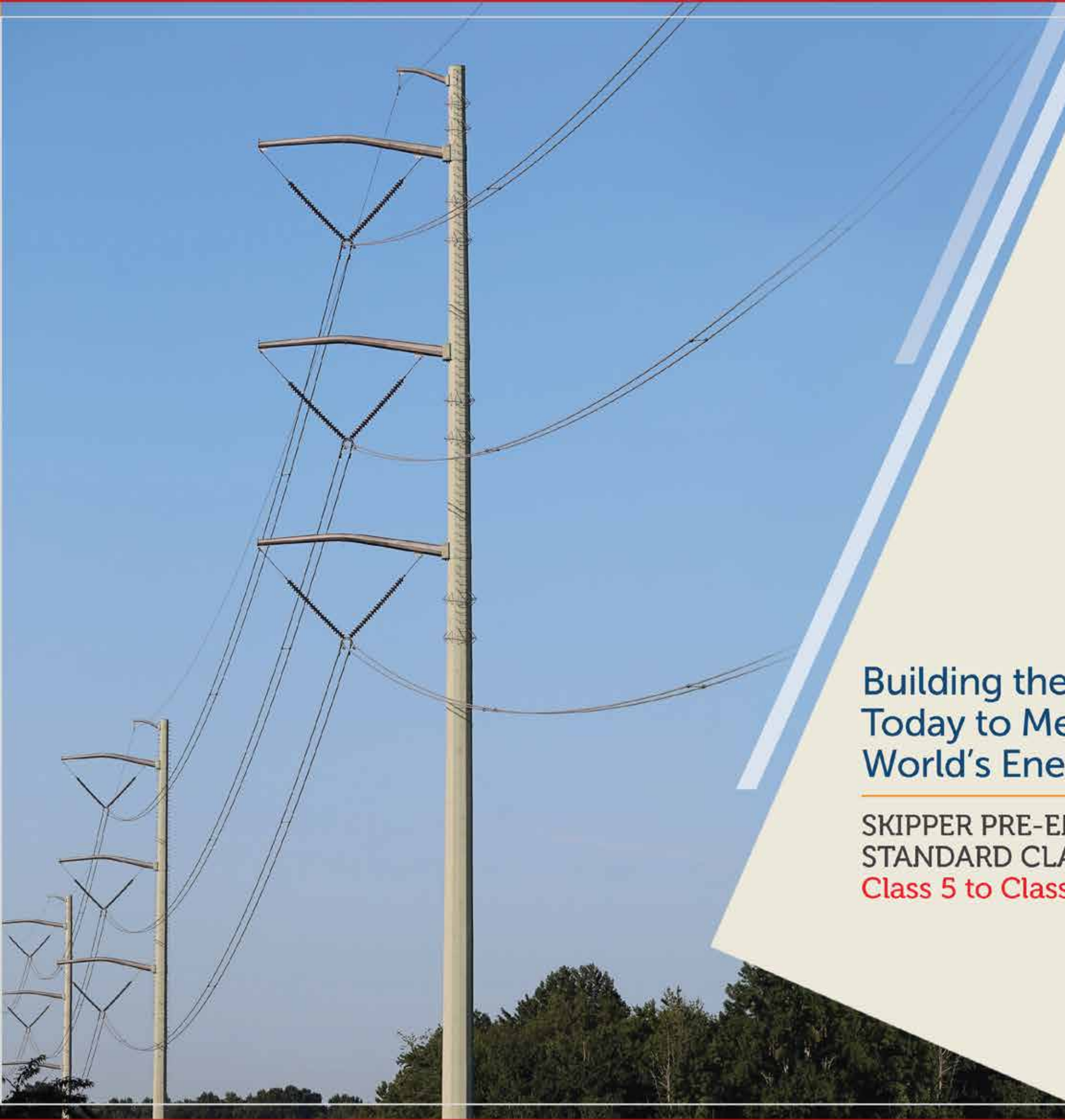


SKIPPER Limited

Building the Infrastructure Today to Meet the World's Energy Needs Tomorrow

SKIPPER PRE-ENGINEERED STANDARD CLASS STEEL POLES

Class 5 to Class H11 (RUS S-12.0)

CONTENTS

INTRODUCTION TO SKIPPER LIMITED

WHO IS SKIPPER LIMITED?

- Skipper Limited was initially established in 1981 as a family-owned business
- Headquartered in Kolkata, India Skipper is now a publicly traded company listed on India's top stock exchanges
- Skipper is the largest integrated steel pole and lattice tower manufacturer in India and among the largest in the world, integrating design, manufacturing, prototyping, trial assembly, load testing, and galvanizing operations into one location
- Operates its own in-house research center and full-scale load testing facility, which is also available to do structure testing for customers on a contract basis
- Skipper also manufactures high-mast lighting structures, telecom towers, street lighting poles, decorative lighting poles, and railway electrification structures
- The company's market reach spans across 30+ countries around the globe in South America, Europe, Africa, the Middle East, South and Southeast Asia, Australia, and now North America.

SKIPPER'S EXPERTISE & RESOURCES

- In-house engineering, design, and drafting resources
- Poles designed to meet ASCE Standard 48
- PLS-Pole, PLS-CADD, and Caisson programs used for design
- AutoCAD utilized for drawings
- In-house testing lab can perform metallurgical and structural testing to verify mill certifications for raw materials
- Skipper has secured and maintains many Quality Certifications including ISO 9001, 14001, and 18001
- AWS or CWB welding standards
- ASTM A572 steel (for galvanized poles) and A871 steel (for weathering steel poles)
- ASTM A615 anchor bolts and ASTM hardware
- Seven in-house galvanizing plants which comply with ASTM A123 standards
- Many years of successful export and container shipping experience around the world.

WHY CHOOSE SKIPPER STEEL POLES?

- Extensive engineering and drafting resources ensure quick turnaround on quotes and drawings
- Many years of experience in delivering high-quality steel poles around the world
- Competitive pricing vs. any North American or other international steel pole manufacturer
- Ability to deliver poles with lead times as good or better than the norms across the industry
- Experienced North American contact person to answer technical or other questions on Skipper products, or for quote requests

FEATURES AND BENEFITS OF SKIPPER STANDARD CLASS STEEL POLES

KEY FEATURES OF SKIPPER POLES:

- Designed using PLS-Pole software in accordance with ASCE Standard 48 and other applicable utility industry standards.
- Steel pole design library is now uploaded and available for use on the Powerline Systems website at https://www.powline.com/files/pls_pole.html
- The pole designs included in this brochure are based on minimum NESC Grade B Construction requirements.
- Pre-engineered to provide consistent performance and predictable deflection and behavior
- H-frame structures which utilize Skipper's standard class steel poles are also available.
- Skipper standard class steel poles are designed for direct embedment based on a setting depth of [10% x pole length] + 2 feet (0.61m).
- Every Skipper steel pole is guaranteed to meet or exceed the minimum stated strength requirements.
- High strength-to-weight ratio compared to wood, concrete, and composite poles.
- Strength will not deteriorate over long service life.
- No material shrinkage means that pole twist is eliminated.

Available Finishes:

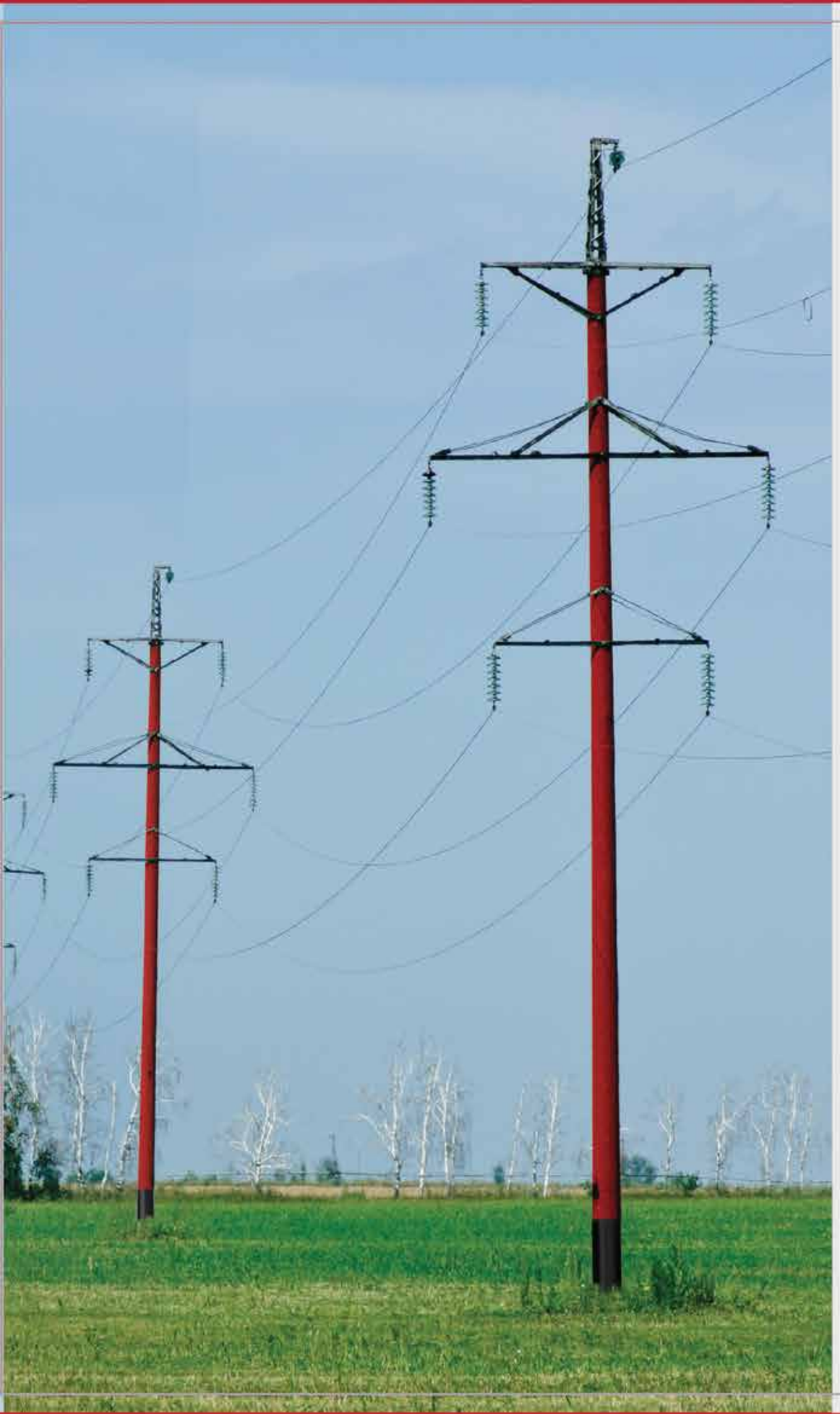
- Hot-dip galvanized in accordance with ASTM A123.
- Weathering steel finish.
- Below-grade coatings are available.

Steel Types:

- ASTM Grade A572 steel used for galvanized poles.
- ASTM Grade A871steel used for weathering steel poles.

KEY BENEFITS OF SKIPPER POLES:

- Pre-drilled to customer specifications, resulting in significant field labor savings.
- Reduces risk of cascading or domino-effect failures.
- Steel poles are inherently fire resistant, which is important in areas prone to forest fires or wildfires.
- Uniform dimensions allow for reduced hardware inventory.
- Price competitive or lower cost than wood, concrete, and fiberglass poles.
- Environmentally inert, non-toxic, and fully recyclable.
- Less than half the weight of equivalent wood and one fifth the weight of concrete resulting in more poles per truckload,and overall reduced transportation costs.
- Compatible with most standard hardware and banding.
- Immune to pole rot, insect, and woodpecker damage.
- The steel pole itself acts as a grounding conductor with no copper down-ground required, thereby saving on grounding costs.
- Steel pole provides enhanced grounding capability, resulting in increased line safety and reliability.
- No re-tightening of hardware or switch alignment problems associated with pole material shrinkage, thereby reducing maintenance labor costs.



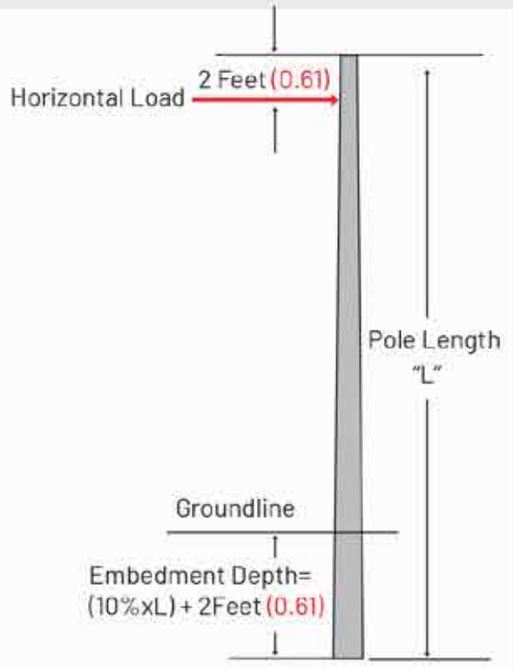
Steel Pole Horizontal Class Loads and Related RUS Designations For Skipper Standard Class Steel Poles

The pole designations under RUS 1724E-214, "Guide Specification for Standard Class Steel Transmission Poles" have been used as a general guideline for the design of Skipper's standard class steel poles.The chart below provides comparative information between Skipper's standard class steel poles and the RUS steel pole designations, and should be used as for general reference purposes only.

