treatment** programs are necessary for steel or concrete pole applications.

Catastrophic Failures

- Concrete and steel poles are less subject to cascading type failures from a single downed pole than wood poles due to the consistent and predictable strength attributed to those products.

Fire Resistance

- Valmont Utility product offerings are fire resistant and **reduce the liability** associated with ground and pole top fires, providing greater reliability.

Ground line Protection

- Our **concrete poles require no additional ground**

line protection while our steel product offers options to **enhance service life** of poles.

- Below grade protection needs to be determined by the utility as it depends on different factors such as soil drainage and soil corrosion potential characteristics.
- The use of galvanization, ground sleeves and 100% solid polyurethane coating have proven to be an effective deterrent against corrosion.

Material Deterioration Solution

- Steel and concrete poles offer a valuable alternative by **mitigating pole performance issues** caused by timber rot and fungi growth, decay by insect damage, material loss due to woodpeckers and damage due to ultraviolet exposure.
- Concrete poles are also an effective solution to most all corrosion conditions and high moisture content service applications.

Impact Resistant

- Concrete and steel poles offer exceptional resilience to surface impacts from minor handling and transportation damage to extreme events such as vehicle strike incidents.
- **The failure mode** of concrete and steel materials is different than wood or fiberglass in that the material yields and deforms in shape while typically **remaining upright and in service**.

Inspection

- Concrete and steel poles offer the value of **less invasive inspection techniques** and are more focused on surface conditions. Advanced inspection techniques exist for below grade inspection and time lapse material monitoring systems.

Environmental Concerns

- Steel and concrete poles contain **no harmful preservative treatment chemicals** to maintain their strength and extended service performance benefitting the users of poles in construction and the public domain which may have interaction with poles.

Sustainable Product Cycle

- Steel poles are non-toxic and 75-100 percent **recycled steel content** at manufacture. They pose no disposable issues and offer a long term solution for regulatory pressures to buy recycled and recyclable materials.
- Steel poles can be re-purposed within their service life and are **recyclable at the end of service life**.

Low Life Cycle Costs

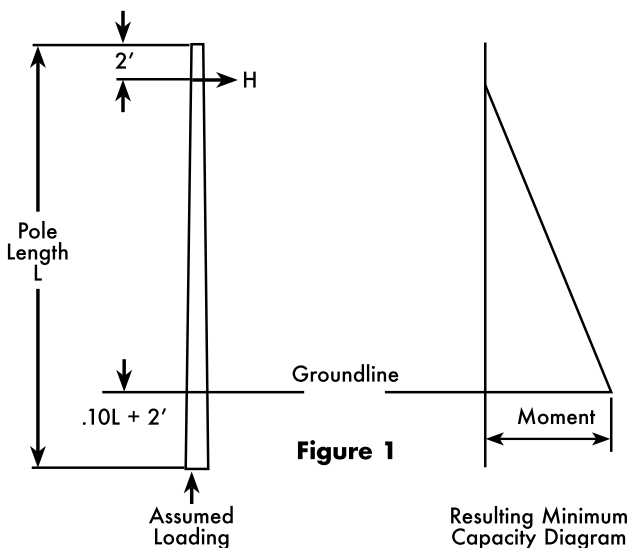
- The **life expectancy of concrete and steel poles is two to three times that of wood**, providing a cost avoidance associated with future installation, maintenance and troubleshooting over the life of the structure.

Design of the Valmont Utility's Rapid Response Series (SW / SWR and D-pole)

The two main factors governing the selection of Rapid Response Series shaft sections are the length of the pole and the groundline moment capacity. The Series is cataloged based on these parameters.

Two major definitions have been made that dictate the shape of the minimum moment capacity diagram for each pole.

Referring to Figure 1, these definitions are:



- The poles are embedded a depth of 0.10 x pole length plus two (2) feet.
- Moment is developed by a single horizontal force (H) applied at two (2) feet from the top of the pole, resulting in a linear minimum moment capacity curve throughout the above ground portion of the pole.

Both of these definitions are in line with common wood pole design practices and make the Rapid Response Series poles comparable to wood poles in that respect. By defining a specific minimum capacity curve, each designer can determine what the minimum capacity of the shaft is at any point along the pole. This may be necessary if a large moment is applied near the top of the pole or if it is necessary to use an embedment depth of something greater than 0.10 x total length + two (2) feet.

It is not intended to imply that the assumed embedment depth will be adequate for all poles. It may be necessary to use greater embedment for some applications. It is the purchaser's responsibility to determine the embedment depths needed for each particular project.

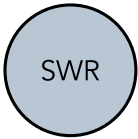
Based on the above loading definitions, sided and round shaft sections have been determined so that stresses meet ASCE "Design of Steel Transmission Pole Structures" allowable stresses OVER THE ENTIRE LENGTH OF THE POLE.

Two methods are available for selecting Valmont's Rapid Response series poles:

- Valmont Utility's preparatory pole design software (IMPAX) and other commercial software systems are capable of selecting the optimum Rapid Response pole.
- Valmont's Rapid Response Series poles can be selected on the basis of user-calculated groundline moments or ultimate horizontal load. This would use the poles more efficiently than simply assuming wood pole/steel pole equivalents.

In the tables on pages 9 - 21 an "APPROXIMATE WOOD POLE EQUIVALENT" is noted for a given steel pole (this is for reference only!). The groundline moment has been calculated by multiplying the horizontal load required by ANSI 05.1 - for each wood pole class - by the ratio: 2.5/3.846. This ratio (0.65) accounts for the differences in overload factors required by the NESC Code for Grade 'B' construction for wind only loading. Thus, a steel pole with a groundline capacity of 260 ft-kips is equivalent to a wood pole rated at 400 ft-kips. Other conditions, such as differing grades of construction, line angles, extreme wind loadings, etc., may dictate different "EQUIVALENTS."

The Ultimate Moment Capacity values indicated in the following class charts are moment capacities based on the materials' yield strength and the cross-sectional properties at the assumed groundline only. Moments over the entire pole length should be checked.



Valmont Utility offers SWR and SW Steel poles that closely match standard wood pole classifications. Standard poles are designed in accordance with ASCE/SEI 48-11 with ground line moment design capacities in relation to wood poles per NESC Grade B construction. The tables provided are intended to be a QUICK REFERENCE to GLMs across heights to identify the appropriate class pole for a project design. For additional information on dimensional sizes, weights, etc. to a chosen class pole, review the detail page to the class.

VALMONT UTILITY SWR CLASS (Round Series)							
	C5	C4	C3	C2	C1	H1	H2
Tip Load (lbs)	1,235	1,560	1,950	2,405	2,925	3,510	4,160
Height (ft)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)
30	28	36	48	60	76	93	114
35	34	42	57	71	88	107	130
40	40	50	66	83	102	123	148
45	46	58	74	92	114	137	164
50	52	65	84	103	129	153	184
55	----	----	90	110	137	161	192
60	----	----	100	122	152	179	212
65	----	----	111	134	166	197	232
70	----	----	121	146	180	216	251
75	----	----	133	159	195	236	270
80	----	----	145	173	211	254	289
85	----	----	157	187	227	272	310
90	----	----	170	201	244	291	351
95	----	----	197	257	261	311	378

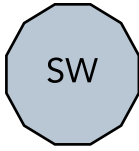
CLASS	PAGE
C5	9
C4	9
C3	9
C2	10
C1	11
H1	12
H2	13
H3	14
H4	15
H5	16
H6	17
H7	18
H8	19
H9	20
H10	21
V13	22
V14	22
V15	23
V16	23
V17	24
V18	24
V19	25
V20	25

Valmont Utility offers SWR and SW Steel poles that closely match the RUS Bulletin 1724E-214 Guide Specification for Standard Class Steel Transmission Poles. The tables provided are intended to be a QUICK REFERENCE to the Valmont Utility class poles compared to the RUS class designations.

RUS Tip Load (Lbs.)	12000	11000	10000	9000	8000	7410	6500
RUS Standard 1724E-214	S-12.0	S-11.0	S-10.0	S-09.0	S-08.0	S-07.4	S-06.5
Valmont Standard Class	H10	H10	H9	H8	H7	H6	H5

RUS Tip Load (Lbs.)	5655	4875	4160	3510	2925	2405	1950
RUS Standard 1724E-214	S-05.7	S-04.9	S-04.2	S-03.5	S-02.9	S-02.4	S-02.0
Valmont Standard Class	H4	H3	H2	H1	C1	C2	C3

Ground Line Moment Quick Tables

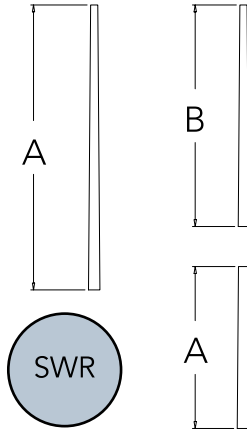


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VALMONT UTILITY SW CLASS (12-Sided Series)												
	C2	C1	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10
Tip Load (lbs)	2,405	2,925	3,510	4,160	4,876	5,656	6,500	7,410	8,386	9,426	10,660	12,000
Height (ft)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)
30	71	96	120	138	167	185	207	249	285	317	358	404
35	80	106	132	151	182	200	225	268	307	341	386	436
40	88	116	143	164	197	215	243	286	329	365	413	469
45	98	126	156	179	214	231	263	307	353	391	443	503
50	108	137	168	194	232	248	283	328	378	418	473	539
55	118	149	182	209	250	266	304	350	404	446	504	577
60-J	121	153	187	215	258	316	364	417	484	520	589	677
65	132	165	201	231	277	338	390	444	516	553	627	721
70	143	177	215	248	297	360	417	471	548	587	665	767
75	155	191	231	266	317	383	444	499	582	623	705	815
80	168	204	246	284	338	406	472	528	617	659	746	864
85	180	218	263	303	360	430	502	558	651	696	788	914
90	194	233	279	322	383	455	532	589	678	735	831	965
95	207	248	297	342	406	481	563	620	705	774	876	1,005
100	222	263	314	362	424	507	595	651	732	814	921	1,045
105	236	279	333	384	442	534	627	676	759	856	967	1,084
110	241	284	339	455	541	542	639	794	934	973	1,103	1,292
115	256	301	358	481	571	570	666	833	977	1,021	1,157	1,357
120	272	318	378	507	601	598	692	873	1,012	1,070	1,212	1,411
125	288	336	398	534	633	628	717	914	1,048	1,120	1,269	1,461
130	305	354	415	561	660	655	743	956	1,083	1,172	1,327	1,511
135	322	372	431	590	685	678	768	990	1,119	1,224	1,383	1,561
140	339	391	447	619	709	700	793	1,022	1,154	1,278	1,428	1,611

VALMONT UTILITY SW CLASS (12-Sided V-Series)									
	V13	V14	V15	V16	V17	V18	V19	V20	
Tip Load (lbs)	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000	
Height (ft)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)	(Ft-Kips)
75	815	861	969	994	1,045	1,118	1,169	1,230	
80	875	924	1,040	1,067	1,122	1,200	1,254	1,320	
85	935	987	1,110	1,139	1,199	1,282	1,340	1,410	
90	995	1,050	1,181	1,212	1,275	1,364	1,425	1,500	
95	1,054	1,113	1,252	1,285	1,352	1,445	1,511	1,590	
100	1,114	1,176	1,323	1,358	1,428	1,527	1,596	1,680	
105	1,174	1,239	1,394	1,416	1,505	1,609	1,682	1,770	
110	1,233	1,302	1,451	1,503	1,581	1,674	1,767	1,860	
115	1,293	1,365	1,506	1,576	1,658	1,755	1,853	1,950	
120	1,353	1,428	1,576	1,648	1,734	1,836	1,938	2,040	
125	1,412	1,491	1,630	1,721	1,811	1,917	2,024	2,130	
130	1,472	1,554	1,682	1,794	1,887	1,998	2,109	2,220	
135	1,532	1,617	1,750	1,866	1,964	2,079	2,195	2,310	
140	1,591	1,680	1,800	1,939	2,040	2,160	2,280	2,400	

Standard Pole Classification (Class 5, 4) (Class 3 - RUS S-2.0)



Valmont Utility offers Steel (SW/SWR), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction.

Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

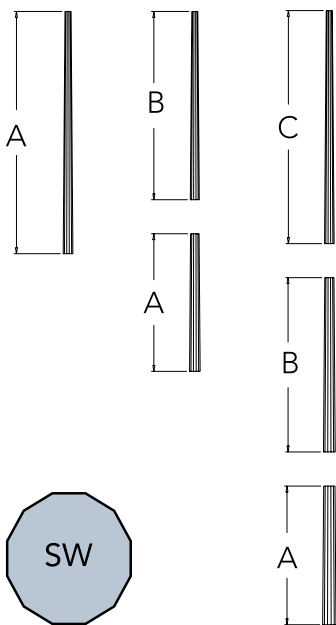
Class 5 Round Steel Designs: Top Diameter 4.5", Thickness 0.120", Taper .155 (in/ft) Horizontal tip load = 1,235 lb						
Total Pole Length	Base OD in.	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)	Section Length (B)	Est. Truckload Qty
C5 30'	9.15	258	28.5	30.0'	----	114
C5 35'	9.93	318	33.6	35.0'	----	102
C5 40'	10.70	384	39.8	40.0'	----	90
C5 45'	11.48	454	45.8	45.0'	----	87
C5 50'	12.25	529	52.2	50.0'	----	65
Class 4 Round Steel Designs: Top Diameter 4.5", Thickness 0.120", Taper .164 (in/ft) Horizontal tip load = 1,560 lb.						
Total Pole Length	Base OD in.	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)	Section Length (B)	Est. Truckload Qty
C4 30'	9.43	263	35.6	30.0'	----	114
C4 35'	10.25	325	42.2	35.0'	----	102
C4 40'	11.07	393	50.1	40.0'	----	90
C4 45'	11.89	466	57.9	45.0'	----	87
C4 50'	12.71	544	65.3	50.0'	----	65
Class 3 Round Steel Designs: Top Diameter 5.25", Thickness 0.120", Taper .187 (in/ft) Horizontal tip load = 1,950 lb.						
Total Pole Length	Base OD in.	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)	Section Length (B)	Est. Truckload Qty
C3 30'	10.89	306	47.8	30.0'	----	102
C3 35'	11.83	378	56.6	35.0'	----	75
C3 40'	12.77	456	66.1	40.0'	----	65
C3 45'	13.66	539	74.3	45.0'	----	65
C3 50'	14.65	630	83.9	50.0'	----	55
C3 55'	15.29	765	90.2	12.6'	45.0'	44
C3 60'	16.22	865	100.1	17.6'	45.0'	30
C3 65'	17.16	971	110.6	22.6'	45.0'	30
C3 70'	18.09	1084	121.5	27.6'	45.0'	18
C3 75'	19.03	1202	132.9	32.6'	45.0'	18
C3 80'	19.96	1326	144.9	37.6'	45.0'	16
C3 85'	20.90	1456	157.4	42.6'	45.0'	15
C3 90'	21.83	1592	170.3	47.6'	45.0'	14
C3 95'	22.11	1818	197.0	50.0'*	47.7'	13

* Exceeds Listed Thickness at 0.133"

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

Standard Pole Classification (Class 2, RUS S-02.4)

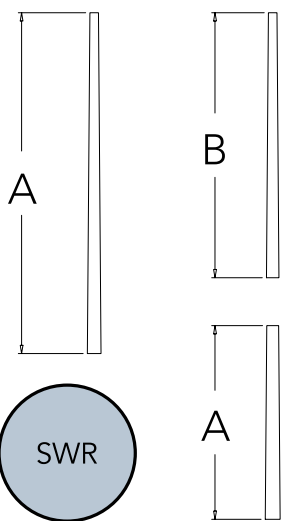
Valmont Utility offers Steel (SW/SWR), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal Tip Load = 2,405 lbs.



NOTE: Shaft thickness is .188" for A, B and C.

Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.



NOTE: Shaft thickness is .133" for A and B.

Class 2 12- Sided Steel Designs (SW) Top Diameter 6.68" Taper .120 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)	Section Length (B)	Section Length (C)
30'	10.28	510	71.4	30.0'	----	----
35'	10.88	617	79.8	35.0'	----	----
40'	11.48	752	88.4	40.0'	----	----
45'	12.08	848	97.7	45.0'	----	----
50'	12.68	973	107.6	50.0'	----	----
55'	13.28	1104	117.9	55.0'	----	----
60'	13.88	1242	128.6	60.0'	----	----
60' J	13.50	1302	121.1	19.3'	43.9'	----
65'	14.10	1442	132.0	24.3'	43.9'	----
70'	14.70	1588	143.4	29.3'	43.9'	----
75'	15.30	1756	155.2	25.5'	52.8'	----
80'	15.90	1914	167.5	30.5'	52.8'	----
85'	16.50	2078	180.3	35.5'	52.8'	----
90'	17.10	2248	193.6	40.5'	52.8'	----
95'	17.70	2425	207.3	45.5'	52.8'	----
100'	18.30	2608	221.5	50.5'	52.8'	----
105'	18.90	2796	236.1	55.5'	52.8'	----
110'	19.13	3098	240.7	22.5'	41.6'	52.8'
115'	19.73	3295	256.0	27.5'	41.6'	52.8'
120'	20.33	3499	271.7	32.5'	41.6'	52.8'
125'	20.93	3708	288.0	37.5'	41.6'	52.8'
130'	21.53	3924	304.7	42.5'	41.6'	52.8'
135'	22.13	4146	321.8	47.5'	41.6'	52.8'
140'	22.73	4374	339.4	52.5'	41.6'	52.8'

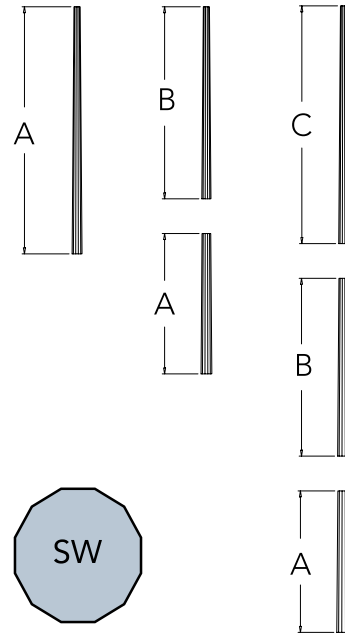
Class 2 Round Steel Designs (SWR) Top Diameter 6.0", Taper .184 (in/ft)						
Total Pole Length	Base OD in.	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)	Section Length (B)	Est. Truckload Qty
30'	11.55	368	60.5	30.0'	----	75
35'	12.48	453	70.6	35.0'	----	65
40'	13.40	544	82.8	40.0'	----	65
45'	14.29	640	92.4	45.0'	----	55
50'	15.25	746	103.3	50.0'	----	52
55'	15.86	902	110.2	12.7'	45.0'	40
60'	16.78	1017	121.6	17.7'	45.0'	30
65'	17.70	1139	133.5	22.7'	45.0'	28
70'	18.62	1267	146.0	27.7'	45.0'	18
75'	19.54	1402	159.0	32.7'	45.0'	18
80'	20.46	1543	172.5	37.7'	45.0'	16
85'	21.38	1691	186.6	42.7'	45.0'	15
90'	22.30	1845	201.2	47.7'	45.0'	14
95'	22.36	2228	256.6	50.0'*	47.9'	13

* Exceeds Listed Thickness at 0.162".

Standard Pole Classification (Class 1, RUS S-02.9)

Valmont Utility offers Steel (SW/SWR), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal Tip Load = 2,925 lbs.

Class 1 12- Sided Steel Designs (SW) Top Diameter 8.18" Taper .120 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)	Section Length (B)	Section Length (C)
30'	11.78	602	96.0	30.0'	----	----
35'	12.38	724	105.7	35.0'	----	----
40'	12.98	852	115.5	40.0'	----	----
45'	13.58	987	126.2	45.0'	----	----
50'	14.18	1127	137.3	50.0'	----	----
55'	14.78	1274	148.9	55.0'	----	----
60'	15.38	1426	161.0	60.0'	----	----
60' J	15.00	1494	152.5	22.8'	40.5'	----
65'	15.60	1647	164.7	28.3'	40.0'	----
70'	16.20	1808	177.4	33.3'	40.0'	----
75'	16.80	1998	190.6	25.5'	52.8'	----
80'	17.40	2171	204.2	30.5'	52.8'	----
85'	18.00	2351	218.3	35.5'	52.8'	----
90'	18.60	2537	232.8	40.5'	52.8'	----
95'	19.20	2729	247.9	45.5'	52.8'	----
100'	19.80	2927	263.4	50.5'	52.8'	----
105'	20.40	3131	279.3	55.5'	52.8'	----
110'	20.63	3465	284.3	22.8'	41.5'	52.8'
115'	21.23	3678	300.9	27.8'	41.5'	52.8'
120'	21.83	3897	317.9	32.8'	41.5'	52.8'
125'	22.43	4122	335.5	37.8'	41.5'	52.8'
130'	23.03	4353	353.5	42.8'	41.5'	52.8'
135'	23.63	4590	371.9	47.8'	41.5'	52.8'
140'	24.23	4834	390.9	52.8'	41.5'	52.8'

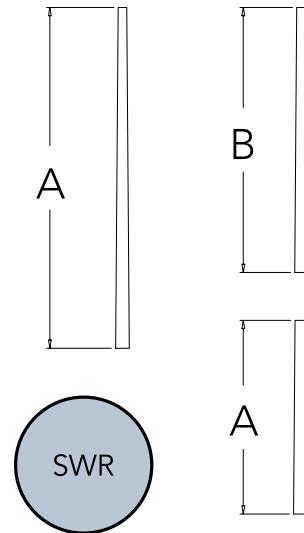


NOTE: Shaft thickness is .188" for A, B and C.

Concrete, Hybrid (NewPole™) & Steel Flanged designs available upon request.

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

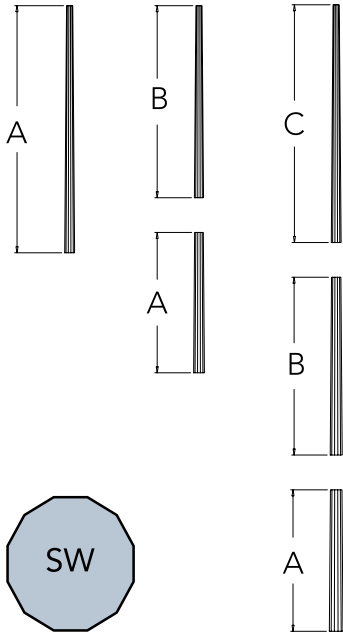
Class 1 Round Steel Designs (SWR) Top Diameter 6.5", Taper .172 (in/ft)						
Total Pole Length	Base OD in.	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)	Section Length (B)	Est. Truckload Qty
30'	11.68	464	75.9	30.0'	----	65
35'	12.55	567	87.6	35.0'	----	65
40'	13.41	678	101.5	40.0'	----	60
45'	14.24	795	114.4	45.0'	----	52
50'	15.10	921	128.6	50.0'	----	44
55'	15.63	1116	137.1	12.9'	45.0'	37
60'	16.49	1254	152.1	17.9'	45.0'	30
65'	17.35	1399	165.9	22.9'	45.0'	28
70'	18.21	1551	180.2	27.9'	45.0'	18
75'	19.07	1711	195.2	32.9'	45.0'	18
80'	19.93	1879	210.7	37.9'	45.0'	16
85'	20.79	2054	226.8	42.9'	45.0'	15
90'	21.65	2236	243.5	47.9'	45.0'	14
95'	22.51	2433	260.8	47.9'	50.0'	13



NOTE: Shaft thickness is .162" for A and B.

Standard Pole Classification (Class H1, RUS S-03.5)

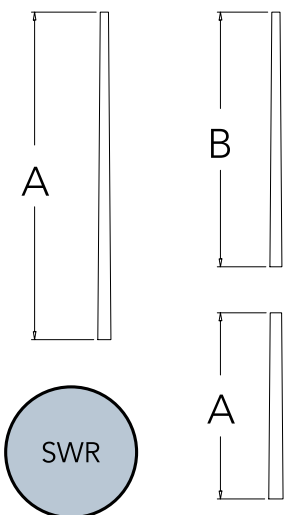
Valmont Utility offers Steel (SW/SWR), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal Tip Load = 3,510 lbs.



NOTE: Shaft thickness is .188" for A, B and C.

Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.



NOTE: Shaft thickness is .188" for A and B.

