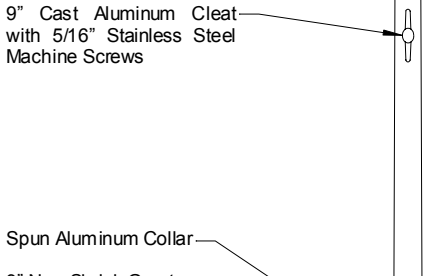
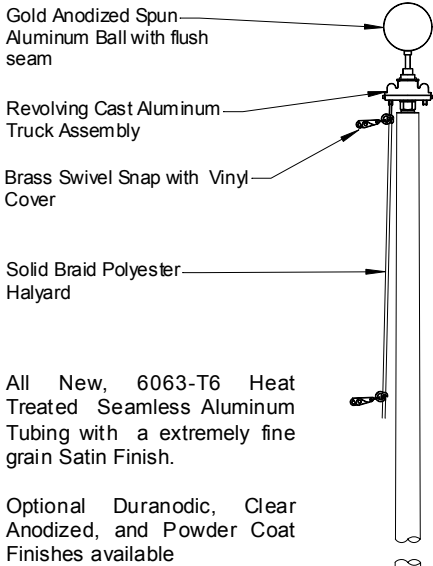


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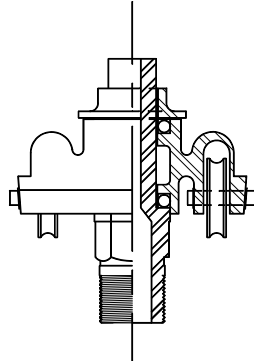
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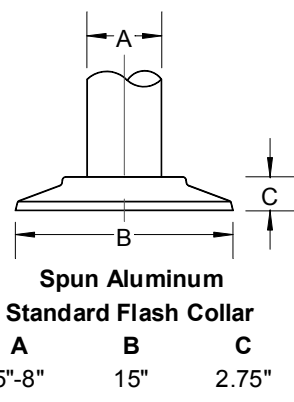
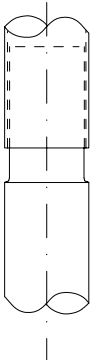
EXTRA HEAVY GROUND SET CONE TAPERED ALUMINUM FLAGPOLES EXTERNAL HALYARD



REVOLVING NON-FOULING TRUCK DETAIL
Aluminum Body, with 26 Stainless Steel Ball Bearings and Two Delrin Sheaves on 3/8" Stainless Pins



SELF ALIGNING INTERNAL SLEEVE
This pre-fitted, shop machined sleeve is designed to allow for the field assembly, without welding, of large shafts which must be shipped in sections. Proper mating of the numbered parts will result in a fine hair line joint.



