CONCORD Industries, Inc.

FLAGPOLES

Aluminum Ground Set

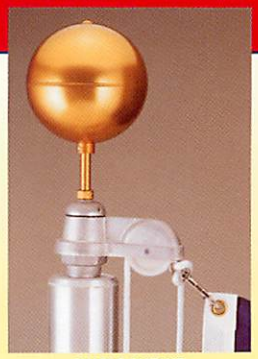
CONCORD Industries, Inc. **flagpole shafts** are manufactured in the United States from seamless 6063-T6 aluminum with tensile strength not less than 30,000psi and a yield point of 25,000psi. Shafts in excess of 35' exposed height are shipped as multiple piece units, then field-assembled with a self aligning internal sleeve assembly (patent pending). All Concord flagpoles are polished to a *Deep Luster Finish* creating an elegant soft sheen. Other architectural finishes, such as powdercoat, clear anodized and Duranodic bronze, are available. In the standard mounting application, Concord flagpoles are produced for the popular ground mount method. In this configuration, the overall shaft length includes the exposed height measurements shown on the middle page plus 10% additional that fits into a ground sleeve assembly. Additional mounting methods including shoebase mounts are also available.

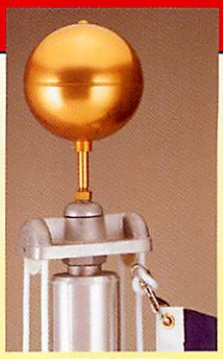

SELF ALIGNING FIELD JOINT SLEEVE

METRIC EQUIVALENT DIMENSIONS: Multiply inch dimensions by 25.4 or feet dimensions by .3048 to obtain millimeters.
All flagpoles can be provided in metric lengths.

CONTINENTAL External Halyard System

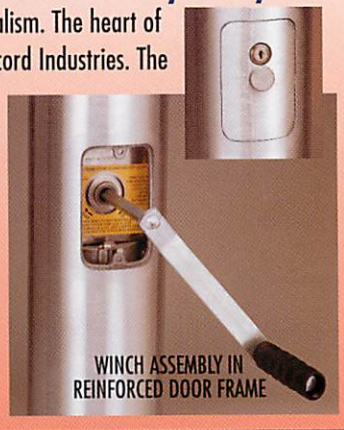
The external halyard system utilizes the traditional method for raising and lowering flags. Standard fittings include a spun aluminum ball, a heavy cast aluminum revolving truck assembly with a single sheave, braided nylon halyard, snaphooks, cast aluminum cleat, spun aluminum collar and ground sleeve assembly. Many upgrades including double halyard systems, cast collars, heavy duty truck assemblies, cast aluminum combination Ball/Truck assemblies and cleat covers are available.


SINGLE SHEAVE REVOLVING TRUCK


DOUBLE SHEAVE REVOLVING TRUCK

INDEPENDENCE Cable Based Internal Halyard System

Internal halyard flagpoles provide the best solution to the problem of vandalism. The heart of the system is a custom stainless steel gearless winch, first introduced by Concord Industries. The winch is mounted on a patented rotating platform for ease of maintenance and elimination of the winch handle hole in the side of the shaft. The winch is accessible only through the keyed, cast aluminum door with a handle access hole. A heavy cast door frame is precision welded inside the shaft opening for strength. The truck assembly rotates on heavy duty sealed bearings. The cable assemblies are constructed of stainless steel components. Upgrades for this model include cast aluminum Ball/Truck assemblies and cast collars.


WINCH ASSEMBLY IN REINFORCED DOOR FRAME


COUNTERWEIGHT AND RETAINER RING


CONE STYLE REVOLVING TRUCK

SENTRY Rope Based Internal Halyard System

Sentry flagpoles, developed by Concord Industries, Inc., replace the stainless steel cable and winch assemblies with a less expensive internal rope and cam cleat mechanism. Eight stainless steel bolts pass through a cast door frame assembly and the flagpole shaft, threading into thick dual inner reinforcement plates. This patented concept adds additional important strength to a flagpole when a door is used. A revolving truck is standard. A less expensive stationary truck may also be substituted. Heavy duty revolving trucks and Concord's popular Cast Aluminum ball/truck assembly – both with dual sealed bearing assemblies – are available as economical options.

