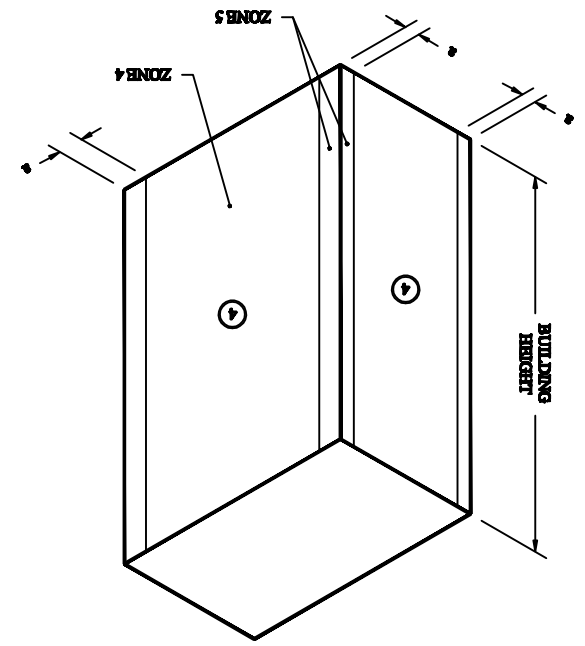
NOTES:

1. EXPOSURE "B", IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 1 TO 20 SQ. FEET.
EXPOSURE "B", Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
2. BUILDINGS GREATER THAN 60 FT HIGH, $B=10\%$ OR MINIMUM WIDTH BUT NOT LESS THAN 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH, MAY BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A KD OF 0.85 AND GCpi OF +/- 0.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

BUILDING HEIGHT > 60',
EXPOSURE B
TRIBUTARY AREA = 20 SQ. FT.



BUILDINGS GREATER THAN 60 FEET HIGH
DESIGN LOADS - PSF EXPOSURE B - 110 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	24.4	24.4	44.7
70	25.4	25.4	46.5
80	26.4	26.4	48.3
90	27.3	27.3	50.0
100	28.1	28.1	51.5
120	29.6	29.6	54.3
140	30.9	30.9	56.7
160	32.1	32.1	58.9
180	33.2	33.2	60.9
200	34.3	34.3	62.8
220	35.2	35.2	64.5
240	36.1	36.1	66.2
260	36.9	36.9	67.7
280	37.7	37.7	69.1
300	38.5	38.5	70.5

BUILDINGS GREATER THAN 60 FEET HIGH
DESIGN LOADS - PSF EXPOSURE B - 120 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	29.0	29.0	53.2
70	30.2	30.2	55.4
80	31.4	31.4	57.5
90	32.5	32.5	59.5
100	33.4	33.4	61.3
120	35.2	35.2	64.6
140	36.8	36.8	67.5
160	38.2	38.2	70.1
180	39.6	39.6	72.5
200	40.8	40.8	74.7
220	41.9	41.9	76.8
240	42.9	42.9	78.7
260	43.9	43.9	80.6
280	44.9	44.9	82.3
300	45.8	45.8	83.9

BUILDINGS GREATER THAN 60 FEET HIGH
DESIGN LOADS - PSF EXPOSURE B - 130 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	34.1	34.1	62.5
70	35.4	35.4	65.0
80	36.8	36.8	67.5
90	38.1	38.1	69.8
100	39.2	39.2	72.0
120	41.3	41.3	75.8
140	43.2	43.2	79.2
160	44.9	44.7	82.3
180	46.4	46.4	85.1
200	47.8	47.8	87.7
220	49.2	49.2	90.1
240	50.4	50.4	92.4
260	51.6	51.6	94.5
280	52.7	52.7	96.6
300	53.7	53.7	98.5

BUILDINGS GREATER THAN 60 FEET HIGH
DESIGN LOADS - PSF EXPOSURE B - 150 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	39.5	39.5	72.5
70	41.1	41.1	75.4
80	42.7	42.7	78.3
90	44.2	44.2	81.0
100	45.5	45.5	83.5
120	48.0	48.0	87.9
140	50.1	50.1	91.9
160	52.1	52.1	95.4
180	53.8	53.8	98.7
200	55.5	55.5	101.7
220	57.0	57.0	104.5
240	58.5	58.5	107.2
260	59.8	59.8	109.6
280	61.1	61.1	112.0
300	62.3	62.3	114.2

BUILDINGS GREATER THAN 60 FEET HIGH
DESIGN LOADS - PSF EXPOSURE B - 140 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	39.5	39.5	72.5
70	41.1	41.1	75.4
80	42.7	42.7	78.3
90	44.2	44.2	81.0
100	45.5	45.5	83.5
120	48.0	48.0	87.9
140	50.1	50.1	91.9
160	52.1	52.1	95.4
180	53.8	53.8	98.7
200	55.5	55.5	101.7
220	57.0	57.0	104.5
240	58.5	58.5	107.2
260	59.8	59.8	109.6
280	61.1	61.1	112.0
300	62.3	62.3	114.2

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

DRAWN:	PHW	DATE:	2-11-02
APPROVED:	DF	DATE:	2-14-02
EST. AREA:	#	EST. WT:	LB/FT
SIZE:	DRAWING NO:		REV:
B	3-01-017		C
FROM JNO:	SCALE:	NTS	
	SHEET 1 OF 2		

