



MARTINEZ & ASSOCIATES

STRUCTURAL ENGINEERS, PA

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February 26, 2018

Mr. Tony Ficano
One Ocean Place Homeowners Association
1990 N Waccamaw Drive
Garden City, SC

Re: Glass Door & Window Replacement at
One Ocean Place Homeowners Association
North and South Towers
1990 N Waccamaw Drive
Garden City, SC

Dear Tony,

Per the request of the Association, this office has been commissioned to assess the feasibility of replacement sliding door and window units at the above referenced buildings. The following requirements have been established for the two buildings to be considered independent:

- DP rating of door and window units are tested at the following pressures compliant with the 2015 International Building Code Chapter 16 and ASCE 7-10 Chapter 28 Components and Cladding (*Envelope Procedure*):
 - **85 PSF** for doors and windows within 10 feet of perimeter [outside four] corners known as the "End Zones".
 - **65 PSF** for doors and windows interior of the designated distance for above guideline corner or "End Zones".
- Compliant with Design Wind Speed requirement of 148 MPH Ultimate and 116 MPH Nominal.
- Door or window unit glazing is impact resistant for ASTM E 1996 (Below 30 feet) and ASTM E 1996 (Above 30 feet).
- Door or window unit is resistant to Wind Exposure Classification of D

It should be stated that the installation contractor will be responsible for all water-proofing requirements as established by industry standards and the manufacturer.

If you have further questions or concerns, please do not hesitate to contact our office at the above listed phone number.

Respectfully,
Saul J. Martinez, P.E.



WIND PRESSURE CALCULATIONS FOR MAIN WIND FORCE RESISTING SYSTEM
PER ASCE 7-10

Job Name	ONE OCEAN PLACE NORTH AND SOUTH TOWER
Job #	18-235
Location	GARDEN CITY, SC
Designer	Saul J. Martinez, PE

DESIGN DATA		
MEAN ROOF HEIGHT, h	120.58 ft.	
BUILDING PERIOD & Vy AND Mx, Txy:	0.728 sec.	Ta = 0.02(h)^.75
BUILDING PERIOD FOR Vx & My, Tyx:	0.728 sec.	Ta = 0.02(h)^.75
BASIC WIND SPEED, V:	148 mph	(FIGURE 26.5-1A)
EXPOSURE CATEGORY:	D	(PARAGRAPH 26.7.3.)
DESIGN BUILDING WIDTH, X:	160.00 ft.	FOR WIND COEFFICIENTS
DESIGN BUILDING LENGTH, Y:	78.00 ft.	FOR WIND COEFFICIENTS
INTERNAL PRESSURE DATA		
POS. COEF. ABOVE 60', Gcpi:	0.18	(TABLE 26.11-1)
NEG. COEF. ABOVE 60', Gcpi:	-0.18	(TABLE 26.11-1)
POS. COEF. BELOW 60', GCpi:	0.18	(TABLE 26.11-1)
NEG. COEF. BELOW 60', GCpi:	-0.18	(TABLE 26.11-1)
CLASS. OF BLDG TYPE (I, II, III, IV):	II	(TABLE 1.5-1)
IMPORTANCE FACTOR, I:	1.00	(TABLE 1.5-2)
POWER LAW COEFFICIENT, alpha:	11.5	(TABLE 26.9-1)
GRADIENT HEIGHT, zg:	700	(TABLE 26.9-1)
WIND DIRECTIONALITY FACTOR, Kd	0.85	(TABLE 26.6-1)
EXP. COEF., Kz AT MEAN ROOF, z = h:	1.48	(TABLE 27.3-1) FOR INDIRECT WIND SUCTION
STRUCTURE COEFFICIENTS		
ALPHA (°):	0.087	(TABLE 26.9-1)
BETA (°):	1.070	(TABLE 26.9-1)
ALPHA (-):	0.111	(TABLE 26.9-1)
BETA (-):	0.800	(TABLE 26.9-1)
C:	0.150	(TABLE 26.9-1)
L:	650 ft.	(TABLE 26.9-1)
EPSILON:	0.125	(TABLE 26.9-1)
Z (MIN):	7 ft.	(TABLE 26.9-1)
RIGID STRUCTURE FACTORS		
Zbar:	72 ft.	(TABLE 26.9-1)
I(Zbar):	0.132	(EQ. 26.9-7)
L(Zbar):	717 ft.	(EQ. 26.9-9)

WIND FORCE Mx, Vy:		
h / X	0.75	
Y / X	0.49	
WINDWARD WALLS, Cp	0.80	(FIGURE 27.4-1)
LEEWARD WALLS, Cp	-0.50	(FIGURE 27.4-1)
TOPO. FACTOR FOR Vy & Mx, Kzt:	1.000	(EQ. 26.8-1)
VEL. PRES. FOR Vy & Mx AT z = h, qh:	70.56 psf	(EQ. 27.3-1)
Q^2 FOR Vy AND Mx:	0.861	(EQ. 26.9-8)
G FOR Vy & Mx:	0.869	0.85 (EQ. 26.9-6) GUST EF. FACT. FOR Vy AND Mx
ABOVE 60':		
POS. INTERNAL PRESSURE, p:	12.70 psf	POSITIVE qh(Gcpi) ABOVE 60'
NEG. INTERNAL PRESSURE, p:	-12.70 psf	NEGATIVE qh(Gcpi) ABOVE 60'
BELOW 60':		
POS. INTERNAL PRESSURE, p:	12.70 psf	POSITIVE qh(Gcpi) BELOW 60'
NEG. INTERNAL PRESSURE, p:	-12.70 psf	NEGATIVE qh(Gcpi) BELOW 60'