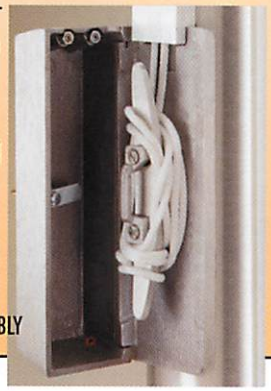

CONE STYLE REVOLVING TRUCK


CAST ALUMINUM DOOR FRAME ASSEMBLY

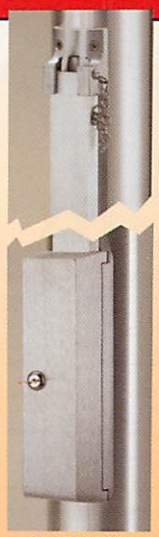
Accessories & Upgrades

Cleat Covers & Halyard Channels

Cleat covers offer protection against unauthorized tampering on external halyard flagpoles. Made of heavy, cast aluminum with stainless steel hinge pins, cleat covers are available in sizes that compliment the flagpole base diameter and exposed height. Cleat covers are available with a factory installed six tumbler lock or with heavy padlock tabs for use with padlocks (not included). For additional protection, cleat covers may be combined with a 5' long polished extruded aluminum halyard channel. The halyard channel is secured by a heavy upper cast bracket and by the cleat cover lid when closed. Cleat covers and halyard channels are provided in a finish to compliment the flagpole.



CLEAT COVER ASSEMBLY



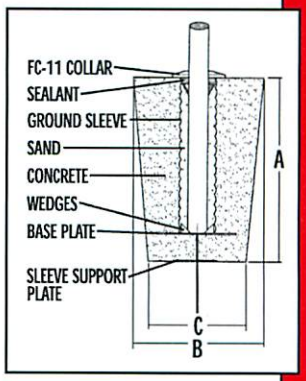
CLEAT COVER SHOWN WITH OPTIONAL HALYARD CHANNEL

Flash Collars

The ornamental flash collar is the finishing touch on an outdoor flagpole. The FC11 spun aluminum collar is standard on the Continental, Independence and Sentry and optional on the Estate and Patio. The FC11 in a heavy, 1/4" thick polished aluminum casting is also available as a low cost upgrade on all models. Other popular cast aluminum models shown are available for most flagpole models and sizes. Collars are provided in a finish to compliment the flagpole.

Typical Installation

The embedded or groundset mounting is the most common and strongest method for installing flagpoles. Depending upon the model chosen, the provided ground sleeve should be set in concrete per instructions provided with the flagpole. A cross section of a typical foundation layout for the Continental, Independence and Sentry models is shown. The table below shows minimum recommended dimensions for good, firm, dry soil only.

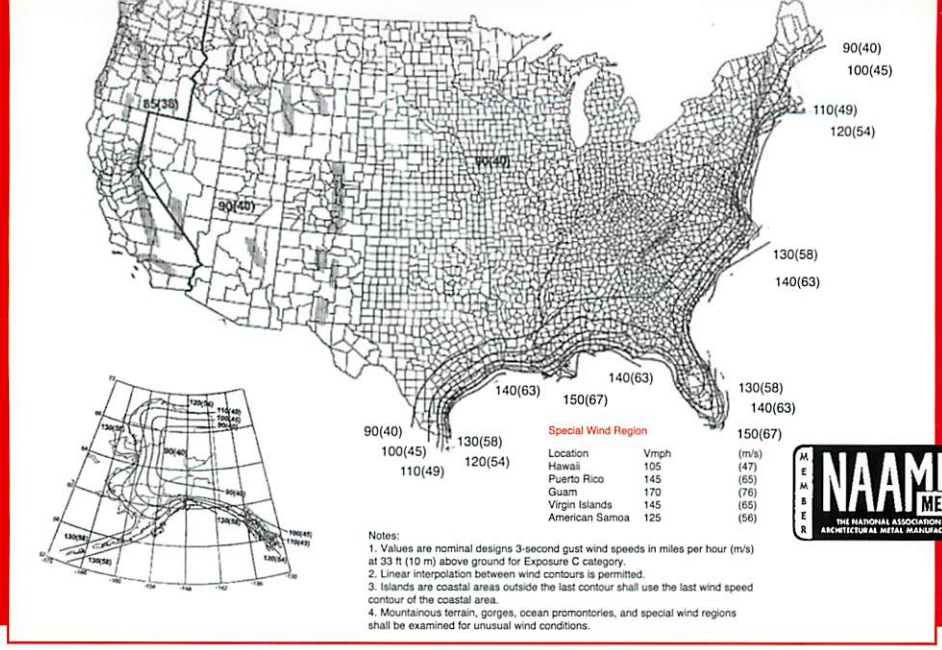


Contact factory for shoebase mounts or other mounting options.