TITLE:
WINDLOAD TABLES FOR COMPONENTS & CLADDING AS PER FLORIDA BUILDING CODE & ASCE 7

Roll-a-way
STORM AND SECURITY SHUTTERS
10801 OAK STREET N.E.
ST. PETERSBURG, FL 33716

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

REVISION

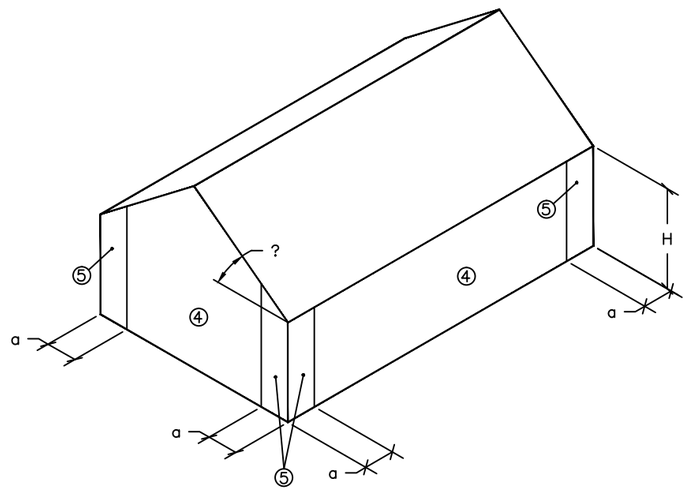
REV	DESCRIPTION
A	4-21-04 ADD FN NOTE AND CLARITY
B	6-18-05, ADDED SHEET 2, 100 SQ. FT.
C	FBC 2007 UPDATE
D	
E	

BROWARD COUNTY			
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	33.2	36.5	39.2
20	35.3	38.8	42.4
25	37.0	40.6	44.4
30	38.4	42.2	46.1
35	39.7	43.6	47.7
40	40.8	44.9	49.0
45	41.8	46.0	50.3
50	42.8	47.0	51.4
55	43.6	48.0	52.4
60	44.5	48.9	53.4

MIAMI-DADE COUNTY			
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 146 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	36.1	39.7	43.4
20	38.4	42.2	46.1
25	40.2	44.2	48.3
30	41.8	45.9	50.2
35	43.2	47.4	51.8
40	44.4	48.8	53.3
45	45.5	50.0	54.7
50	46.5	51.1	55.9
55	47.5	52.2	57.0
60	48.4	53.1	58.1

PALM BEACH COUNTY			
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE B - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	27.4	30.1	32.9
20	27.4	30.1	32.9
25	27.4	30.1	32.9
30	27.4	30.1	32.9
35	28.6	31.5	34.4
40	29.7	32.7	35.7
45	30.8	33.8	36.9
50	31.7	34.8	38.1
55	32.6	35.8	39.1
60	33.4	36.7	40.1

PALM BEACH COUNTY			
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	33.2	36.5	39.2
20	35.3	38.8	42.4
25	37.0	40.6	44.4
30	38.4	42.2	46.1
35	39.7	43.6	47.7
40	40.8	44.9	49.0
45	41.8	46.0	50.3
50	42.8	47.0	51.4
55	43.6	48.0	52.4
60	44.5	48.9	53.4



NOTES:
1. IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET. PALM BEACH COUNTY CAN BE EXPOSURE "B" OR "C". **DADE/BROWARD EXPOSURE "C" ONLY!**
   Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
   Exposure C, EXCEPT IN THE HIGH VELOCITY HURRICANE ZONE, Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet (182.9 m) and width greater than 150 ft. in the upwind direction. Short-term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development buildout will occur within three years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines and shall extend downwind for a distance of 1500 feet. For buildings located within a distance of 600 feet of inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more roof sheathing uplift and roof-to-wall uplift loads shall be increased by 20.
2. BLDGS. 60 FT HIGH OR LESS, a=10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH, MAY BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

MIAMI-DADE, BROWARD, PALM BEACH COUNTIES
BUILDING HEIGHT 60' OR LESS, ROOF ANGLE < 10°
TRIBUTARY AREA = 100 SQ. FT.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

REVISION

REV	DESCRIPTION
A	
B	
C	REVISED PB WIND SPEED TO 140 MPH
D	
E	

THIRD ANGLE PROJECTION
CUSTOMER ADDRESS:

Roll-a-way® STORM AND SECURITY SHUTTERS
10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

TITLE: WINDLOAD TABLES FOR COMPONENTS & CLADDING AS PER FLORIDA BUILDING CODE & ASCE 7

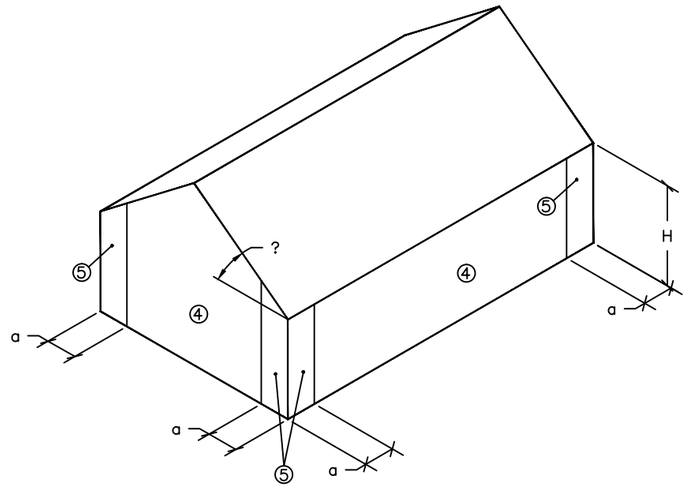
DRAWN:	PA	DATE:	9-14-05
APPROVED:	DF	DATE:	9-9-05
EST. AREA:		EST. WT:	LBFT
SIZE: B	DRAWING NO: 3-01-033	REV: C	
FSCM NO:		SCALE: NTS	
		SHEET 2 OF 2	

BROWARD COUNTY			
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	39.1	42.4	52.1
20	41.5	45.0	55.4
25	43.5	47.2	58.1
30	45.2	49.0	60.3
35	46.7	50.6	62.3
40	48.0	52.1	64.1
45	49.3	53.4	65.7
50	50.4	54.6	67.2
55	51.4	55.7	68.5
60	52.4	56.7	69.8

MIAMI-DADE COUNTY			
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 146 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	42.5	46.1	56.7
20	45.2	48.9	60.2
25	47.4	51.3	63.1
30	49.2	53.3	65.6
35	50.8	55.1	67.8
40	52.3	56.6	69.7
45	53.6	58.1	71.5
50	54.8	59.4	73.1
55	55.9	60.6	74.5
60	56.9	61.7	75.9