FOUNDATION DIMENSIONS

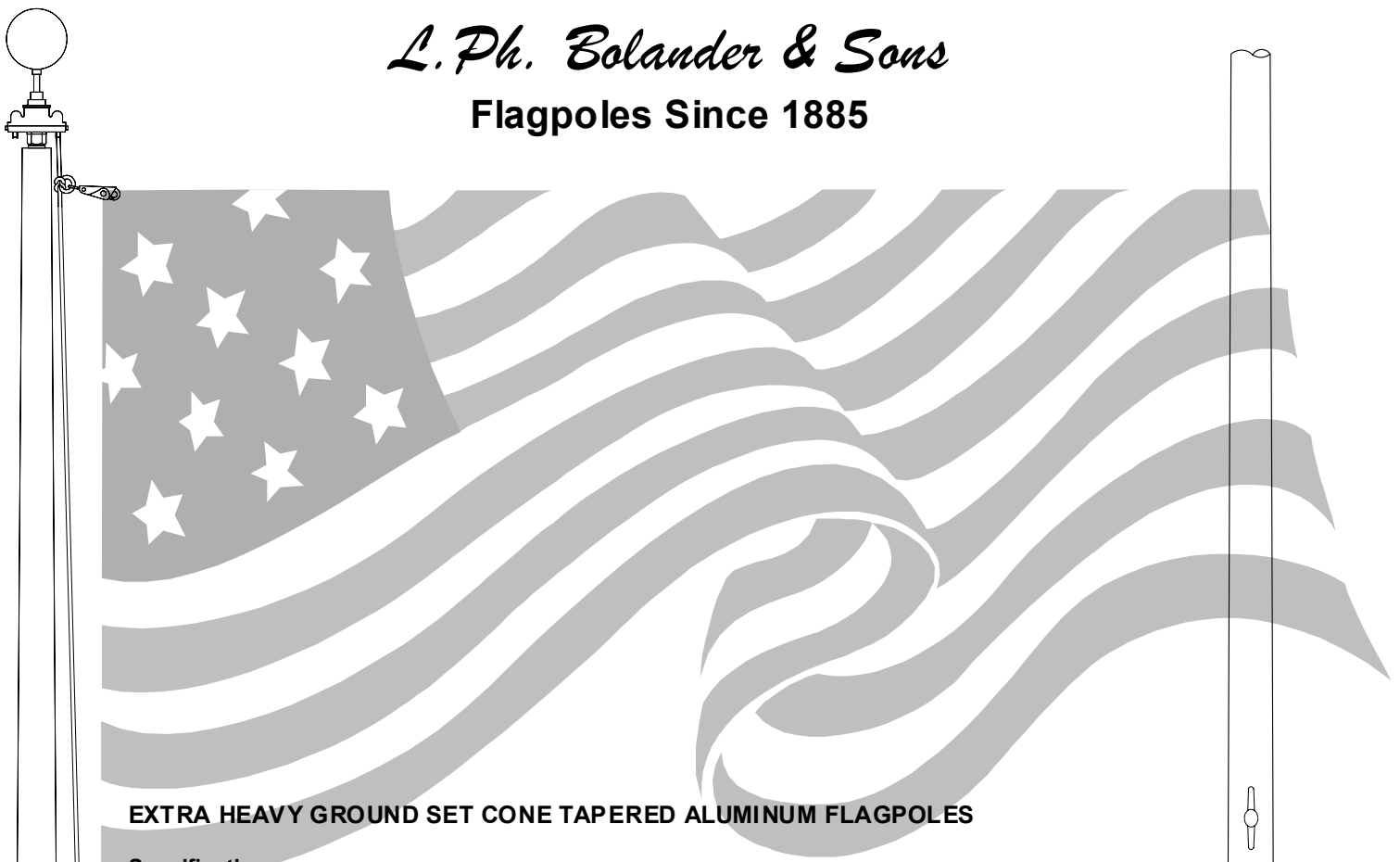
Exposed Height	A	B	C	D	E	F	G	H	K
20'	3'	6"	18"	8"	10"	4"	3'6"	24"	22"
25'	3'	6"	18"	8"	10"	4"	3'6"	28"	22"
30'	3'	6"	18"	10"	12"	4"	3'6"	30"	24"
35'	3'6"	6"	18"	10"	12"	4"	4'	30"	26"

These recommended foundations are only minimums. Dimensions may vary according to soil and wind conditions at location of installation.

Exposed Height	Overall Height	Diameter Butt	Diameter Top	Wall Thickness	Length Tapered	Length Straight	Ball Dia.	Halyard Dia.	Ship Sections	Ground Sleeve	Flag Size	Shipping Weight
HT20'	23'	5"	3"	.188"	11'	12'	5"	5/16"	1	8"	3'x5'	162#
HTS25'	28'	5"	3"	.188"	11'	17'	5"	5/16"	1	8"	4'x6'	167#
HT25'	28'	5.5"	3.5"	.188"	11'	17'	5"	5/16"	1	8"	4'x6'	174#
HTS30'	33'	6"	3.5"	.156"	17'3"	15'9"	6"	5/16"	1 or 2	10"	5'x8'	204#
HT30	33'	6"	3.5"	.188"	17'3"	15'9"	6"	5/16"	1 or 2	10"	5'x8'	224#
HTS35'	38'6"	7"	3.5"	.156"	20'	18'6"	6"	5/16"	1 or 2	10"	5'x8'	265#
HT35'	38'6"	7"	3.5"	.188"	20'	18'6"	6"	5/16"	1 or 2	10"	5'x8'	281#

L. Ph. Bolander & Sons

Flagpoles Since 1885



EXTRA HEAVY GROUND SET CONE TAPERED ALUMINUM FLAGPOLES

Specifications

GENERAL. Bolander External Halyard aluminum flagpoles are made from all new, heat treated, seamless 6063-T6 tubing and are designed to withstand winds in excess of 160 MPH, un-flagged. All shafts are uniformly cone tapered approximately 1" in every 5'6".