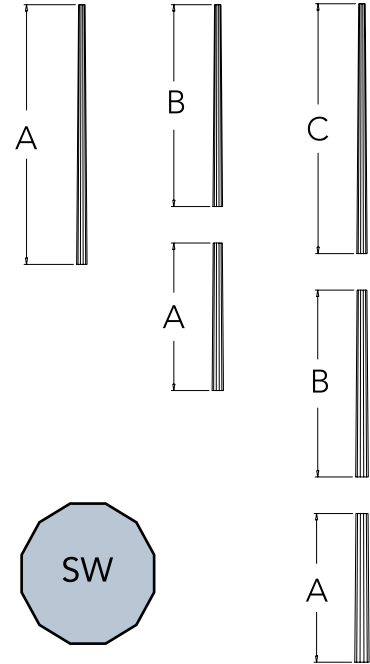
H1 12-Sided Steel Designs (SW) Top Diameter 9.32" Taper .126 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)	Section Length (B)	Section Length (C)
30'	13.10	678	120.0	30.0'	----	----
35'	13.73	814	131.5	35.0'	----	----
40'	14.36	956	143.0	40.0'	----	----
45'	14.99	1105	155.5	45.0'	----	----
50'	15.62	1260	168.4	50.0'	----	----
55'	16.25	1422	181.9	55.0'	----	----
60'	16.88	1590	195.9	60.0'	----	----
60' J	16.51	1672	186.6	20.3'	43.1'	----
65'	17.14	1843	200.7	25.3'	43.1'	----
70'	17.77	2020	215.4	30.3'	43.1'	----
75'	18.40	2221	230.6	25.5'	52.9'	----
80'	19.03	2412	246.3	30.5'	52.9'	----
85'	19.66	2608	262.6	35.5'	52.9'	----
90'	20.29	2811	279.3	40.5'	52.9'	----
95'	20.92	3020	296.6	45.5'	52.9'	----
100'	21.55	3236	314.4	50.5'	52.9'	----
105'	22.18	3458	332.7	55.5'	52.9'	----
110'	22.43	3827	339.0	22.8'	41.6'	52.9'
115'	23.06	4059	358.0	27.8'	41.6'	52.9'
120'	23.69	4296	377.5	32.8'	41.6'	52.9'
125'	24.32	4541	397.6	37.8'	41.6'	52.9'
130'	24.95	4792	415.3	42.8'	41.6'	52.9'
135'	25.58	5049	430.9	47.8'	41.6'	52.9'
140'	26.21	5312	446.5	52.8'	41.6'	52.9'

H1 Round Steel Designs (SWR) Top Diameter 7.0" Taper .167 (in/ft)						
Total Pole Length	Base OD in.	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)	Section Length (B)	Est. Truckload Qty
30'	12.00	560	93.2	30.0'	----	75
35'	12.84	682	106.7	35.0'	----	65
40'	13.67	813	122.5	40.0'	----	52
45'	14.47	951	137.2	45.0'	----	44
50'	15.30	1098	153.3	50.0'	----	38
55'	15.75	1328	161.5	13.0'	45.0'	30
60'	16.58	1488	178.9	18.0'	45.0'	28
65'	17.41	1657	197.2	23.0'	45.0'	25
70'	18.24	1833	216.4	28.0'	45.0'	18
75'	19.07	2018	235.7	33.0'	45.0'	18
80'	19.90	2212	253.5	38.0'	45.0'	16
85'	20.73	2413	271.9	43.0'	45.0'	14
90'	21.56	2623	290.9	48.0'	45.0'	12
95'	22.39	2852	310.6	48.1'	50.0'	10

Standard Pole Classification (Class H2, RUS S-04.2)

Valmont Utility offers Steel (SW/SWR), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal Tip Load = 4,160 lbs.

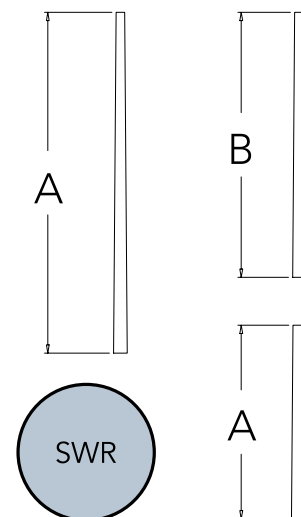
H2 12-Sided Steel Designs (SW) Top Diameter 9.97" Taper .135 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)/ Thickness	Section Length (B)/ Thickness	Section Length (C)/ Thickness
30'	14.02	727	137.9	30.0' / .188"	---	---
35'	14.70	872	151.1	35.0' / .188"	---	---
40'	15.37	1024	164.3	40.0' / .188"	---	---
45'	16.05	1184	178.6	45.0' / .188"	---	---
50'	16.73	1350	193.5	50.0' / .188"	---	---
55'	17.40	1523	209.0	55.0' / .188"	---	---
60'	18.08	1703	225.1	60.0' / .188"	---	---
60' J	17.70	1792	215.1	20.8' / .188"	42.6' / .188"	---
65'	18.38	1975	231.4	25.8' / .188"	42.6' / .188"	---
70'	19.06	2165	248.3	30.8' / .188"	42.6' / .188"	---
75'	19.73	2381	265.9	25.8' / .188"	52.7' / .188"	---
80'	20.41	2585	284.0	30.8' / .188"	52.7' / .188"	---
85'	21.08	2796	302.7	35.8' / .188"	52.7' / .188"	---
90'	21.76	3014	322.0	40.8' / .188"	52.7' / .188"	---
95'	22.44	3239	341.9	45.8' / .188"	52.7' / .188"	---
100'	23.11	3470	362.4	50.8' / .188"	52.7' / .188"	---
105'	23.79	3709	383.5	55.8' / .188"	52.7' / .188"	---
110'	24.09	4286	455.1	22.8' / .219"	42.0' / .188"	52.7' / .188"
115'	24.76	4576	480.6	27.8' / .219"	42.0' / .188"	52.7' / .188"
120'	25.44	4873	506.8	32.8' / .219"	42.0' / .188"	52.7' / .188"
125'	26.12	5179	533.7	37.8' / .219"	42.0' / .188"	52.7' / .188"
130'	26.79	5493	561.3	42.8' / .219"	42.0' / .188"	52.7' / .188"
135'	27.47	5815	589.6	47.8' / .219"	42.0' / .188"	52.7' / .188"
140'	28.14	6145	618.6	52.8' / .219"	42.0' / .188"	52.7' / .188"



Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

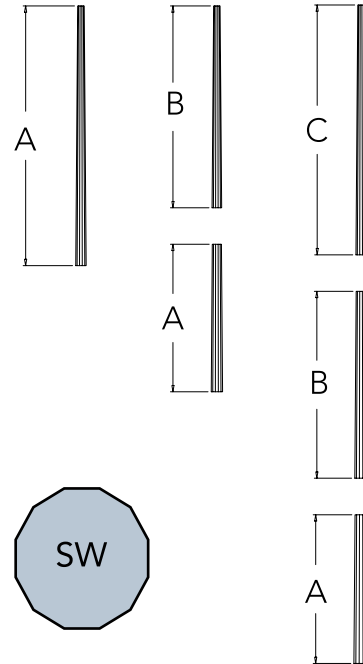
Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

H2 Round Steel Designs (SWR) Top Diameter 8.0" Taper .172 (in/ft)						
Total Pole Length	Base OD in.	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)/ Thickness	Section Length (B)/ Thickness	Est. Truckload Qty
30'	13.19	626	114.2	30.0' / .188"	---	52
35'	14.06	760	129.6	35.0' / .188"	---	44
40'	14.92	904	147.7	40.0' / .188"	---	44
45'	15.75	1054	164.4	45.0' / .188"	---	40
50'	16.66	1217	183.6	50.0' / .188"	---	35
55'	17.09	1468	192.3	13.1' / .188"	45.0' / .188"	28
60'	17.95	1641	211.9	18.1' / .188"	45.0' / .188"	22
65'	18.81	1823	232.4	23.1' / .188"	45.0' / .188"	20
70'	19.67	2014	250.7	28.1' / .188"	45.0' / .188"	16
75'	20.53	2214	269.7	33.1' / .188"	45.0' / .188"	14
80'	21.39	2422	289.3	38.1' / .188"	45.0' / .188"	14
85'	22.25	2639	309.6	43.1' / .188"	45.0' / .188"	12
90'	21.59	3067	351.5	45.0' / .219"	48.1' / .188"	10
95'	22.43	3322	377.6	50.0' / .219"	48.1' / .188"	8



Standard Pole Classification (Class H3, RUS S-04.9)

Valmont Utility offers Steel (SW), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal Tip Load = 4,876 lbs.

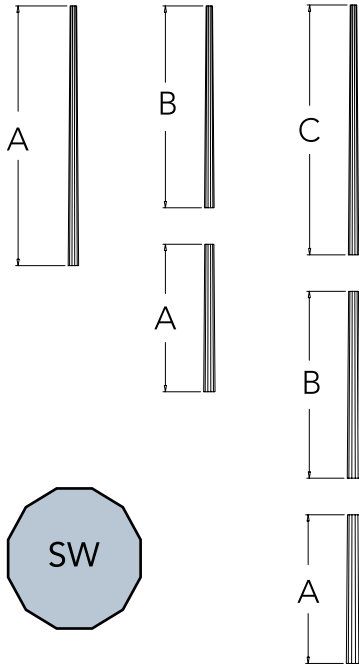


Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

H3 12-Sided Steel Designs (SW) Top Diameter 11.01" Taper .145 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)/ Thickness	Section Length (B)/ Thickness	Section Length (C)/ Thickness
30'	15.36	800	166.5	30.0' / .188"	----	----
35'	16.09	959	182.1	35.0' / .188"	----	----
40'	16.81	1126	197.4	40.0' / .188"	----	----
45'	17.53	1300	214.2	45.0' / .188"	----	----
50'	18.25	1482	231.7	50.0' / .188"	----	----
55'	18.98	1671	249.8	55.0' / .188"	----	----
60'	19.70	1867	268.7	60.0' / .188"	----	----
60' J	19.33	1969	257.8	20.8' / .188"	42.7' / .188"	----
65'	20.05	2169	276.9	25.8' / .188"	42.7' / .188"	----
70'	20.78	2376	296.7	30.8' / .188"	42.7' / .188"	----
75'	21.50	2612	317.2	25.8' / .188"	52.8' / .188"	----
80'	22.23	2835	338.4	30.8' / .188"	52.8' / .188"	----
85'	22.95	3064	360.3	35.8' / .188"	52.8' / .188"	----
90'	23.68	3302	382.9	40.8' / .188"	52.8' / .188"	----
95'	24.40	3546	406.3	45.8' / .188"	52.8' / .188"	----
100'	25.12	3798	424.2	50.8' / .188"	52.8' / .188"	----
105'	25.85	4058	442.1	55.8' / .188"	52.8' / .188"	----
110'	26.20	4691	540.9	22.8' / .219"	42.1' / .188"	52.8' / .188"
115'	26.92	5006	570.7	27.8' / .219"	42.1' / .188"	52.8' / .188"
120'	27.65	5330	601.3	32.8' / .219"	42.1' / .188"	52.8' / .188"
125'	28.37	5663	632.7	37.8' / .219"	42.1' / .188"	52.8' / .188"
130'	29.10	6004	660.2	42.8' / .219"	42.1' / .188"	52.8' / .188"
135'	29.82	6354	684.6	47.8' / .219"	42.1' / .188"	52.8' / .188"
140'	30.55	6712	708.9	52.8' / .219"	42.1' / .188"	52.8' / .188"

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

Standard Pole Classification (Class H4, RUS S-05.7)



Valmont Utility offers Steel (SW), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal tip load = 5,656 lbs.