PALM BEACH COUNTY			
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE B - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	32.2	34.9	43.0
20	32.2	34.9	43.0
25	32.2	34.9	43.0
30	32.3	35.0	43.0
35	33.7	36.5	45.0
40	35.0	38.0	46.7
45	36.2	39.3	48.3
50	37.3	40.5	49.8
55	38.4	41.6	51.2
60	39.3	42.6	52.5

PALM BEACH COUNTY			
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	39.1	42.4	52.1
20	41.5	45.0	55.4
25	43.5	47.2	58.1
30	45.2	49.0	60.3
35	46.7	50.6	62.3
40	48.0	52.1	64.1
45	49.3	53.4	65.7
50	50.4	54.6	67.2
55	51.4	55.7	68.5
60	52.4	56.7	69.8



NOTES:

1. IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET. PALM BEACH COUNTY CAN BE EXPOSURE "B" OR "C". **DADE/BROWARD EXPOSURE "C" ONLY!**
   Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
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2. BLDGS. 60 FT HIGH OR LESS, a=10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH, MAY BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

MIAMI-DADE, BROWARD, PALM BEACH COUNTIES
BUILDING HEIGHT 60' OR LESS, ROOF ANGLE < 10°
TRIBUTARY AREA = 10 SQ. FT.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

REVISION

REV	DESCRIPTION
A	9-6-05 ADDED SHEET 2 100 SQ FT
B	FBC 2007 UPDATE
C	REVISED PB WIND SPEED TO 140 MPH
D	
E	

THIRD ANGLE PROJECTION
CUSTOMER ADDRESS:

Roll-a-way® STORM AND SECURITY SHUTTERS
10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

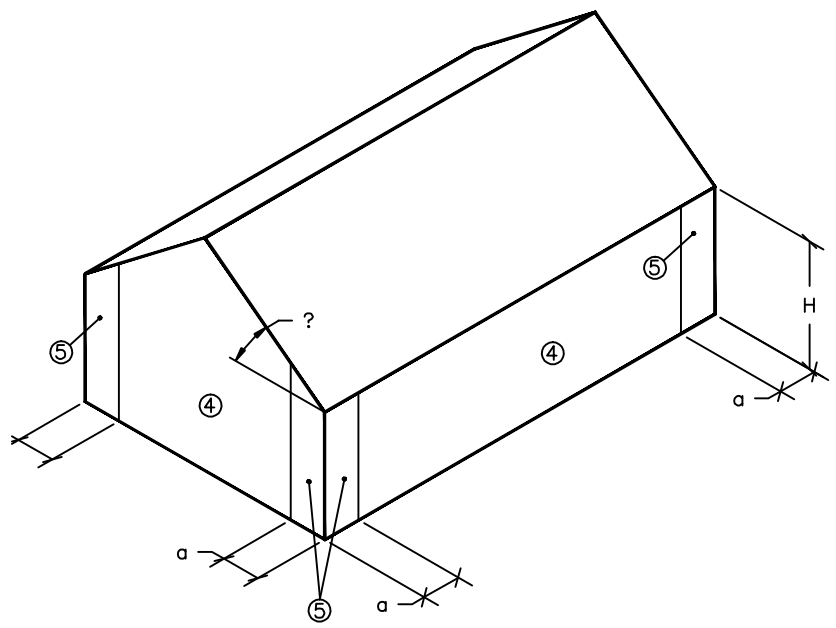
DRAWN:	DLF	DATE:	6-29-04
APPROVED:	DF	DATE:	9-14-05
EST. AREA:		EST. WT:	LBS
SIZE: B	DRAWING NO: 3-01-033	REV: C	
FSCM NO:		SCALE: NTS	SHEET 1 OF 2

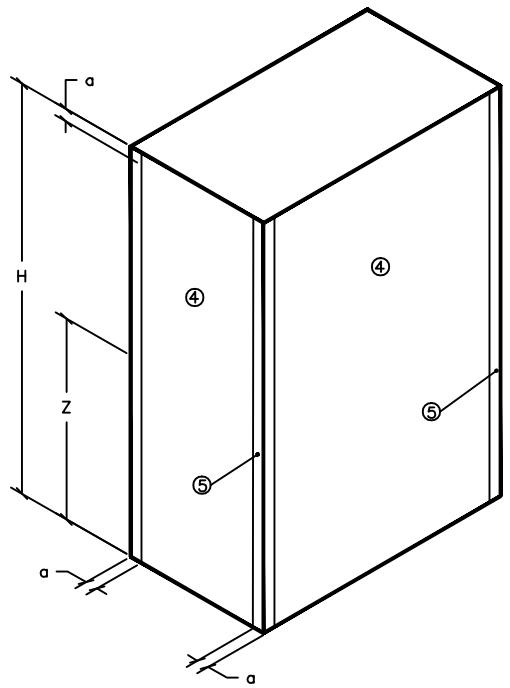
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF, EXPOSURE B, 123 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	23.0	25.4	27.8
20	23.0	25.4	27.8
25	23.0	25.4	27.8
30	23.0	25.4	27.8
35	24.1	26.5	29.0
40	25.0	27.6	30.2
45	25.9	28.5	31.2
50	26.7	29.4	32.2
55	27.4	30.2	33.1
60	28.1	31.0	33.9

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF, EXPOSURE C, 123 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	28.0	30.8	33.7
20	29.7	32.7	35.8
25	31.1	34.3	37.5
30	32.3	35.6	39.0
35	33.4	36.8	40.3
40	34.4	37.8	41.4
45	35.2	38.7	42.4
50	36.0	39.6	43.4
55	36.7	40.5	44.3
60	37.4	41.2	45.1

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF, EXPOSURE C, 123 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	25.6	28.2	30.8
20	27.3	30.0	32.7
25	28.6	31.4	34.3
30	29.7	32.6	35.7
35	30.7	33.7	36.8
40	31.5	34.7	37.9
45	32.3	35.5	38.8
50	33.1	36.3	39.7
55	33.7	37.0	40.5
60	34.4	37.8	41.3

BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF, EXPOSURE C, 123 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	35.6	36.8	59.3
70	36.6	37.9	61.1
80	37.6	39.0	62.8
90	38.6	39.9	64.4
100	39.4	40.8	65.8
120	41.0	42.4	68.4
140	42.3	43.8	70.7
160	43.6	45.1	72.7
180	44.6	46.2	74.5
200	45.6	47.3	76.2
220	46.6	48.2	77.7
240	47.4	49.1	79.2
260	48.2	49.9	80.5
280	49.0	50.7	81.8
300	49.7	51.5	83.0





NOTES:

1. IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET.
   Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
   Exposure C, EXCEPT IN THE HIGH VELOCITY HURRICANE ZONE, Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet (182.9 m) and width greater than 150 ft. in the upwind direction. Short-term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development buildout will occur within three years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines and shall extend downwind for a distance of 1500 feet. For buildings located within a distance of 600 feet of inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more roof sheathing uplift and roof-to-wall uplift loads shall be increased by 20.
2. BLDGS. 60 FT HIGH OR LESS, a=10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH, CAN BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW, OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

BUILDING HEIGHT, EXPOSURE,
123 MPH, ROOF ANGLE PER CHART
TRIBUTARY AREA = 100 SQ. FT.

REVISION

REV	DESCRIPTION
A	
B	
C	
D	
E	

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

Roll-a-way
STORM AND SECURITY SHUTTERS
10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

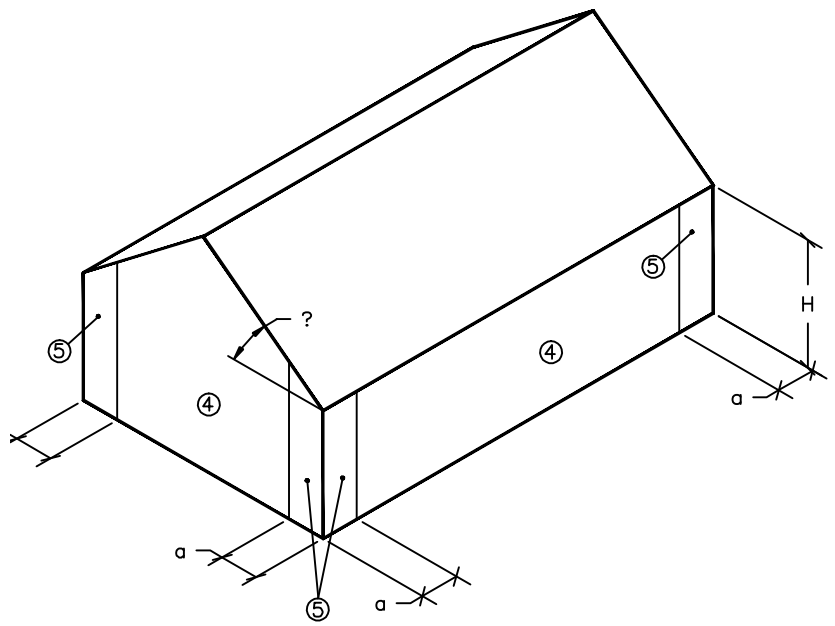
TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

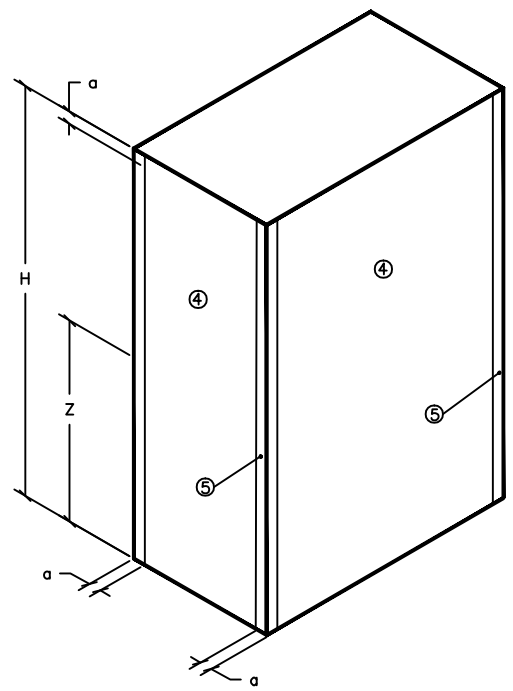
DRAWN:	PA	DATE:	08-23-05
APPROVED:	DF	DATE:	8-31-05
EST. AREA:		EST. WT:	LBS
SIZE: B	DRAWING NO: 3-01-032	REV:	
FSCM NO:		SCALE: NTS	
		SHEET 2 OF 2	

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF, EXPOSURE B, 123 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	27.3	29.6	36.5
20	27.3	29.6	36.5
25	27.3	29.6	36.5
30	27.3	29.6	36.5
35	28.5	31.0	38.1
40	29.6	32.1	39.7
45	30.6	33.2	40.0
50	31.6	34.2	42.2
55	32.4	35.2	43.4
60	33.3	36.1	44.5

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF, EXPOSURE C, 123 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	33.0	35.8	44.2
20	35.1	38.1	47.0
25	36.8	39.9	49.3
30	38.2	41.5	51.2
35	39.5	42.9	52.9
40	40.6	44.1	54.4
45	41.7	45.2	55.8
50	42.6	46.2	57.0
55	43.5	47.1	58.1
60	44.2	48.0	59.2

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF, EXPOSURE C, 123 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	30.2	32.7	40.2
20	32.1	34.8	42.8
25	33.7	36.5	44.9
30	35.0	37.9	46.6
35	36.1	39.1	48.1
40	37.2	40.2	49.5
45	38.1	41.2	50.8
50	38.9	42.2	51.9
55	39.7	43.0	53.0
60	40.5	43.8	53.9





BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF, EXPOSURE C, 123 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	40.6	40.6	74.4
70	41.8	41.8	76.6
80	43.0	43.0	78.7
90	44.1	44.1	80.7
100	45.0	45.0	82.5
120	46.8	46.8	85.8
140	48.3	48.3	88.6
160	49.7	49.7	91.1
180	51.0	51.0	93.4
200	52.1	52.1	95.5
220	53.2	53.2	97.4
240	54.2	54.2	99.2
260	55.1	55.1	100.9
280	55.9	55.9	102.5
300	56.8	56.8	104.0

NOTES:
1. IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET.
   Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
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2. BLDGS. 60 FT HIGH OR LESS, a=10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH, MAY BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

BUILDING HEIGHT, EXPOSURE,
123 MPH, ROOF ANGLE PER CHART
TRIBUTARY AREA = 10 SQ. FT.