WIND FORCE My, Vx:		
h / Y	1.55	
X / Y	2.05	
WINDWARD WALLS, Cp	0.80	(FIGURE 27.4-1)
LEEWARD WALLS, Cp	-0.30	(FIGURE 27.4-1)
TOPO. FACTOR FOR Vx & My, Kzt:	1.000	(EQ. 26.8-1)
VEL. PRES. FOR Vx & My AT z = h, qh:	70.56 psf	(EQ. 27.3-1)
Q^2 FOR Vx & My:	0.884	(EQ. 26.9-8)
G FOR Vx & My:	0.879	0.85 (EQ. 26.9-6) GUST EF. FACT. FOR Vy AND Mx
ABOVE 60':		
POS. INTERNAL PRESSURE, p:	12.70 psf	POSITIVE qh(Gcpi) ABOVE 60'
NEG. INTERNAL PRESSURE, p:	-12.70 psf	NEGATIVE qh(Gcpi) ABOVE 60'
BELOW 60':		
POS. INTERNAL PRESSURE, p:	12.70 psf	POSITIVE qh(Gcpi) BELOW 60'
NEG. INTERNAL PRESSURE, p:	-12.70 psf	NEGATIVE qh(Gcpi) BELOW 60'

BUILDING LEVEL INFORMATION						WINDWARD		LEEWARD	
Level	Elevation	Delta	Kz	qz	qh	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
MR Roof	138.08	8.75 ft.	1.52	72.24 psf	70.56 psf	37.55	63.25	-43.37	-17.97
MR	129.33	8.75 ft.	1.50	71.42 psf	70.56 psf	36.98	62.53	-43.37	-17.97
Roof	120.58	26.29 ft.	1.48	70.56 psf	70.56 psf	36.38	61.78	-43.37	-17.97
13th	111.83	8.75 ft.	1.46	69.64 psf	70.56 psf	35.74	60.97	-43.37	-17.97
12th	103.08	8.75 ft.	1.44	68.66 psf	70.56 psf	35.06	60.12	-43.37	-17.97
11th	94.29	8.75 ft.	1.42	67.60 psf	70.56 psf	34.32	59.19	-43.37	-17.97
10th	85.54	8.75 ft.	1.39	66.47 psf	70.56 psf	33.53	58.20	-43.37	-17.97
9th	76.79	8.75 ft.	1.37	65.23 psf	70.56 psf	32.67	57.11	-43.37	-17.97
8th	68.04	8.75 ft.	1.34	63.87 psf	70.56 psf	31.73	55.93	-43.37	-17.97
7th	59.29	8.75 ft.	1.31	62.36 psf	70.56 psf	30.68	54.60	-43.37	-17.97
6th	50.54	8.75 ft.	1.27	60.65 psf	70.56 psf	29.49	53.11	-43.37	-17.97
5th	41.79	8.75 ft.	1.23	58.68 psf	70.56 psf	28.12	51.38	-43.37	-17.97
4th	33.04	8.75 ft.	1.18	56.33 psf	70.56 psf	26.48	49.32	-43.37	-17.97
3rd	24.29	8.75 ft.	1.12	53.40 psf	70.56 psf	24.44	46.75	-43.37	-17.97
2nd	15.54	8.75 ft.	1.04	49.41 psf	70.56 psf	21.67	43.26	-43.37	-17.97
Ground	6.79	6.79 ft.	1.03	49.10 psf	70.56 psf	21.46	42.99	-43.37	-17.97
Foundation	0.00	0.00 ft.	1.03	49.10 psf	70.56 psf	21.46	42.99	-43.37	-17.97

WIND FORCE Mx, Vy DESIGN VALUES									
Level	qz	Width above	Width below	Net pressure	Area above	Area below	Net force	Story shear	Moment
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
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				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
MR Roof	72.24 psf		16.25 ft.	80.92 psf	-	71 sft	5.8 kips	5.8 kips	-
MR	71.42 psf	16.25 ft.	16.25 ft.	80.35 psf	71 sft	71 sft	11.4 kips	17.2 kips	50 k-ft
Roof	70.56 psf	16.25 ft.	78.00 ft.	79.75 psf	71 sft	1,025 sft	87.4 kips	104.6 kips	201 k-ft
13th	69.64 psf	78.00 ft.	78.00 ft.	79.11 psf	1,024 sft	341 sft	108.0 kips	113.7 kips	151 k-ft
12th	68.66 psf	78.00 ft.	78.00 ft.	78.43 psf	1,024 sft	343 sft	107.2 kips	124.4 kips	501 k-ft
11th	67.60 psf	78.00 ft.	78.00 ft.	77.70 psf	1,025 sft	341 sft	106.2 kips	210.8 kips	2,951 k-ft
10th	66.47 psf	78.00 ft.	78.00 ft.	76.91 psf	341 sft	341 sft	52.5 kips	263.3 kips	4,795 k-ft
9th	65.23 psf	78.00 ft.	78.00 ft.	76.05 psf	341 sft	341 sft	51.9 kips	315.2 kips	7,099 k-ft
8th	63.87 psf	78.00 ft.	78.00 ft.	75.10 psf	341 sft	341 sft	51.3 kips	366.4 kips	9,857 k-ft
7th	62.36 psf	78.00 ft.	78.00 ft.	74.05 psf	341 sft	341 sft	50.5 kips	417.0 kips	13,063 k-ft
6th	60.65 psf	78.00 ft.	78.00 ft.	72.86 psf	341 sft	341 sft	49.7 kips	466.7 kips	16,712 k-ft
5th	58.68 psf	78.00 ft.	78.00 ft.	71.49 psf	341 sft	341 sft	48.8 kips	515.5 kips	20,796 k-ft
4th	56.33 psf	78.00 ft.	78.00 ft.	69.86 psf	341 sft	341 sft	47.7 kips	563.2 kips	25,306 k-ft
3rd	53.40 psf	78.00 ft.	78.00 ft.	67.82 psf	341 sft	341 sft	46.3 kips	609.5 kips	30,234 k-ft
2nd	49.41 psf	78.00 ft.	78.00 ft.	65.04 psf	341 sft	341 sft	44.4 kips	653.9 kips	35,567 k-ft
Ground	49.10 psf	78.00 ft.	78.00 ft.	64.83 psf	341 sft	265 sft	39.3 kips	693.1 kips	41,288 k-ft
Foundation	49.10 psf	78.00 ft.		64.83 psf	265 sft	-	17.2 kips	710.3 kips	45,995 k-ft

