

PROJECT: COMMONWEALTH BANK REBRAND
UNDER AWNING FIXING ARRANGEMENT

ADDRESS: REGION A AND B

REFERENCE: SCF:085:A

DATE: 19/MAY/09

Vistek engineered solutions	UNDER AWNING SIGN		SCF	085:A
	COMMONWEALTH BANK - REGION A & B		22-May-09	A3
SELF WEIGHT LOADS:				
	Param.	Formula	Value	Units
Loads:	UDL	Approx mass distribution.	45.00	kg/m^2
	Length	Sign Length	3.95	m
	Height	Sign Height	0.60	m
	Area	Sign Area	0.81	m^2
	Mass	Sign Mass	36.45	Kg
	Φ	Factor of safety	1.20	
	W (Serv)	Dead Load Tension	0.36	kN
	W (Ult)	Dead Load Tension	0.44	kN
	No.	Number of Droppers	2	
	UDL (Serv)	Nt/dropper	0.18	kN/m
	UDL (Ult)	Nt/dropper	0.22	kN/m

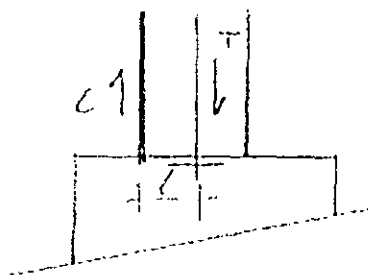
WIND LOADS:

Param.	Formula	Value	Units
Reg	Region.	B	..
TC	Terrain Category.	0.0	..
hz	Height top of sign above NGL.	3.00	m
ho	Height to datum	0.00	m
h	Height: top of sign above datum = $h_z - h_o$	3.00	m
R	Recurrence Interval	50	..
V _R	Regional wind speed.	0	m/s
p _z	Wind pressure at height $z = h_z$	0.58	kPa
c	Height of sign face (vertical)	0.35	m
b	Length of sign face (horizontal)	1.80	m
b/c	Ratio: length to height.	5.14	..
c/h	Ratio: height to total height.	0.12	..
C _p	Wind pressure coefficient.	1.60	..
p _d	Design wind pressure	0.93	kPa
A _s	Area sign face	0.63	m ²
W _s	Wind load	0.59	kN
Comments:			

PROJECT	COMP BANK U/A SIGN			AS
NUMBER		DATE		TIME
LOCATION				
ATTEND				

CHECK OF CONNECTION

M12 (8.8/S) WITH SC x SC x 3.0 AISI 304



$$\text{MAX } T = 56 \text{ kN}$$

MAX C FOR 6063-T5

$$F_{cu} = 110 \text{ MPa}$$

$$= 50 \times 3.0 = 150 \text{ mm}^2$$

$$\Rightarrow 16.5 \text{ kN}$$

$$\Rightarrow L = 25 \text{ mm}$$

$$\begin{aligned} \text{Mom CAP} &= (0.025)(16.5) \\ &= 0.413 \text{ kNm} \end{aligned}$$

$$\text{WIND LOAD} = 0.66 \text{ kN} \Rightarrow 0.33 \text{ kN/row}$$

$$\text{DROPPER LENGTH} = d$$

$$(d + 0.17)(0.33) = 0.413$$

$$\Rightarrow d = 1.0 \text{ m}$$