Title	Wind Load for Project Bluster, 100 MPH
Author	Kerry Veenstra

Width of Base Plate	Wb =	4.0	ft	
Weight of Base Plate		160	lb	
Weight of Lamppost		149	lb	
Wind Velocity	V =	100	MPH	

Four Anchors, One in Each Base-plate Corner

Anemometer Display

Projected Area	A =	1.3	sq ft	
Midpoint Height	H =	5.0	ft	
Drag Coefficient	Cd =	1.4		(square)
Pressure	$0.00256 \times V^2 = P$ =	26	lb/sq ft	
Lateral Force	P x A x Cd = F =	48	lb	
Uplift Multiplier	H / Wb = R =	1.25		
Uplift per Anchor	F x R ÷ 2 = Uplift =	30	lb	

Globe

Projected Area	A =	1.4	sq ft	
Midpoint Height	H =	12.0	ft	
Drag Coefficient	Cd =	0.7		(round)
Pressure	$0.00256 \times V^2 = P$ =	26	lb/sq ft	
Lateral Force	P x A x Cd = F =	25	lb	
Uplift Multiplier	H / Wb = R =	3.00		
Uplift per Anchor	F x R ÷ 2 = Uplift =	38	lb	

Lamppost

Projected Area	A =	6.0	sq ft	
Midpoint Height	H =	5.5	ft	
Drag Coefficient	Cd =	0.7		(round)
Pressure	$0.00256 \times V^2 = P$ =	26	lb/sq ft	
Lateral Force	P x A x Cd = F =	109	lb	
Uplift Multiplier	H / Wb = R =	1.38		
Uplift per Anchor	F x R ÷ 2 = Uplift =	75	lb	

Total

Weight of Plate at Anchor	-40	lb
Weight of Lamppost at Anchor	-37	lb
Wind Uplift at Anchor	143	lb
Net Uplift at Anchor	66	lb

Title	Wind Load for Project Bluster, 73 MPH
Author	Kerry Veenstra

Width of Base Plate	Wb =	4.0	ft	
Weight of Base Plate		160	lb	
Weight of Lamppost		149	lb	
Wind Velocity	V =	73	MPH	

Four Anchors, One in Each Base-plate Corner

Anemometer Display

Projected Area	A =	1.3	sq ft	
Midpoint Height	H =	5.0	ft	
Drag Coefficient	Cd =	1.4		(square)
Pressure	$0.00256 \times V^2 = P$ =	14	lb/sq ft	
Lateral Force	P x A x Cd = F =	26	lb	
Uplift Multiplier	H / Wb = R =	1.25		
Uplift per Anchor	F x R ÷ 2 = Uplift =	16	lb	

Globe

Projected Area	A =	1.4	sq ft	
Midpoint Height	H =	12.0	ft	
Drag Coefficient	Cd =	0.7		(round)
Pressure	$0.00256 \times V^2 = P$ =	14	lb/sq ft	
Lateral Force	P x A x Cd = F =	14	lb	
Uplift Multiplier	H / Wb = R =	3.00		
Uplift per Anchor	F x R ÷ 2 = Uplift =	21	lb	

Lamppost

Projected Area	A =	6.0	sq ft	
Midpoint Height	H =	5.5	ft	
Drag Coefficient	Cd =	0.7		(round)
Pressure	$0.00256 \times V^2 = P$ =	14	lb/sq ft	
Lateral Force	P x A x Cd = F =	59	lb	
Uplift Multiplier	H / Wb = R =	1.38		
Uplift per Anchor	F x R ÷ 2 = Uplift =	41	lb	

Total

Weight of Plate at Anchor	-40	lb
Weight of Lamppost at Anchor	-37	lb
Wind Uplift at Anchor	78	lb
Net Uplift at Anchor	1	lb