The Ultimate Groundline Moments for the Skipper standard class steel poles indicated in the chart below have been calculated by multiplying the applicable horizontal class load applied 2 feet (0.61m) from pole top by the distance from the groundline to the load application point.

The applicable steel pole horizontal load for a given pole class under NESC Grade B Construction is determined by multiplying the ANSI 05.1 wood pole horizontal load for that class by the ratio of 2.5/3.85 = 0.65. This ratio is derived as follows: [(steel strength factor/wood strength factor)/(steel overload factor/wood overload factor)], based solely on wind loading considerations. As an example,the applicable horizontal class load for a Skipper Class 1 (RUS S-02.9) steel pole under NESC Grade B Construction is determined by multiplying the Class 1 wood pole horizontal load of 4,500 lbs (20.02 kN) x 0.65, which results in a horizontal load requirement of 2,925 lbs (13.01 kN) for Class 1 (RUS S-02.9) steel poles.

Pole Class	RUS Standard 1724E-214 Pole Designation	Horizontal Load @ 2' (0.61m) From Pole Top	
		(lbs)	(kN)
Class 5	None	1,235	5.49
Class 4	None	1,560	6.94
Class 3	S-02.0	1,950	8.67
Class 2	S-02.4	2,405	10.70
Class 1	S-02.9	2,925	13.01
Class H1	S-03.5	3,510	15.61
Class H2	S-04.2	4,160	18.50
Class H3	S-04.5	4,875	21.69
Class H4	S-05.7	5,655	25.15
Class H5	S-06.5	5,500	28.91
Class H6	S-07.4	7,410	32.96
Class H7	S-08.0	8,000	35.59
Class H8	S-09.0	9,000	40.03
Class H9	S-10.0	10,000	44.48
Class H10	S-11.0	11,000	48.93
Class H11	S-12.0	12,000	53.38



SKIPPER 12-SIDED Standard CLASS 5 Steel Poles

Pole Length		No. of Sections	SKIPPER Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths						Estimated Pole Weight (Black)	
									Top		Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-C5-12G	SP-30-C5-12W	8.60	218	28.5	39	30.0	9.14	---	---	---	---	407	185
35	10.67	1	SP-35-C5-12G	SP-35-C5-12W	9.20	234	34.1	46	35.0	10.67	---	---	---	---	496	225
40	12.19	2	SP-40-C5-12G	SP-40-C5-12W	9.42	239	39.8	54	22.0	6.71	---	---	20.9	6.37	619	281
45	13.72	2	SP-45-C5-12G	SP-45-C5-12W	10.02	255	45.4	62	22.0	6.71	---	---	25.9	7.89	717	325
50	15.24	2	SP-50-C5-12G	SP-50-C5-12W	10.62	270	51.1	69	22.0	6.71	---	---	30.9	9.42	821	372
55	16.76	2	SP-55-C5-12G	SP-55-C5-12W	11.22	285	56.9	77	22.0	6.71	---	---	35.9	10.94	931	422
60	18.29	2	SP-60-C5-12G	SP-60-C5-12W	11.82	300	62.6	85	39.0	11.89	---	---	24.0	7.32	1074	487
65	19.81	2	SP-65-C5-12G	SP-65-C5-12W	12.42	315	68.3	93	39.0	11.89	---	---	29.0	8.84	1197	543
70	21.34	2	SP-70-C5-12G	SP-70-C5-12W	13.02	331	74.2	101	39.0	11.89	---	---	34.0	10.36	1325	601
75	22.86	2	SP-75-C5-12G	SP-75-C5-12W	13.62	346	80.0	109	39.0	11.89	---	---	39.0	11.89	1460	662

Horizontal Load	
(lbs)	(kN)
1,235	5.49

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness					
				Top		Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)
5.00	127	0.120	10.00	0.1875	4.76	---	---	0.1875	4.76

Design Notes:

1. Under NESC Grade B Construction, for a given steel pole class the required horizontal load applied at 2' (0.61m) from the pole top is determined by multiplying the ANSI 05.1 wood pole horizontal class load by the ratio of [(steel strength factor/wood strength factor) / (steel overload factor/wood overload factor)] = 2.5/3.85 = 0.65. Therefore, for Class 5 steel poles the required horizontal class load = 1,900 pounds (8.45 kN) x 0.65 = 1,235 pounds (5.49 kN), based on wind loading considerations only.
2. For the Skipper standard class steel poles indicated in the chart above, the Ultimate Groundline Moments have been calculated by multiplying the pole class horizontal load by the distance from the groundline to the applied load point at 2 feet (0.61 m) from the pole top.
3. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
4. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
5. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "C5" = Class 5; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-C5-12G" = Skipper Pole, 75', Class 5, 12-sided, Galvanized; and "SP-75-C5-12W" = Skipper Pole, 75', Class 5, 12-sided, Weathering.
6. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS 4 Steel Poles

Pole Length		No. of Sections	SKIPPER Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths						Estimated Pole Weight (Black)	
									Top		Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-C4-12G	SP-30-C4-12W	8.60	218	36	49	30.0	9.14	---	---	---	---	407	185
35	10.67	1	SP-35-C4-12G	SP-35-C4-12W	9.20	234	43	58	35.0	10.67	---	---	---	---	496	225
40	12.19	2	SP-40-C4-12G	SP-40-C4-12W	9.42	239	50	68	22.0	6.71	---	---	20.9	6.37	619	281
45	13.72	2	SP-45-C4-12G	SP-45-C4-12W	10.02	255	57	78	22.0	6.71	---	---	25.9	7.89	717	325
50	15.24	2	SP-50-C4-12G	SP-50-C4-12W	10.62	270	64	87	22.0	6.71	---	---	30.9	9.42	821	372
55	16.76	2	SP-55-C4-12G	SP-55-C4-12W	11.22	285	72	97	22.0	6.71	---	---	35.9	10.94	931	422
60	18.29	2	SP-60-C4-12G	SP-60-C4-12W	11.82	300	79	107	39.0	11.89	---	---	24.0	7.32	1074	487
65	19.81	2	SP-65-C4-12G	SP-65-C4-12W	12.42	315	86	117	39.0	11.89	---	---	29.0	8.84	1197	543
70	21.34	2	SP-70-C4-12G	SP-70-C4-12W	13.02	331	93	126	39.0	11.89	---	---	34.0	10.36	1325	601
75	22.86	2	SP-75-C4-12G	SP-75-C4-12W	13.62	346	101	136	39.0	11.89	---	---	39.0	11.89	1460	662

Horizontal Load	
(lbs)	(kN)
1,560	6.94

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness					
				Top		Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)
5.00	127	0.120	10.00	0.1875	4.76	---	---	0.1875	4.76

Design Notes:

1. Under NESC Grade B Construction, for a given steel pole class the required horizontal load applied at 2' (0.61m) from the pole top is determined by multiplying the ANSI 05.1 wood pole horizontal class load by the ratio of [(steel strength factor/wood strength factor) / (steel overload factor/wood overload factor)] = 2.5/3.85 = 0.65. Therefore, for Class 4 steel poles the required horizontal class load = 2,400 pounds (10.68 kN) x 0.65 = 1,560 pounds (6.94 kN), based on wind loading considerations only.
2. For the Skipper standard class steel poles indicated in the chart above, the Ultimate Groundline Moments have been calculated by multiplying the pole class horizontal load by the distance from the groundline to the applied load point at 2 feet (0.61 m) from the pole top.
3. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
4. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
5. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "C4" = Class 4; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-C4-12G" = Skipper Pole, 75', Class 4, 12-sided, Galvanized; and "SP-75-C4-12W" = Skipper Pole, 75', Class 4, 12-sided, Weathering.
6. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS 3 (RUS S-02.0) Steel Poles

Pole Length		No. of Sections	SKIPPER Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths						Estimated Pole Weight (Black)	
									Top		Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-C3-12G	SP-30-C3-12W	10.00	254	45	61	30.0	9.14	---	---	---	---	489	222
35	10.67	1	SP-35-C3-12G	SP-35-C3-12W	10.62	270	54	73	35.0	10.67	---	---	---	---	592	269
40	12.19	2	SP-40-C3-12G	SP-40-C3-12W	10.87	276	63	85	22.0	6.71	---	---	20.9	6.37	738	335
45	13.72	2	SP-45-C3-12G	SP-45-C3-12W	11.50	292	72	97	22.0	6.71	---	---	25.9	7.89	851	386
50	15.24	2	SP-50-C3-12G	SP-50-C3-12W	12.12	308	80	109	22.0	6.71	---	---	30.9	9.42	970	440
55	16.76	2	SP-55-C3-12G	SP-55-C3-12W	12.75	324	89	121	22.0	6.71	---	---	35.9	10.94	1096	497
60	18.29	2	SP-60-C3-12G	SP-60-C3-12W	13.37	340	98	133	39.0	11.89	---	---	24.1	7.35	1258	570
65	19.81	2	SP-65-C3-12G	SP-65-C3-12W	14.00	356	107	146	39.0	11.89	---	---	29.1	8.87	1396	633
70	21.34	2	SP-70-C3-12G	SP-70-C3-12W	14.62	371	116	158	39.0	11.89	---	---	34.1	10.39	1541	699
75	22.86	3	SP-75-C3-12G	SP-75-C3-12W	14.87	378	126	170	39.0	11.89	22.0	6.71	20.4	6.22	1763	800
80	24.38	3	SP-80-C3-12G	SP-80-C3-12W	15.50	394	135	183	39.0	11.89	22.0	6.71	25.4	7.74	1917	869
85	25.91	3	SP-85-C3-12G	SP-85-C3-12W	16.12	409	144	195	39.0	11.89	22.0	6.71	30.4	9.27	2077	942
90	27.43	3	SP-90-C3-12G	SP-90-C3-12W	16.75	425	153	208	39.0	11.89	22.0	6.71	35.4	10.79	2244	1018
95	28.96	3	SP-95-C3-12G	SP-95-C3-12W	17.37	441	163	221	39.0	11.89	39.0	11.89	23.6	7.19	2450	1111
100	30.48	3	SP-100-C3-12G	SP-100-C3-12W	18.00	457	172	233	39.0	11.89	35.0	10.67	32.5	9.91	2620	1188
105	32.00	3	SP-105-C3-12G	SP-105-C3-12W	18.62	473	182	246	39.0	11.89	35.0	10.67	37.5	11.43	2806	1273

Horizontal Load	
(lbs)	(kN)
1,950	8.67

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness					
				Top		Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)
6.25	159	0.125	10.42	0.1875	4.76	0.2	4.8	0.1875	4.76

Design Notes:

1. Under NESC Grade B Construction, for a given steel pole class the required horizontal load applied at 2' (0.61m) from the pole top is determined by multiplying the ANSI 05.1 wood pole horizontal class load by the ratio of [(steel strength factor/wood strength factor) / (steel overload factor/wood overload factor)] = 2.5/3.85 = 0.65. Therefore, for Class 3 steel poles the required horizontal class load = 3,000 pounds (13.34 kN) x 0.65 = 1,950 pounds (8.67 kN), based on wind loading considerations only.
2. For the Skipper standard class steel poles indicated in the chart above, the Ultimate Groundline Moments have been calculated by multiplying the pole class horizontal load by the distance from the groundline to the applied load point at 2 feet (0.61 m) from the pole top.
3. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
4. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
5. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "C3" = Class 3; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-C3-12G" = Skipper Pole, 75', Class 3, 12-sided, Galvanized; and "SP-75-C3-12W" = Skipper Pole, 75', Class 3, 12-sided, Weathering.
6. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS 2 (RUS S-02.4) Steel Poles