MAIN WIND FORCE RESISTING SYSTEM - Vy AND Mx WINDBLOCKS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
h	Kz	qz	WINDWARD POSITIVE INTERNAL	WINDWARD NEGATIVE INTERNAL	LEEWARD POSITIVE INTERNAL	LEEWARD NEGATIVE INTERNAL	NET WIND PRESSURE
400 ft.	1.82	102.26 psf	58.43 psf	83.83 psf	-43.37 psf	-17.97 psf	101.80 psf
350 ft.	1.78	99.91 psf	56.79 psf	82.19 psf	-43.37 psf	-17.97 psf	100.17 psf
300 ft.	1.73	97.27 psf	54.96 psf	80.36 psf	-43.37 psf	-17.97 psf	98.33 psf
250 ft.	1.68	94.23 psf	52.84 psf	78.24 psf	-43.37 psf	-17.97 psf	96.22 psf
200 ft.	1.62	90.64 psf	50.35 psf	75.75 psf	-43.37 psf	-17.97 psf	93.72 psf
180 ft.	1.59	89.00 psf	49.20 psf	74.60 psf	-43.37 psf	-17.97 psf	92.58 psf
160 ft.	1.55	87.19 psf	47.95 psf	73.35 psf	-43.37 psf	-17.97 psf	91.32 psf
140 ft.	1.52	85.19 psf	46.56 psf	71.96 psf	-43.37 psf	-17.97 psf	89.93 psf
120 ft.	1.48	82.94 psf	44.99 psf	70.39 psf	-43.37 psf	-17.97 psf	88.36 psf
100 ft.	1.43	80.35 psf	43.19 psf	68.59 psf	-43.37 psf	-17.97 psf	86.56 psf
90 ft.	1.41	78.89 psf	42.17 psf	67.57 psf	-43.37 psf	-17.97 psf	85.55 psf
80 ft.	1.38	77.29 psf	41.06 psf	66.46 psf	-43.37 psf	-17.97 psf	84.44 psf
70 ft.	1.35	75.52 psf	39.83 psf	65.23 psf	-43.37 psf	-17.97 psf	83.20 psf
60 ft.	1.31	73.52 psf	38.44 psf	63.84 psf	-43.37 psf	-17.97 psf	81.81 psf
50 ft.	1.27	71.23 psf	36.84 psf	62.24 psf	-43.37 psf	-17.97 psf	80.22 psf
40 ft.	1.22	68.51 psf	34.96 psf	60.36 psf	-43.37 psf	-17.97 psf	78.33 psf
30 ft.	1.16	65.17 psf	32.63 psf	58.03 psf	-43.37 psf	-17.97 psf	76.00 psf
25 ft.	1.13	63.14 psf	31.22 psf	56.62 psf	-43.37 psf	-17.97 psf	74.59 psf
20 ft.	1.08	60.73 psf	29.54 psf	54.94 psf	-43.37 psf	-17.97 psf	72.92 psf
15 ft.	1.03	57.77 psf	27.48 psf	52.88 psf	-43.37 psf	-17.97 psf	70.86 psf

- (1)- HEIGHT ABOVE GROUND
- (2)- VELOCITY PRESSURE EXPOSURE COEFFICIENT AT HEIGHT z
- (3)- VELOCITY PRESSURE AT HEIGHT z ABOVE GROUND, $q_z = 0.00256(K_z)(K_{zt})(V^2)$ [Eq.6-1]
- (4)- WINDWARD PRESSURE WITH MAXIMUM POSITIVE INTERNAL PRESSURE = $q_z G C_p - q_h (-G C_{pi})$
- (5)- WINDWARD PRESSURE WITH MAXIMUM NEGATIVE INTERNAL PRESSURE = $q_z G C_p - q_h (-G C_{pi})$
- (6)- LEEWARD PRESSURE WITH MAXIMUM POSITIVE INTERNAL PRESSURE = $q_h G C_p - q_h (+G C_{pi})$
- (7)- LEEWARD PRESSURE WITH MAXIMUM NEGATIVE INTERNAL PRESSURE = $q_h G C_p - q_h (-G C_{pi})$
- (8)- NET HORIZONTAL WIND FORCE [(4) - (6) OR (5) - (7)]

