SNYDER
Equipment, Inc.
Storing, Rolling, Lifting since 1947

PRODUCT INFORMATION

Eder Flag flagpoles

2946 Larimer St. Denver, CO 80205
303-295-1100 / 800-373-7693
FAX 303-295-2464
Email info@snyderequipment.com
www.snyderequipment.com

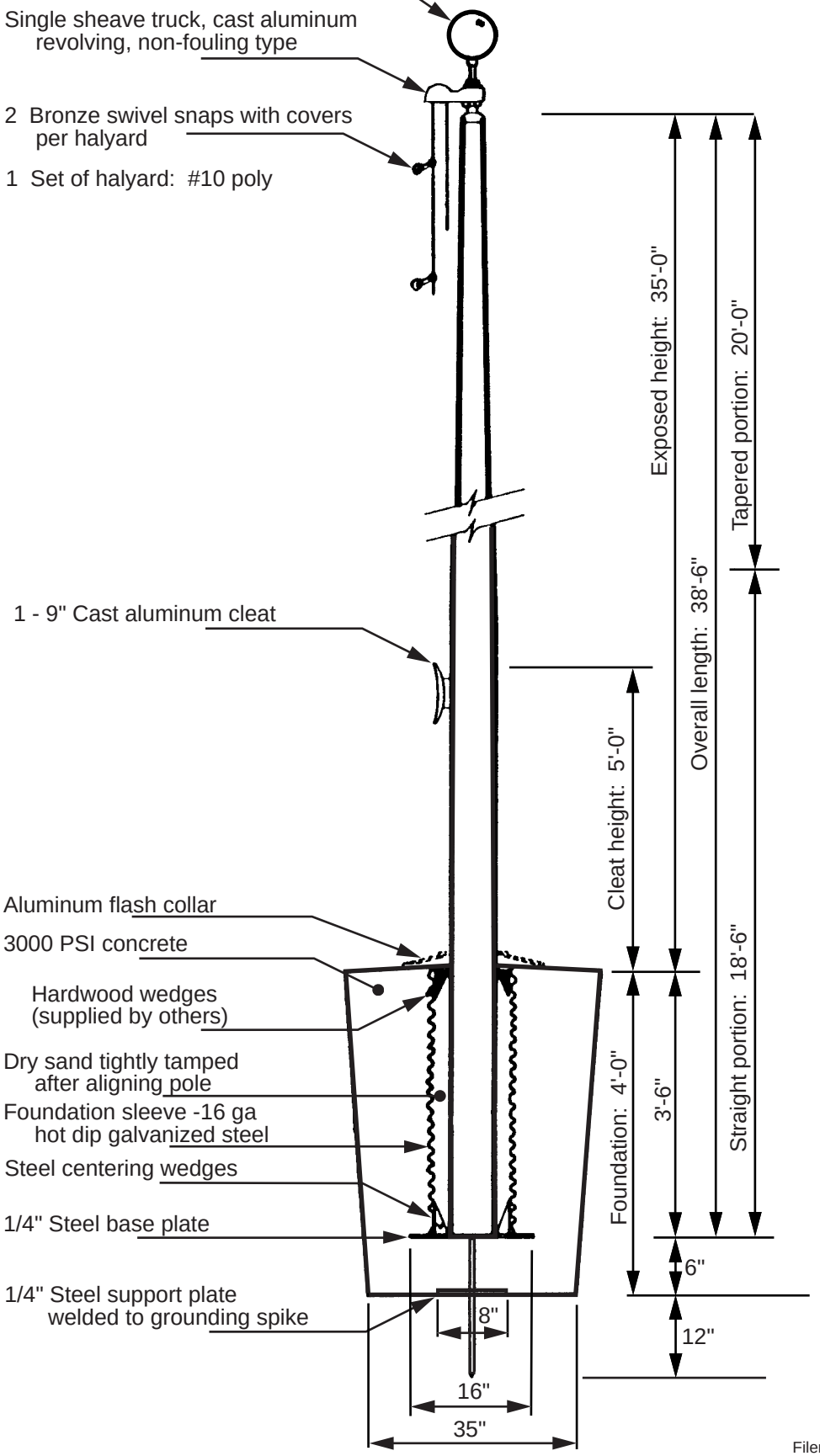
Model EC35

8" - 14 gauge spun aluminum ball
gold anodized

Single sheave truck, cast aluminum
revolving, non-fouling type

2 Bronze swivel snaps with covers
per halyard

1 Set of halyard: #10 poly



1 - 9" Cast aluminum cleat

Aluminum flash collar

3000 PSI concrete

Hardwood wedges
(supplied by others)

