

Project :
 Subject :
 Location :

File :
 Date : 5/13/2003
 Eng. :

Simplified Procedure - Components and Cladding

Design Wind Pressure Components (ASCE 7-02)

Building Height	= 60.00 ft	
Roof Angle	= 25.00 deg.	
Basic Wind Speed	= 90.00 mph	(Figure 6-1)
Category	= I	(Table 1-1)
Importance Factor (I)	= 0.87	(Table 6-1)
Exposure Category	= C (Open terrain)	

Constants:

Kz	= Velocity pressure coefficient @ height z	
	= 0.70	
Kzt	= Topographic factor	
	= 1.00	
Kd	= Wind directionality factor	
	= 0.85	
G	= Gust Factor	
	= 0.85	
Enclosure Classification	= Enclosed Buildings	

Design Wind Pressure, p, Figure 6-3

Design wind pressures and forces are determined by Figure 6-3

Location	Zone	Wind Area	Pnet30 (+) (psf)	Pnet30 (-) (psf)	Adjustment Factor	I	Ending P(+) (psf)	Ending P(-) (psf)
Roof	1	10	8.40	-13.30	1.62	0.87	11.84	-18.75
	2	10	8.40	-23.20	1.62	0.87	11.84	-32.70
	3	10	8.40	-34.30	1.62	0.87	11.84	-48.34
Wall	4	10	14.60	-15.80	1.62	0.87	20.58	-22.27
	5	10	14.60	-19.50	1.62	0.87	20.58	-27.48
Overhang	2	10	-27.2	-	1.62	0.87	-38.34	-
	3	10	-45.7	-	1.62	0.87	-64.41	-