MAIN WIND FORCE RESISTING SYSTEM - Vx AND My WINDBLOCKS



(1) h	(2) Kz	(3) qz	(4) WINDWARD POSITIVE INTERNAL	(5) WINDWARD NEGATIVE INTERNAL	(6) LEEWARD POSITIVE INTERNAL	(7) LEEWARD NEGATIVE INTERNAL	(8) NET WIND PRESSURE
400	1.82	102.26 psf	59.17 psf	84.57 psf	-31.14 psf	-5.74 psf	90.30 psf
350	1.78	99.91 psf	57.52 psf	82.92 psf	-31.14 psf	-5.74 psf	88.65 psf
300	1.73	97.27 psf	55.66 psf	81.06 psf	-31.14 psf	-5.74 psf	86.80 psf
250	1.68	94.23 psf	53.53 psf	78.93 psf	-31.14 psf	-5.74 psf	84.66 psf
200	1.62	90.64 psf	51.01 psf	76.41 psf	-31.14 psf	-5.74 psf	82.14 psf
180	1.59	89.00 psf	49.85 psf	75.25 psf	-31.14 psf	-5.74 psf	80.99 psf
160	1.55	87.19 psf	48.58 psf	73.98 psf	-31.14 psf	-5.74 psf	79.72 psf
140	1.52	85.19 psf	47.17 psf	72.57 psf	-31.14 psf	-5.74 psf	78.31 psf
120	1.48	82.94 psf	45.59 psf	70.99 psf	-31.14 psf	-5.74 psf	76.73 psf
100	1.43	80.35 psf	43.77 psf	69.17 psf	-31.14 psf	-5.74 psf	74.91 psf
90	1.41	78.89 psf	42.75 psf	68.15 psf	-31.14 psf	-5.74 psf	73.88 psf
80	1.38	77.29 psf	41.62 psf	67.02 psf	-31.14 psf	-5.74 psf	72.76 psf
70	1.35	75.52 psf	40.37 psf	65.77 psf	-31.14 psf	-5.74 psf	71.51 psf
60	1.31	73.52 psf	38.97 psf	64.37 psf	-31.14 psf	-5.74 psf	70.11 psf
50	1.27	71.23 psf	37.36 psf	62.76 psf	-31.14 psf	-5.74 psf	68.49 psf
40	1.22	68.51 psf	35.45 psf	60.85 psf	-31.14 psf	-5.74 psf	66.59 psf
30	1.16	65.17 psf	33.10 psf	58.50 psf	-31.14 psf	-5.74 psf	64.24 psf
25	1.13	63.14 psf	31.67 psf	57.07 psf	-31.14 psf	-5.74 psf	62.81 psf
20	1.08	60.73 psf	29.98 psf	55.38 psf	-31.14 psf	-5.74 psf	61.12 psf
15	1.03	57.77 psf	27.90 psf	53.30 psf	-31.14 psf	-5.74 psf	59.04 psf

- (1)- HEIGHT ABOVE GROUND
- (2)- VELOCITY PRESSURE EXPOSURE COEFFICIENT AT HEIGHT z
- (3)- VELOCITY PRESSURE AT HEIGHT z ABOVE GROUND, $q_z = 0.00256(K_z)(K_{zt})(V^2)$ [Eq.6-1]
- (4)- WINDWARD PRESSURE WITH MAXIMUM POSITIVE INTERNAL PRESSURE = $q_z G C_p - q_h (-G C_{pi})$
- (5)- WINDWARD PRESSURE WITH MAXIMUM NEGATIVE INTERNAL PRESSURE = $q_z G C_p - q_h (-G C_{pi})$
- (6)- LEEWARD PRESSURE WITH MAXIMUM POSITIVE INTERNAL PRESSURE = $q_h G C_p - q_h (+G C_{pi})$
- (7)- LEEWARD PRESSURE WITH MAXIMUM NEGATIVE INTERNAL PRESSURE = $q_h G C_p - q_h (-G C_{pi})$
- (8)- NET HORIZONTAL WIND FORCE [(4) - (6) OR (5) - (7)]

WALL COMPONENTS AND CLADDING, FIGURE 30.6-1

ZONE	WINDWARD PRESSURE				LEEWARD PRESSURE			
	MIN AREA	GCp	MAX AREA	GCp	MIN AREA	GCp	MAX AREA	GCp
4	20 sft	0.90	500 sft	0.60	20 sft	-0.90	500 sft	-0.70
5	20 sft	0.90	500 sft	0.60	20 sft	-1.80	500 sft	-1.00
VEL. PRES. FOR Vy AND Mx AT z = h, qh:				70.56 psf	USE MAXIMUM VALUE FROM EITHER DIRECTION			
TOPOGRAPHIC FACTOR FOR Vy AND Mx, Kzt:				1.00	USE MAXIMUM VALUE FROM EITHER DIRECTION			
ZONE 4 IS INTERIOR WALL PANEL				$p = q [(GCp) - (GCpi)]$	(FIGURE 30.6-1, Components and cladding, h > 60')			
ZONE 5 IS EDGE WALL PANEL				$q = qz$	(windward face)			
				$q = qh$	(leeward face and sides)			

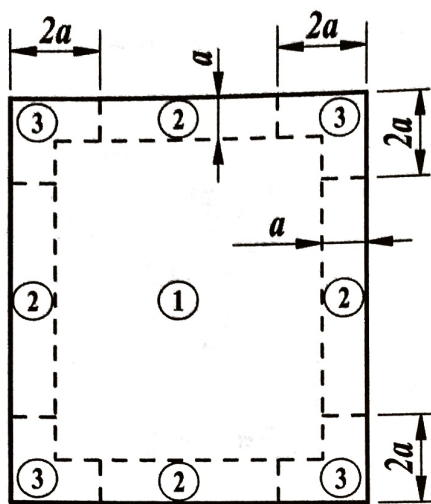
WALL COMPONENTS FOR INTERIOR PANELS - ZONE 4

