

PoleEnforcer®

PATENT NO. 5,383,749

Strength Chart and Selection Guide

- NESC Grade "B" & "C" Construction
- Pole Classes 7 through H-2
- Pole Lengths from 30 to 125 feet
- Driving Systems, Tools and Ordering Information

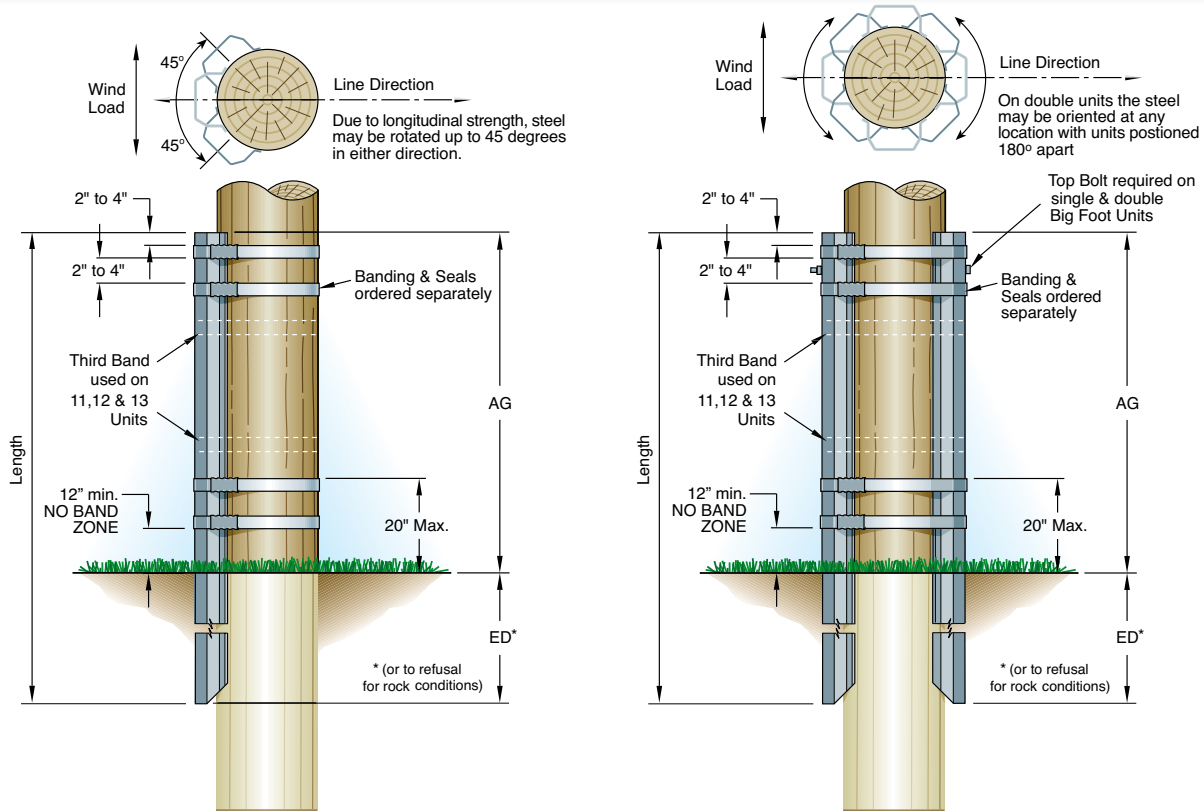
The logo consists of the letters 'LWS' in a large, bold, grey, three-dimensional sans-serif font.

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Single & Double Installation