Overall lengths up to 28' can be fabricated in one piece and shipped via motor freight to almost any destination. Longer lengths requiring shipment in two sections shall be factory fitted with self aligning flush seam field joint, requiring no welding.

All poles are highly polished with fine grain aluminum oxide cloths resulting in a high quality deep luster finish. This extremely fine grain finish provides a elegant soft sheen while remaining maintenance free. Optional Duranodic and Clear anodizing finishes are available upon request as well as a full line of powder coating.

Upon completion of polishing, the poles are spiral wrapped in tire paper and shipment is made in a hard fiber tube to protect the finish. The unexposed portion of the shaft, which will be below grade, can be given a heavy coat of asphaltum paint if required.

STANDARD FITTINGS. Fittings listed below are standard on all ground mounted HT External Halyard flagpoles.

BALL. Constructed of 14ga. aluminum, with flush seam and gold anodized for color and durability.

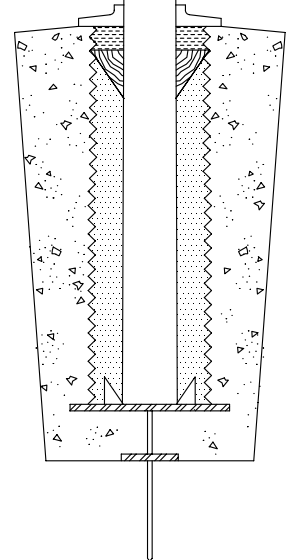
TRUCK. Cast of virgin aluminum and shall be two sheave, revolving, non-fouling, with 26 stainless steel ball bearings. The truck will be provided with two Delrin sheaves.

HALYARD. Shall be white, UV resistant Polyester, of length for pole height, with white vinyl covered brass flag snaps

CLEAT. Provide a 9" cast aluminum cleat with finish to match that of pole. Mount with 5/16" stainless steel machine screws.

FLASH COLLAR. The flash collar shall be spun aluminum alloy 5052-H32, of diameter and shape as detailed. The finish shall match that of the pole.

GROUND SLEEVE. Fabricated from #16 ga. galvanized steel with 3/8" steel base plate, whose square dimension is two inches larger than the sleeve diameter. All steel wedges, base plate, support plate and lightning ground rod shall be welded of dimensions as detailed.

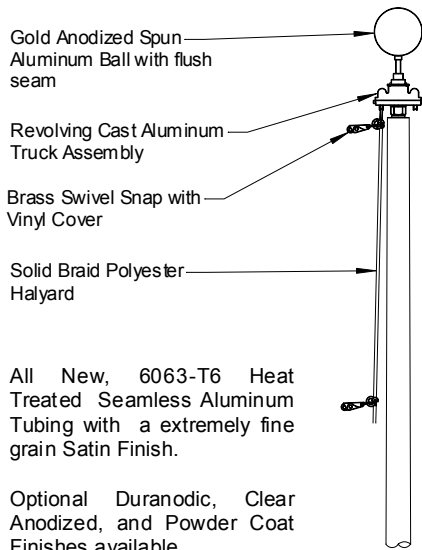


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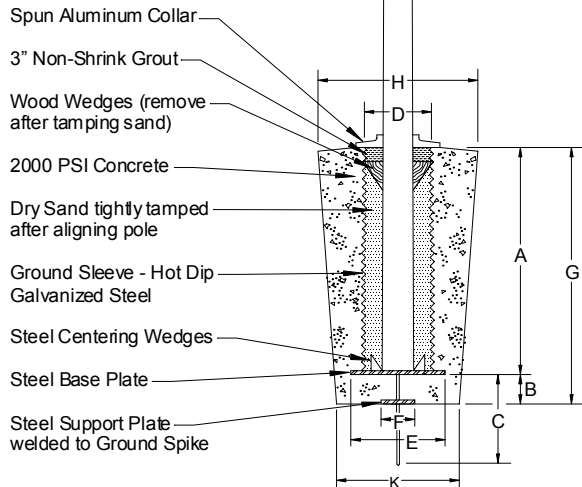
EXTRA HEAVY GROUND SET CONE TAPERED ALUMINUM FLAGPOLES EXTERNAL HALYARD 40' - 80'