HEIGHT feet	BUTT DIAMETER inches	SLEEVE DIAMETER inches	DEPTH "A"	TOP "B" inches	BOTTOM "C" inches
20	4	6	3' 6"	30	24
20	5	8	3' 6"	30	24
25	5	8	3' 6"	30	24
25	5.5 - 6	10	3' 6"	30	24
30	5	8	3' 6"	30	24
30	6	10	3' 6"	30	24
35	5	8	4' 0"	36	30
35	6 - 7	10	4' 0"	36	30
40	7	10	4' 6"	42	36
40	8	12	4' 6"	42	36
45	8	12	5' 0"	48	42
50	8	12	5' 8"	48	42
50	10	15	5' 8"	48	42
60	10 - 12	15	6' 10"	60	48
70	10 - 12	15	8' 0"	60	48
80	12	15	9' 0"	60	48

Contact us for literature on these other Concord Industries, Inc. products:

- **Extreme Duty External or Internal Ground Mounted Flagpoles**
- **Wall Mounted Flagpoles**
- **Nautical Flagpoles**
- **Flagpole Parts and Accessories**



WIND SPEED CHART
for FLAGPOLE and FLAG APPLICATION

Major factors to consider when specifying the correct flagpole include: the wind zone area, flagpole height, base diameter, wall thickness and flag size.

This map, revised in 2007 by the National Association of Architectural Metal Manufacturers (NAAMM) in compliance with changes in the American National Standard (ANSI) commercial building codes (ANSI/NAAMM FP 1001-97), shows the maximum steady wind expected within a 50-year period of recurrence, at an elevation of 30 feet above ground level.

This page lists the standard flagpole models which are sorted by exposed shaft height sequence with the maximum unflagged wind speed shown for each height/base diameter/wall thickness configuration. Also shown is the recommended flag size for each height.

These calculations are for ground mounted flagpoles only. Contact **Concord Customer Service** for shoebase mounting and other mounting applications.

MEMBER NAAMM METAL THE NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS

This map is reproduced, with permission from ASCE Standard Minimum Design Loads for Buildings and Other Structures, ADSCE 7-95 by the American Society Of Civil Engineers.

CAUTION: Flag size recommendations do not constitute a warranty that flags of the size shown may be safely flown in all wind speeds. Flying oversized flags may result in personal injury, property damage or damage to the flagpole. Extreme caution should be exercised when installing flagpoles near overhead power lines or in the vicinity of underground cable or utility pipes.

*** Part numbers for Sovereignty and Sentry II flagpoles are different than the part numbers for the Independence and Sentry flagpoles, see the price list for specifics.**