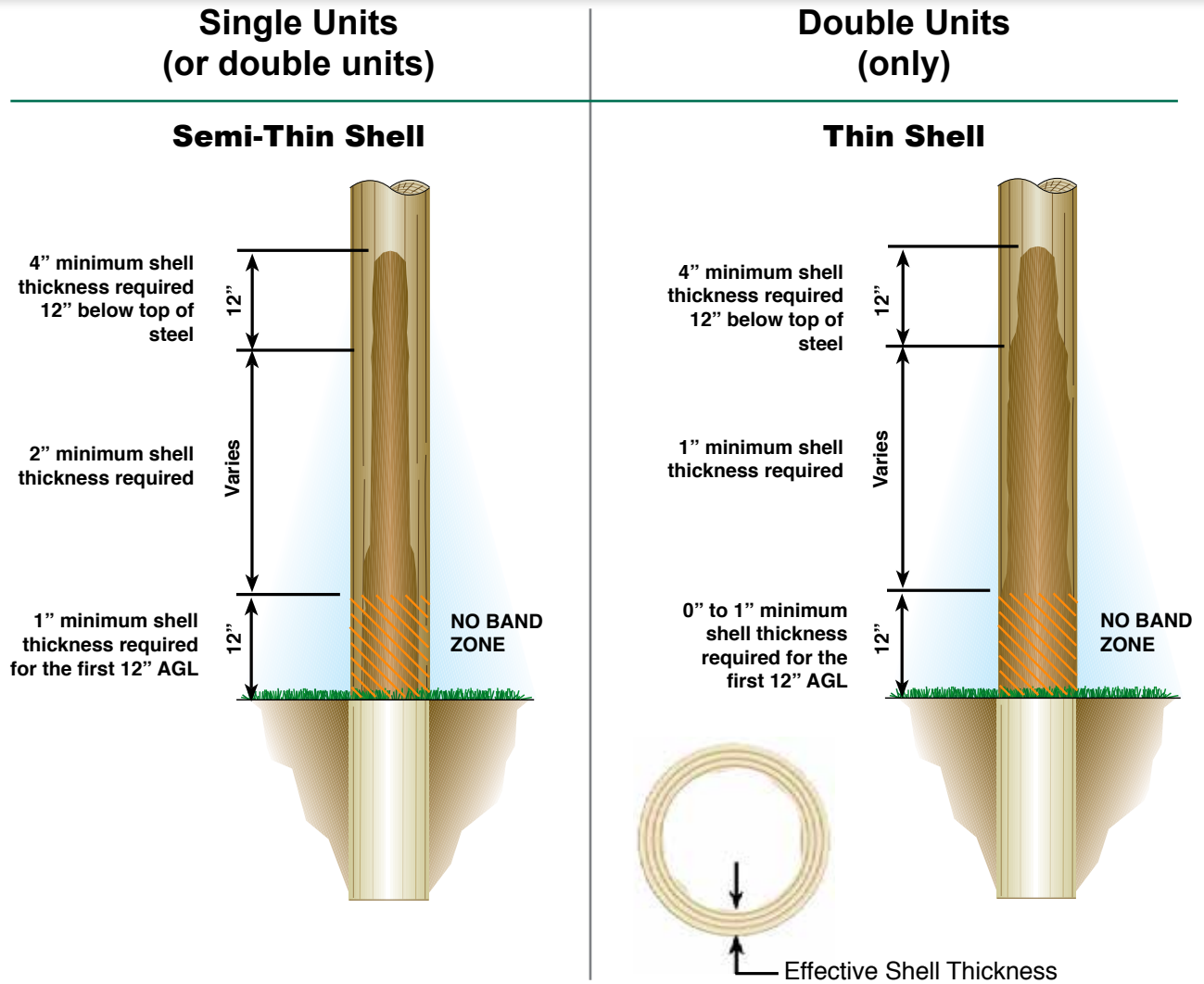
PoleEnforcer® Strength Chart

	PoleEnforcer® Unit Number	Ultimate Transverse Strength (Ft.-Lbs.)		Longitudinal Strength Single Unit	Unit Dimensions			E D* Embedment Depth (Feet)	A G Above Ground (Feet)	Unit Weight (Lbs.) Single Unit
		Single Unit	Double Unit		Width	Length	Thickness			
60ksi A-572 Grade 60 Steel	PE - 26 - 10	26,000	52,000	20,000	5"	10'	1/4"	5.0	5.0	101
	PE - 35 - 10	35,000	70,000	30,000	5-3/4"	10'	1/4"	5.0	5.0	119
	PE - 56 - 10	56,000	112,000	35,000	7-1/8"	10'	1/4"	5.0	5.0	154
	7 - 10 - 4	62,800	125,600	37,000	7"	10'	1/4"	5.0	5.0	145
	7 - 10 - 5	78,300	156,600	49,000	7"	10'	5/16"	5.0	5.0	180
	8 - 10 - 4	73,700	147,400	42,000	8"	10'	1/4"	5.0	5.0	154
	8 - 11 - 5	91,700	183,400	56,000	8"	11'	5/16"	5.5	5.5	210
	9 - 11 - 4	85,200	170,400	47,000	9"	11'	1/4"	5.5	5.5	179
	9 - 11 - 5	108,000	216,000	62,000	9"	11'	5/16"	5.5	5.5	222
	9 - 11 - 6	128,600	257,200	72,000	9"	11'	3/8"	6.0	5.0	266
80ksi A-656 Grade 80 Steel	10 - 11 - 5	123,700	247,400	69,000	10"	11'	5/16"	6.0	5.0	234
	10 - 11 - 6	148,100	296,200	80,000	10"	11'	3/8"	6.0	5.0	286
	11 - 11 - 6	169,500	339,000	87,000	11"	11'	3/8"	6.0	5.0	294
	12 - 12 - 6	191,500	383,000	95,000	12"	12'	3/8"	6.0	6.0	337
	13 - 12 - 6	211,500	423,000	103,000	13"	12'	3/8"	6.0	6.0	352