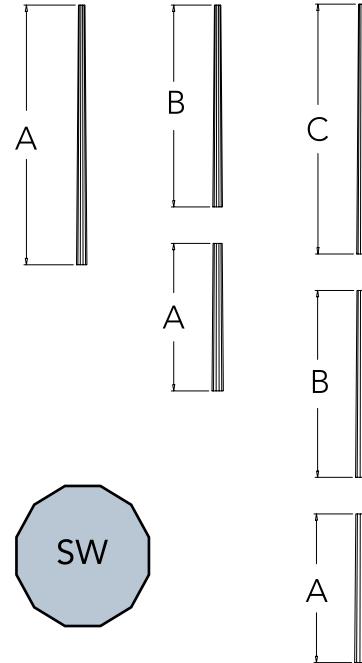
Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

H4 12-Sided Steel Designs (SW) Top Diameter 12" Taper .136 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)/ Thickness	Section Length (B)/ Thickness	Section Length (C)/ Thickness
30'	16.08	852	184.7	30.0' / .188"	----	----
35'	16.76	1018	199.9	35.0' / .188"	----	----
40'	17.42	1192	214.7	40.0' / .188"	----	----
45'	18.10	1372	231.1	45.0' / .188"	----	----
50'	18.78	1559	248.0	50.0' / .188"	----	----
55'	19.46	1753	265.6	55.0' / .188"	----	----
60'	20.13	1954	283.7	60.0' / .188"	----	----
60' J	19.76	2195	316.4	21.0' / .219"	42.6' / .188"	----
65'	20.44	2432	337.8	26.0' / .219"	42.6' / .188"	----
70'	21.12	2678	359.9	31.0' / .219"	42.6' / .188"	----
75'	21.79	2898	382.7	26.0' / .219"	52.8' / .188"	----
80'	22.47	3160	406.2	31.0' / .219"	52.8' / .188"	----
85'	23.15	3430	430.4	36.0' / .219"	52.8' / .188"	----
90'	23.83	3709	455.3	41.0' / .219"	52.8' / .188"	----
95'	24.51	3995	480.9	46.0' / .219"	52.8' / .188"	----
100'	25.18	4290	507.2	51.0' / .219"	52.8' / .188"	----
105'	25.86	4593	534.2	56.0' / .219"	52.8' / .188"	----
110'	26.10	5114	541.9	22.8' / .219"	42.4' / .219"	52.8' / .188"
115'	26.78	5428	569.8	27.8' / .219"	42.4' / .219"	52.8' / .188"
120'	27.46	5750	598.4	32.8' / .219"	42.4' / .219"	52.8' / .188"
125'	28.14	6080	627.7	37.8' / .219"	42.4' / .219"	52.8' / .188"
130'	28.81	6418	654.9	42.8' / .219"	42.4' / .219"	52.8' / .188"
135'	29.49	6764	677.7	47.8' / .219"	42.4' / .219"	52.8' / .188"
140'	30.17	7119	700.4	52.8' / .219"	42.4' / .219"	52.8' / 0.188"

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

Standard Pole Classification (Class H5, RUS S-06.5)

Valmont Utility offers Steel (SW), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal Tip Load = 6,500 lbs.



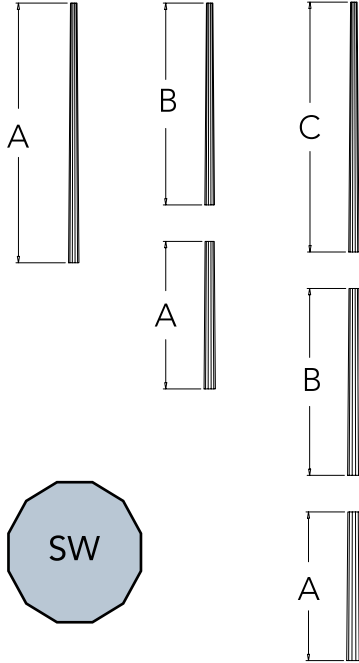
Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

Standard Pole Classification (Class H5, RUS S-06.5)

H5 12-Sided Steel Designs (SW) Top Diameter 12.5" Taper .152 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)/ Thickness	Section Length (B)/ Thickness	Section Length (C)/ Thickness
30'	17.06	898	207.3	30.0' / .188"	----	----
35'	17.82	1075	225.4	35.0' / .188"	----	----
40'	18.57	1259	243.2	40.0' / .188"	----	----
45'	19.33	1452	262.7	45.0' / .188"	----	----
50'	20.09	1652	283.0	50.0' / .188"	----	----
55'	20.85	1860	304.0	55.0' / .188"	----	----
60'	21.60	2076	325.7	60.0' / .188"	----	----
60' J	21.23	2334	364.3	21.0' / .219"	42.6' / .188"	----
65'	21.99	2590	390.0	26.0' / .219"	42.6' / .188"	----
70'	22.75	2855	416.6	31.0' / .219"	42.6' / .188"	----
75'	23.50	3092	444.0	26.0' / .219"	52.8' / .188"	----
80'	24.26	3375	472.4	31.0' / .219"	52.8' / .188"	----
85'	25.02	3668	501.6	36.0' / .219"	52.8' / .188"	----
90'	25.78	3969	531.7	41.0' / .219"	52.8' / .188"	----
95'	26.54	4280	562.6	46.0' / .219"	52.8' / .188"	----
100'	27.30	4599	594.5	51.0' / .219"	52.8' / .188"	----
105'	28.06	4928	627.2	56.0' / .219"	52.8' / .188"	----
110'	28.38	5500	639.2	22.8' / .219"	42.5' / .219"	52.8' / .188"
115'	29.14	5842	666.3	27.8' / .219"	42.5' / .219"	52.8' / .188"
120'	29.89	6192	691.8	32.8' / .219"	42.5' / .219"	52.8' / .188"
125'	30.65	6552	717.3	37.8' / .219"	42.5' / .219"	52.8' / .188"
130'	31.41	6921	742.7	42.8' / .219"	42.5' / .219"	52.8' / .188"
135'	32.17	7298	768.0	47.8' / .219"	42.5' / .219"	52.8' / .188"
140'	32.93	7685	793.2	52.8' / .219"	42.5' / .219"	52.8' / .188"

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

Standard Pole Classification (Class H6, RUS S-07.4)



Valmont Utility offers Steel (SW), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal tip load = 7,410 lbs.

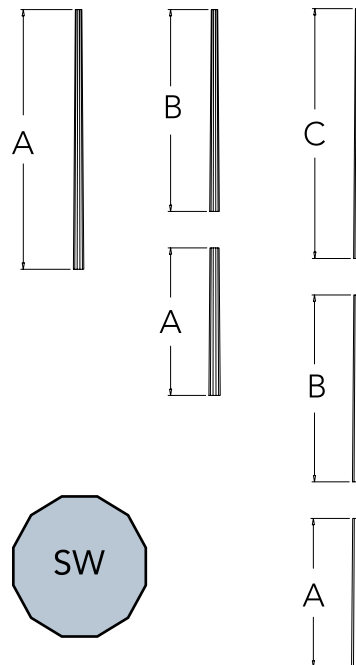
Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

H6 12-Sided Steel Designs (SW) Top Diameter 14.15" Taper .147 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)/ Thickness	Section Length (B)/ Thickness	Section Length (C)/ Thickness
30'	18.56	995	248.7	30.0' / .188"	----	----
35'	19.30	1187	267.9	35.0' / .188"	----	----
40'	20.02	1387	286.3	40.0' / .188"	----	----
45'	20.75	1594	306.7	45.0' / .188"	----	----
50'	21.48	1808	327.8	50.0' / .188"	----	----
55'	22.22	2031	349.6	55.0' / .188"	----	----
60'	22.95	2260	372.1	60.0' / .188"	----	----
60' J	22.57	2546	417.3	21.0' / .219"	42.8' / .188"	----
65'	23.31	2818	443.9	26.0' / .219"	42.8' / .188"	----
70'	24.04	3099	471.3	31.0' / .219"	42.8' / .188"	----
75'	24.77	3346	499.4	26.0' / .219"	52.9' / .188"	----
80'	25.51	3645	528.4	31.0' / .219"	52.9' / .188"	----
85'	26.24	3952	558.3	36.0' / .219"	52.9' / .188"	----
90'	26.97	4267	588.9	41.0' / .219"	52.9' / .188"	----
95'	27.71	4592	620.4	46.0' / .219"	52.9' / .188"	----
100'	28.44	4925	651.0	51.0' / .219"	52.9' / .188"	----
105'	29.17	5267	675.7	56.0' / .219"	52.9' / .188"	----
110'	29.47	6110	794.0	25.5' / .25"	40.0' / .219"	52.9' / .188"
115'	30.20	6515	833.0	30.5' / .25"	40.0' / .219"	52.9' / .188"
120'	30.93	6930	872.9	35.5' / .25"	40.0' / .219"	52.9' / .188"
125'	31.67	7354	913.8	40.5' / .25"	40.0' / .219"	52.9' / .188"
130'	32.40	7789	955.6	45.5' / .25"	40.0' / .219"	52.9' / .188"
135'	33.13	8234	989.9	50.5' / .25"	40.0' / .219"	52.9' / .188"
140'	33.86	8688	1022.1	55.5' / .25"	40.0' / .219"	52.9' / .188"

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

Standard Pole Classification (Class H7, RUS S-08.0)

Valmont Utility offers Steel (SW), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal Tip Load = 8,386 lbs.



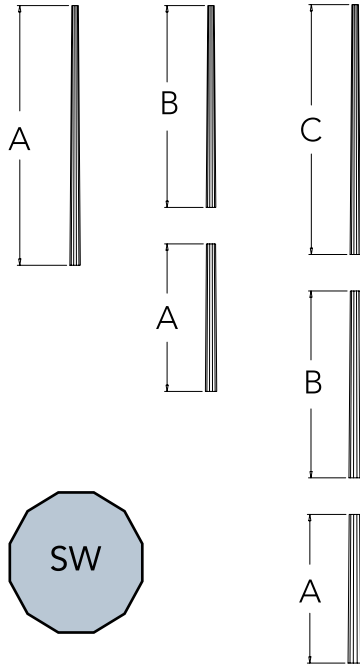
Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

Standard Pole Classification (Class H7, RUS S-02.9)

H7 12-Sided Steel Designs (SW) Top Diameter 15" Taper .162 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)/ Thickness	Section Length (B)/ Thickness	Section Length (C)/ Thickness
30'	19.86	1061	284.6	30.0' / .188"	----	----
35'	20.67	1267	307.2	35.0' / .188"	----	----
40'	21.47	1481	329.1	40.0' / .188"	----	----
45'	22.28	1703	353.2	45.0' / .188"	----	----
50'	23.08	1934	378.2	50.0' / .188"	----	----
55'	23.89	2173	404.0	55.0' / .188"	----	----
60'	24.70	2420	424.6	60.0' / .188"	----	----
60' J	24.32	2734	484.4	21.3' / .219"	42.6' / .188"	----
65'	25.13	3027	515.9	26.3' / .219"	42.6' / .188"	----
70'	25.94	3330	548.4	31.3' / .219"	42.6' / .188"	----
75'	26.75	3598	582.0	26.3' / .219"	52.8' / .188"	----
80'	27.56	3921	616.5	31.3' / .219"	52.8' / .188"	----
85'	28.36	4253	650.5	36.3' / .219"	52.8' / .188"	----
90'	29.17	4594	677.7	41.3' / .219"	52.8' / .188"	----
95'	29.98	4946	704.9	46.3' / .219"	52.8' / .188"	----
100'	30.79	5307	732.0	51.3' / .219"	52.8' / .188"	----
105'	31.60	5677	759.0	56.3' / .219"	52.8' / .188"	----
110'	31.97	6600	934.3	25.8' / .250"	40.1' / .219"	52.8' / .188"
115'	32.77	7040	976.9	30.8' / .250"	40.1' / .219"	52.8' / .188"
120'	33.58	7490	1012.4	35.8' / .250"	40.1' / .219"	52.8' / .188"
125'	34.39	7951	1047.8	40.8' / .250"	40.1' / .219"	52.8' / .188"
130'	35.20	8424	1083.2	45.8' / .250"	40.1' / .219"	52.8' / .188"
135'	36.01	8907	1118.6	50.8' / .250"	40.1' / .219"	52.8' / .188"
140'	36.81	9402	1153.7	55.8' / .250"	40.1' / .219"	52.8' / .188"

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

Standard Pole Classification (Class H8, RUS S-09.0)



Valmont Utility offers Steel (SW), Concrete and Hybrid (New Pole[®]) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal tip load = 9,426 lbs.

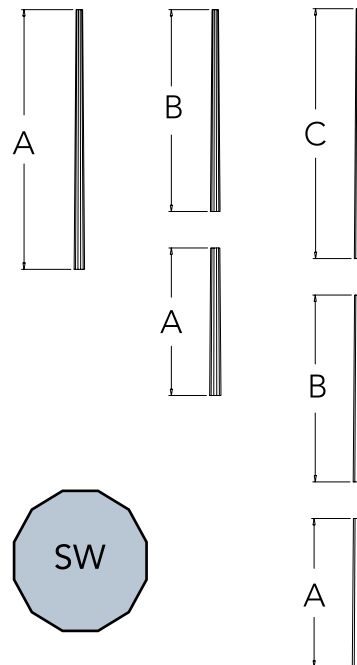
Concrete, Hybrid (NewPole[®]) & Steel Flanged designs available upon request.