EXPOSED HEIGHT feet	SHAFT DIAMETER inches		WALL THICKNESS inches	UNFLAGGED WINDSPEED	MAXIMUM FLAG SIZE	FLAGGED WINDSPEED	CONTINENTAL External Halyard	ESTATE External Halyard	INDEPENDENCE SOVEREIGNTY Cable Based Internal Halyard	SENTRY SENTRY II Rope Based Internal Halyard
15	3	2	.125	170	3 x 5	120		E15030125		
20	3	2	.125	123	5 x 8	85		E20030125		
20	4	2	.125	147	5 x 8	100	C20040125	E20040125		
20	5	3	.125	230	5 x 8	120+	C20050125	E20050125		S20050125
20	5	3	.156	280	5 x 8	120+	C20050156	E20050156	I20050156*	S20050156
20	5	3	.188	288	5 x 8	120+	C20050188	E20050188	I20050188*	S20050188
20	6	3.5	.156	327	5 x 8	120+	C20060156		I20060156*	S20060156*
20	6	3.5	.188	356	5 x 8	120+	C20060188		I20060188*	S20060188*
25	3	2	.125	94	5 x 8	50		E25030125		
25	4	2	.125	120	5 x 8	85	C25040125	E25040125		
25	5	3	.125	136	5 x 8	95	C25050125	E25050125		S25050125
25	5	3	.156	175	5 x 8	110	C25050156	E25050156	I25050156*	S25050156*
25	5.5	3.5	.188	237	5 x 8	120+	C25055188			
25	6	3.5	.156	233	5 x 8	120+	C25060156		I25060156*	S25060156*
25	6	3.5	.188	255	5 x 8	120+	C25060188		I25060188*	S25060188*
30	4	2	.125	97	6 x 10	50		E30040125		
30	5	3	.125	100	6 x 10	85	C30050125	E30050125		
30	5	3	.156	114	6 x 10	85	C30050156	E30050156	I30050156*	S30050156
30	6	3.5	.156	175	6 x 10	105	C30060156		I30060156*	S30060156*
30	6	3.5	.188	200	6 x 10	120	C30060188		I30060188*	S30060188*
35	5	3	.125	90	6 x 10	75		E35050125		
35	5	3	.156	91	6 x 10	80	C35050156	E35050156	I35050156*	S35050156
35	6	3.5	.156	116	6 x 10	85	C35060156		I35060156*	S35060156*
35	7	3.5	.156	166	6 x 10	110	C35070156		I35070156*	S35070156*
35	7	3.5	.188	189	6 x 10	120	C35070188		I35070188*	S35070188*
40	7	3.5	.156	122	8 x 12	85	C40070156		I40070156*	S40070156*
40	8	3.5	.156	172	8 x 12	105	C40080156		I40080156	S40080156*
40	8	3.5	.188	178	8 x 12	120	C40080188		I40080188	S40080188*
45	8	3.5	.188	149	8 x 12	100	C45080188		I45080188	
50	8	3.5	.188	115	10 x 15	85	C50080188		I50080188	
50	10	4	.188	185	10 x 15	115	C50100188		I50100188	
60	10	4	.188	121	12 x 18	85	C60100188		I60100188	
60	10	4	.250	150	12 x 18	105	C60100250		I60100250	
60	12	4.4	.250	179	12 x 18	120	C60120250		I60120250	
70	10	4	.312	135	15 x 25	90	C70100312		I70100312	
70	12	3.6	.250	153	15 x 25	105	C70120250		I70120250	
80	12	4	.375	158	20 x 30	105	C80120375		I80120375	

ESTATE

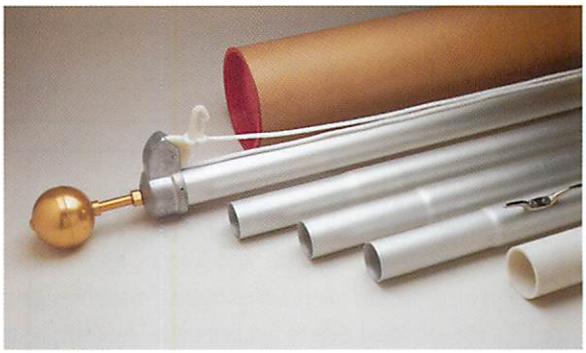
Economy External Halyard System

These flagpoles are manufactured to the same high standards and with the same shaft material and processes as the larger CONTINENTAL line of architecturally designed flagpoles. ESTATE flagpoles are gracefully tapered with scaled down proportions perfect for home, apartment or small businesses. Standard fittings include: a gold anodized, spun aluminum ball; a cast aluminum, single sheave stationary truck assembly; cast aluminum cleat; braided nylon halyard with snaphooks and a ground setting tube. Upgrades include spun or cast aluminum collars, stationary cast aluminum Ball/Truck assemblies, revolving truck assemblies, and more. ESTATE shafts are available in single or multiple sections to allow for economic shipping alternatives.

PATIO

Non Tapered, Modular - External Halyard System

This lightweight, modular flagpole is a popular, inexpensive choice for the home or apartment landscape. The shaft sections are manufactured from strong 6063T5 seamless aluminum tubing to provide a long lasting, rust-free beautiful appearance. The swedged top of each section fits into the bottom of the section above it to provide a strong, water repellent joint and an attractive, straight assembly. The PATIO flagpole can be proudly displayed year round or easily disassembled and stored in it's heavy duty combination shipping/storage container designed specifically for this dual purpose.