All PoleEnforcers are hot dip galvanized per ASTM A-123 specifications.

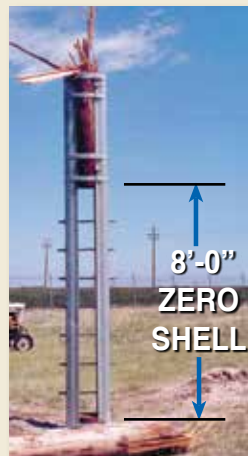
*Longer lengths or SRS® units are available for higher decay applications.

Minimum Shell Thickness



PhaseRaiser® Test... "Zero Thin Shell"

Tests conducted on the patented PhaseRaiser® structure lifting system (whose steel design is based on the patented PoleEnforcer®) proved the remarkable strength of the PoleEnforcer® in thin shell applications. The test simulated the equivalent of 8'-0" of ZERO SHELL THICKNESS.



50'-0" Class 3 Pole

Pole
Failure.....3,550 lbs

Loaded.... 48'-0" AGL

Groundline
Moment
Failure..... 170,400 ft-lbs

No permanent deformation of steel.

PoleEnforcer® + Crossbolts = PhaseRaiser®

PoleEnforcer® Selection Guide / Grade “B” Construction

SEMI-THIN SHELL

Pole Length	Pole Class								
	H-2	H-1	1	2	3	4	5	6	7
30 ft.			8-10-4	56-10	56-10	56-10	35-10	26-10	26-10
35 ft.	10-11-5	9-11-5	9-11-4	8-10-4	56-10	56-10	35-10	35-10	26-10
40 ft.	10-11-6	10-11-5	9-11-5	7-10-5	7-10-4	56-10	56-10	35-10	
45 ft.	11-11-6	9-11-6	9-11-5	8-11-5	8-10-4	7-10-4	56-10	56-10	
50 ft.	12-12-6	10-11-6	10-11-5	9-11-5	9-11-4	8-10-4	56-10		
55 ft.	12-12-6	11-11-6	10-11-6	10-11-5	8-11-5	8-10-4			
60 ft.	13-12-6	12-12-6	10-11-6	10-11-5	9-11-5	7-10-5			
65 ft.	10-11-5D	12-12-6	11-11-6	10-11-6	9-11-5	9-11-4			
70 ft.	10-11-6D	10-11-5D	13-12-6	11-11-6	10-11-6	9-11-5			
75 ft.	11-11-6D	9-11-6D	9-11-5D	12-12-6	10-11-6				
80 ft.	11-11-6D	10-11-6D	10-11-5D	12-12-6	11-11-6				
85 ft.	12-12-6D	10-11-6D	10-11-5D	13-12-6	11-11-6				
90 ft.	12-12-6D	11-11-6D	10-11-6D	9-11-5D	12-12-6				
95 ft.	13-12-6D	11-11-6D	10-11-6D	10-11-5D		LARGER UNITS AVAILABLE UPON REQUEST			
100 ft.	13-12-6D	12-12-6D	10-11-6D	10-11-5D					
105 ft.		12-12-6D	11-11-6D	9-11-6D					
110 ft.		13-12-6D	11-11-6D	10-11-6D					
115 ft.		13-12-6D	11-11-6D	10-11-6D					
120 ft.		13-12-6D	12-12-6D	10-11-6D					
125 ft.			12-12-6D	11-11-6D					