H8 12-Sided Steel Designs (SW) Top Diameter 14.82" Taper .154 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)/ Thickness	Section Length (B)/ Thickness	Section Length (C)/ Thickness
30'	19.44	1214	316.7	30.0' / .219"	----	----
35'	20.21	1448	341.0	35.0' / .219"	----	----
40'	20.97	1692	365.2	40.0' / .219"	----	----
45'	21.74	1945	391.3	45.0' / .219"	----	----
50'	22.50	2207	418.3	50.0' / .219"	----	----
55'	23.27	2478	446.2	55.0' / .219"	----	----
60'	24.04	2759	475.0	60.0' / .219"	----	----
60' J	23.60	3088	519.8	21.3' / .250"	42.7' / .219"	----
65'	24.37	3413	553.0	26.3' / .250"	42.7' / .219"	----
70'	25.14	3748	587.2	31.3' / .250"	42.7' / .219"	----
75'	25.91	4052	622.5	26.3' / .250"	52.8' / .219"	----
80'	26.68	4409	658.8	31.3' / .250"	52.8' / .219"	----
85'	27.45	4775	696.1	36.3' / .250"	52.8' / .219"	----
90'	28.21	5153	734.5	41.3' / .250"	52.8' / .219"	----
95'	28.98	5540	773.8	46.3' / .250"	52.8' / .219"	----
100'	29.75	5938	814.2	51.3' / .250"	52.8' / .219"	----
105'	30.52	6347	855.7	56.3' / .250"	52.8' / .219"	----
110'	30.79	7330	972.6	26.8' / .281"	39.1' / .250"	52.8' / .219"
115'	31.56	7805	1020.6	31.8' / .281"	39.1' / .250"	52.8' / .219"
120'	32.33	8292	1069.8	36.8' / .281"	39.1' / .250"	52.8' / .219"
125'	33.09	8791	1120.1	41.8' / .281"	39.1' / .250"	52.8' / .219"
130'	33.86	9302	1171.6	46.8' / .281"	39.1' / .250"	52.8' / .219"
135'	34.63	9825	1224.2	51.8' / .281"	39.1' / .250"	52.8' / .219"
140'	35.40	10359	1278.0	56.8' / .281"	39.1' / .250"	52.8' / .219"

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

Standard Pole Classification (Class H9, RUS S-10.0)

Valmont Utility offers Steel (SW), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal Tip Load = 10,660 lbs.



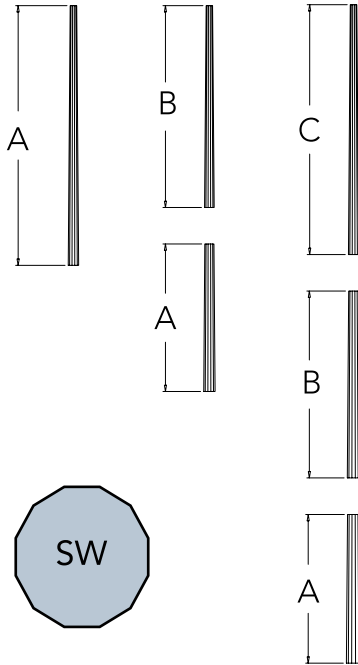
Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

Standard Pole Classification (Class H9, RUS S-10.0)

H9 12-Sided Steel Designs (SW) Top Diameter 15.76" Taper .163 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)/ Thickness	Section Length (B)/ Thickness	Section Length (C)/ Thickness
30'	20.65	1291	358.2	30.0' / .219"	----	----
35'	21.47	1541	385.8	35.0' / .219"	----	----
40'	22.28	1800	413.2	40.0' / .219"	----	----
45'	23.09	2069	442.6	45.0' / .219"	----	----
50'	23.91	2347	473.0	50.0' / .219"	----	----
55'	24.72	2636	504.4	55.0' / .219"	----	----
60'	25.54	2934	536.9	60.0' / .219"	----	----
60' J	25.10	3286	589.1	21.3' / .250"	42.7' / .219"	----
65'	25.91	3631	626.5	26.3' / .250"	42.7' / .219"	----
70'	26.73	3988	665.2	31.3' / .250"	42.7' / .219"	----
75'	27.54	4316	704.9	26.3' / .250"	52.8' / .219"	----
80'	28.36	4695	745.9	31.3' / .250"	52.8' / .219"	----
85'	29.17	5085	788.0	36.3' / .250"	52.8' / .219"	----
90'	29.99	5486	831.2	41.3' / .250"	52.8' / .219"	----
95'	30.80	5898	875.6	46.3' / .250"	52.8' / .219"	----
100'	31.62	6322	921.2	51.3' / .250"	52.8' / .219"	----
105'	32.43	6756	967.0	56.3' / .250"	52.8' / .219"	----
110'	32.74	7815	1102.5	26.5' / .281"	39.5' / .250"	52.8' / .219"
115'	33.56	8321	1156.7	31.5' / .281"	39.5' / .250"	52.8' / .219"
120'	34.37	8839	1212.1	36.5' / .281"	39.5' / .250"	52.8' / .219"
125'	35.19	9370	1268.9	41.5' / .281"	39.5' / .250"	52.8' / .219"
130'	36.00	9913	1327.0	46.5' / .281"	39.5' / .250"	52.8' / .219"
135'	36.82	10469	1383.1	51.5' / .281"	39.5' / .250"	52.8' / .219"
140'	37.63	11038	1428.4	56.5' / .281"	39.5' / .250"	52.8' / .219"

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

Standard Pole Classification (Class H10, RUS S-11.0 & 12.0)



Valmont Utility offers Steel (SW), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal tip load = 12,000 lbs.

Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

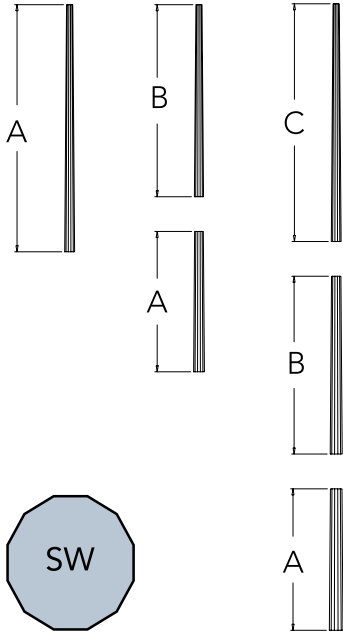
H10 12-Sided Steel Designs (SW) Top Diameter 16.51" Taper .181 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)/ Thickness	Section Length (B)/ Thickness	Section Length (C)/ Thickness
30'	21.94	1365	403.6	30.0' / .219"	----	----
35'	22.85	1630	436.2	35.0' / .219"	----	----
40'	23.75	1906	468.5	40.0' / .219"	----	----
45'	24.65	2193	503.3	45.0' / .219"	----	----
50'	25.55	2491	539.3	50.0' / .219"	----	----
55'	26.46	2800	576.6	55.0' / .219"	----	----
60'	27.36	3119	615.1	60.0' / .219"	----	----
60' J	26.93	3502	676.7	21.3' / .250"	42.8' / .219"	----
65'	27.83	3873	721.3	26.3' / .250"	42.8' / .219"	----
70'	28.73	4256	767.3	31.3' / .250"	42.8' / .219"	----
75'	29.64	4610	814.8	26.3' / .250"	52.9' / .219"	----
80'	30.54	5018	863.6	31.3' / .250"	52.9' / .219"	----
85'	31.45	5438	913.9	36.3' / .250"	52.9' / .219"	----
90'	32.35	5871	965.3	41.3' / .250"	52.9' / .219"	----
95'	33.25	6316	1005.0	46.3' / .250"	52.9' / .219"	----
100'	34.16	6774	1044.7	51.3' / .250"	52.9' / .219"	----
105'	35.06	7244	1084.3	56.3' / .250"	52.9' / .219"	----
110'	35.46	8399	1291.6	26.5' / .281"	39.6' / .250"	52.9' / .219"
115'	36.37	8947	1356.7	31.5' / .281"	39.6' / .250"	52.9' / .219"
120'	37.27	9509	1410.8	36.5' / .281"	39.6' / .250"	52.9' / .219"
125'	38.18	10085	1461.1	41.5' / .281"	39.6' / .250"	52.9' / .219"
130'	39.08	10675	1511.3	46.5' / .281"	39.6' / .250"	52.9' / .219"
135'	39.98	11279	1561.4	51.5' / .281"	39.6' / .250"	52.9' / .219"
140'	40.89	11897	1611.3	56.5' / .281"	39.6' / .250"	52.9' / .219"

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

Standard Pole Classification (Class V13, V14)

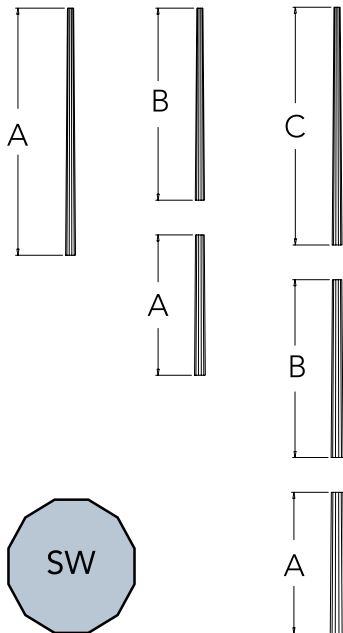
Valmont Utility offers Steel (SW/SWR), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction.

Standard Pole Classification (Class V13, V14)



V13 12-Sided Steel Designs (SW) Top Diameter 14.66" Taper .200 (in/ft) Horizontal tip load = 13,000 lbs.						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A) / Thickness	Section Length (B) / Thickness	Section Length (C) / Thickness
75'	29.16	4967	815.5	26.3 / .281	52.8 / .250	----
80'	30.16	5419	875.2	31.3 / .281	52.8 / .250	----
85'	31.16	5886	934.8	36.3 / .281	52.8 / .250	----
90'	32.16	6369	994.6	41.3 / .281	52.8 / .250	----
95'	33.16	6867	1054.3	46.3 / .281	52.8 / .250	----
100'	34.16	7381	1114.0	51.3 / .281	52.8 / .250	----
105'	35.16	7910	1173.6	56.3 / .281	52.8 / .250	----
110'	35.60	8863	1233.2	26.5 / .281	39.5 / .281	52.8 / .250
115'	36.60	9414	1292.9	31.5 / .281	39.5 / .281	52.8 / .250
120'	37.60	9981	1352.6	36.5 / .281	39.5 / .281	52.8 / .250
125'	38.60	10563	1412.4	41.5 / .281	39.5 / .281	52.8 / .250
130'	39.60	11160	1471.9	46.5 / .281	39.5 / .281	52.8 / .250
135'	40.60	11772	1531.5	51.5 / .281	39.5 / .281	52.8 / .250
140'	41.60	12400	1591.3	56.5 / .281	39.5 / .281	52.8 / .250

Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

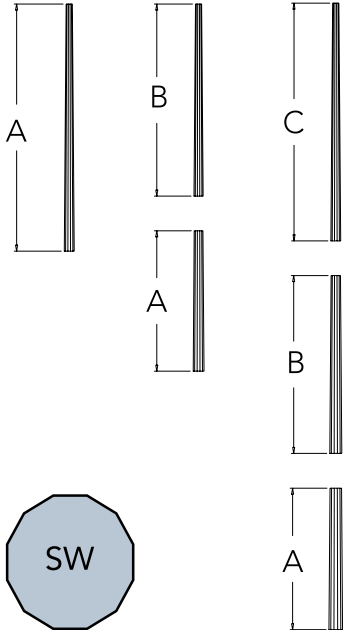


V14 12-Sided Steel Designs (SW) Top Diameter 14.94" Taper .208 (in/ft) Horizontal tip load = 14,000 lbs.						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A) / Thickness	Section Length (B) / Thickness	Section Length (C) / Thickness
75'	30.04	5107	861.0	26.5 / .281	52.7 / .250	----
80'	31.08	5573	924.1	31.5 / .281	52.7 / .250	----
85'	32.12	6054	987.0	36.5 / .281	52.7 / .250	----
90'	33.16	6552	1050.1	41.5 / .281	52.7 / .250	----
95'	34.20	7066	1113.1	46.5 / .281	52.7 / .250	----
100'	35.24	7596	1176.0	51.5 / .281	52.7 / .250	----
105'	36.28	8142	1239.1	56.5 / .281	52.7 / .250	----
110'	36.75	9133	1302.0	26.5 / .281	39.8 / .281	52.7 / .250
115'	37.79	9703	1365.1	31.5 / .281	39.8 / .281	52.7 / .250
120'	38.83	10288	1428.1	36.5 / .281	39.8 / .281	52.7 / .250
125'	39.87	10889	1491.1	41.5 / .281	39.8 / .281	52.7 / .250
130'	40.91	11506	1554.1	46.5 / .281	39.8 / .281	52.7 / .250
135'	41.95	12139	1617.0	51.5 / .281	39.8 / .281	52.7 / .250
140'	42.99	12789	1680.1	56.5 / .281	39.8 / .281	52.7 / .250

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 4 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

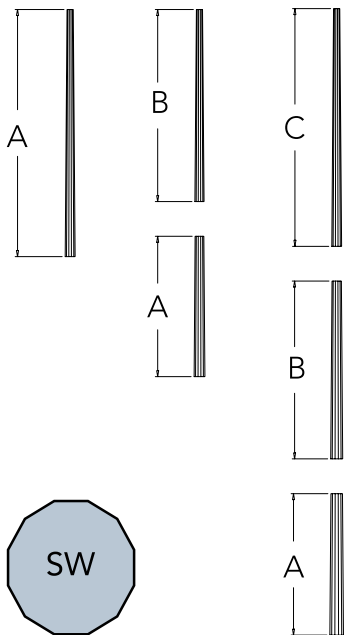
Standard Pole Classification (Class V15, V16)

Valmont Utility offers Steel (SW/SWR), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction.