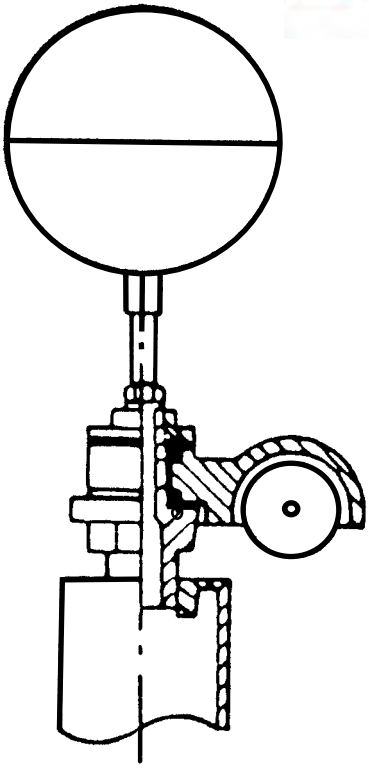
Dry sand tightly tamped
after aligning pole

Foundation sleeve -16 ga
hot dip galvanized steel

Steel centering wedges

1/4" Steel base plate

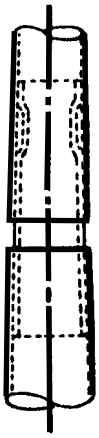
1/4" Steel support plate
welded to grounding spike



Truck Detail

Aluminum body
Stainless steel ball bearings
Aluminum sheave
Cast aluminum spindle

All shafts with overall length of more than 38'-6" are shipped in two sections.



Each section matched marked for field assembly. Exposed portion of jam sleeve must be **well lubricated** prior to assembly.

1-1/2" maximum shop gap allowed for field fitting (ram for tight joint)

Filename: EC35 single sheave_revolving truck.ai

Project:	Ground set tapered aluminum flagpole: ALLOY: 6063T6		EDER FLAG	Date:
Location:	Exposed height: 35'-0"	Overall height: 38'-6"	MANUFACTURING COMPANY	Revision:
Architect:	Ship in 1 section	Butt diameter: 7"	1000 W. Rawson Avenue	
Contractor	Top diameter: 3-1/2"	Wall thickness: .188"	Oak Creek, WI 53154	
Customer:	Finish: 100 grit polish			Job:

Flag Pole Calculations per NAAMM Standard FP-1-86

Customer name: CUSTOM FLAG
Note: EC35 W/6'X10' FLAG
Date: 02/23/07
Time: 5:00 pm

****
This pole passes for wind speeds up to 149 MPH ie, gusts UP TO 149 MPH.
****

Pole type.....Tapered
Pole material.....Aluminum
Mount height above grade (ft.).....0
Height from mount to top (ft.).....35
Diameter at mount (in.).....7.000
Wall thickness at mount (in.).....0.188
Length of tapered section (ft.).....25.000
Wall thickness in taper (in.).....0.188
Diameter - pole top (in.).....3.500

Flag material.....Cotton or nylon
Flag length (ft.).....10.000
Flag height (ft.).....6.000
Flag height above grade (ft.).....35.000

Material Density.....0.100
Modulus of Elasticity.....10,000,000
Allowable Bending Stress.....25,000
Allowable Shear Stress.....11,900
Allowable Yield Stress.....25,000
Allowable Axial Stress.....277.705

Seg	Zone	psf	A(seg)	Cd	Wp(lbs)	L(ft)	M(ft-lbs)	STRESS	CALC'D	ALLOW
1	0-15	45	5.83	0.45	119.4	5.0	597	Axial	38	278
2	0-15	45	2.77	0.45	56.7	12.5	709			
3	15-30	57	6.56	0.45	167.8	22.5	3776	Bending	23868	25000
4	30-50	63	1.60	0.66	65.8	32.5	2137			
					409.6		7219	Shear	298	11900

(amp) =
0.966

Height of Flag Centroid (ft.).....32.000
Wind Load Due to Flag.....189.165
Bending Moment Due to Flag.....6,053.281
Wind Load Due to Pole.....409.643
Bending Moment Due to Pole.....7,218.947
Total Axial Load.....151.768
Pole Base Area.....4.023
Moment of Inertia at Pole Base.....23.355
Calculated Axial Stress.....37.722
Calculated Bending Stress.....23,868.262
Calculated Shear Stress.....297.670
Coefficient of Amplification.....0.965

Combined Stress Ratio (MUST be < 1.0).....0.991