Pole Length		No. of Sections	SKIPPER Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths						Estimated Pole Weight (Black)	
									Top		Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-C2-12G	SP-30-C2-12W	10.50	267	55	75	30.0	9.14	---	---	---	---	510	231
35	10.67	1	SP-35-C2-12G	SP-35-C2-12W	11.17	284	66	90	35.0	10.67	---	---	---	---	619	281
40	12.19	2	SP-40-C2-12G	SP-40-C2-12W	11.47	291	77	105	22.0	6.71	---	---	20.9	6.37	773	351
45	13.72	2	SP-45-C2-12G	SP-45-C2-12W	12.15	309	88	119	22.0	6.71	---	---	25.9	7.89	892	405
50	15.24	2	SP-50-C2-12G	SP-50-C2-12W	12.82	326	99	134	22.0	6.71	---	---	30.9	9.42	1019	462
55	16.76	2	SP-55-C2-12G	SP-55-C2-12W	13.50	343	110	149	22.0	6.71	---	---	35.9	10.94	1152	522
60	18.29	2	SP-60-C2-12G	SP-60-C2-12W	14.17	360	121	164	39.0	11.89	---	---	24.1	7.35	1323	600
65	19.81	2	SP-65-C2-12G	SP-65-C2-12W	14.85	377	132	179	39.0	11.89	---	---	29.1	8.87	1470	667
70	21.34	2	SP-70-C2-12G	SP-70-C2-12W	15.52	394	143	194	39.0	11.89	---	---	34.1	10.39	1624	736
75	22.86	3	SP-75-C2-12G	SP-75-C2-12W	15.82	402	154	209	39.0	11.89	22.0	6.71	20.4	6.22	1860	844
80	24.38	3	SP-80-C2-12G	SP-80-C2-12W	16.50	419	166	225	39.0	11.89	22.0	6.71	25.4	7.74	2024	918
85	25.91	3	SP-85-C2-12G	SP-85-C2-12W	17.17	436	177	240	39.0	11.89	22.0	6.71	30.4	9.27	2195	995
90	27.43	3	SP-90-C2-12G	SP-90-C2-12W	17.85	453	188	255	39.0	11.89	22.0	6.71	35.4	10.79	2372	1076
95	28.96	3	SP-95-C2-12G	SP-95-C2-12W	18.52	470	200	271	39.0	11.89	35.0	10.67	27.5	8.38	2582	1171
100	30.48	3	SP-100-C2-12G	SP-100-C2-12W	19.20	488	211	286	39.0	11.89	35.0	10.67	32.5	9.91	2773	1258
105	32.00	3	SP-105-C2-12G	SP-105-C2-12W	19.87	505	223	302	39.0	11.89	35.0	10.67	37.5	11.43	2972	1348

Horizontal Load	
(lbs)	(kN)
2,405	10.70

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness					
				Top		Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)
6.45	164	0.135	11.25	0.1875	4.76	0.2	4.8	0.1875	4.76

Design Notes:

1. Under NESC Grade B Construction, for a given steel pole class the required horizontal load applied at 2' (0.61m) from the pole top is determined by multiplying the ANSI 05.1 wood pole horizontal class load by the ratio of [(steel strength factor/wood strength factor) / (steel overload factor/wood overload factor)] = 2.5/3.85 = 0.65. Therefore, for Class 2 steel poles the required horizontal class load = 3,700 pounds (16.46 kN) x 0.65 = 2,405 pounds (10.70 kN), based on wind loading considerations only.
2. For the Skipper standard class steel poles indicated in the chart above, the Ultimate Groundline Moments have been calculated by multiplying the pole class horizontal load by the distance from the groundline to the applied load point at 2 feet (0.61 m) from the pole top.
3. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
4. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
5. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "C3" = Class 2; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-C2-12G" = Skipper Pole, 75', Class 2, 12-sided, Galvanized; and "SP-75-C2-12W" = Skipper Pole, 75', Class 2, 12-sided, Weathering.
6. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS 1 (RUS S-02.9) Steel Poles

Pole Length		No. of Sections	SKIPPER Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths								Estimated Pole Weight (Black)	
									Top		Middle		Lower Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-C1-12G	SP-30-C1-12W	11.65	296	67	91	30.0	9.14	---	---	---	---	---	---	576	261
35	10.67	1	SP-35-C1-12G	SP-35-C1-12W	12.35	314	81	109	35.0	10.67	---	---	---	---	---	---	697	316
40	12.19	2	SP-40-C1-12G	SP-40-C1-12W	12.67	322	94	127	22.0	6.71	---	---	---	---	20.9	6.37	870	395
45	13.72	2	SP-45-C1-12G	SP-45-C1-12W	13.37	340	107	145	22.0	6.71	---	---	---	---	25.9	7.89	1002	454
50	15.24	2	SP-50-C1-12G	SP-50-C1-12W	14.07	357	120	163	22.0	6.71	---	---	---	---	30.9	9.42	1141	517
55	16.76	2	SP-55-C1-12G	SP-55-C1-12W	14.77	375	134	181	22.0	6.71	---	---	---	---	35.9	10.94	1287	584
60	18.29	2	SP-60-C1-12G	SP-60-C1-12W	15.47	393	147	199	39.0	11.89	---	---	---	---	24.2	7.38	1474	669
65	19.81	2	SP-65-C1-12G	SP-65-C1-12W	16.17	411	161	218	39.0	11.89	---	---	---	---	29.2	8.90	1635	741
70	21.34	2	SP-70-C1-12G	SP-70-C1-12W	16.87	428	174	236	39.0	11.89	---	---	---	---	34.2	10.42	1802	818
75	22.86	3	SP-75-C1-12G	SP-75-C1-12W	17.20	437	188	254	39.0	11.89	22.0	6.71	---	---	20.6	6.28	2064	936
80	24.38	3	SP-80-C1-12G	SP-80-C1-12W	17.90	455	201	273	39.0	11.89	22.0	6.71	---	---	25.6	7.80	2242	1017
85	25.91	3	SP-85-C1-12G	SP-85-C1-12W	18.60	472	215	291	39.0	11.89	22.0	6.71	---	---	30.6	9.33	2427	1101
90	27.43	3	SP-90-C1-12G	SP-90-C1-12W	19.30	490	229	310	39.0	11.89	22.0	6.71	---	---	35.6	10.85	2620	1188
95	28.96	3	SP-95-C1-12G	SP-95-C1-12W	20.00	508	242	328	39.0	11.89	35.0	10.67	---	---	27.7	8.44	2846	1291
100	30.48	3	SP-100-C1-12G	SP-100-C1-12W	20.70	526	256	347	39.0	11.89	35.0	10.67	---	---	32.7	9.97	3052	1384
105	32.00	3	SP-105-C1-12G	SP-105-C1-12W	21.40	544	270	366	39.0	11.89	35.0	10.67	---	---	37.7	11.49	3266	1482
110	33.53	3	SP-110-C1-12G	SP-110-C1-12W	22.10	561	284	385	39.0	11.89	39.0	11.89	---	---	38.8	11.83	3498	1587
115	35.05	4	SP-115-C1-12G	SP-115-C1-12W	22.42	569	298	404	39.0	11.89	35.0	10.67	25.0	7.62	26.4	8.05	3841	1742
120	36.58	4	SP-120-C1-12G	SP-120-C1-12W	23.12	587	312	423	39.0	11.89	35.0	10.67	25.0	7.62	31.4	9.57	4073	1847

Horizontal Load	
(lbs)	(kN)
2,925	13.01

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness							
				Top		Middle		Lower Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
7.45	189	0.140	11.67	0.1875	4.76	0.1875	4.76	0.1875	4.76	0.1875	4.76

Design Notes:

1. Under NESC Grade B Construction, for a given steel pole class the required horizontal load applied at 2' (0.61m) from the pole top is determined by multiplying the ANSI 05.1 wood pole horizontal class load by the ratio of [(steel strength factor/wood strength factor) / (steel overload factor/wood overload factor)] = 2.5/3.85 = 0.65. Therefore, for Class 1 steel poles the required horizontal class load = 4,500 pounds (20.02 kN) x 0.65 = 2,925 pounds (13.01 kN), based on wind loading considerations only.
2. For the Skipper standard class steel poles indicated in the chart above, the Ultimate Groundline Moments have been calculated by multiplying the pole class horizontal load by the distance from the groundline to the applied load point at 2 feet (0.61 m) from the pole top.
3. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
4. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
5. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "C1" = Class 1; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-C1-12G" = Skipper Pole, 75', Class 1, 12-sided, Galvanized; and "SP-75-C1-12W" = Skipper Pole, 75', Class 1, 12-sided, Weathering.
6. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS H1 (RUS S-03.5) Steel Poles

Pole Length		No. of Sections	TAPP Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths								Estimated Pole Weight (Black)	
									Top		Middle		Lower Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-H1-12G	SP-30-H1-12W	12.54	319	81	110	30.0	9.14	---	---	---	---	---	---	628	285
35	10.67	1	SP-35-H1-12G	SP-35-H1-12W	13.25	337	97	131	35.0	10.67	---	---	---	---	---	---	759	344
40	12.19	2	SP-40-H1-12G	SP-40-H1-12W	13.59	345	113	153	22.0	6.71	---	---	---	---	21.0	6.40	948	430
45	13.72	2	SP-45-H1-12G	SP-45-H1-12W	14.31	363	129	174	22.0	6.71	---	---	---	---	26.0	7.92	1089	494
50	15.24	2	SP-50-H1-12G	SP-50-H1-12W	15.02	382	144	196	22.0	6.71	---	---	---	---	31.0	9.45	1238	561
55	16.76	2	SP-55-H1-12G	SP-55-H1-12W	15.74	400	160	218	22.0	6.71	---	---	---	---	36.0	10.97	1393	632
60	18.29	2	SP-60-H1-12G	SP-60-H1-12W	16.45	418	176	239	39.0	11.89	---	---	---	---	24.2	7.38	1590	721
65	19.81	2	SP-65-H1-12G	SP-65-H1-12W	17.17	436	192	261	39.0	11.89	---	---	---	---	29.2	8.90	1760	799
70	21.34	2	SP-70-H1-12G	SP-70-H1-12W	17.88	454	209	283	39.0	11.89	---	---	---	---	34.2	10.42	1938	879
75	22.86	3	SP-75-H1-12G	SP-75-H1-12W	18.22	463	225	305	39.0	11.89	22.0	6.71	---	---	20.6	6.28	2217	1006
80	24.38	3	SP-80-H1-12G	SP-80-H1-12W	18.94	481	241	327	39.0	11.89	22.0	6.71	---	---	25.6	7.80	2406	1091
85	25.91	3	SP-85-H1-12G	SP-85-H1-12W	19.65	499	257	349	39.0	11.89	22.0	6.71	---	---	30.6	9.33	2602	1180
90	27.43	3	SP-90-H1-12G	SP-90-H1-12W	20.37	517	274	371	39.0	11.89	22.0	6.71	---	---	35.6	10.85	2805	1272
95	28.96	3	SP-95-H1-12G	SP-95-H1-12W	21.08	535	290	393	39.0	11.89	39.0	11.89	---	---	23.8	7.25	3053	1385
100	30.48	3	SP-100-H1-12G	SP-100-H1-12W	21.80	554	306	415	39.0	11.89	39.0	11.89	---	---	28.8	8.78	3271	1484
105	32.00	3	SP-105-H1-12G	SP-105-H1-12W	22.51	572	323	438	39.0	11.89	39.0	11.89	---	---	33.8	10.30	3497	1586
110	33.53	3	SP-110-H1-12G	SP-110-H1-12W	23.23	590	340	460	39.0	11.89	39.0	11.89	---	---	38.8	11.83	3729	1692
115	35.05	4	SP-115-H1-12G	SP-115-H1-12W	23.57	599	356	483	39.0	11.89	35.0	10.67	25.0	7.62	26.6	8.11	4099	1859
120	36.58	4	SP-120-H1-12G	SP-120-H1-12W	24.28	617	373	506	39.0	11.89	35.0	10.67	25.0	7.62	31.6	9.63	4343	1970

Horizontal Load	
(lbs)	(kN)
3,510	15.61

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness							
				Top		Middle		Lower Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
8.25	210	0.143	11.92	0.1875	4.76	0.1875	4.76	0.1875	4.76	0.1875	4.76

Design Notes:

1. Under NESC Grade B Construction, for a given steel pole class the required horizontal load applied at 2' (0.61m) from the pole top is determined by multiplying the ANSI 05.1 wood pole horizontal class load by the ratio of [(steel strength factor/wood strength factor) / (steel overload factor/wood overload factor)] = 2.5/3.85 = 0.65. Therefore, for Class H1 steel poles the required horizontal class load = 5,400 pounds (24.02 kN) x 0.65 = 3,510 pounds (15.61 kN), based on wind loading considerations only.
2. For the Skipper standard class steel poles indicated in the chart above, the Ultimate Groundline Moments have been calculated by multiplying the pole class horizontal load by the distance from the groundline to the applied load point at 2 feet (0.61 m) from the pole top.
3. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
4. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
5. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "H1" = Class H1; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-H1-12G" = Skipper Pole, 75', Class H1, 12-sided, Galvanized; and "SP-75-H1-12W" = Skipper Pole, 75', Class H1, 12-sided, Weathering.
6. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS H2 (RUS S-04.2) Steel Poles