PoleEnforcer® Selection Guide / Grade “B” Construction

THIN SHELL - DOUBLE UNITS

Pole Length	Pole Class								
	H-2	H-1	1	2	3	4	5	6	7
30 ft.			35-10D	35-10D	26-10D	26-10D	26-10D	26-10D	26-10D
35 ft.	7-10-4D	56-10D	56-10D	35-10D	35-10D	26-10D	26-10D	26-10D	26-10D
40 ft.	8-10-4D	7-10-4D	56-10D	56-10D	35-10D	26-10D	26-10D	26-10D	
45 ft.	7-10-5D	8-10-4D	56-10D	56-10D	56-10D	35-10D	26-10D	26-10D	
50 ft.	8-11-5D	8-10-4D	7-10-4D	56-10D	56-10D	35-10D	26-10D		
55 ft.	9-11-5D	9-11-4D	8-10-4D	56-10D	56-10D	56-10D			
60 ft.	9-11-5D	8-11-5D	8-10-4D	7-10-4D	56-10D	56-10D			
65 ft.	10-11-5D	9-11-5D	9-11-4D	8-10-4D	56-10D	56-10D			
70 ft.	10-11-6D	10-11-5D	9-11-5D	9-11-4D	8-10-4D	56-10D			
75 ft.	11-11-6D	9-11-6D	9-11-5D	8-11-5D	8-10-4D				
80 ft.	11-11-6D	10-11-6D	10-11-5D	9-11-5D	7-10-5D				
85 ft.	12-12-6D	10-11-6D	10-11-5D	9-11-5D	9-11-4D				
90 ft.	12-12-6D	11-11-6D	10-11-6D	9-11-5D	8-11-5D				
95 ft.	13-12-6D	11-11-6D	10-11-6D	10-11-5D					
100 ft.	13-12-6D	12-12-6D	10-11-6D	10-11-5D					
105 ft.		12-12-6D	11-11-6D	9-11-6D					
110 ft.		13-12-6D	11-11-6D	10-11-6D					
115 ft.		13-12-6D	11-11-6D	10-11-6D					
120 ft.		13-12-6D	12-12-6D	10-11-6D					
125 ft.			12-12-6D	11-11-6D					

LARGER
UNITS
AVAILABLE
UPON
REQUEST

PoleEnforcer® Selection Guide / Grade “C” Construction

SEMI-THIN SHELL

Pole Length	Pole Class								
	H-2	H-1	1	2	3	4	5	6	7
30 ft.			8-11-5	8-10-4	7-10-4	56-10	56-10	35-10	26-10
35 ft.	11-11-6	9-11-6	9-11-5	8-11-5	8-10-4	7-10-4	56-10	56-10	26-10
40 ft.	12-12-6	10-11-6	10-11-5	9-11-5	9-11-4	8-10-4	56-10	56-10	
45 ft.	13-11-6	11-11-6	10-11-6	10-11-5	9-11-5	7-10-5	7-10-4	56-10	
50 ft.	10-11-5D	12-12-6	11-11-6	10-11-6	9-11-5	9-11-4	8-10-4		
55 ft.	9-11-6D	13-12-6	12-12-6	10-11-6	10-11-5	9-11-5			
60 ft.	10-11-6D	10-11-5D	12-12-6	11-11-6	9-11-6	9-11-5			
65 ft.	11-11-6D	9-11-6D	13-12-6	12-12-6	10-11-6	10-11-5			
70 ft.	11-11-6D	10-11-6D	10-11-5D	12-12-6	11-11-6	10-11-5			
75 ft.	12-12-6D	10-11-6D	10-11-5D	13-12-6	11-11-6		LARGER UNITS AVAILABLE UPON REQUEST		
80 ft.	12-12-6D	11-11-6D	10-11-6D	9-11-5D	12-12-6				
85 ft.	13-12-6D	11-11-6D	10-11-6D	10-11-5D	12-12-6				
90 ft.	13-12-6D	12-12-6D	10-11-6D	10-11-5D	13-12-6				
95 ft.		12-12-6D	11-11-6D	9-11-6D					
100 ft.		13-12-6D	11-11-6D	10-11-6D					