REVISION

REV	DESCRIPTION
A	8-23-05 ADDED SHEET 2, 100 SQ FT
B	FBC 2007 UPDATE
C	
D	
E	

THIRD ANGLE PROJECTION
CUSTOMER ADDRESS:

10601 OAK STREET N.E.
ST. PETERSBURG, FL. 33716

TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

DRAWN:	DF	DATE:	10-20-04
APPROVED:	DF	DATE:	10-22-04
EST. AREA:		EST. WT:	LBS
SIZE: B	DRAWING NO: 3-01-032		REV: B
FROM NO:		SCALE: NTS	SHEET 1 OF 2

BROWARD COUNTY

BUILDINGS GREATER THAN 60 FEET HIGH

DESIGN LOADS - PSF EXPOSURE C - 140 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
61	46.0	47.6	76.8
70	47.4	49.0	79.1
80	48.7	50.4	81.3
90	49.9	51.7	83.4
100	51.1	52.9	85.2
120	53.1	54.9	88.6
140	54.8	56.7	91.5
160	56.4	58.4	94.1
180	57.8	59.8	96.5
200	59.1	61.2	98.6
220	60.3	62.4	100.6
240	61.4	63.6	102.5
260	62.4	64.6	104.2
280	63.4	65.7	105.9
300	64.4	66.6	107.4

MIAMI-DADE COUNTY

BUILDINGS GREATER THAN 60 FEET HIGH

DESIGN LOADS - PSF EXPOSURE C - 146 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
61	50.0	51.9	83.6
70	51.6	53.3	86.0
80	53.0	54.9	88.5
90	54.4	56.3	90.7
100	55.6	57.5	92.8
120	55.8	59.8	96.3
140	59.7	61.8	99.6
160	61.4	63.5	102.4
180	62.9	65.1	104.9
200	64.3	66.6	107.3
220	65.6	67.9	109.5
240	66.8	69.2	111.5
260	68.0	70.3	113.4
280	69.0	71.5	115.2
300	70.0	72.5	116.9

PALM BEACH COUNTY

BUILDINGS GREATER THAN 60 FEET HIGH

DESIGN LOADS - PSF EXPOSURE B - 140 MPH

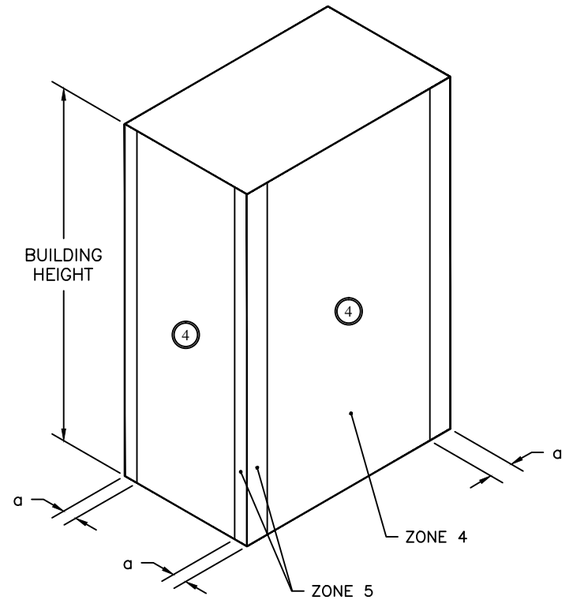
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
61	34.6	35.8	57.8
70	36.0	37.3	60.1
80	37.4	38.7	62.4
90	38.7	40.0	64.6
100	39.9	41.3	66.5
120	42.0	43.5	70.1
140	43.9	45.4	73.3
160	45.6	47.2	76.1
180	47.2	48.8	78.7
200	48.6	50.3	81.1
220	49.9	51.7	83.4
240	51.2	53.0	85.5
260	52.4	54.2	87.5
280	53.5	55.4	89.3
300	54.6	56.5	91.1

PALM BEACH COUNTY

BUILDINGS GREATER THAN 60 FEET HIGH

DESIGN LOADS - PSF EXPOSURE C - 140 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
61	46.0	47.6	76.8
70	47.4	49.0	79.1
80	48.7	50.4	81.3
90	49.9	51.7	83.4
100	51.1	52.9	85.2
120	53.1	54.9	88.6
140	54.8	56.7	91.5
160	56.4	58.4	94.1
180	57.8	59.8	96.5
200	59.1	61.2	98.6
220	60.3	62.4	100.6
240	61.4	63.6	102.5
260	62.4	64.6	104.2
280	63.4	65.7	105.9
300	64.4	66.6	107.4



NOTES:

1. TRIBUTARY AREA USED 100 SQ. FEET, IMPORTANCE FACTOR 1.0,
   PALM BEACH COUNTY CAN BE EXPOSURE "B" OR "C". **DADE/BROWARD EXPOSURE "C" ONLY!**
   Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
   Exposure C has open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet and width greater than 150 ft. in the upwind direction. Short-term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development buildout will occur within three years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines and shall extend downwind for a distance of 1500 feet. For buildings located within a distance of 600 feet of inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more roof sheathing uplift and roof-to-wall uplift loads shall be increased by 20 percent.
2. BUILDINGS GREATER THAN 60 FT HIGH, a=10% OF MINIMUM WIDTH BUT NOT LESS THAN 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH CAN BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW, OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

MIAMI-DADE, BROWARD, PALM BEACH COUNTIES
BUILDING HEIGHT GREATER THAN 60'
TRIBUTARY AREA = 100 SQ. FT.