V15 12-Sided Steel Designs (SW) Top Diameter 16.08" Taper .215 (in/ft) Horizontal tip load = 15,000 lbs.						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A) / Thickness	Section Length (B) / Thickness	Section Length © / Thickness
75'	31.71	5433	968.6	26.5 / .281	52.7 / .250	----
80'	32.78	5925	1039.6	31.5 / .281	52.7 / .250	----
85'	33.86	6433	1110.5	36.5 / .281	52.7 / .250	----
90'	34.93	6958	1181.3	41.5 / .281	52.7 / .250	----
95'	36.01	7500	1252.1	46.5 / .281	52.7 / .250	----
100'	37.08	8058	1323.1	51.5 / .281	52.7 / .250	----
105'	38.16	8632	1394.0	56.5 / .281	52.7 / .250	----
110'	38.67	9697	1450.8	26.5 / .281	40.0 / .281	52.7 / .250
115'	39.75	10296	1506.4	31.5 / .281	40.0 / .281	52.7 / .250
120'	40.82	10912	1576.0	36.5 / .281	40.0 / .281	52.7 / .250
125'	41.90	11544	1629.5	41.5 / .281	40.0 / .281	52.7 / .250
130'	42.97	12192	1681.7	46.5 / .281	40.0 / .281	52.7 / .250
135'	44.05	12857	1749.8	51.5 / .281	40.0 / .281	52.7 / .250
140'	45.12	13539	1800.1	56.5 / .281	40.0 / .281	52.7 / .250

Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

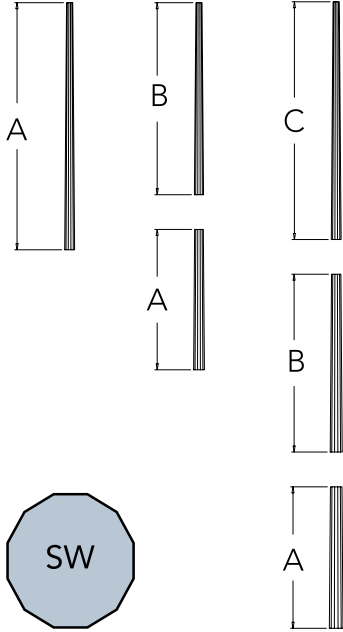


V16 12-Sided Steel Designs (SW) Top Diameter 16.83" Taper .205 (in/ft) Horizontal tip load = 16,000 lbs.						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A) / Thickness	Section Length (B) / Thickness	Section Length (C) / Thickness
75'	31.71	5520	993.9	26.5 / .281	52.8 / .250	----
80'	32.73	6012	1066.6	31.5 / .281	52.8 / .250	----
85'	33.76	6519	1139.4	36.5 / .281	52.8 / .250	----
90'	34.78	7042	1212.1	41.5 / .281	52.8 / .250	----
95'	35.81	7581	1284.8	46.5 / .281	52.8 / .250	----
100'	36.83	8135	1357.5	51.5 / .281	52.8 / .250	----
105'	37.86	8705	1416.0	56.5 / .281	52.8 / .250	----
110'	38.32	10090	1502.9	26.5 / .313	40.1 / .281	52.8 / .250
115'	39.35	10748	1575.6	31.5 / .313	40.1 / .281	52.8 / .250
120'	40.37	11424	1648.3	36.5 / .313	40.1 / .281	52.8 / .250
125'	41.40	12118	1721.0	41.5 / .313	40.1 / .281	52.8 / .250
130'	42.42	12829	1793.8	46.5 / .313	40.1 / .281	52.8 / .250
135'	43.45	13558	1866.5	51.5 / .313	40.1 / .281	52.8 / .250
140'	44.47	14304	1939.2	56.5 / .313	40.1 / .281	52.8 / .250

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 4 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

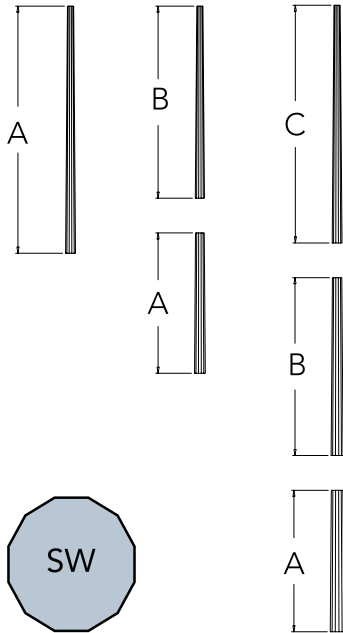
Standard Pole Classification (Class V17, V18)

Valmont Utility offers Steel (SW/SWR), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction.



V17 12-Sided Steel Designs (SW) Top Diameter 14.99" Taper .227 (in/ft) Horizontal tip load = 17,000 lbs.						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A) / Thickness	Section Length (B) / Thickness	Section Length (C) / Thickness
75'	31.46	5909	1045.4	26.5 / .313	52.7 / .281	----
80'	32.59	6451	1122.1	31.5 / .313	52.7 / .281	----
85'	33.73	7013	1198.6	36.5 / .313	52.7 / .281	----
90'	34.86	7594	1275.0	41.5 / .313	52.7 / .281	----
95'	36.00	8194	1351.5	46.5 / .313	52.7 / .281	----
100'	37.13	8814	1428.0	51.5 / .313	52.7 / .281	----
105'	38.27	9453	1504.5	56.5 / .313	52.7 / .281	----
110'	38.78	10631	1581.0	26.5 / .313	40.0 / .313	52.7 / .281
115'	39.91	11298	1657.6	31.5 / .313	40.0 / .313	52.7 / .281
120'	41.05	11984	1734.1	36.5 / .313	40.0 / .313	52.7 / .281
125'	42.18	12691	1810.6	41.5 / .313	40.0 / .313	52.7 / .281
130'	43.32	13416	1887.0	46.5 / .313	40.0 / .313	52.7 / .281
135'	44.45	14161	1963.5	51.5 / .313	40.0 / .313	52.7 / .281
140'	45.59	14925	2040.0	56.5 / .313	40.0 / .313	52.7 / .281

Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

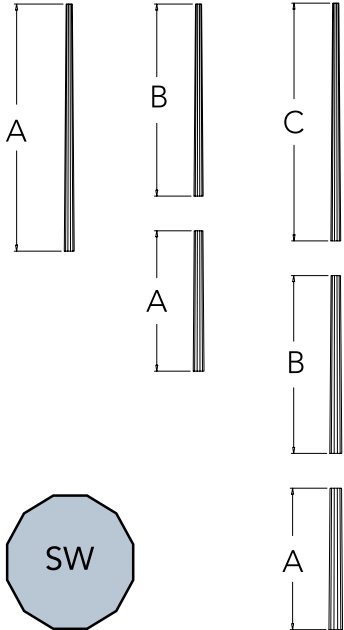


V18 12-Sided Steel Designs (SW) Top Diameter 15.87" Taper .226 (in/ft) Horizontal tip load = 18,000 lbs.						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A) / Thickness	Section Length (B) / Thickness	Section Length (C) / Thickness
75'	32.25	6127	1118.1	26.5 / .313	52.8 / .281	----
80'	33.38	6682	1200.0	31.5 / .313	52.8 / .281	----
85'	34.51	7257	1281.7	36.5 / .313	52.8 / .281	----
90'	35.64	7852	1363.5	41.5 / .313	52.8 / .281	----
95'	36.77	8465	1445.4	46.5 / .313	52.8 / .281	----
100'	37.90	9098	1527.1	51.5 / .313	52.8 / .281	----
105'	39.03	9751	1608.9	56.5 / .313	52.8 / .281	----
110'	39.54	10964	1673.9	26.5 / .313	40.1 / .313	52.8 / .281
115'	40.67	11644	1755.0	31.5 / .313	40.1 / .313	52.8 / .281
120'	41.80	12344	1836.0	36.5 / .313	40.1 / .313	52.8 / .281
125'	42.93	13062	1917.0	41.5 / .313	40.1 / .313	52.8 / .281
130'	44.06	13801	1998.1	46.5 / .313	40.1 / .313	52.8 / .281
135'	45.19	14558	2079.0	51.5 / .313	40.1 / .313	52.8 / .281
140'	46.32	15335	2160.0	56.5 / .313	40.1 / .313	52.8 / .281

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 4 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

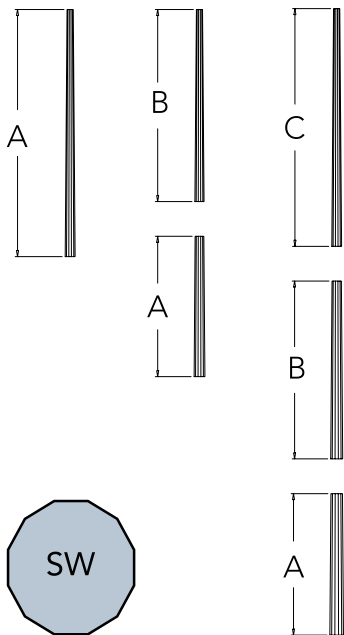
Standard Pole Classification (Class V19, V20)

Valmont Utility offers Steel (SW/SWR), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction.



V19 12-Sided Steel Designs (SW) Top Diameter 16.02" Taper .237 (in/ft) Horizontal tip load = 19,000 lbs.						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A) / Thickness	Section Length (B) / Thickness	Section Length (C) / Thickness
75'	33.24	6276	1168.6	26.5 / .313	52.8 / .281	----
80'	34.42	6849	1254.1	31.5 / .313	52.8 / .281	----
85'	35.61	7442	1339.6	36.5 / .313	52.8 / .281	----
90'	36.79	8055	1425.1	41.5 / .313	52.8 / .281	----
95'	37.98	8689	1510.6	46.5 / .313	52.8 / .281	----
100'	39.16	9343	1596.1	51.5 / .313	52.8 / .281	----
105'	40.35	10017	1681.6	56.5 / .313	52.8 / .281	----
110'	40.91	11284	1767.2	26.5 / .313	40.2 / .313	52.8 / .281
115'	42.09	11988	1852.6	31.5 / .313	40.2 / .313	52.8 / .281
120'	43.28	12712	1938.2	36.5 / .313	40.2 / .313	52.8 / .281
125'	44.46	13457	2023.6	41.5 / .313	40.2 / .313	52.8 / .281
130'	45.65	14222	2109.2	46.5 / .313	40.2 / .313	52.8 / .281
135'	46.83	15007	2194.6	51.5 / .313	40.2 / .313	52.8 / .281
140'	48.02	15812	2280.2	56.5 / .313	40.2 / .313	52.8 / .281