PoleEnforcer® Selection Guide / Grade “C” Construction

THIN SHELL - DOUBLE UNITS

Pole Length	Pole Class								
	H-2	H-1	1	2	3	4	5	6	7
30 ft.			56-10D	56-10D	35-10D	26-10D	26-10D	26-10D	26-10D
35 ft.	7-10-5D	8-10-4D	56-10D	56-10D	56-10D	35-10D	26-10D	26-10D	26-10D
40 ft.	8-11-5D	8-10-4D	7-10-4D	56-10D	56-10D	35-10D	26-10D	26-10D	
45 ft.	9-11-5D	9-11-4D	8-10-4D	7-10-4D	56-10D	56-10D	35-10D	26-10D	
50 ft.	10-11-5D	9-11-5D	9-11-4D	8-10-4D	56-10D	56-10D	35-10D		
55 ft.	9-11-6D	9-11-5D	8-11-5D	8-10-4D	7-10-4D	56-10D			
60 ft.	10-11-6D	10-11-5D	9-11-5D	9-11-4D	8-10-4D	56-10D			
65 ft.	11-11-6D	9-11-6D	9-11-5D	8-11-5D	8-10-4D	56-10D			
70 ft.	11-11-6D	10-11-6D	10-11-5D	9-11-5D	7-10-5D	7-10-4D			
75 ft.	12-12-6D	10-11-6D	10-11-5D	9-11-5D	9-11-4D		LARGER UNITS AVAILABLE UPON REQUEST		
80 ft.	12-12-6D	11-11-6D	10-11-6D	9-11-5D	8-11-5D				
85 ft.	13-12-6D	11-11-6D	10-11-6D	10-11-5D	9-11-5D				
90 ft.	13-12-6D	12-12-6D	10-11-6D	10-11-5D	9-11-5D				
95 ft.		12-12-6D	11-11-6D	9-11-6D					
100 ft.		13-12-6D	11-11-6D	10-11-6D					

Banding • Seals • Tools • Accessories • Options



2" Wide Galvanized Banding

Part Number	Description	Weight
PEB-2G-85	2" x .044" Steel Banding (approx. 280 ft.) 12,000 lbs. ultimate tensile strength.	95 lbs. per coil



Galvanized Seals

Part Number	Description	Weight
PEOS-2GL	2" x 4-1/4" Open Crimp Seal (250 per box)	50 lbs.



Safety Caps†

Part Number	Description	Weight
PE-2-SC	Safety Cap for 6" to 10" units	1 lb.
PE-3-SC	Safety Cap for 11" to 13" units	1 lb.

† Nails included

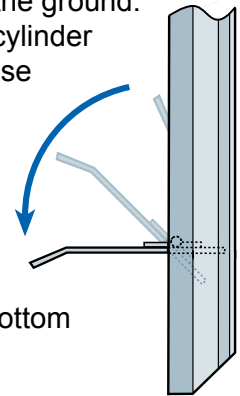
Complete Tool & Driving Systems*

- PE90PDS Pneumatic Driving System**
 Includes the PE90HHB-B-D Air Hammer & Bracket Assembly, the PE90WP Sectional Winch Pole Assembly and the PE90TWB Pull Down Winch Assembly.
- PE500DWS Drop Weight Driving System**
 May be operated using either a truck mounted or pole mounted capstan hoist. Includes the PE250DS Driving Shank and ten PE25WW 25 lb. Wafer Weights. The drop weight driving system is recommended for hard driving soil conditions.
- Hydraulic Driving System**
 Available upon request.
- PE90PDS Pneumatic Driving System Tool Package**
 Includes the PE90PDS Pneumatic Driving System and nine other specialized tools, everything needed to install the PoleEnforcer® groundline reinforcement system.

*Refer to the PoleEnforcer® Driving Systems & Tool brochure for complete ordering information.

Optional "Big Foot" Uplift & Thrust System

H-frame and guyed angle structures can be reinforced using the PoleEnforcer® BIG FOOT internal footed system. The installation procedure is essentially the same with the exception that the BIG FOOT unit is driven an additional 6" into the ground. A hydraulic uplift cylinder is then used to raise the unit to the standard setting depth. Raising the BIG FOOT unit causes the "foot" to rotate and engage the bottom of the pole.



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