REVISION

REV	DESCRIPTION
A	
B	
C	
D	REVISED PB WIND SPEED TO 140 MPH
E	

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

TITLE: WINDLOAD TABLES FOR COMPONENTS & CLADDING AS PER FLORIDA BUILDING CODE & ASCE 7

DRAWN: PTW DATE: 08-23-05

APPROVED: DF DATE: 8-31-05

EST. AREA: EST. WT: LBFT

SIZE: B DRAWING NO: 3-01-026 REV: D

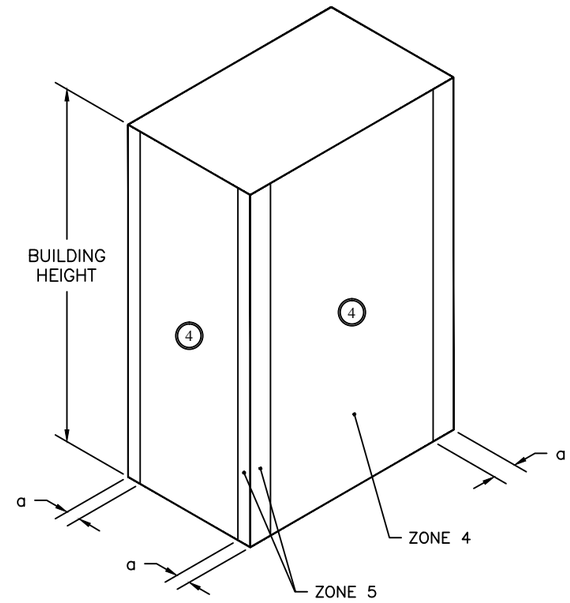
SCALE: NTS

FSCM NO:

SHEET 2 OF 2

BROWARD COUNTY			
BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
61	52.5	52.5	96.3
70	54.1	54.1	99.2
80	55.6	55.6	102.0
90	57.0	57.0	104.5
100	58.3	58.3	106.9
120	60.6	60.6	111.1
140	62.6	62.6	114.7
160	64.4	64.4	118.0
180	66.0	66.0	121.0
200	67.5	67.5	123.7
220	68.8	68.8	126.2
240	70.1	70.1	128.5
260	71.3	71.3	130.7
280	72.4	72.4	132.8
300	73.5	73.5	134.7

MIAMI-DADE COUNTY			
BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE C - 146 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
61	57.1	57.1	104.8
70	58.8	58.8	107.8
80	60.5	60.5	110.9
90	62.0	62.0	113.7
100	63.4	63.4	116.2
120	65.9	65.9	120.8
140	68.1	68.1	124.8
160	70.0	70.0	128.3
180	71.8	71.8	131.5
200	73.4	73.4	134.5
220	74.9	74.9	137.2
240	76.2	76.2	139.8
260	77.5	77.5	142.1
280	78.8	78.8	144.4
300	79.9	79.9	146.5



PALM BEACH COUNTY			
BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE B - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
61	39.5	39.5	72.5
70	41.1	41.1	75.4
80	42.7	42.7	78.3
90	44.2	44.2	81.0
100	45.5	45.5	83.5
120	48.0	48.0	87.9
140	50.1	50.1	91.9
160	52.1	52.1	95.4
180	53.8	53.8	98.7
200	55.5	55.5	101.7
220	57.0	57.0	104.5
240	58.5	58.5	107.2
260	59.8	59.8	109.6
280	61.1	61.1	112.0
300	62.3	62.3	114.2

PALM BEACH COUNTY			
BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
61	52.5	52.5	96.3
70	54.1	54.1	99.2
80	55.6	55.6	102.0
90	57.0	57.0	104.5
100	58.3	58.3	106.9
120	60.6	60.6	111.1
140	62.6	62.6	114.7
160	64.4	64.4	118.0
180	66.0	66.0	121.0
200	67.5	67.5	123.7
220	68.8	68.8	126.2
240	70.1	70.1	128.5
260	71.3	71.3	130.7
280	72.4	72.4	132.8
300	73.5	73.5	134.7

NOTES:
1. TRIBUTARY AREA USED 100 SQ. FEET, IMPORTANCE FACTOR 1.0,
   PALM BEACH COUNTY CAN BE EXPOSURE "B" OR "C". **DADE/BROWARD EXPOSURE "C" ONLY!**
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2. BUILDINGS GREATER THAN 60 FT HIGH, a=10% OF MINIMUM WIDTH BUT NOT LESS THAN 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH CAN BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW, OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

MIAMI-DADE, BROWARD, PALM BEACH COUNTIES
BUILDING HEIGHT GREATER THAN 60'
TRIBUTARY AREA = 20 SQ. FT.

REVISION

REV	DESCRIPTION
A	4-21-04 ADD KD NOTE AND CLARITY
B	8-23-05 ADDED SHEET 2, 100 SQ. FT.
C	FBC 2007 UPDATE
D	REVISED PB WIND SPEED TO 140 MPH
E	

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

TITLE: WINDLOAD TABLES FOR COMPONENTS & CLADDING AS PER FLORIDA BUILDING CODE & ASCE 7

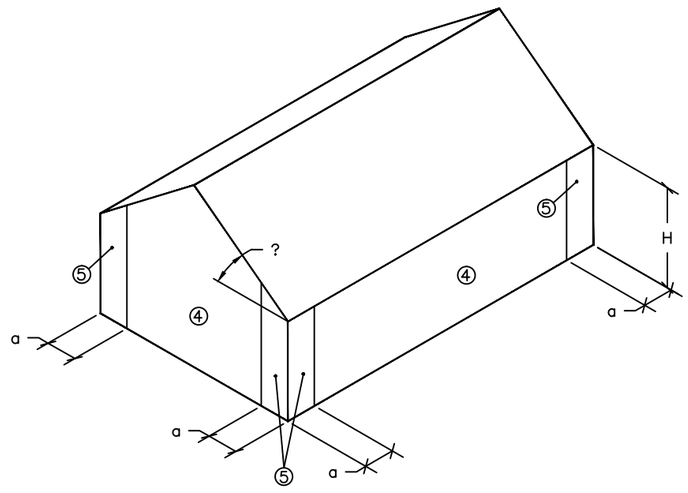
DRAWN:	PMW	DATE:	3-15-02
APPROVED:	DN	DATE:	3-19-02
EST. AREA:		EST. WT:	LBFT
SIZE: B	DRAWING NO: 3-01-026	REV: D	
FSCM NO:		SCALE: NTS	
		SHEET 1 OF 2	