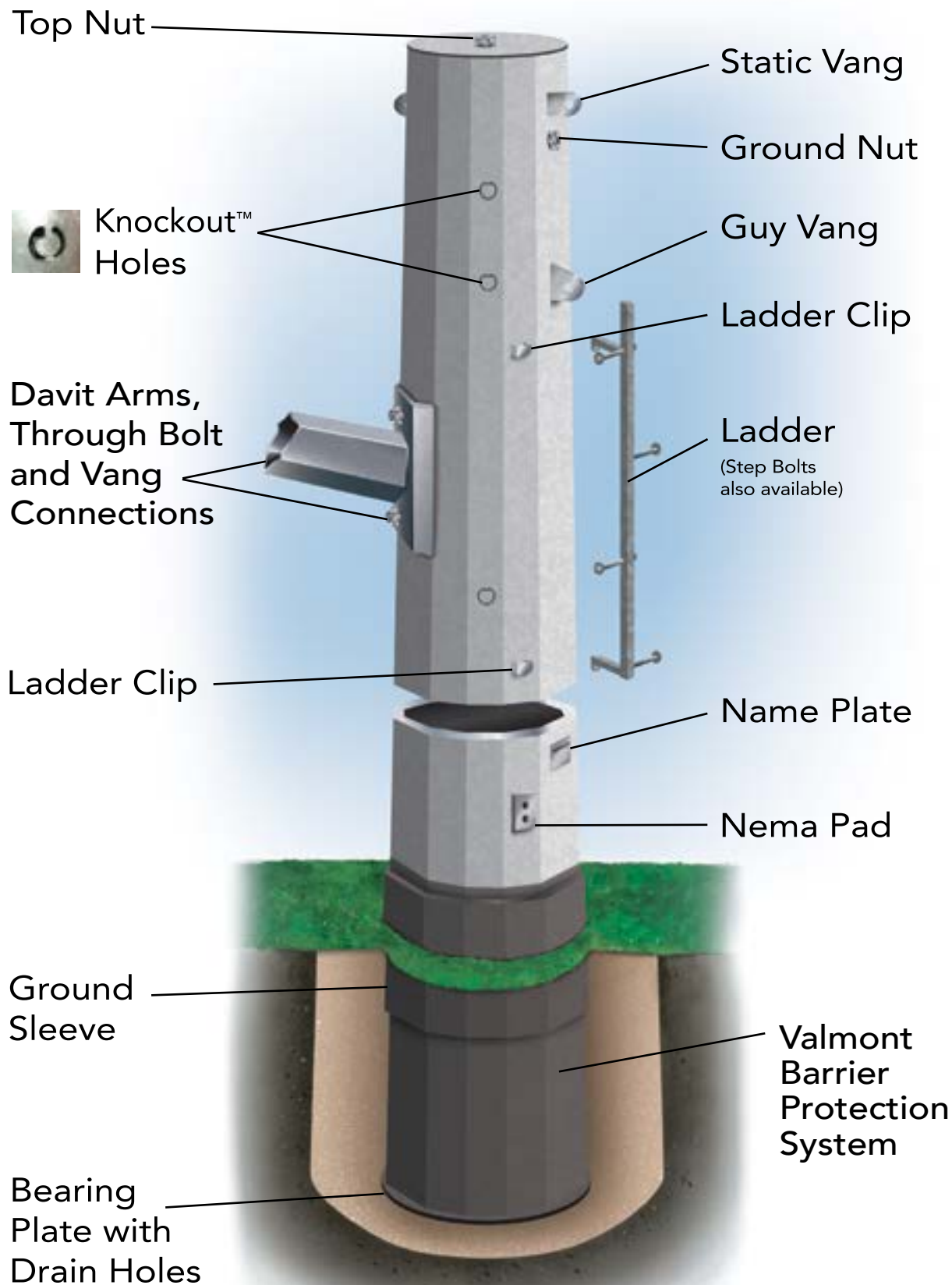
Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.



V20 12-Sided Steel Designs (SW) Top Diameter 16.18" Taper .248 (in/ft) Horizontal tip load = 20,000 lbs.						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A) / Thickness	Section Length (B) / Thickness	Section Length (C) / Thickness
75'	34.22	6432	1230.2	26.5 / .313	52.9 / .281	----
80'	35.46	7023	1320.1	31.5 / .313	52.9 / .281	----
85'	36.70	7634	1410.1	36.5 / .313	52.9 / .281	----
90'	37.94	8267	1500.2	41.5 / .313	52.9 / .281	----
95'	39.18	8921	1590.1	46.5 / .313	52.9 / .281	----
100'	40.42	9596	1680.1	51.5 / .313	52.9 / .281	----
105'	41.66	10292	1770.1	56.5 / .313	52.9 / .281	----
110'	42.27	11611	1860.2	26.5 / .313	40.3 / .313	52.9 / .281
115'	43.51	12339	1950.1	31.5 / .313	40.3 / .313	52.9 / .281
120'	44.75	13088	2040.1	36.5 / .313	40.3 / .313	52.9 / .281
125'	45.99	13859	2130.2	41.5 / .313	40.3 / .313	52.9 / .281
130'	47.23	14650	2220.1	46.5 / .313	40.3 / .313	52.9 / .281
135'	48.47	15463	2310.1	51.5 / .313	40.3 / .313	52.9 / .281
140'	49.71	16297	2400.2	56.5 / .313	40.3 / .313	52.9 / .281

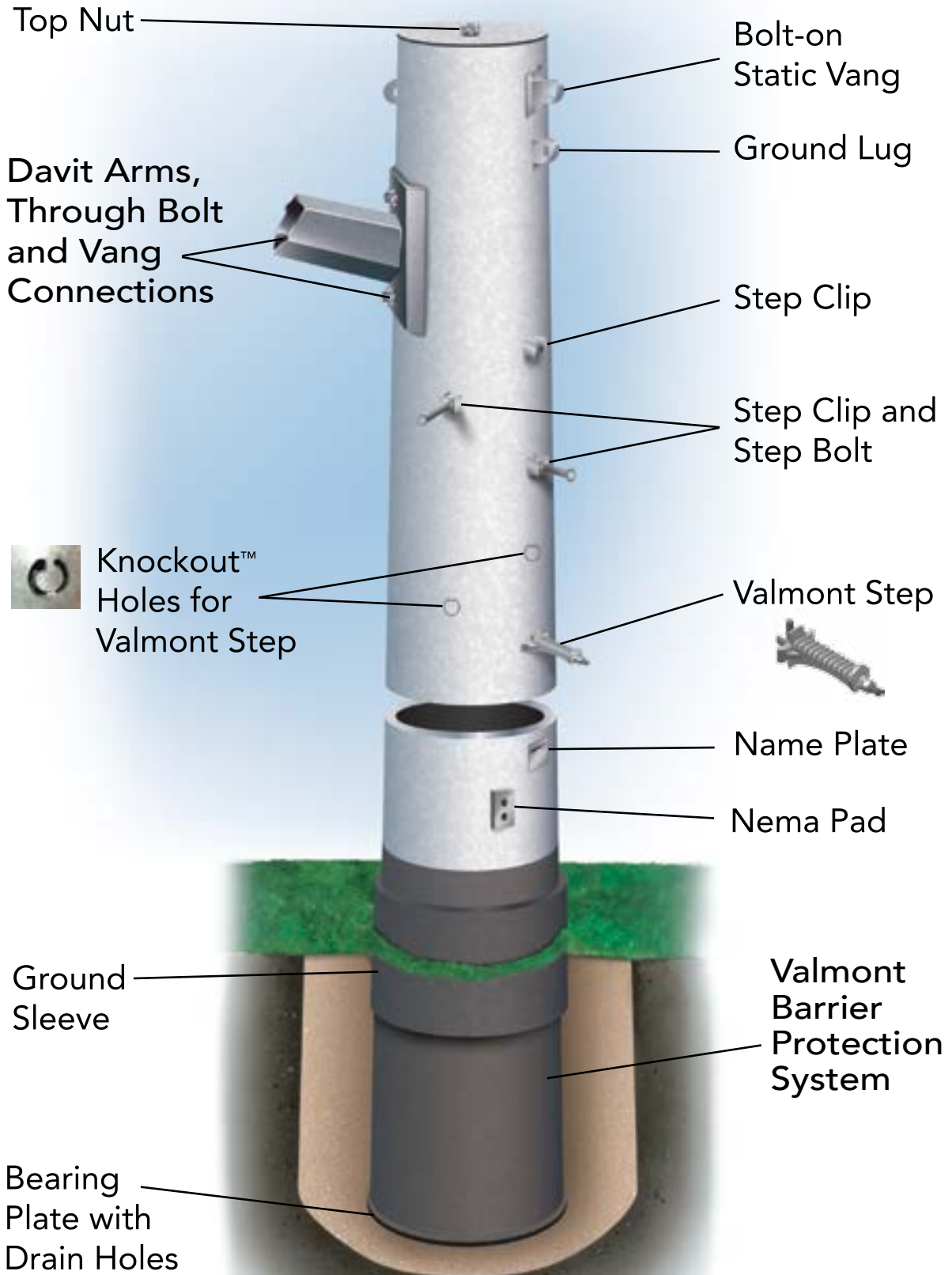
Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length +4 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

SW - 12 Sided Steel Pole



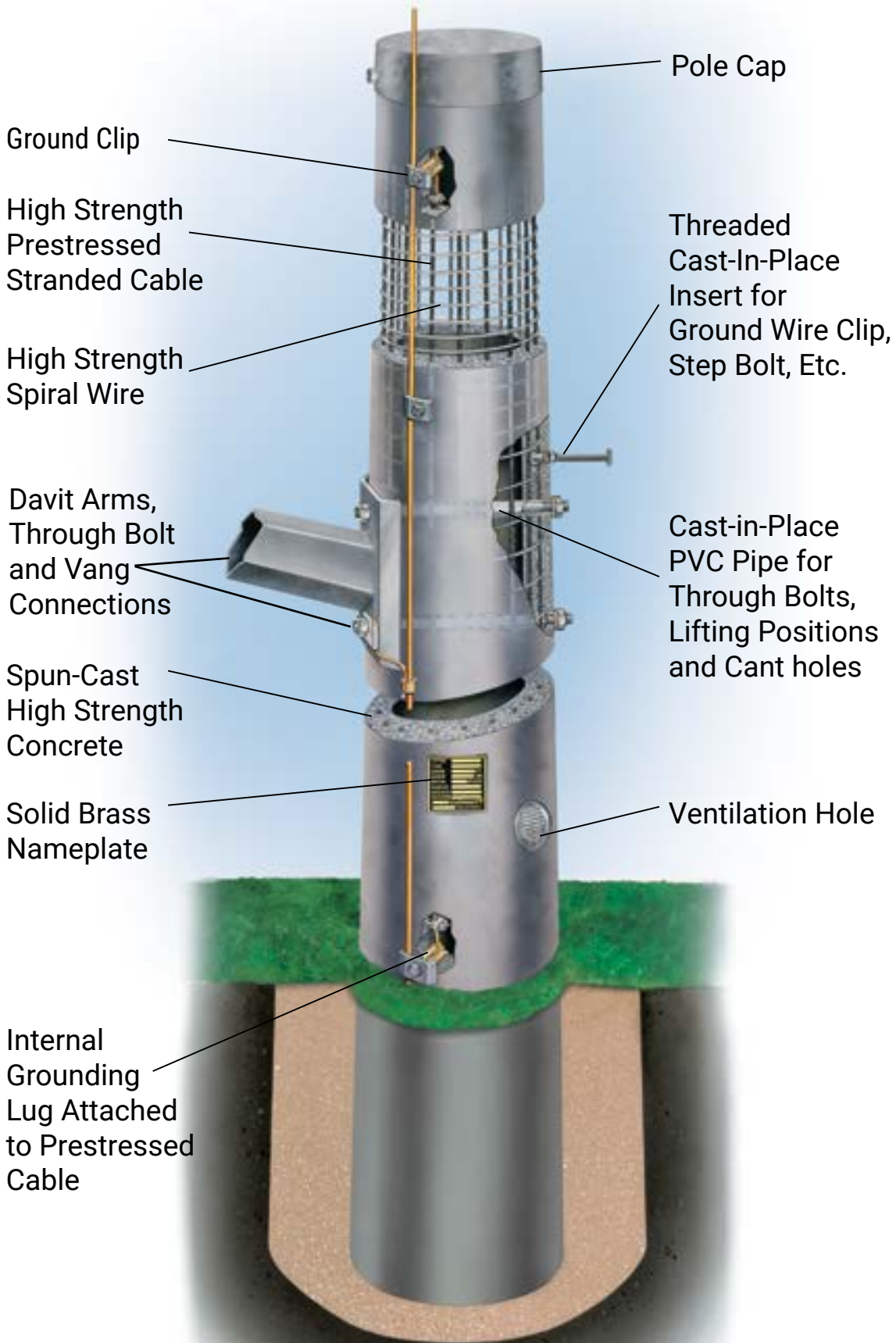
(Accessories also Available for Round Poles)

SWR - Round Steel Pole



(Accessories also Available for 12 Sided Poles)

Prestressed, Spun-Cast Concrete Pole



NewPole® - A Hybrid Pole

Valmont Utility's hybrid pole is a steel pole with a concrete pole base, giving you the exceptional height, strength and light weight of steel in the air and the quick installation and impermeability of concrete in the ground.