Pole Length		No. of Sections	TAPP Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths								Estimated Pole Weight (Black)	
									Top		Middle		Lower Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-H2-12G	SP-30-H2-12W	13.70	348	96	130	30.0	9.14	---	---	---	---	---	---	693	314
35	10.67	1	SP-35-H2-12G	SP-35-H2-12W	14.45	367	115	155	35.0	10.67	---	---	---	---	---	---	836	379
40	12.19	2	SP-40-H2-12G	SP-40-H2-12W	14.82	376	133	181	22.0	6.71	---	---	---	---	21.0	6.40	1044	474
45	13.72	2	SP-45-H2-12G	SP-45-H2-12W	15.57	395	152	206	22.0	6.71	---	---	---	---	26.0	7.92	1198	543
50	15.24	2	SP-50-H2-12G	SP-50-H2-12W	16.32	415	171	232	22.0	6.71	---	---	---	---	31.0	9.45	1360	617
55	16.76	2	SP-55-H2-12G	SP-55-H2-12W	17.07	434	190	258	22.0	6.71	---	---	---	---	36.0	10.97	1529	694
60	18.29	2	SP-60-H2-12G	SP-60-H2-12W	17.82	453	209	283	39.0	11.89	---	---	---	---	24.3	7.41	1744	791
65	19.81	2	SP-65-H2-12G	SP-65-H2-12W	18.57	472	228	309	39.0	11.89	---	---	---	---	29.3	8.93	1928	875
70	21.34	2	SP-70-H2-12G	SP-70-H2-12W	19.32	491	247	335	39.0	11.89	---	---	---	---	34.3	10.45	2121	962
75	22.86	3	SP-75-H2-12G	SP-75-H2-12W	19.70	500	266	361	39.0	11.89	22.0	6.71	---	---	20.8	6.34	2427	1101
80	24.38	3	SP-80-H2-12G	SP-80-H2-12W	20.45	519	285	387	39.0	11.89	22.0	6.71	---	---	25.8	7.86	2631	1193
85	25.91	3	SP-85-H2-12G	SP-85-H2-12W	21.20	538	305	413	39.0	11.89	22.0	6.71	---	---	30.8	9.39	2843	1289
90	27.43	3	SP-90-H2-12G	SP-90-H2-12W	21.95	558	324	439	39.0	11.89	22.0	6.71	---	---	35.8	10.91	3062	1389
95	28.96	3	SP-95-H2-12G	SP-95-H2-12W	22.70	577	343	465	39.0	11.89	39.0	11.89	---	---	24.0	7.32	3328	1510
100	30.48	3	SP-100-H2-12G	SP-100-H2-12W	23.45	596	362	491	39.0	11.89	39.0	11.89	---	---	29.0	8.84	3563	1616
105	32.00	3	SP-105-H2-12G	SP-105-H2-12W	24.20	615	382	518	39.0	11.89	39.0	11.89	---	---	34.0	10.36	3806	1726
110	33.53	3	SP-110-H2-12G	SP-110-H2-12W	24.95	634	402	544	39.0	11.89	39.0	11.89	---	---	39.0	11.89	4056	1840
115	35.05	4	SP-115-H2-12G	SP-115-H2-12W	25.32	643	421	571	39.0	11.89	35.0	10.67	22.0	6.71	29.9	9.11	4454	2020
120	36.58	4	SP-120-H2-12G	SP-120-H2-12W	26.07	662	441	598	39.0	11.89	35.0	10.67	22.0	6.71	34.9	10.64	4715	2139

Horizontal Load	
(lbs)	(kN)
4,160	18.50

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness							
				Top		Middle		Lower Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
9.20	234	0.150	12.50	0.1875	4.76	0.1875	4.76	0.1875	4.76	0.1875	4.76

Design Notes:

1. Under NESC Grade B Construction, for a given steel pole class the required horizontal load applied at 2' (0.61m) from the pole top is determined by multiplying the ANSI 05.1 wood pole horizontal class load by the ratio of [(steel strength factor/wood strength factor) / (steel overload factor/wood overload factor)] = 2.5/3.85 = 0.65. Therefore, for Class H2 steel poles the required horizontal class load = 6,400 pounds (28.27 kN) x 0.65 = 4,160 pounds (18.50 kN), based on wind loading considerations only.
2. For the Skipper standard class steel poles indicated in the chart above, the Ultimate Groundline Moments have been calculated by multiplying the pole class horizontal load by the distance from the groundline to the applied load point at 2 feet (0.61 m) from the pole top.
3. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
4. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
5. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "H2" = Class H2; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-H2-12G" = Skipper Pole, 75', Class H2, 12-sided, Galvanized; and "SP-75-H2-12W" = Skipper Pole, 75', Class H2, 12-sided, Weathering.
6. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS H3 (RUS S-04.9) Steel Poles

Pole Length		No. of Sections	TAPP Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths								Estimated Pole Weight (Black)	
									Top		Middle		Lower Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-H3-12G	SP-30-H3-12W	14.95	380	112	152	30.0	9.14	---	---	---	---	---	---	766	347
35	10.67	1	SP-35-H3-12G	SP-35-H3-12W	15.72	399	134	182	35.0	10.67	---	---	---	---	---	---	921	418
40	12.19	2	SP-40-H3-12G	SP-40-H3-12W	16.12	409	156	212	22.0	6.71	---	---	---	---	21.1	6.43	1152	523
45	13.72	2	SP-45-H3-12G	SP-45-H3-12W	16.90	429	178	242	22.0	6.71	---	---	---	---	26.1	7.96	1320	599
50	15.24	2	SP-50-H3-12G	SP-50-H3-12W	17.67	449	200	272	22.0	6.71	---	---	---	---	31.1	9.48	1495	678
55	16.76	2	SP-55-H3-12G	SP-55-H3-12W	18.45	469	223	302	22.0	6.71	---	---	---	---	36.1	11.00	1679	761
60	18.29	2	SP-60-H3-12G	SP-60-H3-12W	19.22	488	245	332	39.0	11.89	---	---	---	---	24.3	7.41	1906	865
65	19.81	2	SP-65-H3-12G	SP-65-H3-12W	20.00	508	267	362	39.0	11.89	---	---	---	---	29.3	8.93	2105	955
70	21.34	2	SP-70-H3-12G	SP-70-H3-12W	20.77	528	289	392	39.0	11.89	---	---	---	---	34.3	10.45	2313	1049
75	22.86	3	SP-75-H3-12G	SP-75-H3-12W	21.17	538	312	422	39.0	11.89	22.0	6.71	---	---	20.9	6.37	2648	1201
80	24.38	3	SP-80-H3-12G	SP-80-H3-12W	21.95	558	334	453	39.0	11.89	22.0	6.71	---	---	25.9	7.89	2867	1300
85	25.91	3	SP-85-H3-12G	SP-85-H3-12W	22.72	577	356	483	39.0	11.89	22.0	6.71	---	---	30.9	9.42	3094	1403
90	27.43	3	SP-90-H3-12G	SP-90-H3-12W	23.50	597	379	514	39.0	11.89	22.0	6.71	---	---	35.9	10.94	3329	1510
95	28.96	3	SP-95-H3-12G	SP-95-H3-12W	24.27	616	401	544	39.0	11.89	39.0	11.89	---	---	24.1	7.35	3613	1639
100	30.48	3	SP-100-H3-12G	SP-100-H3-12W	25.05	636	424	575	39.0	11.89	39.0	11.89	---	---	29.1	8.87	3864	1753
105	32.00	3	SP-105-H3-12G	SP-105-H3-12W	25.82	656	447	606	39.0	11.89	39.0	11.89	---	---	34.1	10.39	4123	1870
110	33.53	4	SP-110-H3-12G	SP-110-H3-12W	26.22	666	470	637	39.0	11.89	35.0	10.67	25.0	7.62	22.0	6.71	4735	2148
115	35.05	4	SP-115-H3-12G	SP-115-H3-12W	27.00	686	493	668	39.0	11.89	35.0	10.67	25.0	7.62	27.0	8.23	5052	2291
120	36.58	4	SP-120-H3-12G	SP-120-H3-12W	27.77	705	515	699	39.0	11.89	35.0	10.67	25.0	7.62	32.0	9.75	5377	2439

Horizontal Load	
(lbs)	(kN)
4,875	21.69

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness							
				Top		Middle		Lower Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
10.30	262	0.155	12.92	0.1875	4.76	0.1875	4.76	0.1875	4.76	0.2190	5.56

Design Notes:

1. Under NESC Grade B Construction, for a given steel pole class the required horizontal load applied at 2' (0.61m) from the pole top is determined by multiplying the ANSI 05.1 wood pole horizontal class load by the ratio of [(steel strength factor/wood strength factor) / (steel overload factor/wood overload factor)] = 2.5/3.85 = 0.65. Therefore, for Class H3 steel poles the required horizontal class load = 7,500 pounds (33.36 kN) x 0.65 = 4,875 pounds (21.69 kN), based on wind loading considerations only.
2. For the Skipper standard class steel poles indicated in the chart above, the Ultimate Groundline Moments have been calculated by multiplying the pole class horizontal load by the distance from the groundline to the applied load point at 2 feet (0.61 m) from the pole top.
3. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
4. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
5. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "H3" = Class H3; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-H3-12G" = Skipper Pole, 75', Class H3, 12-sided, Galvanized; and "SP-75-H3-12W" = Skipper Pole, 75', Class H3, 12-sided, Weathering.
6. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS H4 (RUS S-05.7) Steel Poles

Pole Length		No. of Sections	TAPP Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths								Estimated Pole Weight (Black)	
									Top		Middle		Lower Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-H4-12G	SP-30-H4-12W	15.86	403	130	176	30.0	9.14	---	---	---	---	---	---	815	370
35	10.67	1	SP-35-H4-12G	SP-35-H4-12W	16.67	423	156	211	35.0	10.67	---	---	---	---	---	---	980	444
40	12.19	2	SP-40-H4-12G	SP-40-H4-12W	17.10	434	181	246	22.0	6.71	---	---	---	---	21.1	6.43	1227	556
45	13.72	2	SP-45-H4-12G	SP-45-H4-12W	17.91	455	207	280	22.0	6.71	---	---	---	---	26.1	7.96	1404	637
50	15.24	2	SP-50-H4-12G	SP-50-H4-12W	18.72	475	232	315	22.0	6.71	---	---	---	---	31.1	9.48	1590	721
55	16.76	2	SP-55-H4-12G	SP-55-H4-12W	19.53	496	258	350	22.0	6.71	---	---	---	---	36.1	11.00	1785	810
60	18.29	2	SP-60-H4-12G	SP-60-H4-12W	20.34	517	284	385	39.0	11.89	---	---	---	---	24.4	7.44	2028	920
65	19.81	2	SP-65-H4-12G	SP-65-H4-12W	21.15	537	309	420	39.0	11.89	---	---	---	---	29.4	8.96	2239	1016
70	21.34	2	SP-70-H4-12G	SP-70-H4-12W	21.96	558	335	454	39.0	11.89	---	---	---	---	34.4	10.49	2458	1115
75	22.86	3	SP-75-H4-12G	SP-75-H4-12W	22.40	569	361	489	39.0	11.89	22.0	6.71	---	---	21.0	6.40	2960	1343
80	24.38	3	SP-80-H4-12G	SP-80-H4-12W	23.21	590	387	525	39.0	11.89	22.0	6.71	---	---	26.0	7.92	3231	1465
85	25.91	3	SP-85-H4-12G	SP-85-H4-12W	24.02	610	413	560	39.0	11.89	22.0	6.71	---	---	31.0	9.45	3511	1593
90	27.43	3	SP-90-H4-12G	SP-90-H4-12W	24.83	631	439	595	39.0	11.89	22.0	6.71	---	---	36.0	10.97	3801	1724
95	28.96	3	SP-95-H4-12G	SP-95-H4-12W	25.64	651	465	630	39.0	11.89	35.0	10.67	---	---	28.2	8.60	4048	1836
100	30.48	3	SP-100-H4-12G	SP-100-H4-12W	26.45	672	491	666	39.0	11.89	35.0	10.67	---	---	33.2	10.12	4358	1977
105	32.00	3	SP-105-H4-12G	SP-105-H4-12W	27.26	692	517	701	39.0	11.89	35.0	10.67	---	---	38.2	11.64	4677	2121
110	33.53	4	SP-110-H4-12G	SP-110-H4-12W	27.63	702	544	737	39.0	11.89	35.0	10.67	25.0	7.62	22.4	6.83	5229	2372
115	35.05	4	SP-115-H4-12G	SP-115-H4-12W	28.44	722	570	773	39.0	11.89	35.0	10.67	25.0	7.62	27.4	8.35	5563	2523
120	36.58	4	SP-120-H4-12G	SP-120-H4-12W	29.25	743	596	809	39.0	11.89	35.0	10.67	25.0	7.62	32.4	9.88	5906	2679

