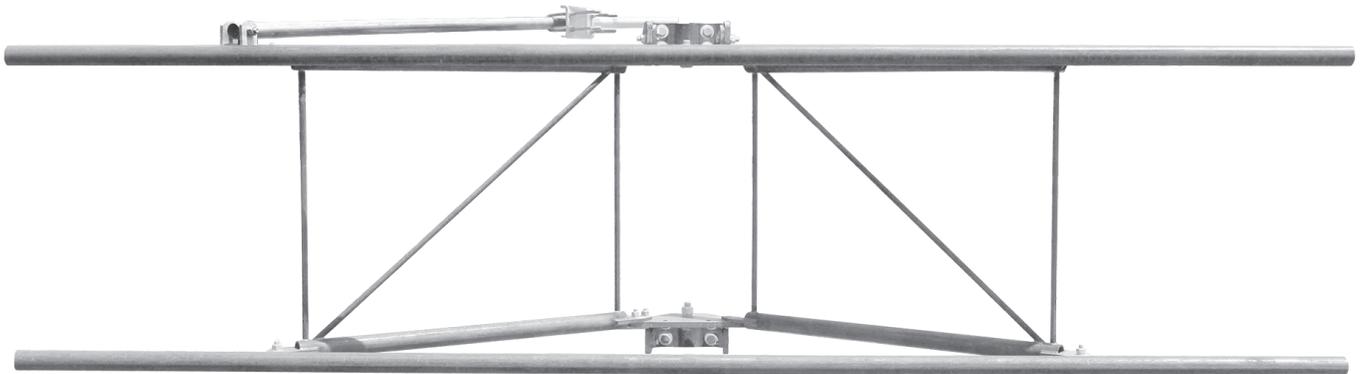


# Your Solution for **HEAVY DUTY** Equipment Loads

Sabre Site Solutions' new **HD V-Boom** is designed for today's technology and built strong enough for your current and future needs.



## Our New V-Boom:

- Has the capacity to handle today's heavy equipment
- Features round members for less wind area
- Is designed and packaged for easy installation

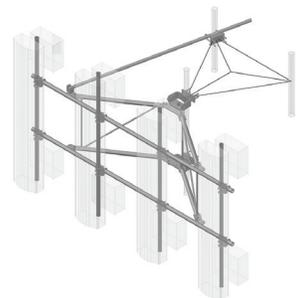


Contact Sabre Site Solutions today to order yours.

866.428.6937 | [www.SabreSiteSolutions.com](http://www.SabreSiteSolutions.com)

See how easily Sabre's new  
HD V-Boom assembles!

**Sabre Industries™**  
Site Solutions



# 12' V-Boom with 3' standoff

Capacity Chart (per ANSI/TIA 222-G)

Factored Wind Force per Antenna/Equipment,  $P_u = 1.6 \times Q_z \times G_H \times (EPA)_A$ , per Section 2.3.2 and 2.6.9.2

Velocity Pressure,  $Q_z = 0.00256 \times K_z \times K_{ZT} \times K_D \times V^2 \times I$ , per Section 2.6.9.6

$G_H = 1.0$  for strength design of appurtenances, per Section 2.6.9

$K_z$  = Velocity Pressure Coefficient for Exposure Category C, varies with height per Section 2.6.5.2

$K_{ZT} = 1.0$  for Topographic Category 1, per Section 2.6.6.4

$K_D = 0.95$  for strength design of appurtenances, per Table 2-2

$V$  = Basic Wind Speed (mph), 3-second gust, based on ASCE 7-05

$I = 1.0$  Importance Factor for Structure Class II, per Table 2-3

Maximum Factored Wind Load of Antenna/Equipment per Mounting Pipe,  $P_u = 1280$  lbs.

Maximum Dead Weight of Antenna/Equipment per Mounting Pipe, Weight = 500 lbs.

(Weight is unfactored and includes the antenna mounting pipe)

## Maximum $(EPA)_A$ per Pipe Mount, CaAa (sq.ft.)

Elevation AGL (ft.)	Basic Wind Speed (mph)									
	90	95	100	105	110	115	120	130	140	150
50	37.1	33.3	30.1	27.3	24.9	22.7	20.9	17.8	15.3	13.4
75	34.1	30.6	27.6	25.0	22.8	20.9	19.2	16.3	14.1	12.3
100	32.1	28.8	26.0	23.6	21.5	19.7	18.0	15.4	13.3	11.6
125	30.6	27.5	24.8	22.5	20.5	18.8	17.2	14.7	12.7	11.0
150	29.5	26.4	23.9	21.6	19.7	18.0	16.6	14.1	12.2	10.6
200	27.7	24.9	22.5	20.4	18.6	17.0	15.6	13.3	11.5	10.0
250	26.5	23.7	21.4	19.4	17.7	16.2	14.9	12.7	10.9	9.5
300	25.5	22.9	20.6	18.7	17.0	15.6	14.3	12.2	10.5	9.2
350	24.6	22.1	20.0	18.1	16.5	15.1	13.9	11.8	10.2	8.9
400	24.0	21.5	19.4	17.6	16.0	14.7	13.5	11.5	9.9	8.6

Notes: 1. Values shown above are valid for 4 mounting pipes per sector.

2. Analyzed by a third party engineer for 12 wind directions, Sabre's V-Boom is structurally sound for all loads listed in the chart above.

## V-Boom EPA Values

One Sector:

$EPA_N = 9.12$  sq.ft.

$EPA_T = 4.97$  sq.ft.

Three Sectors:

$EPA_A = 15.85$  sq.ft. (assumes 120° apart)