- Extremely durable
- Easy installation
- Economical alternative to drilled pier foundation

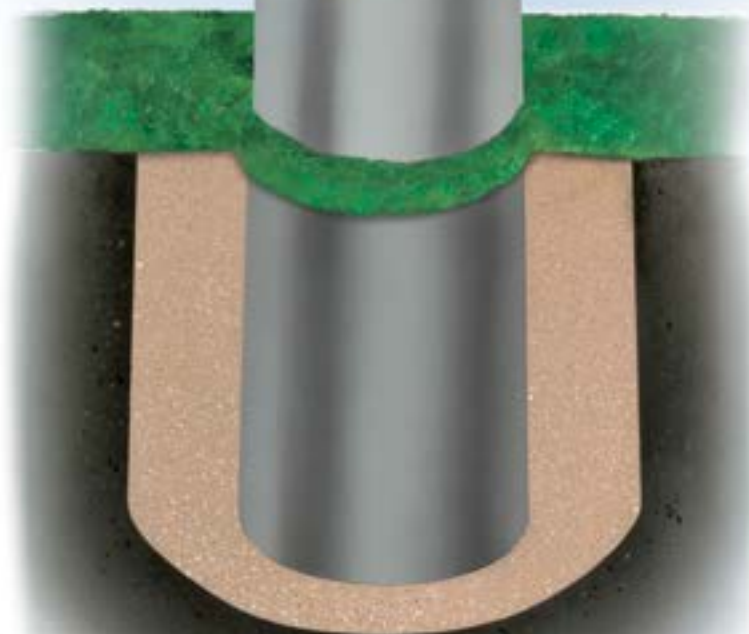
Direct Embedded
Spun Concrete
Base Section

Spun-Cast
High Strength
Concrete

Galvanized Tapered
Tubular Steel Upper
Section(s)

Spiral and Longitudinal
Reinforcing Steel

Solid Brass
Nameplate



This product is protected
by one or more of the
following patents:
U.S. Patent 6,705,058;
U.S. Patent 7,343,718

Ordering Options

Customer Name: _____

Class Height Shape

Material / Finish

- Concrete
 - Standard
 - Consult factory for color finishes
- Hybrid (NewPole®)
- Galvanized
- Weathering Steel
- Additional Option

Pole Connections

- Slip Jointed
- Butt Weld Single Piece
- Flanged

Below Grade Protection (Steel)

- Embedment Depth _____
- Polyurethane (16 mils min Standard) _____
 - Feet Above Ground _____
 - Feet Below Ground _____
 - Full length _____
- Ground Sleeve _____
 - Length _____
 - Thickness _____
 - Feet above Ground _____

Contact Name: _____

Climbing

Start (below pole top) _____ ft ____ in
 Finish (above Groundline) _____ ft ____ in
 Working top of pole _____ ft ____ in

- Holes
 - Size _____
 - Spacing (standard 15") _____

- Step Clips
- Ladder Clips

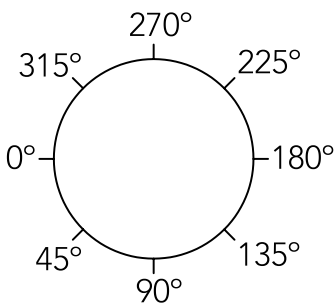
Provide

- Ladders
- Step Bolt _____ Length _____ Thickness _____
- Valmont Step

Grounding

- Ground Clip (concrete)
- Tank Ground (Internal Concrete)
- 0.50" insert (RIVNUT)
- Grounding Nut
 - Steel
 - Stainless Steel
- Nema Pad
 - Steel
 - Stainless Steel

EXAMPLE



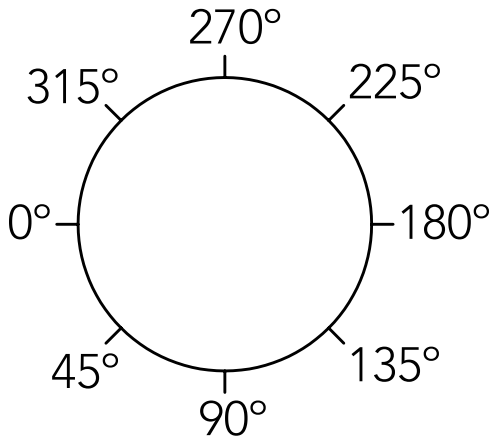
Top View

Orientation Reference

LOCATION FROM TOP OF POLE	ORIENTATION							
	0°	45°	90°	135°	180°	225°	270°	315°
2'-6"	7/8"				7/8"			
3'-8"		15/16"				15/16"		
14'-0"			1"				1"	
14'-5"				11/16"				11/16"
40'-6"					RIVNUT			
45'-0"	1/2" NUT							

For more information, please contact: 800-533-5103 • www.valmont-newmark.com

POLE TYPES: ROUND

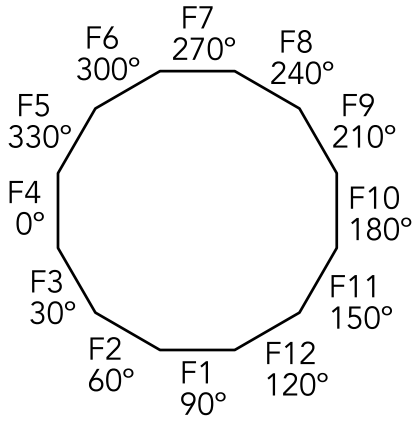


ENTER HOLE DIAMETER OR
GROUND PROVISION AT EACH
ELEVATION AND ORIENTATION.

LOCATION FROM TOP OF POLE	ORIENTATION							
	0°	45°	90°	135°	180°	225°	270°	315°

Holes, Attachments and Grounding Locations

POLE TYPES: 12-SIDED



ENTER HOLE DIAMETER OR
GROUND PROVISION AT EACH
ELEVATION AND ORIENTATION.

LOCATION FROM TOP OF POLE	ORIENTATION											
	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°



Hot-Dip Galvanizing

Hot-dip galvanizing has been an effective corrosion prevention coating on utility steel structures for many years and is the only coating system that is completely controlled by an ASTM specification: A-123.

The application of molten zinc to both external and internal steel surfaces offers a unique solution to typical structure corrosion problems. In the galvanizing process, zinc forms a true metallurgical bond with the steel in an alloying reaction and presents a pure zinc surface to the elements. Because zinc is, electrochemically, more active than steel, it will act as an anode when the coating is penetrated, sacrificing itself before the steel will be attacked. The pure zinc top surface also weathers to form a tough, durable, corrosion resistant barrier film.

Assemblies are detailed to allow proper wetting of surfaces by flux and zinc and to allow adequate draining and venting. "Double dipping" of very long tubular members is not normally recommended.

For more information on the use of Hot Dipped Galvanizing or Weathering Steel material, please contact your Valmont representative.

Weathering Steel Guidelines

Generally, weathering steel is intended for and is most often used in a bare, uncoated, boldly exposed condition. Surfaces exposed to the south and west mature sooner, forming a tightly adherent oxide coating. For other exposures, the oxide coating takes longer to form and has a more granular, loosely adherent aspect. Structure details presenting surfaces upon which moisture and corrosives can accumulate should be avoided.

Bare weathering steel should not be considered a maintenance-free material. Structures utilizing bare weathering steel should be inspected periodically, as there are many factors that affect the formation and integrity of the oxide coating. If excessive corrosion is found, the affected area must be cleaned and a protective coating applied.

Some environments should be carefully evaluated prior to specifying weathering steel:

- Atmospheres with high concentrations of corrosive chemicals or fumes.
- Direct burial situations where the material would be in contact with the soil should have a method of protection suitable to the particular condition. This protection should extend well above the ground line to ensure that uncoated steel does not come in contact with the soil or organic debris at a later time.
- Exposures to repeated wetting by waste or salt water splash, spray or fogs will accelerate corrosion.
- Sites where dense vegetation or deep snowpacks can keep moisture against the surface for long periods of time.



Multiple Section Pole Designs

Slip joints are designed for a minimum overlap of 1.5 times the maximum inside diameter of the female section of the joint, meeting or exceeding ASCE/SEI 48-11, Design of Transmission Pole Structures. Flanged connections are also available for all heights and classes.

Field Drilling of Hole (Steel and Concrete)

Steel: Holes can easily be drilled using either a hole saw or stepped style bit. The stepped style bit works best since it requires less energy to drill a hole. Drill speed should be at 300 rpm or less. Valmont Utility can provide factory drilled holes in multiple shapes and sizes including knockouts upon request.

Concrete: Holes are typically already cast in place. The factory should be consulted if holes need to be field drilled. Use a rotary hammer drill with a carbide tipped bit or a diamond tipped core bit. Field drilling should be performed from both sides of the pole to prevent spalling of the concrete on the outside face of the pole.

Hardware

Most hardware currently used on wood poles works well with steel and concrete poles. Most all connections on steel and concrete poles can be accomplished with through bolt hardware. Steel and concrete pole dimensions are uniform and repetitive reducing the range of bolt lengths needed. Hardware components containing cleats and lags need to be avoided. All hardware should be tightened to "Turn-of-Nut" method.

Guy Applications

A steel pole needs to be guyed if the wood pole it is replacing is guyed. The steel pole can be guyed just as you would a wood pole using the same hardware. By using a stronger class steel or concrete pole, it may be possible to eliminate the need for guys altogether. Steel and concrete poles can be guyed using the non-cleat hardware following existing practices known to wood poles. Permanent attachments such as vangs can be welded into steel poles to assist field construction.

Insulation Analysis and Grounding

Rural Utility Services provides guidance of 300 kV minimum insulation strength for the basic insulation level (BIL) of a distribution pole top construction. The solutions include using higher BIL pin insulator, off-setting wood crossarms and adding a third bell insulator to the deadend configuration. Contact Valmont Utility to receive more detailed reports of these solutions. Some of the grounding provisions offered by Valmont Utility include threaded inserts, welded nuts, tabs and pads.



Energized Line Installation

Steel, concrete and wood poles are generally considered to be conductive during hot line insertion. The same safety procedures and precautions currently being used for wood poles should be used for steel and concrete poles in these types of applications.

Avian Protection

The most complete and up-to-date document on avian protection is "Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006" by Avian Power Line Interaction Committee. These practices include guidance of steel, concrete and wood. Steel poles provide an additional phase-to-ground contact point. Solutions are a combination of circuit cover up and line construction clearances. Additional information and details are available from Valmont Utility product manufacturers.

Steel Operation Training

Operations Training for introduction to advanced levels available upon request from the Steel Market Development Institute. Learn more at <http://lineman.steel.org/>

Steel Installation Guidelines

The Valmont Installation Guide is intended to be used as a reference source to the line designer in preparing construction specifications. This is general information about typical Valmont Utility class pole products and cannot cover all situations or the special features that may be unique to a specific utility. Additional information can be found in the Valmont Installation Guide 1002, "Assembly and Installation of Valmont Utility Transmission Structures."

Steel Handling Guidelines

The preferred method of lifting the poles is to use nylon slings. While a galvanized pole is very tough and abrasion resistant, it is not recommended that chains be used when handling them. During storage, blocking should be used to keep the poles off the ground and to separate each layer.

Concrete Installation Guidelines

Concrete poles are usually erected in the same manner as other poles. Assuming that the poles were properly placed before they were framed, a single-point pickup with a choker sling is usually permissible. The choker should be placed well above the center of gravity. This means that as the pole is raised from the horizontal position, much of its weight stays on the ground until the pole is nearly in the vertical position. Once it reaches the vertical position, it will not be damaged by lifting its full weight with a single-point pickup.

Refer to ASCE Manuals and Reports on Engineering Practice No. 123. Consult factory for additional information



Choosing the right pole for the right application is the key to a successful project.

Valmont Utility—Your one source for Steel, Concrete, Hybrid, Transmission, Distribution, and Substation Power Delivery Structures.

A Broad Structure Offering

Because every installation has its specific challenges, Valmont Utility knows the key to success is being able to use the right structure for a given application. That is why Valmont Utility, a leader in the industry, provides the products necessary to meet your specific needs.

Engineering Expertise

The experienced engineering staff at Valmont Utility, dedicated customer serviceteam, customer-driven research and development and reputable know-how in materials technology enable us to provide you the highest quality structures as your most economical solution.

Production Capability

Multiple locations throughout North America allow us to respond to large scale projects and emergency restoration situations in a timely manner.

Look to Valmont Utility for a complete product line with the expertise to engineer, manufacture, and deliver the right pole to the right place at the right time.

www.ValmontUtility.com

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Seller disclaims any implied warranties of merchantability or fitness for a particular purpose, and provides no other express or implied warranties to buyer, unless specifically stated in a written agreement signed by seller. If no signed written agreement exists between Buyer and Seller, all sales are made on Valmont Utility's Standard Terms and Conditions, a copy of those terms can be requested by contacting Valmont Utility.



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