Horizontal Load	
(lbs)	(kN)
5,655	25.15

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness							
				Top		Middle		Lower Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
11.00	279	0.162	13.50	0.1875	4.76	0.1875	4.76	0.2190	5.56	0.2190	5.56

Design Notes:

1. Under NESC Grade B Construction, for a given steel pole class the required horizontal load applied at 2' (0.61m) from the pole top is determined by multiplying the ANSI 05.1 wood pole horizontal class load by the ratio of [(steel strength factor/wood strength factor) / (steel overload factor/wood overload factor)] = 2.5/3.85 = 0.65. Therefore, for Class H4 steel poles the required horizontal class load = 8,700 pounds (38.70 kN) x 0.65 = 5,655 pounds (25.15 kN), based on wind loading considerations only.
2. For the Skipper standard class steel poles indicated in the chart above, the Ultimate Groundline Moments have been calculated by multiplying the pole class horizontal load by the distance from the groundline to the applied load point at 2 feet (0.61 m) from the pole top.
3. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
4. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
5. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "H4" = Class H4; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-H4-12G" = Skipper Pole, 75', Class H4, 12-sided, Galvanized; and "SP-75-H4-12W" = Skipper Pole, 75', Class H4, 12-sided, Weathering.
6. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS H5 (RUS S-06.5) Steel Poles

Pole Length		No. of Sections	TAPP Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths								Estimated Pole Weight (Black)	
									Top		Middle		Lower Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-H5-12G	SP-30-H5-12W	16.94	430	150	203	30.0	9.14	---	---	---	---	---	---	871	395
35	10.67	1	SP-35-H5-12G	SP-35-H5-12W	17.80	452	179	243	35.0	10.67	---	---	---	---	---	---	1048	475
40	12.19	2	SP-40-H5-12G	SP-40-H5-12W	18.29	465	208	282	22.0	6.71	---	---	---	---	21.2	6.46	1316	597
45	13.72	2	SP-45-H5-12G	SP-45-H5-12W	19.16	487	238	322	22.0	6.71	---	---	---	---	26.2	7.99	1506	683
50	15.24	2	SP-50-H5-12G	SP-50-H5-12W	20.02	509	267	362	22.0	6.71	---	---	---	---	31.2	9.51	1705	773
55	16.76	2	SP-55-H5-12G	SP-55-H5-12W	20.89	531	297	402	22.0	6.71	---	---	---	---	36.2	11.03	1913	868
60	18.29	2	SP-60-H5-12G	SP-60-H5-12W	21.75	552	326	442	39.0	11.89	---	---	---	---	24.4	7.44	2169	984
65	19.81	2	SP-65-H5-12G	SP-65-H5-12W	22.62	575	355	482	39.0	11.89	---	---	---	---	29.4	8.96	2395	1086
70	21.34	2	SP-70-H5-12G	SP-70-H5-12W	23.48	596	385	522	39.0	11.89	---	---	---	---	34.4	10.49	2629	1193
75	22.86	3	SP-75-H5-12G	SP-75-H5-12W	23.97	609	415	562	39.0	11.89	22.0	6.71	---	---	21.1	6.43	3173	1439
80	24.38	3	SP-80-H5-12G	SP-80-H5-12W	24.84	631	444	602	39.0	11.89	22.0	6.71	---	---	26.1	7.96	3462	1571
85	25.91	3	SP-85-H5-12G	SP-85-H5-12W	25.70	653	474	643	39.0	11.89	22.0	6.71	---	---	31.1	9.48	3763	1707
90	27.43	3	SP-90-H5-12G	SP-90-H5-12W	26.57	675	504	683	39.0	11.89	22.0	6.71	---	---	36.1	11.00	4073	1847
95	28.96	3	SP-95-H5-12G	SP-95-H5-12W	27.43	697	534	724	39.0	11.89	35.0	10.67	---	---	28.3	8.63	4337	1967
100	30.48	3	SP-100-H5-12G	SP-100-H5-12W	28.30	719	564	764	39.0	11.89	35.0	10.67	---	---	33.3	10.15	4669	2118
105	32.00	3	SP-105-H5-12G	SP-105-H5-12W	29.16	741	594	805	39.0	11.89	35.0	10.67	---	---	38.3	11.67	5010	2273
110	33.53	4	SP-110-H5-12G	SP-110-H5-12W	29.59	752	624	846	39.0	11.89	35.0	10.67	25.0	7.62	22.6	6.89	5609	2544
115	35.05	4	SP-115-H5-12G	SP-115-H5-12W	30.46	774	654	887	39.0	11.89	35.0	10.67	25.0	7.62	27.6	8.41	5966	2706
120	36.58	4	SP-120-H5-12G	SP-120-H5-12W	31.32	796	684	928	39.0	11.89	35.0	10.67	25.0	7.62	32.6	9.94	6334	2873

Horizontal Load	
(lbs)	(kN)
6,500	28.91

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness							
				Top		Middle		Lower Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
11.75	298	0.173	14.42	0.1875	4.76	0.1875	4.76	0.2190	5.56	0.2190	5.56

Design Notes:

1. Under NESC Grade B Construction, for a given steel pole class the required horizontal load applied at 2' (0.61m) from the pole top is determined by multiplying the ANSI 05.1 wood pole horizontal class load by the ratio of [(steel strength factor/wood strength factor) / (steel overload factor/wood overload factor)] = 2.5/3.85 = 0.65. Therefore, for Class H5 steel poles the required horizontal class load =10,000 pounds (44.48 kN) x 0.65 = 6,500 pounds (28.91 kN), based on wind loading considerations only.
2. For the Skipper standard class steel poles indicated in the chart above, the Ultimate Groundline Moments have been calculated by multiplying the pole class horizontal load by the distance from the groundline to the applied load point at 2 feet (0.61 m) from the pole top.
3. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
4. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
5. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "H5" = Class H5; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-H5-12G" = Skipper Pole, 75', Class H5, 12-sided, Galvanized; and "SP-75-H5-12W" = Skipper Pole, 75', Class H5, 12-sided, Weathering.
6. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS H6 (RUS S-07.4) Steel Poles

Pole Length		No. of Sections	TAPP Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths								Estimated Pole Weight (Black)	
									Top		Middle		Lower Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-H6-12G	SP-30-H6-12W	18.84	479	171	231	30.0	9.14	---	---	---	---	---	---	984	446
35	10.67	1	SP-35-H6-12G	SP-35-H6-12W	19.73	501	204	277	35.0	10.67	---	---	---	---	---	---	1180	535
40	12.19	2	SP-40-H6-12G	SP-40-H6-12W	20.24	514	237	322	22.0	6.71	---	---	---	---	21.3	6.49	1483	673
45	13.72	2	SP-45-H6-12G	SP-45-H6-12W	21.13	537	271	367	22.0	6.71	---	---	---	---	26.3	8.02	1693	768
50	15.24	2	SP-50-H6-12G	SP-50-H6-12W	22.02	559	304	413	22.0	6.71	---	---	---	---	31.3	9.54	1913	867
55	16.76	2	SP-55-H6-12G	SP-55-H6-12W	22.91	582	338	458	22.0	6.71	---	---	---	---	36.3	11.06	2141	971
60	18.29	2	SP-60-H6-12G	SP-60-H6-12W	23.80	605	372	504	39.0	11.89	---	---	---	---	24.6	7.50	2424	1100
65	19.81	2	SP-65-H6-12G	SP-65-H6-12W	24.69	627	405	549	39.0	11.89	---	---	---	---	29.6	9.02	2671	1212
70	21.34	2	SP-70-H6-12G	SP-70-H6-12W	25.58	650	439	595	39.0	11.89	---	---	---	---	34.6	10.55	2927	1328
75	22.86	3	SP-75-H6-12G	SP-75-H6-12W	26.10	663	473	641	39.0	11.89	22.0	6.71	---	---	21.4	6.52	3529	1601
80	24.38	3	SP-80-H6-12G	SP-80-H6-12W	26.99	686	506	687	39.0	11.89	22.0	6.71	---	---	26.4	8.05	3844	1744
85	25.91	3	SP-85-H6-12G	SP-85-H6-12W	27.88	708	540	733	39.0	11.89	22.0	6.71	---	---	31.4	9.57	4170	1892
90	27.43	3	SP-90-H6-12G	SP-90-H6-12W	28.77	731	574	779	39.0	11.89	22.0	6.71	---	---	36.4	11.09	4507	2044
95	28.96	3	SP-95-H6-12G	SP-95-H6-12W	29.66	753	608	825	39.0	11.89	35.0	10.67	---	---	28.7	8.75	4797	2176
100	30.48	3	SP-100-H6-12G	SP-100-H6-12W	30.55	776	642	871	39.0	11.89	35.0	10.67	---	---	33.7	10.27	5155	2338
105	32.00	3	SP-105-H6-12G	SP-105-H6-12W	31.44	799	676	917	39.0	11.89	35.0	10.67	---	---	38.7	11.80	5524	2505
110	33.53	4	SP-110-H6-12G	SP-110-H6-12W	31.89	810	711	964	39.0	11.89	35.0	10.67	25.0	7.62	23.2	7.07	6185	2805
115	35.05	4	SP-115-H6-12G	SP-115-H6-12W	32.78	833	745	1010	39.0	11.89	35.0	10.67	25.0	7.62	28.2	8.60	6570	2980
120	36.58	4	SP-120-H6-12G	SP-120-H6-12W	33.67	855	780	1057	39.0	11.89	35.0	10.67	25.0	7.62	33.2	10.12	6965	3159

Horizontal Load	
(lbs)	(kN)
7,410	32.96

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness							
				Top		Middle		Lower Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
13.50	343	0.178	14.83	0.1875	4.76	0.1875	4.76	0.2190	5.56	0.2190	5.56

Design Notes:

1. Under NESC Grade B Construction, for a given steel pole class the required horizontal load applied at 2' (0.61m) from the pole top is determined by multiplying the ANSI 05.1 wood pole horizontal class load by the ratio of [(steel strength factor/wood strength factor) / (steel overload factor/wood overload factor)] = 2.5/3.85 = 0.65. Therefore, for Class H6 steel poles the required horizontal class load =11,400 pounds (50.71 kN) x 0.65 = 7,410 pounds (32.96 kN), based on wind loading considerations only.
2. For the Skipper standard class steel poles indicated in the chart above, the Ultimate Groundline Moments have been calculated by multiplying the pole class horizontal load by the distance from the groundline to the applied load point at 2 feet (0.61 m) from the pole top.
3. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
4. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
5. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "H6" = Class H6; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-H6-12G" = Skipper Pole, 75', Class H6, 12-sided, Galvanized; and "SP-75-H6-12W" = Skipper Pole, 75', Class H6, 12-sided, Weathering.
6. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS H7 (RUS S-08.0) Steel Poles

Pole Length		No. of Sections	TAPP Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths								Estimated Pole Weight (Black)	
									Top		Middle		Lower Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-H7-12G	SP-30-H7-12W	17.49	444	184	250	30.0	9.14	---	---	---	---	---	---	905	411
35	10.67	1	SP-35-H7-12G	SP-35-H7-12W	18.35	466	220	298	35.0	10.67	---	---	---	---	---	---	1087	493
40	12.19	2	SP-40-H7-12G	SP-40-H7-12W	18.84	479	256	347	22.0	6.71	---	---	---	---	21.2	6.46	1486	674
45	13.72	2	SP-45-H7-12G	SP-45-H7-12W	19.71	501	292	396	22.0	6.71	---	---	---	---	26.2	7.99	1714	777
50	15.24	2	SP-50-H7-12G	SP-50-H7-12W	20.57	522	329	445	22.0	6.71	---	---	---	---	31.2	9.51	1953	886
55	16.76	2	SP-55-H7-12G	SP-55-H7-12W	21.44	545	365	495	22.0	6.71	---	---	---	---	36.2	11.03	2202	999
60	18.29	2	SP-60-H7-12G	SP-60-H7-12W	22.30	566	401	543	39.0	11.89	---	---	---	---	24.5	7.47	2411	1094
65	19.81	2	SP-65-H7-12G	SP-65-H7-12W	23.17	589	437	593	39.0	11.89	---	---	---	---	29.5	8.99	2681	1216
70	21.34	2	SP-70-H7-12G	SP-70-H7-12W	24.03	610	473	642	39.0	11.89	---	---	---	---	34.5	10.52	2961	1343
75	22.86	3	SP-75-H7-12G	SP-75-H7-12W	24.46	621	510	691	39.0	11.89	22.0	6.71	---	---	21.3	6.49	3583	1625
80	24.38	3	SP-80-H7-12G	SP-80-H7-12W	25.33	643	546	740	39.0	11.89	22.0	6.71	---	---	26.3	8.02	3921	1778
85	25.91	3	SP-85-H7-12G	SP-85-H7-12W	26.19	665	583	790	39.0	11.89	22.0	6.71	---	---	31.3	9.54	4269	1937
90	27.43	3	SP-90-H7-12G	SP-90-H7-12W	27.06	687	619	839	39.0	11.89	22.0	6.71	---	---	36.3	11.06	4630	2100
95	28.96	3	SP-95-H7-12G	SP-95-H7-12W	27.92	709	656	889	39.0	11.89	35.0	10.67	---	---	28.5	8.69	4955	2247
100	30.48	3	SP-100-H7-12G	SP-100-H7-12W	28.79	731	692	939	39.0	11.89	35.0	10.67	---	---	33.5	10.21	5339	2422
105	32.00	3	SP-105-H7-12G	SP-105-H7-12W	29.65	753	729	989	39.0	11.89	35.0	10.67	---	---	38.5	11.73	5735	2601
110	33.53	4	SP-110-H7-12G	SP-110-H7-12W	30.02	763	766	1039	39.0	11.89	35.0	10.67	25.0	7.62	22.9	6.98	6433	2918
115	35.05	4	SP-115-H7-12G	SP-115-H7-12W	30.88	784	803	1089	39.0	11.89	35.0	10.67	25.0	7.62	27.9	8.50	6846	3105
120	36.58	4	SP-120-H7-12G	SP-120-H7-12W	31.95	812	841	1140	39.0	11.89	35.0	10.67	25.0	7.62	33.1	10.09	7349	3333