BROWARD COUNTY			
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	36.2	39.8	43.6
20	38.4	42.3	46.3
25	40.3	44.3	48.5
30	41.8	46.1	50.4
35	43.2	47.6	52.1
40	44.5	49.0	53.6
45	45.6	50.2	54.9
50	46.6	51.3	56.2
55	47.5	52.4	57.3
60	48.4	53.3	58.4

MIAMI-DADE COUNTY			
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 146 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	39.4	43.4	47.5
20	41.8	46.1	50.4
25	43.8	48.3	52.8
30	45.6	50.2	54.9
35	47.1	51.8	56.7
40	48.4	53.3	58.3
45	49.6	54.6	59.8
50	50.7	55.9	61.1
55	51.8	57.0	62.4
60	52.7	58.0	63.5

PALM BEACH COUNTY			
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE B - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	29.8	32.8	36.0
20	29.8	32.8	36.0
25	29.8	32.8	36.0
30	29.8	32.8	36.0
35	31.2	34.3	37.6
40	32.4	35.7	39.0
45	33.5	36.9	40.4
50	34.5	38.1	41.6
55	35.5	39.1	42.8
60	36.4	40.1	43.9

PALM BEACH COUNTY			
BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	36.2	39.8	43.6
20	38.4	42.3	46.3
25	40.3	44.3	48.5
30	41.8	46.1	50.4
35	43.2	47.6	52.1
40	44.5	49.0	53.6
45	45.6	50.2	54.9
50	46.6	51.3	56.2
55	47.5	52.4	57.3
60	48.4	53.3	58.4



NOTES:

1. IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET. PALM BEACH COUNTY CAN BE EXPOSURE "B" OR "C". **DADE/BROWARD EXPOSURE "C" ONLY!**
   Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
   Exposure C, EXCEPT IN THE HIGH VELOCITY HURRICANE ZONE, Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet (182.9 m) and width greater than 150 ft. in the upwind direction. Short-term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development buildout will occur within three years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines and shall extend downwind for a distance of 1500 feet. For buildings located within a distance of 600 feet of inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more roof sheathing uplift and roof-to-wall uplift loads shall be increased by 20.
2. BLDGS. 60 FT HIGH OR LESS, a=10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH, MAY BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

MIAMI-DADE, BROWARD, PALM BEACH COUNTIES
BUILDING HEIGHT 60' OR LESS
TRIBUTARY AREA = 100 SQ. FT.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

REVISION

REV	DESCRIPTION
A	
B	
C	
D	REVISED PALM BEACH TO 140 MPH
E	

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

Roll-a-way® STORM AND SECURITY SHUTTERS
10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

TITLE: WINDLOAD TABLES FOR COMPONENTS & CLADDING AS PER FLORIDA BUILDING CODE & ASCE 7

DRAWN:	PHW
APPROVED:	DF
EST. AREA:	SF
DATE:	08-23-05
DATE:	8-31-05
EST. WT:	LBS
SIZE:	B
DRAWING NO:	3-01-025
FSCM NO:	
REV:	D
SCALE:	NTS
SHEET	2 OF 2

BROWARD COUNTY

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH

ROOF ANGLE > 10°

DESIGN LOADS - PSF EXPOSURE C - 140 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	42.7	46.3	57.2
20	45.4	49.2	60.8
25	47.6	51.6	63.7
30	49.4	53.6	66.2
35	51.1	55.4	68.4
40	52.5	57.0	70.3
45	53.8	58.4	72.1
50	55.0	59.7	73.7
55	56.2	60.9	75.2
60	57.2	62.0	76.6

MIAMI-DADE COUNTY

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH

ROOF ANGLE > 10°

DESIGN LOADS - PSF EXPOSURE C - 146 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	46.5	50.4	62.2
20	49.4	53.5	66.1
25	51.7	56.1	69.3
30	53.8	58.3	72.0
35	55.5	60.2	74.4
40	57.1	62.0	76.5
45	58.6	63.5	78.4
50	59.9	64.9	80.2
55	61.1	66.3	81.8
60	62.2	67.5	83.3

PALM BEACH COUNTY

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH

ROOF ANGLE > 10°

DESIGN LOADS - PSF EXPOSURE B - 140 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	35.2	38.2	47.2
20	35.2	38.2	47.2
25	35.2	38.2	47.2
30	35.3	38.2	47.2
35	36.8	40.0	49.3
40	38.3	41.5	51.3
45	39.6	42.9	53.0
50	40.8	44.3	54.6
55	41.9	45.5	56.1
60	43.0	46.6	57.5

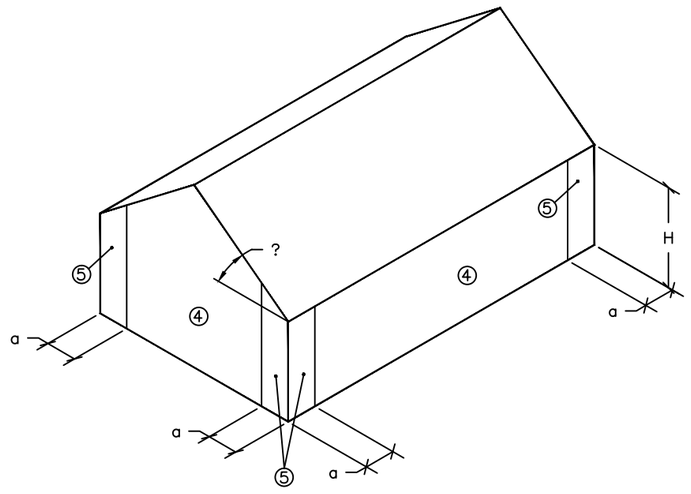
PALM BEACH COUNTY

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH

ROOF ANGLE > 10°

DESIGN LOADS - PSF EXPOSURE C - 140 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	42.7	46.3	57.2
20	45.4	49.2	60.8
25	47.6	51.6	63.7
30	49.4	53.6	66.2
35	51.1	55.4	68.4
40	52.5	57.0	70.3
45	53.8	58.4	72.1
50	55.0	59.7	73.7
55	56.2	60.9	75.2
60	57.2	62.0	76.6



