Project : **File :**
Subject : **Date :** 3/21/2012
Location : **Eng :**

Design Wind Pressure, p, Equation 30.5-1 (ASCE 7-10).

System Type	Structure Type	Equation
Components and Cladding Simplified Envelope Procedure	Low Rise Buildings with h<= 60 ft Enclosed Buildings	*pnet* : λ Kzt pnet30 λ : adjustment factor kzt : topographic factor pnet30 : Figure 30.5-1

Building Height	=	60 ft	
Roof Angle	=	25 deg.	
Basic Wind Speed	=	115 mph	(Figure 26.5-1 A-C)
Occupancy Category	=	II	(Table 1.5-1)
Exposure Category	=	C	(Section 26.7.3)
Kzt	=	$(1 + K1 \cdot K2 \cdot K3)^2$	(Figure 26.8-1)
Topography (at 0.33h)	=	3-D Axisym. Hill	
K1,K2,K3	=	Multipliers from Fig. 26.8-1 to obtain Kzt	
Lh	=	100.00 ft	
H	=	200.00 ft	
H/Lh	=	0.50	
K1	=	0.53	
X	=	100.00 ft	
X/Lh	=	0.25	
K2	=	0.83	
z/lh	=	0.60	
K3 @ h	=	0.82	
Kzt @ 0.33 h	=	1.85	

Design Wind Pressure, p, Figure 30.5-1.

Location	Zone	Wind Area	Pnet30(+) (psf)	Pnet30(-) (psf)	Adjustment Factor	Ending P(+) (psf)	Ending P(-) (psf)
Roof	1	10	13.70	-21.80	1.62	40.98	-65.22
	2	10	13.70	-37.90	1.62	40.98	-113.38
	3	10	13.70	-56.00	1.62	40.98	-167.53
Wall	4	10	23.80	-25.80	1.62	71.20	-77.18
	5	10	23.80	-31.90	1.62	71.20	-95.43
Overhang	2	10	-	-44.40	1.62	-	-132.83
	3	10	-	-74.60	1.62	-	-223.17