Horizontal Load	
(lbs)	(kN)
8,000	35.59

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness							
				Top		Middle		Lower Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
12.30	312	0.173	14.42	0.1875	4.76	0.2190	5.56	0.2500	6.35	0.2500	6.35

Design Notes:

1. The Ultimate Groundline Moments for the above poles have been determined by multiplying the RUS S-08.0 class horizontal load of 8,000 pounds (35.59 kN) applied 2' (0.61 m) from the pole top, by the distance from the load point to the groundline. The Ultimate Groundline Moments provided above are based on a standard embedment depth of 10% of pole length + 2' (0.61 m). For any given location the required embedment depth may vary based on soil conditions, foundation type, vertical loading, or other factors.
2. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
3. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
4. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "H7" = Class H7; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-H7-12G" = Skipper Pole, 75', Class H7, 12-sided, Galvanized; and "SP-75-H7-12W" = Skipper Pole, 75', Class H7, 12-sided, Weathering.
5. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS H8 (RUS S-09.0) Steel Poles

Pole Length		No. of Sections	TAPP Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths								Estimated Pole Weight (Black)	
									Top		Middle		Lower Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-H8-12G	SP-30-H8-12W	18.60	472	207	281	30.0	9.14	---	---	---	---	---	---	976	443
35	10.67	1	SP-35-H8-12G	SP-35-H8-12W	19.45	494	248	336	35.0	10.67	---	---	---	---	---	---	1170	530
40	12.19	2	SP-40-H8-12G	SP-40-H8-12W	19.92	506	288	391	22.0	6.71	---	---	---	---	21.3	6.49	1726	783
45	13.72	2	SP-45-H8-12G	SP-45-H8-12W	20.77	528	329	446	22.0	6.71	---	---	---	---	26.3	8.02	2001	908
50	15.24	2	SP-50-H8-12G	SP-50-H8-12W	21.62	549	370	501	22.0	6.71	---	---	---	---	31.3	9.54	2288	1038
55	16.76	2	SP-55-H8-12G	SP-55-H8-12W	22.47	571	410	556	22.0	6.71	---	---	---	---	36.3	11.06	2586	1173
60	18.29	2	SP-60-H8-12G	SP-60-H8-12W	23.32	592	451	611	39.0	11.89	---	---	---	---	24.6	7.50	2742	1244
65	19.81	2	SP-65-H8-12G	SP-65-H8-12W	24.17	614	492	666	39.0	11.89	---	---	---	---	29.6	9.02	3064	1390
70	21.34	2	SP-70-H8-12G	SP-70-H8-12W	25.02	636	532	722	39.0	11.89	---	---	---	---	34.6	10.55	3397	1541
75	22.86	3	SP-75-H8-12G	SP-75-H8-12W	25.37	644	573	777	39.0	11.89	22.0	6.71	---	---	21.6	6.58	3956	1794
80	24.38	3	SP-80-H8-12G	SP-80-H8-12W	26.22	666	614	833	39.0	11.89	22.0	6.71	---	---	26.6	8.11	4305	1953
85	25.91	3	SP-85-H8-12G	SP-85-H8-12W	27.07	688	655	889	39.0	11.89	22.0	6.71	---	---	31.6	9.63	4666	2117
90	27.43	3	SP-90-H8-12G	SP-90-H8-12W	27.92	709	697	944	39.0	11.89	22.0	6.71	---	---	36.6	11.16	5039	2286
95	28.96	3	SP-95-H8-12G	SP-95-H8-12W	28.77	731	738	1000	39.0	11.89	35.0	10.67	---	---	28.8	8.78	5478	2485
100	30.48	3	SP-100-H8-12G	SP-100-H8-12W	29.62	752	779	1056	39.0	11.89	35.0	10.67	---	---	33.8	10.30	5874	2664
105	32.00	3	SP-105-H8-12G	SP-105-H8-12W	30.47	774	821	1112	39.0	11.89	35.0	10.67	---	---	38.8	11.83	6282	2849
110	33.53	4	SP-110-H8-12G	SP-110-H8-12W	30.82	783	862	1169	39.0	11.89	35.0	10.67	25.0	7.62	23.3	7.10	7007	3179
115	35.05	4	SP-115-H8-12G	SP-115-H8-12W	31.67	804	904	1226	39.0	11.89	35.0	10.67	25.0	7.62	28.3	8.63	7431	3371
120	36.58	4	SP-120-H8-12G	SP-120-H8-12W	32.52	826	946	1282	39.0	11.89	35.0	10.67	25.0	7.62	33.3	10.15	7867	3568

Horizontal Load	
(lbs)	(kN)
9,000	40.03

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness							
				Top		Middle		Lower Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
13.50	343	0.170	14.17	0.1875	4.76	0.2500	6.35	0.2500	6.35	0.2500	6.35

Design Notes:

1. The Ultimate Groundline Moments for the above poles have been determined by multiplying the RUS S-09.0 class horizontal load of 9,000 pounds (40.03 kN) applied 2' (0.61 m) from the pole top, by the distance from the load point to the groundline. The Ultimate Groundline Moments provided above are based on a standard embedment depth of 10% of pole length + 2' (0.61 m). For any given location the required embedment depth may vary based on soil conditions, foundation type, vertical loading, or other factors.
2. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
3. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
4. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "H8" = Class H8; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-H8-12G" = Skipper Pole, 75', Class H8, 12-sided, Galvanized; and "SP-75-H8-12W" = Skipper Pole, 75', Class H8, 12-sided, Weathering.
5. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS H9 (RUS S-10.0) Steel Poles

Pole Length		No. of Sections	TAPP Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths								Estimated Pole Weight (Black)	
									Top		Middle		Lower Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-H9-12G	SP-30-H9-12W	19.75	502	230	312	30.0	9.14	---	---	---	---	---	---	1042	473
35	10.67	1	SP-35-H9-12G	SP-35-H9-12W	20.62	524	275	373	35.0	10.67	---	---	---	---	---	---	1248	566
40	12.19	2	SP-40-H9-12G	SP-40-H9-12W	21.12	536	320	434	22.0	6.71	---	---	---	---	21.4	6.52	1845	837
45	13.72	2	SP-45-H9-12G	SP-45-H9-12W	22.00	559	365	495	22.0	6.71	---	---	---	---	26.4	8.05	2137	969
50	15.24	2	SP-50-H9-12G	SP-50-H9-12W	22.87	581	411	557	22.0	6.71	---	---	---	---	31.4	9.57	2440	1107
55	16.76	2	SP-55-H9-12G	SP-55-H9-12W	23.75	603	456	618	22.0	6.71	---	---	---	---	36.4	11.09	2756	1250
60	18.29	2	SP-60-H9-12G	SP-60-H9-12W	24.62	625	501	679	39.0	11.89	---	---	---	---	24.7	7.53	2919	1324
65	19.81	2	SP-65-H9-12G	SP-65-H9-12W	25.50	648	546	740	39.0	11.89	---	---	---	---	29.7	9.05	3258	1478
70	21.34	2	SP-70-H9-12G	SP-70-H9-12W	26.37	670	591	802	39.0	11.89	---	---	---	---	34.7	10.58	3610	1637
75	22.86	3	SP-75-H9-12G	SP-75-H9-12W	26.75	679	637	864	39.0	11.89	22.0	6.71	---	---	21.8	6.64	4207	1908
80	24.38	3	SP-80-H9-12G	SP-80-H9-12W	27.62	702	682	925	39.0	11.89	22.0	6.71	---	---	26.8	8.17	4576	2075
85	25.91	3	SP-85-H9-12G	SP-85-H9-12W	28.50	724	728	987	39.0	11.89	22.0	6.71	---	---	31.8	9.69	4956	2248
90	27.43	3	SP-90-H9-12G	SP-90-H9-12W	29.37	746	774	1049	39.0	11.89	22.0	6.71	---	---	36.8	11.22	5348	2426
95	28.96	3	SP-95-H9-12G	SP-95-H9-12W	30.25	768	819	1111	39.0	11.89	35.0	10.67	---	---	29.0	8.84	5810	2635
100	30.48	3	SP-100-H9-12G	SP-100-H9-12W	31.12	790	865	1173	39.0	11.89	35.0	10.67	---	---	34.0	10.36	6226	2824
105	32.00	3	SP-105-H9-12G	SP-105-H9-12W	32.00	813	911	1235	39.0	11.89	35.0	10.67	---	---	39.0	11.89	6654	3018
110	33.53	4	SP-110-H9-12G	SP-110-H9-12W	32.37	822	957	1298	39.0	11.89	35.0	10.67	25.0	7.62	23.7	7.22	7433	3372
115	35.05	4	SP-115-H9-12G	SP-115-H9-12W	33.25	845	1004	1361	39.0	11.89	35.0	10.67	25.0	7.62	28.7	8.75	7879	3574
120	36.58	4	SP-120-H9-12G	SP-120-H9-12W	34.12	867	1050	1424	39.0	11.89	35.0	10.67	25.0	7.62	33.7	10.27	8336	3781

Horizontal Load	
(lbs)	(kN)
10,000	44.48

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness							
				Top		Middle		Lower Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
14.50	368	0.175	14.58	0.1875	4.76	0.2500	6.35	0.2500	6.35	0.2500	6.35

Design Notes:

1. The Ultimate Groundline Moments for the above poles have been determined by multiplying the RUS S-10.0 class horizontal load of 10,000 pounds (44.48 kN) applied 2' (0.61 m) from the pole top, by the distance from the load point to the groundline. The Ultimate Groundline Moments provided above are based on a standard embedment depth of 10% of pole length + 2' (0.61 m). For any given location the required embedment depth may vary based on soil conditions, foundation type, vertical loading, or other factors.
2. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
3. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
4. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "H9" = Class H9; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-H9-12G" = Skipper Pole, 75', Class H9, 12-sided, Galvanized; and "SP-75-H9-12W" = Skipper Pole, 75', Class H9, 12-sided, Weathering.
5. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS H10 (RUS S-11.0) Steel Poles