HEIGHT	WINDWARD PRESSURES		WINDWARD FACE			SIDEWALLS AND LEEWARD FACE		
	Kz	qz	MIN AREA	50 sft	MAX AREA	MIN AREA	50 sft	MAX AREA
400	1.82	102.26 psf	110.44 psf	108.52 psf	79.76 psf	-76.20 psf	-75.32 psf	-62.09 psf
350	1.78	99.91 psf	107.90 psf	106.03 psf	77.93 psf	-76.20 psf	-75.32 psf	-62.09 psf
300	1.73	97.27 psf	105.05 psf	103.22 psf	75.87 psf	-76.20 psf	-75.32 psf	-62.09 psf
250	1.68	94.23 psf	101.77 psf	100.00 psf	73.50 psf	-76.20 psf	-75.32 psf	-62.09 psf
200	1.62	90.64 psf	97.90 psf	96.20 psf	70.70 psf	-76.20 psf	-75.32 psf	-62.09 psf
180	1.59	89.00 psf	96.12 psf	94.45 psf	69.42 psf	-76.20 psf	-75.32 psf	-62.09 psf
160	1.55	87.19 psf	94.17 psf	92.53 psf	68.01 psf	-76.20 psf	-75.32 psf	-62.09 psf
140	1.52	85.19 psf	92.01 psf	90.41 psf	66.45 psf	-76.20 psf	-75.32 psf	-62.09 psf
120	1.48	82.94 psf	89.57 psf	88.02 psf	64.69 psf	-76.20 psf	-75.32 psf	-62.09 psf
100	1.43	80.35 psf	86.78 psf	85.27 psf	62.67 psf	-76.20 psf	-75.32 psf	-62.09 psf
90	1.41	78.89 psf	85.20 psf	83.72 psf	61.54 psf	-76.20 psf	-75.32 psf	-62.09 psf
80	1.38	77.29 psf	83.47 psf	82.03 psf	60.29 psf	-76.20 psf	-75.32 psf	-62.09 psf
70	1.35	75.52 psf	81.56 psf	80.14 psf	58.90 psf	-76.20 psf	-75.32 psf	-62.09 psf
60	1.31	73.52 psf	79.40 psf	78.02 psf	57.35 psf	-76.20 psf	-75.32 psf	-62.09 psf
50	1.27	71.23 psf	76.92 psf	75.59 psf	55.56 psf	-76.20 psf	-75.32 psf	-62.09 psf
40	1.22	68.51 psf	74.00 psf	72.71 psf	53.44 psf	-76.20 psf	-75.32 psf	-62.09 psf
30	1.16	65.17 psf	70.38 psf	69.16 psf	50.83 psf	-76.20 psf	-75.32 psf	-62.09 psf
25	1.13	63.14 psf	68.19 psf	67.00 psf	49.25 psf	-76.20 psf	-75.32 psf	-62.09 psf
20	1.08	60.73 psf	65.59 psf	64.45 psf	47.37 psf	-76.20 psf	-75.32 psf	-62.09 psf
15	1.03	57.77 psf	62.39 psf	61.31 psf	45.06 psf	-76.20 psf	-75.32 psf	-62.09 psf

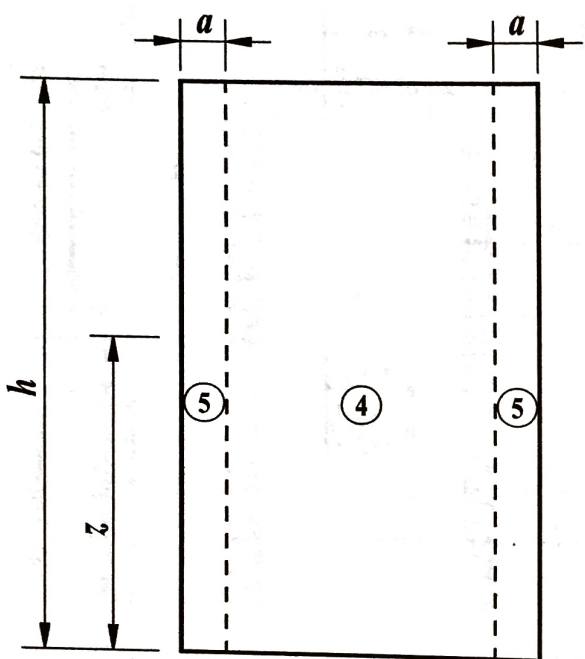
WALL COMPONENTS FOR NEAR EDGE PANELS - ZONE 5

