

PLP  
COMPOSITE TECHNOLOGIES INC.  
57 Creamery Road  
P.O. Box 429  
Fitzwilliam, New Hampshire 03447

DATE: 03-31-2014

Computerized Composite FLAGPOLE Engineering and Design  
with Load Calculations Based on Standards Established by  
The National Association of Architectural Metal Manufacturers (NAAMM)  
and

The American Association of State Highway and Transportation Officials (AASHTO)  
6th Edition 2013, using Appendix C-Alternate Method for Wind Pressures.

TABLE 1

GIVEN INFORMATION

Flagpole name.....	50 CMDR
Nautical yardarm.....	13.5 feet long, 33 feet above ground
Gaff.....	7.5 feet long, 33 feet above ground
Height of pole.....	50 feet
Depth of bury in ground.....	5 feet
Base diameter.....	9.818 inches
Tip diameter.....	4.044 inches
Flag size, hoist x fly.....	0 feet x 0 feet (polyester fabric)
Flags, nautical yardarm (2)...	0 feet x 0 feet (polyester fabric)
Flag, gaff.....	0 feet x 0 feet (polyester fabric)
wind speed.....	150 MPH, gust factor 1.3
Material.....	PLP16, 50 inches wide
Breaking Stress.....	24000 psi
Modulus of Elasticity.....	2000000 psi
wall Th./Inside Dia. ratio....	.018