Pole Length		No. of Sections	TAPP Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths								Estimated Pole Weight (Black)	
									Top		Middle		Lower Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-H10-12G	SP-30-H10-12W	20.70	526	253	343	30.0	9.14	---	---	---	---	---	---	1096	497
35	10.67	1	SP-35-H10-12G	SP-35-H10-12W	21.60	549	303	410	35.0	10.67	---	---	---	---	---	---	1311	595
40	12.19	2	SP-40-H10-12G	SP-40-H10-12W	22.12	562	352	478	22.0	6.71	---	---	---	---	21.5	6.55	1944	882
45	13.72	2	SP-45-H10-12G	SP-45-H10-12W	23.02	585	402	545	22.0	6.71	---	---	---	---	26.5	8.08	2249	1020
50	15.24	2	SP-50-H10-12G	SP-50-H10-12W	23.92	608	452	612	22.0	6.71	---	---	---	---	31.5	9.60	2567	1164
55	16.76	2	SP-55-H10-12G	SP-55-H10-12W	24.82	630	501	680	22.0	6.71	---	---	---	---	36.5	11.13	2897	1314
60	18.29	2	SP-60-H10-12G	SP-60-H10-12W	25.72	653	551	747	39.0	11.89	---	---	---	---	24.7	7.53	3061	1388
65	19.81	2	SP-65-H10-12G	SP-65-H10-12W	26.62	676	601	814	39.0	11.89	---	---	---	---	29.7	9.05	3416	1549
70	21.34	2	SP-70-H10-12G	SP-70-H10-12W	27.52	699	650	882	39.0	11.89	---	---	---	---	34.7	10.58	3782	1716
75	22.86	3	SP-75-H10-12G	SP-75-H10-12W	27.92	709	700	950	39.0	11.89	22.0	6.71	---	---	21.9	6.68	4414	2002
80	24.38	3	SP-80-H10-12G	SP-80-H10-12W	28.82	732	750	1017	39.0	11.89	22.0	6.71	---	---	26.9	8.20	4799	2177
85	25.91	3	SP-85-H10-12G	SP-85-H10-12W	29.72	755	801	1085	39.0	11.89	22.0	6.71	---	---	31.9	9.72	5196	2357
90	27.43	3	SP-90-H10-12G	SP-90-H10-12W	30.62	778	851	1153	39.0	11.89	22.0	6.71	---	---	36.9	11.25	5605	2542
95	28.96	3	SP-95-H10-12G	SP-95-H10-12W	31.52	801	901	1221	39.0	11.89	39.0	11.89	---	---	25.2	7.68	6107	2770
100	30.48	3	SP-100-H10-12G	SP-100-H10-12W	32.42	823	951	1290	39.0	11.89	39.0	11.89	---	---	30.2	9.20	6541	2967
105	32.00	3	SP-105-H10-12G	SP-105-H10-12W	33.32	846	1002	1358	39.0	11.89	39.0	11.89	---	---	35.2	10.73	6987	3169
110	33.53	4	SP-110-H10-12G	SP-110-H10-12W	33.72	856	1052	1427	39.0	11.89	35.0	10.67	25.0	7.62	23.9	7.28	8039	3646
115	35.05	4	SP-115-H10-12G	SP-115-H10-12W	34.62	879	1103	1495	39.0	11.89	35.0	10.67	25.0	7.62	28.9	8.81	8560	3883
120	36.58	4	SP-120-H10-12G	SP-120-H10-12W	35.52	902	1154	1564	39.0	11.89	35.0	10.67	25.0	7.62	33.9	10.33	9094	4125

Horizontal Load	
(lbs)	(kN)
11,000	48.93

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness							
				Top		Middle		Lower Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
15.30	389	0.180	15.00	0.1875	4.76	0.2500	6.35	0.2500	6.35	0.2810	7.14

Design Notes:

1. The Ultimate Groundline Moments for the above poles have been determined by multiplying the RUS S-11.0 class horizontal load of 11,000 pounds (48.93 kN) applied 2' (0.61 m) from the pole top, by the distance from the load point to the groundline. The Ultimate Groundline Moments provided above are based on a standard embedment depth of 10% of pole length + 2' (0.61 m). For any given location the required embedment depth may vary based on soil conditions, foundation type, vertical loading, or other factors.
2. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
3. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
4. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "H10" = Class H10; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-H10-12G" = Skipper Pole, 75', Class H10, 12-sided, Galvanized; and "SP-75-H10-12W" = Skipper Pole, 75', Class H10, 12-sided, Weathering.
5. Metric units in the above data are indicated in red font.

SKIPPER 12-SIDED Standard CLASS H11 (RUS S-12.0) Steel Poles

Pole Length		No. of Sections	TAPP Catalog No.		Pole Bottom Diameter (F-F)		Ultimate Groundline Moment		Pole Section Lengths								Estimated Pole Weight (Black)	
									Top		Middle		Lower Middle		Bottom			
(ft)	(m)		Galvanized	Weathering	(in)	(mm)	(ft-kips)	(kN-m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(lbs)	(kg)
30	9.14	1	SP-30-H11-12G	SP-30-H11-12W	22.05	560	276	374	30.0	9.14	---	---	---	---	---	---	1175	533
35	10.67	1	SP-35-H11-12G	SP-35-H11-12W	22.97	583	330	448	35.0	10.67	---	---	---	---	---	---	1404	637
40	12.19	2	SP-40-H11-12G	SP-40-H11-12W	23.52	597	384	521	22.0	6.71	---	---	---	---	21.6	6.58	2085	946
45	13.72	2	SP-45-H11-12G	SP-45-H11-12W	24.45	621	438	594	22.0	6.71	---	---	---	---	26.6	8.11	2410	1093
50	15.24	2	SP-50-H11-12G	SP-50-H11-12W	25.37	644	493	668	22.0	6.71	---	---	---	---	31.6	9.63	2747	1246
55	16.76	2	SP-55-H11-12G	SP-55-H11-12W	26.30	668	547	741	22.0	6.71	---	---	---	---	36.6	11.16	3097	1405
60	18.29	2	SP-60-H11-12G	SP-60-H11-12W	27.22	691	601	815	39.0	11.89	---	---	---	---	24.9	7.59	3274	1485
65	19.81	2	SP-65-H11-12G	SP-65-H11-12W	28.15	715	655	888	39.0	11.89	---	---	---	---	29.9	9.11	3649	1655
70	21.34	2	SP-70-H11-12G	SP-70-H11-12W	29.07	738	710	962	39.0	11.89	---	---	---	---	34.9	10.64	4037	1831
75	22.86	3	SP-75-H11-12G	SP-75-H11-12W	29.50	749	764	1036	39.0	11.89	22.0	6.71	---	---	22.2	6.77	4714	2138
80	24.38	3	SP-80-H11-12G	SP-80-H11-12W	30.42	773	819	1110	39.0	11.89	22.0	6.71	---	---	27.2	8.29	5120	2322
85	25.91	3	SP-85-H11-12G	SP-85-H11-12W	31.35	796	873	1184	39.0	11.89	22.0	6.71	---	---	32.2	9.81	5539	2512
90	27.43	3	SP-90-H11-12G	SP-90-H11-12W	32.27	820	928	1258	39.0	11.89	22.0	6.71	---	---	37.2	11.34	5971	2708
95	28.96	3	SP-95-H11-12G	SP-95-H11-12W	33.20	843	983	1332	39.0	11.89	39.0	11.89	---	---	25.5	7.77	6499	2948
100	30.48	3	SP-100-H11-12G	SP-100-H11-12W	34.12	867	1037	1407	39.0	11.89	39.0	11.89	---	---	30.5	9.30	6956	3155
105	32.00	3	SP-105-H11-12G	SP-105-H11-12W	35.05	890	1092	1481	39.0	11.89	39.0	11.89	---	---	35.5	10.82	7425	3368
110	33.53	4	SP-110-H11-12G	SP-110-H11-12W	35.47	901	1148	1556	39.0	11.89	35.0	10.67	25.0	7.62	24.4	7.44	8554	3880
115	35.05	4	SP-115-H11-12G	SP-115-H11-12W	36.40	925	1203	1631	39.0	11.89	35.0	10.67	25.0	7.62	29.4	8.96	9102	4129
120	36.58	4	SP-120-H11-12G	SP-120-H11-12W	37.32	948	1258	1706	39.0	11.89	35.0	10.67	25.0	7.62	34.4	10.49	9665	4384

Horizontal Load	
(lbs)	(kN)
12,000	53.38

Top Diameter (F-F)		Pole Taper		Pole Section Material Thickness							
				Top		Middle		Lower Middle		Bottom	
(in)	(mm)	(in/ft)	(mm/m)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
16.50	419	0.185	15.42	0.1875	4.76	0.2500	6.35	0.2500	6.35	0.2810	7.14

Design Notes:

1. The Ultimate Groundline Moments for the above poles have been determined by multiplying the RUS S-12.0 class horizontal load of 12,000 pounds (53.38 kN) applied 2' (0.61 m) from the pole top, by the distance from the load point to the groundline. The Ultimate Groundline Moments provided above are based on a standard embedment depth of 10% of pole length + 2' (0.61 m). For any given location the required embedment depth may vary based on soil conditions, foundation type, vertical loading, or other factors.
2. Typical embedment depths of 10% of pole length + 2 feet (0.61 m) have been used for purposes of calculating the Ultimate Groundline Moment capacities listed above. Please note that the actual embedment depth for any given location will often be defined by the purchaser based on vertical loading, special soil considerations, foundation capacity, or other specified conditions.
3. The Estimated Pole Weights listed above are based on black condition and do not include galvanizing, accessories such as davit arms, ground sleeves, vangs, base plates, top caps, or climbing provisions.
4. Catalog numbers for the above poles are derived as follows: "SP" = Skipper Pole; "30 to 75" = pole length (feet); "H11" = Class H11; "12" = 12-sided; "G" = Galvanized; "W" = Weathering. For example, "SP-75-H11-12G" = Skipper Pole, 75', Class H11, 12-sided, Galvanized; and "SP-75-H11-12W" = Skipper Pole, 75', Class H11, 12-sided, Weathering.
5. Metric units in the above data are indicated in red font.

Groundline Moment Capacities for Skipper 12-SIDED CLASS 5 TO CLASS 1 Steel Poles

Pole Length		12-Sided Class 5		12-Sided Class 4		12-Sided Class 3		12-Sided Class 2		12-Sided Class 1	
(ft)	(m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)
30	9.14	28.5	39	36	49	45	61	55	75	67	91
35	10.67	34.1	46	43	58	54	73	66	90	81	109
40	12.19	39.8	54	50	68	63	85	77	105	94	127
45	13.72	45.4	62	57	78	72	97	88	119	107	145
50	15.24	51.1	69	64	87	80	109	99	134	120	163
55	16.76	56.9	77	72	97	89	121	110	149	134	181
60	18.29	62.6	85	79	107	98	133	121	164	147	199
65	19.81	68.3	93	86	117	107	146	132	179	161	218
70	21.34	74.2	101	93	126	116	158	143	194	174	236
75	22.86	80.0	109	101	136	126	170	154	209	188	254
80	24.38					135	183	166	225	201	273
85	25.91					144	195	177	240	215	291
90	27.43					153	208	188	255	229	310
95	28.96					163	221	200	271	242	328
100	30.48					172	233	211	286	256	347
105	32.00					182	246	223	302	270	366
110	33.53									284	385
115	35.05									298	404
120	36.58									312	423

Design Notes:

1. The Groundline Moment Capacities for the Skipper 12-sided steel poles in the above chart have been determined for the indicated pole class by multiplying the horizontal class load, applied at 2 feet (0.61 m) from the pole top, by the distance from the load point to the groundline.

2. The Ultimate Groundline Moments provided above are based on standard embedment depth of 10% of pole length + 2 feet (0.61m). For any given location the required embedment depth may vary based on soil conditions, foundation type, vertical loading, or other factors.

3. For Skipper 12-sided Class 5 through Class 1 steel poles, the required steel pole horizontal load applied at 2 feet (0.61 m) from the pole top or a given pole class under NESC Grade "B" Construction, is calculated by multiplying the ANSI O5.1 wood pole horizontal load for that pole class by the ratio of 2.5/3.85 = 0.65.

4. Metric units in the above data are indicated in red font.

Groundline Moment Capacity Data for Skipper Class 5 to Class 1 Poles

Groundline Moment Capacities for Skipper 12-SIDED CLASS H1 TO CLASS H6 Steel Poles

Pole Length		Class H1		Class H2		Class H3		Class H4		Class H5		Class H6	
(ft)	(m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)
30	9.14	81	110	96	130	112	152	130	176	150	203	171	231
35	10.67	97	131	115	155	134	182	156	211	179	243	204	277
40	12.19	113	153	133	181	156	212	181	246	208	282	237	322
45	13.72	129	174	152	206	178	242	207	280	238	322	271	367
50	15.24	144	196	171	232	200	272	232	315	267	362	304	413
55	16.76	160	218	190	258	223	302	258	350	297	402	338	458
60	18.29	176	239	209	283	245	332	284	385	326	442	372	504
65	19.81	192	261	228	309	267	362	309	420	355	482	405	549
70	21.34	209	283	247	335	289	392	335	454	385	522	439	595
75	22.86	225	305	266	361	312	422	361	489	415	562	473	641
80	24.38	241	327	285	387	334	453	387	525	444	602	506	687
85	25.91	257	349	305	413	356	483	413	560	474	643	540	733
90	27.43	274	371	324	439	379	514	439	595	504	683	574	779
95	28.96	290	393	343	465	401	544	465	630	534	724	608	825
100	30.48	306	415	362	491	424	575	491	666	564	764	642	871
105	32.00	323	438	382	518	447	606	517	701	594	805	676	917
110	33.53	340	460	402	544	470	637	544	737	624	846	711	964
115	35.05	356	483	421	571	493	668	570	773	654	887	745	1010
120	36.58	373	506	441	598	515	699	596	809	684	928	780	1057

Design Notes:

1. The Groundline Moment Capacities for the Skipper 12-sided steel poles in the above chart have been determined for the indicated pole class by multiplying the horizontal class load, applied at 2 feet (0.61 m) from the pole top, by the distance from the load point to the groundline.
2. The Ultimate Groundline Moments provided above are based on standard embedment depth of 10% of pole length + 2 feet (0.61 m). For any given location the required embedment depth may vary based on soil conditions, foundation type, vertical loading, or other factors.
3. For Skipper 12-sided Class H1 through Class H6 steel poles, the required steel pole horizontal load applied at 2 feet (0.61 m) from the pole top for a given pole class under NESC Grade "B" Construction, is calculated by multiplying the ANSI O5.1 wood pole horizontal load for that pole class by the ratio of 2.5/3.85 = 0.65.
4. Metric units in the above data are indicated in red font.