HEIGHT	WINDWARD PRESSURES		WINDWARD FACE			SIDEWALLS AND LEEWARD FACE		
	Kz	qz	MIN AREA	50 sft	MAX AREA	MIN AREA	50 sft	MAX AREA
400	1.82	102.26 psf	110.44 psf	108.52 psf	79.76 psf	-139.70 psf	-136.17 psf	-83.26 psf
350	1.78	99.91 psf	107.90 psf	106.03 psf	77.93 psf	-139.70 psf	-136.17 psf	-83.26 psf
300	1.73	97.27 psf	105.05 psf	103.22 psf	75.87 psf	-139.70 psf	-136.17 psf	-83.26 psf
250	1.68	94.23 psf	101.77 psf	100.00 psf	73.50 psf	-139.70 psf	-136.17 psf	-83.26 psf
200	1.62	90.64 psf	97.90 psf	96.20 psf	70.70 psf	-139.70 psf	-136.17 psf	-83.26 psf
180	1.59	89.00 psf	96.12 psf	94.45 psf	69.42 psf	-139.70 psf	-136.17 psf	-83.26 psf
160	1.55	87.19 psf	94.17 psf	92.53 psf	68.01 psf	-139.70 psf	-136.17 psf	-83.26 psf
140	1.52	85.19 psf	92.01 psf	90.41 psf	66.45 psf	-139.70 psf	-136.17 psf	-83.26 psf
120	1.48	82.94 psf	89.57 psf	88.02 psf	64.69 psf	-139.70 psf	-136.17 psf	-83.26 psf
100	1.43	80.35 psf	86.78 psf	85.27 psf	62.67 psf	-139.70 psf	-136.17 psf	-83.26 psf
90	1.41	78.89 psf	85.20 psf	83.72 psf	61.54 psf	-139.70 psf	-136.17 psf	-83.26 psf
80	1.38	77.29 psf	83.47 psf	82.03 psf	60.29 psf	-139.70 psf	-136.17 psf	-83.26 psf
70	1.35	75.52 psf	81.56 psf	80.14 psf	58.90 psf	-139.70 psf	-136.17 psf	-83.26 psf
60	1.31	73.52 psf	79.40 psf	78.02 psf	57.35 psf	-139.70 psf	-136.17 psf	-83.26 psf
50	1.27	71.23 psf	76.92 psf	75.59 psf	55.56 psf	-139.70 psf	-136.17 psf	-83.26 psf
40	1.22	68.51 psf	74.00 psf	72.71 psf	53.44 psf	-139.70 psf	-136.17 psf	-83.26 psf
30	1.16	65.17 psf	70.38 psf	69.16 psf	50.83 psf	-139.70 psf	-136.17 psf	-83.26 psf
25	1.13	63.14 psf	68.19 psf	67.00 psf	49.25 psf	-139.70 psf	-136.17 psf	-83.26 psf
20	1.08	60.73 psf	65.59 psf	64.45 psf	47.37 psf	-139.70 psf	-136.17 psf	-83.26 psf
15	1.03	57.77 psf	62.39 psf	61.31 psf	45.06 psf	-139.70 psf	-136.17 psf	-83.26 psf

