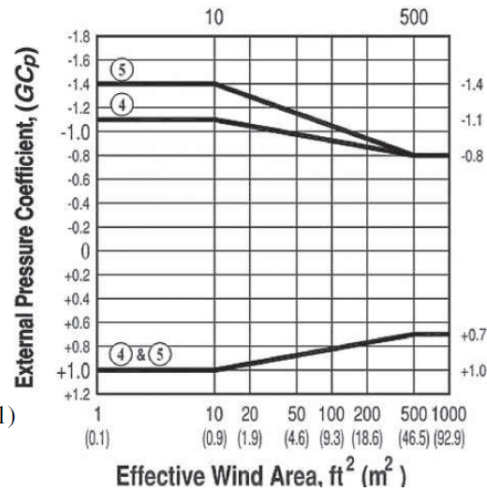
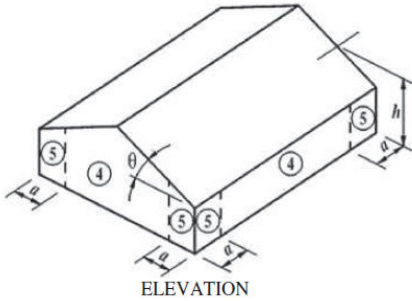


Design wind pressures for walls and wall elements



$$p = q_h [(GC_p) - (GC_{pi})] (\text{lb/ft}^2) \quad (30.3-1)$$

$$q_h = 64.021 \text{ psf}$$

$$GC_{pi} = 0.18$$

Velocity pressure at roof height

Internal pressure coefficient for Enclosed Buildings

$$EWA := \begin{bmatrix} 10 \\ 20 \\ 50 \\ 100 \\ 200 \\ 500 \end{bmatrix} \text{ ft}^2$$

$$GC_{p_{zone4}} := \begin{bmatrix} 1 & -1.1 \\ 1 & -1.1 \\ 0.95 & -1 \\ 0.85 & -0.9 \\ 0.8 & -0.85 \\ 0.7 & -0.7 \end{bmatrix}$$

$$GC_{p_{zone5}} := \begin{bmatrix} 1 & -1.4 \\ 1 & -1.3 \\ 0.95 & -1.15 \\ 0.85 & -1.05 \\ 0.8 & -0.95 \\ 0.7 & -0.8 \end{bmatrix}$$

Ultimate wind loads table for walls

	"Eff. Wind Area"	"Zone 4 Pos."	"Zone 4 Neg."	"Zone 5 Pos."	"Zone 5 Neg"
	"ft²"	"psf"	"psf"	"psf"	"psf"
$WLu_table =$	10	75.545	-81.947	75.545	-101.154
	20	75.545	-81.947	75.545	-94.752
	50	72.344	-75.545	72.344	-85.148
	100	65.942	-69.143	65.942	-78.746
	200	62.741	-65.942	62.741	-72.344
	500	56.339	-56.339	56.339	-62.741

Allowable wind loads table for walls

	"Eff. Wind Area"	"Zone 4 Pos."	"Zone 4 Neg."	"Zone 5 Pos."	"Zone 5 Neg"
	"ft²"	"psf"	"psf"	"psf"	"psf"
$WLa_table =$	10	45.327	-49.168	45.327	-60.692
	20	45.327	-49.168	45.327	-56.851
	50	43.406	-45.327	43.406	-51.089
	100	39.565	-41.486	39.565	-47.248
	200	37.645	-39.565	37.645	-43.406
	500	33.803	-33.803	33.803	-37.645