Groundline Moment Capacity Data for Skipper Class H1 to Class H6 Poles

Groundline Moment Capacities for Skipper 12-SIDED CLASS H7 TO CLASS H11 (RUS S-08.0 TO S-12.0) Steel Poles

Pole Length		Class H7 (RUS S-08.0)		Class H8 (RUS S-09.0)		Class H9 (RUS S-10.0)		Class H10 (RUS S-11.0)		Class H11 (RUS S-12.0)	
(ft)	(m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)	(ft-kips)	(kN-m)
30	9.14	184	250	207	281	230	312	253	343	276	374
35	10.67	220	298	248	336	275	373	303	410	330	448
40	12.19	256	347	288	391	320	434	352	478	384	521
45	13.72	292	396	329	446	365	495	402	545	438	594
50	15.24	329	445	370	501	411	557	452	612	493	668
55	16.76	365	495	410	556	456	618	501	680	547	741
60	18.29	401	543	451	611	501	679	551	747	601	815
65	19.81	437	593	492	666	546	740	601	814	655	888
70	21.34	473	642	532	722	591	802	650	882	710	962
75	22.86	510	691	573	777	637	864	700	950	764	1036
80	24.38	546	740	614	833	682	925	750	1017	819	1110
85	25.91	583	790	655	889	728	987	801	1085	873	1184
90	27.43	619	839	697	944	774	1049	851	1153	928	1258
95	28.96	656	889	738	1000	819	1111	901	1221	983	1332
100	30.48	692	939	779	1056	865	1173	951	1290	1037	1407
105	32.00	729	989	821	1112	911	1235	1002	1358	1092	1481
110	33.53	766	1039	862	1169	957	1298	1052	1427	1148	1556
115	35.05	803	1089	904	1226	1004	1361	1103	1495	1203	1631
120	36.58	841	1140	946	1282	1050	1424	1154	1564	1258	1706

Design Notes:

1. The Groundline Moment Capacities for the Skipper 12-sided steel poles in the above chart have been determined for the indicated pole class by multiplying the applicable RUS horizontal class load, applied at 2 feet (0.61 m) from the pole top, by the distance from the load point to the groundline.

2. The applicable RUS horizontal class loads are as follows:

Class H7 (RUS S-08.0) = 8,000 lbs (35.59 kN)
Class H8 (RUS S-09.0) = 9,000 lbs (40.03 kN)
Class H9 (RUS S-10.0) = 10,000 lbs (44.48 kN)
Class H10 (RUS S-11.0) = 11,000 lbs (48.93 kN)
Class H11 (RUS S-12.0) = 12,000 lbs (53.38 kN)

2. The Ultimate Groundline Moments provided above are based on standard embedment depth of 10% of pole length + 2 feet (0.61 m). For any given location the required embedment depth may vary based on soil conditions, foundation type, vertical loading, or other factors.

3. Metric units in the above data are indicated in red font.

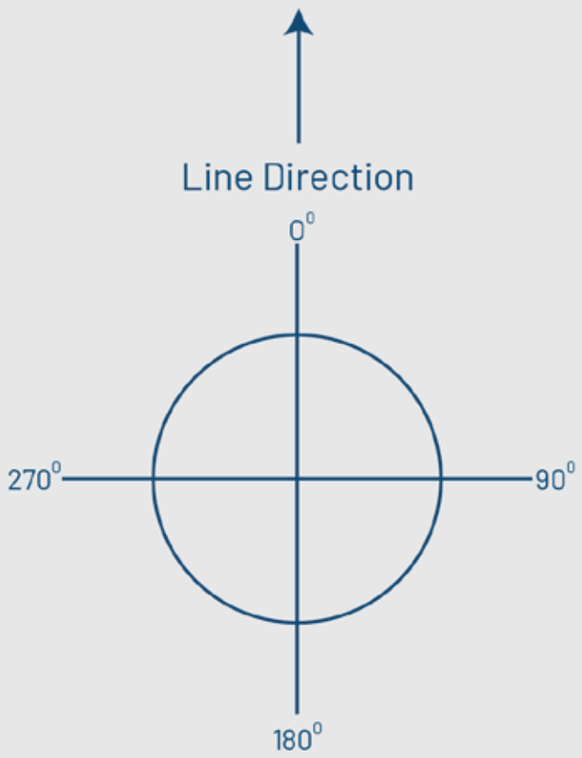
Groundline Moment Capacity Data for Skipper
Class H7 to Class H11 (RUS S-0.80 to S-12.0) Poles

SKIPPER Limited

Ordering Information for Skipper Standard Class Steel Poles

(Note: Provide Separate Sheet for Each Pole Length and Class)

Pole Length: _____ Class: _____ Quantity: _____ Skipper Catalog #: _____



Quantity	Dist.From Pole Top (feet &inches) or (m)	Qrientation Angle - (degrees)	Hole Diameter (inches) or (mm)

ADDITIONAL ORDERING DETAILS:

1. Pole Finish: ☐Galvanized Poles; ☐Weathering Steel Poles
2. Below-Grade Coating: ☐4' band; ☐Full Embedded Length; ☐Other: _____
3. Climbing or Other Special Requirements: _____

_____

_____

_____

Manufacturing Process for Skipper Standard Class Poles

De-Coiling

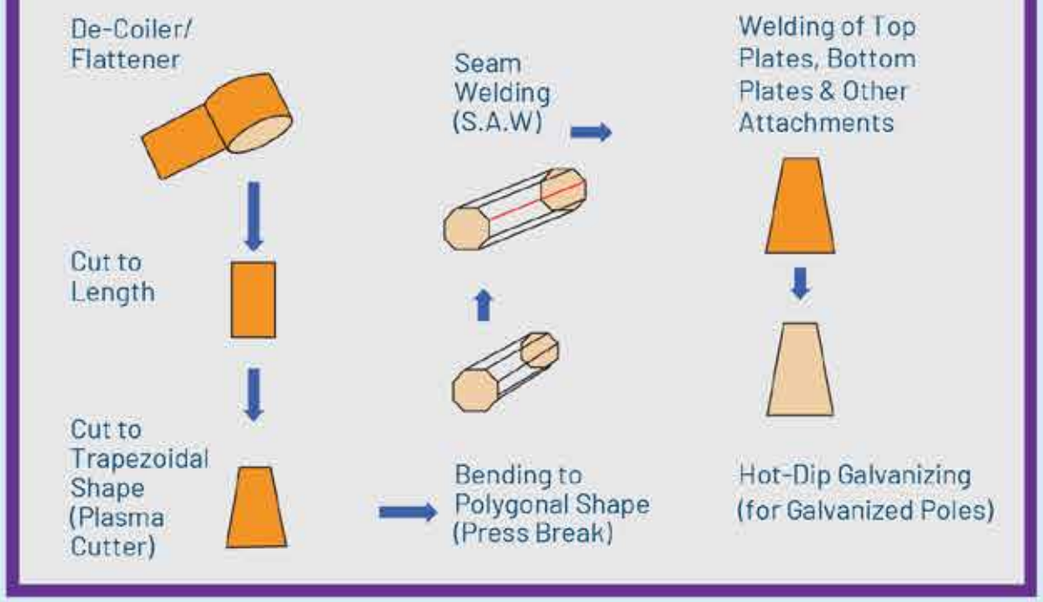
Seam Welder

S.A.W. Process

Weld Attachments

Flattening

Plasma Cutter



Galvanizing

Trapezoid

Press Brake

Formed Tube

Load Container:

Available Finish Options for Skipper Standard Class Steel Poles

Hot-Dip Galvanized Poles:

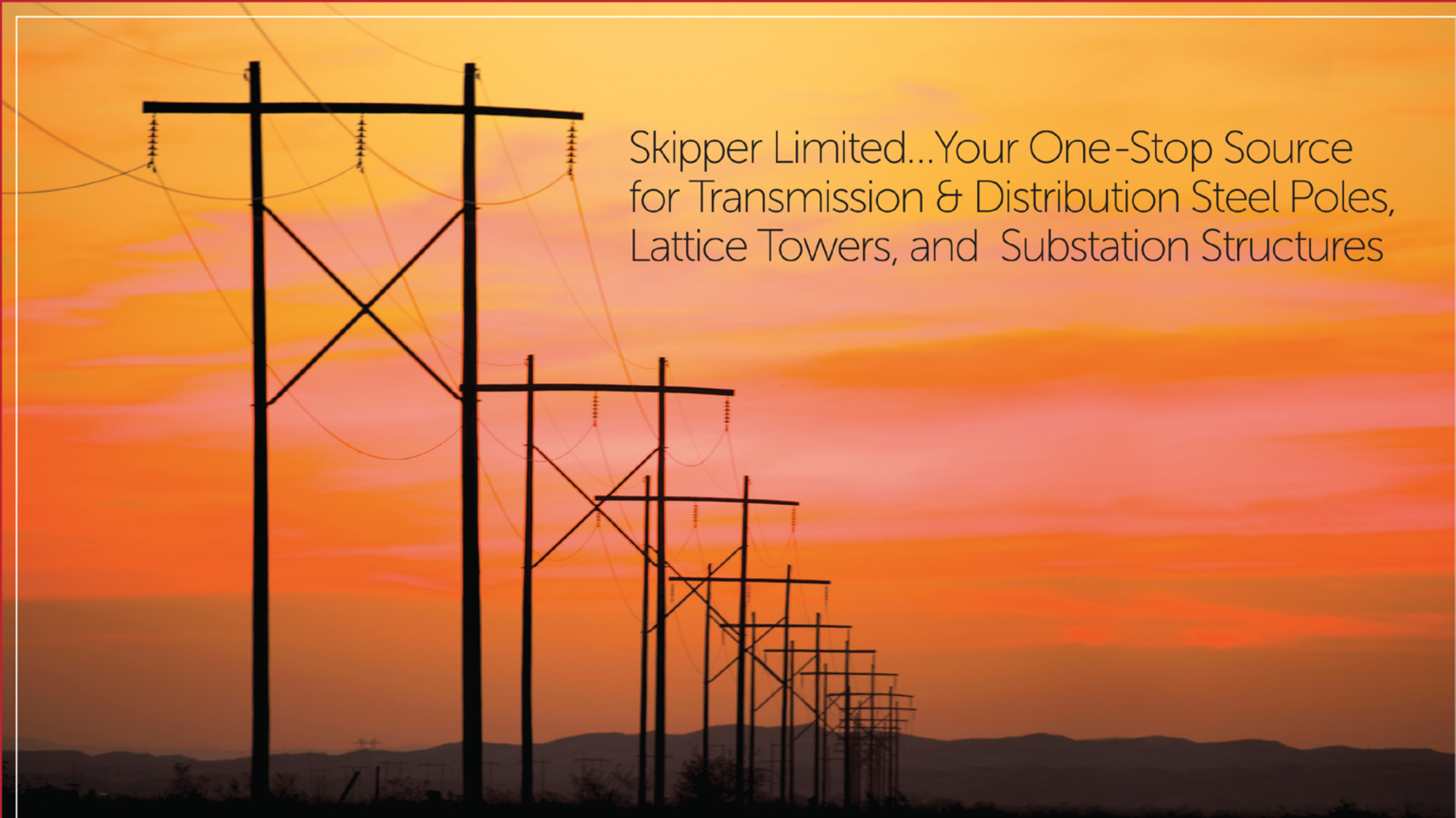
- Skipper's in-house galvanizing facilities ensure the highest quality finish and minimal shipping and handling damage
- Galvanized in accordance with ASTM A123 standards
- Dulled galvanizing and zinc chromate finish options are available
- Additional below-grade coatings are available

Weathering Steel Poles:

- For weathering steel poles an iron oxide film (patina) builds up over time which protects the underlying steel
- Additional below-grade coatings are available
- Welded ground sleeves for additional protection in the groundline area are available

Paint Over Galvanizing:

- For situations where special paint colors may be required, such as red and white banding for poles near airport runways, or to match the colors on a college or university campus, Skipper can provide a durable painted finish on a galvanized pole in virtually any color



Skipper Limited...Your One-Stop Source for Transmission & Distribution Steel Poles, Lattice Towers, and Substation Structures

Skipper Limited welcomes the opportunity to quote on any of your upcoming Steel Distribution or Transmission Pole, H-frame, Lattice Tower, or Substation projects. Please send any quote requests, RFP's or bid documents directly to:

Brian Lacoursiere, P. Eng.
VP of Sales & Business Development, North America
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