CRITICAL PRESSURES

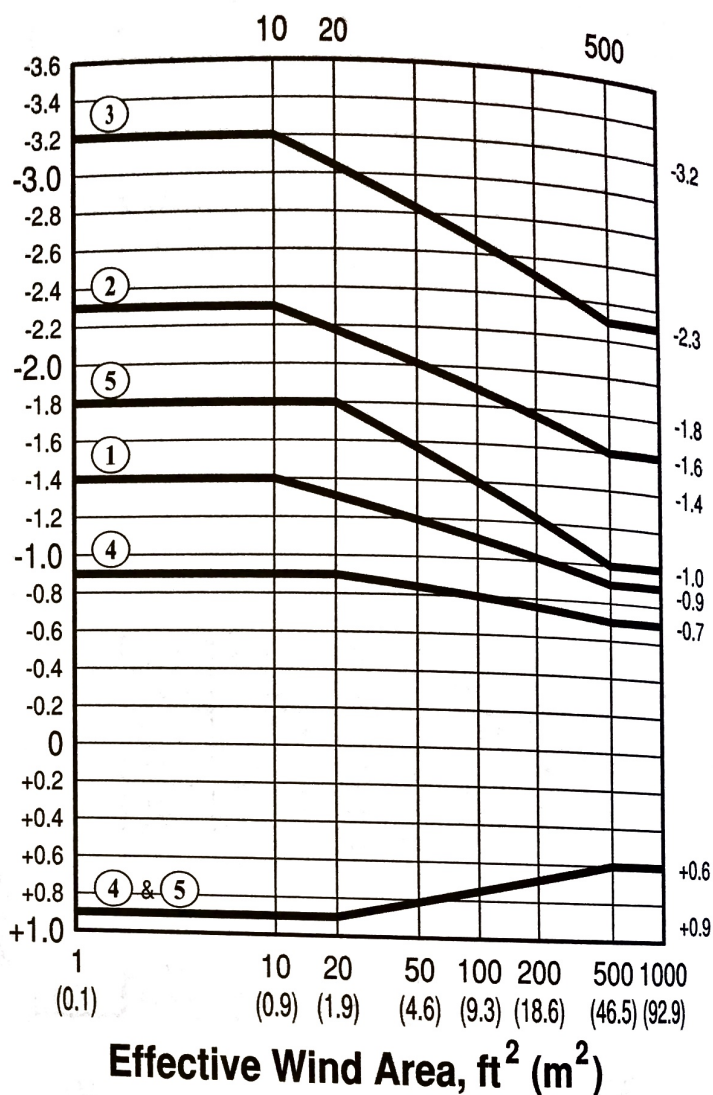


ROOF PLAN



WALL ELEVATION

External Pressure Coefficient, GC_p



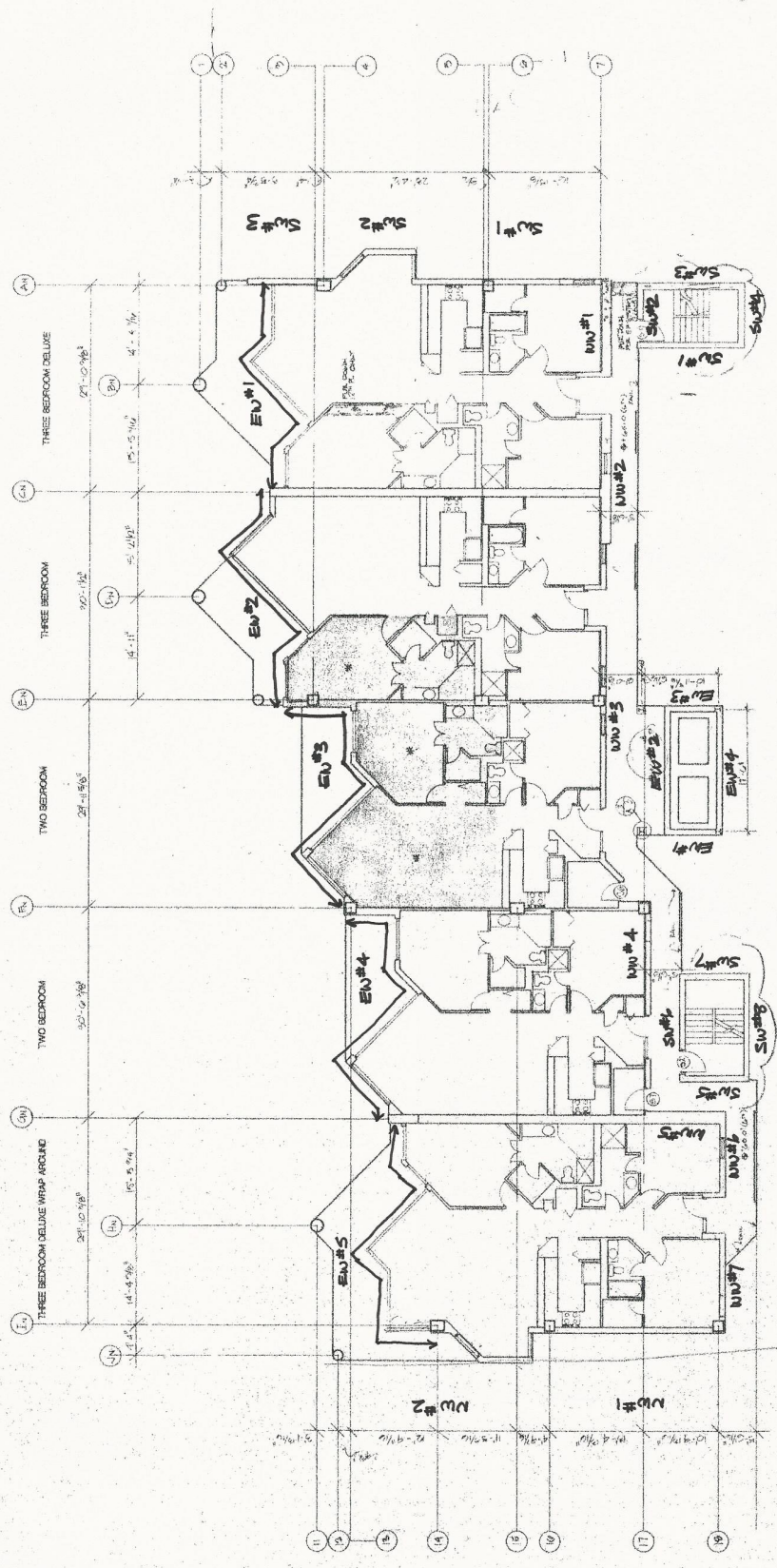
Notes:

1. Vertical scale denotes GC_p to be used with appropriate q_z or q_h .
2. Horizontal scale denotes effective wind area A , in square feet (square meters).
3. Plus and minus signs signify pressures acting toward and away from the surfaces, respectively.
4. Use q_z with positive values of GC_p and q_h with negative values of GC_p .
5. Each component shall be designed for maximum positive and negative pressures.
6. Coefficients are for roofs with angle $\theta \leq 10^\circ$. For other roof angles and geometry, use GC_p values from Fig. 30.4-2A, B and C and attendant q_h based on exposure defined in Section 26.7.
7. If a parapet equal to or higher than 3 ft (0.9m) is provided around the perimeter of the roof with $\theta \leq 10^\circ$, Zone 3 shall be treated as Zone 2.
8. Notation:

- a : 10 percent of least horizontal dimension, but not less than 3 ft (0.9 m).
- h : Mean roof height, in feet (meters), except that eave height shall be used for $\theta \leq 10^\circ$.
- z : height above ground, in feet (meters).
- θ : Angle of plane of roof from horizontal, in degrees.

NORTH TOWER PLAN

* ALL DIMENSIONS ARE IN FEET AND INCHES.
 DIMENSIONS SHOWN IN THIS PLAN SHALL BE
 CONSIDERED AS SHOWN IN 2" = 1/4"
 UNLESS OTHERWISE NOTED.
 DIMENSIONS FOR THE SWAP



17007 A10
 DATE: 11/11/11
 DRAWN BY: J. J. J.

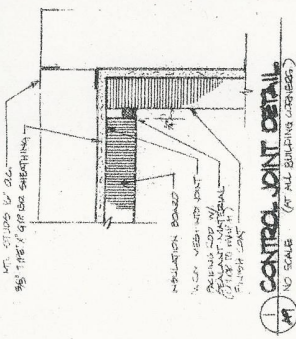
LITTLE & ASSOCIATES
 ARCHITECTS
 1000 G ST. N.W.
 WASHINGTON, D.C. 20004

ALL DIMENSIONS AND NOTES ON THIS PLAN SHALL BE CONSIDERED AS SHOWN IN 2" = 1/4" UNLESS OTHERWISE NOTED.