Standard fittings include a gold anodized, spun aluminum ball; a cast aluminum stationary single sheave truck assembly; braided nylon halyard; nylon snaphooks; cast aluminum cleat and a heavy wall setting tube. Options include stationary Ball/Truck combination, revolving truck assemblies and spun collars.

EXPOSED HEIGHT	DIAMETER	TUBING WALL THICKNESS	NUMBER OF SECTIONS	RECOMMENDED FLAG SIZE	NATURAL ANODIZED	WHITE POWDERCOAT	313 POWDERCOAT
10'	2"	.058"	2	2' x 3'	P1002058N	P1002058W	P1002058D
15'	2"	.058"	3	3' x 5'	P1502058N	P1502058W	P1502058D
20'	2"	.058"	4	3' x 5'	P2002058N	P2002058W	P2002058D
20'	2.5"	.062"	5	4' x 6'	P2002570N	P2002570W	P2002570D
25'	2.5"	.062"	6	4' x 6'	P2502570N	P2502570W	P2502570D

NeverFurl Rotating System

PATIO flagpoles can also be fitted with the NeverFurl rotating system. This alternative, ideal for use with a permanently flown flag, utilizes the popular NeverFurl device in lieu of the traditional truck/halyard/cleat configuration. Included with the dual NeverFurl assemblies are a cast aluminum fitted end plug and a gold anodized, spun aluminum ball.

NeverFurl ROTATING SYSTEM

Accessories & Upgrades

Concord Industries, Inc. offers a broad range of accessories and upgrades to customize a flagpole to meet the end user's specific needs or applications.

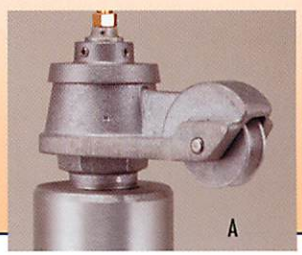
Eagles, 23k gold leaf balls and a variety of anodized or powdercoat shaft finishes can enhance the beauty of a flagpole. Heavy duty truck assemblies with dual sealed bearing sets, stainless steel flag snaps, cleat covers and halyard channels, cast aluminum collars or wire core halyard add to the durability, long life and security of the flagpole and the flag. Security accent lighting and aviation warning lights are also available for most models. Cast aluminum Ball/Truck assemblies with a durable gold powdercoat finish and dual sealed spindle bearings add to the durability and beauty of the flagpole. This catalog features some of the more popular flagpole options.

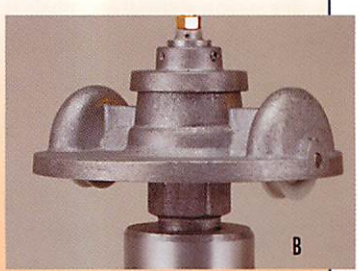
Eagles

Decorative eagles compliment the beauty of any flagpole and the grandeur of the flag. Cast aluminum eagles with a wingspan of up to 27" are available in a natural color enamel finish (A) or a gold powderpaint (B). A cast aluminum eagle (C) with a 44" overall wingspan on a 3/4"-10NC stainless steel threaded rod in a gold powderpaint finish is available for custom mounting on factory modified trucks with stainless steel spindles. Contact factory for specifics.

Heavy Duty Revolving Truck Assemblies

Available in single (A) or double (B) sheave styles, the reinforced truck body rotates on upper and lower sealed bearing assemblies for longer product life and increased ease of rotation caused by changing wind directions. The machined aluminum sheave rotates smoothly on a stainless steel axle. These models are available with optional stainless steel spindles and sealed sheave bearings.





Cast Aluminum Ball/Truck Assemblies

These truck assemblies are perfect for the Continental, Independence and Sentry aluminum flagpoles. Using dual sealed spindle bearing assemblies, these units combine the function of the truck with the traditional ball finial. The ball section is thick cast aluminum with the entire assembly finished in a choice of gold powdercoat, satin or bronzetone. Ball/Trucks are available in a 8" diameter single sheave model (A), 12" diameter with a single sheave (B) or double sheaves (C), 8" diameter for use with cable or rope based internal halyards (D) and a 12" cable based internal halyard style (E). External halyard Ball/Trucks use machined aluminum sheaves on stainless steel axles. Consider adding an eagle for added visual effect. Contact factory regarding eagle applications.