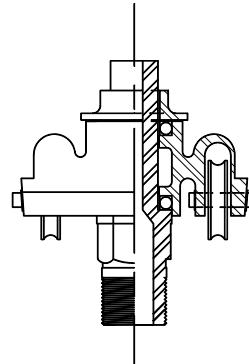
All New, 6063-T6 Heat Treated Seamless Aluminum Tubing with a extremely fine grain Satin Finish.

Optional Duranodic, Clear Anodized, and Powder Coat Finishes available

9" Cast Aluminum Cleat with 5/16" Stainless Steel Machine Screws

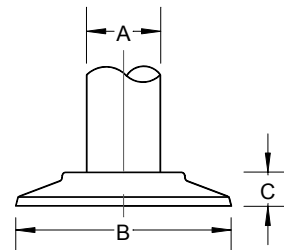
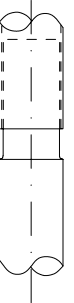


REVOLVING NON-FOULING TRUCK DETAIL
Aluminum Body, with 26 Stainless Steel Ball Bearings and Two Delrin Sheaves on Stainless Pins



SELF ALIGNING INTERNAL SLEEVE

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Spun Aluminum Standard Flash Collar

A	B	C
10-12"	22"	3.5"

FOUNDATION DIMENSIONS

Exposed Height	A	B	C	D	E	F	G	H	K
40'	4'	6"	18"	12"	14"	8"	4'6"	36"	32"
45'	4'6"	6"	18"	12"	14"	8"	5'	42"	36"
50'	5'	6"	24"	15"	18"	8"	5'6"	48"	42"
60'	6'	6"	24"	15"	18"	8"	6'6"	48"	42"
70'	7'	6"	24"	15"	18"	8"	7'6"	60"	48"
80'	8'	6"	24"	15"	18"	8"	8'6"	60"	48"

These recommended foundations are only minimums. Dimensions may vary according to soil and wind conditions at location of installation.

Exposed Height	Overall Height	Diameter		Wall Thickness	Length		Ball Dia.	Halyard Dia.	Ship Sections	Ground Sleeve	Flag Size	Shipping Weight
		Butt	Top		Tapered	Straight						
HTS40'	44'	8"	3.5"	.156"	29'1"	14'11"	8"	5/16"	2	12"	6'x10'	303#
HT40'	44'	8"	3.5"	.188"	29'1"	14'11"	8"	5/16"	2	12"	6'x10'	337#
HT45'	49'6"	8"	3.5"	.188"	32'8"	16'10"	8"	5/16"	2	12"	6'x10'	375#
HT50'	55'	10"	4"	.188"	37'2"	17'10"	10"	3/8"	3	15"	8'x12'	547#
HT60'	66'	12"	4"	.250"	60'	6'	12"	3/8"	3	15"	10'x15'	699#
HT70'	77'	12"	4"	.250"	66'6"	10'6"	12"	3/8"	3	15"	12'x18'	876#
HT80'	88'	12"	4"	.375"	77'6"	10'6"	12"	3/8"	3	15"	15'x25'	1153#

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Flagpoles Since 1885



EXTRA HEAVY GROUND SET CONE TAPERED ALUMINUM FLAGPOLES

Specifications

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HALYARD. Shall be white, UV resistant Polyester, of length for pole height, with white vinyl covered brass flag snaps

CLEAT. Provide a 9" cast aluminum cleat with finish to match that of pole. Mount with 5/16" stainless steel machine screws.

FLASH COLLAR. The flash collar shall be spun aluminum alloy 5052-H32, of diameter and shape as detailed. The finish shall match that of the pole.

GROUND SLEEVE. Fabricated from #16 ga. galvanized steel with 3/8" steel base plate, whose square dimension is two inches larger than the sleeve diameter. All steel wedges, base plate, support plate and lightning ground rod shall be welded of dimensions as detailed.