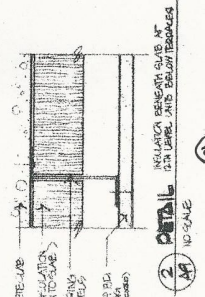
11/11/11

SOUTH TOWER PLAN

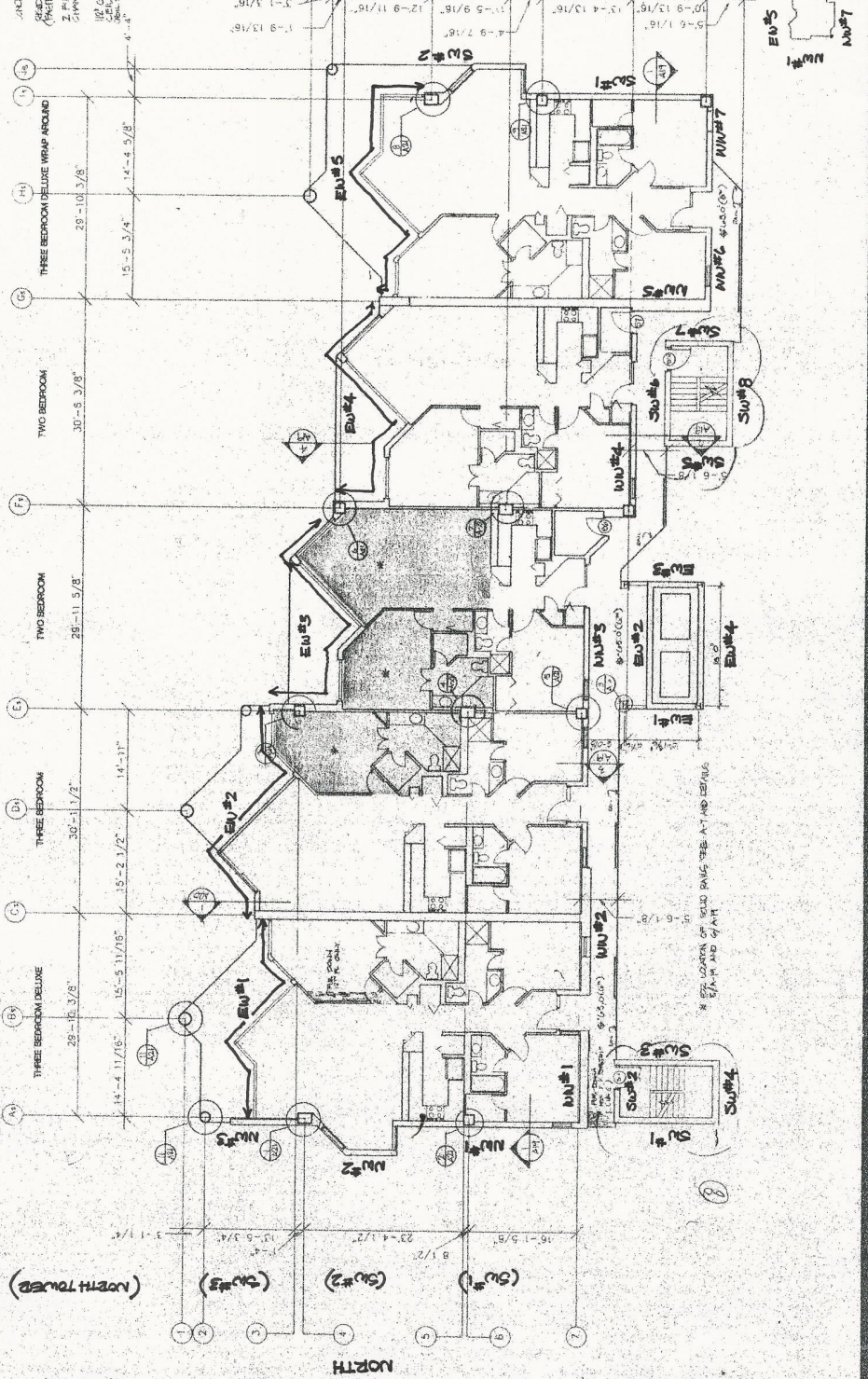
8' AT WALL, 10' OVER AND 1/4" STRIP ONLY
 THESE SHOWN AS PER SHALL BE
 CODE OF THE RESIDENTIAL DESIGN IN SET 216-1
 MUST BE IN THE SUBS. INSULATION



1 CONTROL JOINT DETAIL
 NO SCALE (FOR ALL BUILDING CORNERS)



2 DETAIL
 NO SCALE (RELATION SHOWN TO GIVE AN IDEA OF HOW THIS WINDOW AND DOOR WORKS)



DATE: 10/27/04
 DRAWN BY: J. J. JONES
 CHECKED BY: J. J. JONES
 PROJECT: 1297 A9
 SHEET: 1297 A9
 CLIENT: RESORTMASTER development
 LOCATION: OCEAN PLACE
 PROJECT NAME: COMPOSITE PLAN: SOUTH TOWER
 ARCHITECTS: LITTLE & ASSOCIATES
 ENGINEERS: PLANNERS

NO.	DATE	DESCRIPTION
1	10/27/04	ISSUED FOR PERMITS
2	11/10/04	ISSUED FOR PERMITS
3	11/10/04	ISSUED FOR PERMITS
4	11/10/04	ISSUED FOR PERMITS
5	11/10/04	ISSUED FOR PERMITS
6	11/10/04	ISSUED FOR PERMITS
7	11/10/04	ISSUED FOR PERMITS
8	11/10/04	ISSUED FOR PERMITS
9	11/10/04	ISSUED FOR PERMITS
10	11/10/04	ISSUED FOR PERMITS
11	11/10/04	ISSUED FOR PERMITS
12	11/10/04	ISSUED FOR PERMITS
13	11/10/04	ISSUED FOR PERMITS
14	11/10/04	ISSUED FOR PERMITS
15	11/10/04	ISSUED FOR PERMITS
16	11/10/04	ISSUED FOR PERMITS
17	11/10/04	ISSUED FOR PERMITS
18	11/10/04	ISSUED FOR PERMITS
19	11/10/04	ISSUED FOR PERMITS
20	11/10/04	ISSUED FOR PERMITS