NOTES:

1. IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET. PALM BEACH COUNTY CAN BE EXPOSURE "B" OR "C". **DADE/BROWARD EXPOSURE "C" ONLY!**
   Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
   Exposure C, EXCEPT IN THE HIGH VELOCITY HURRICANE ZONE, Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet (182.9 m) and width greater than 150 ft. in the upwind direction. Short-term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development buildout will occur within three years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines and shall extend downwind for a distance of 1500 feet. For buildings located within a distance of 600 feet of inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more roof sheathing uplift and roof-to-wall uplift loads shall be increased by 20.
2. BLDGS. 60 FT HIGH OR LESS, a=10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH, MAY BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

MIAMI-DADE, BROWARD, PALM BEACH COUNTIES
BUILDING HEIGHT 60' OR LESS
TRIBUTARY AREA = 10 SQ. FT.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

REVISION

REV	DESCRIPTION
A	4-21-04 ADD KD NOTE AND CLARITY
B	8-23-05 ADDED SHEET 2, 100 SQ FT
C	FBC 2007 UPDATE
D	PALM BEACH CHANGE TO 140 MPH
E	

THIRD ANGLE PROJECTION
CUSTOMER ADDRESS:

Roll-a-way STORM AND SECURITY SHUTTERS
10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

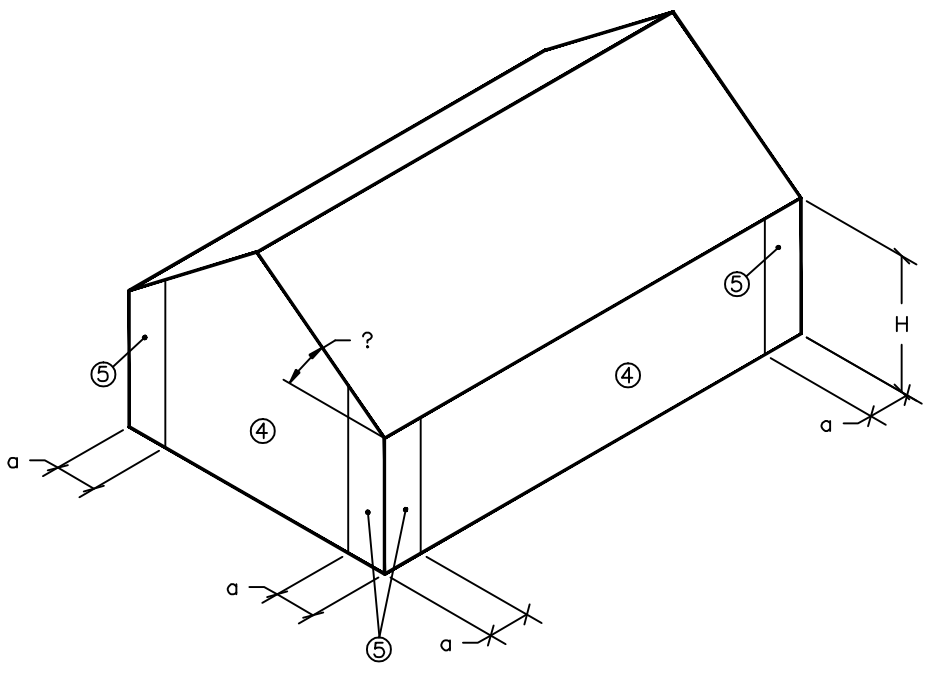
DRAWN:	PTW	DATE:	3-15-02
APPROVED:	DN	DATE:	3-19-02
EST. AREA:		EST. WT:	LB/FT

SIZE:	B	DRAWING NO:	3-01-025
FSCM NO:		SCALE:	NTS
		SHEET	1 OF 2
		REV:	D

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 110 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	22.3	24.6	26.9
20	23.7	26.1	28.6
25	24.8	27.4	29.9
30	25.8	28.4	31.1
35	26.7	29.4	32.1
40	27.4	30.2	33.1
45	28.1	31.0	33.9
50	28.8	31.7	34.7
55	29.3	32.3	35.4
60	29.9	32.9	36.0

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 120 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	26.6	29.2	32.0
20	28.2	31.1	34.0
25	29.6	32.6	35.6
30	30.7	33.8	37.0
35	31.7	35.0	38.3
40	32.7	36.0	39.4
45	33.5	36.9	40.3
50	34.2	37.7	41.3
55	34.9	38.5	42.1
60	35.6	39.2	42.9

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 130 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	31.2	34.3	37.6
20	33.1	36.5	39.9
25	34.7	38.2	41.8
30	36.1	39.7	43.5
35	37.3	41.0	44.9
40	38.3	42.2	46.2
45	39.3	43.3	47.1
50	40.2	44.2	48.4
55	41.0	45.1	49.4
60	41.8	46.0	50.3



BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	36.2	39.8	43.6
20	38.4	42.3	46.3
25	40.3	44.3	48.5
30	41.8	46.1	50.4
35	43.2	47.6	52.1
40	44.5	49.0	53.6
45	45.6	50.2	54.9
50	46.6	51.3	56.2
55	47.5	52.4	57.3
60	48.4	53.3	58.4

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 150 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	41.5	45.7	50.0
20	44.1	48.6	53.2
25	46.2	50.9	55.7
30	48.0	52.9	57.9
35	49.6	54.6	59.8
40	51.0	56.2	61.5
45	52.3	57.6	63.1
50	53.5	58.9	64.5
55	54.6	60.1	65.8
60	55.6	61.2	67.0

NOTES:
1. EXPOSURE C, IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET.
   EXPOSURE C:Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet (182.9 m) and width greater than 150 ft. in the upwind direction. Short-term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development buildout will occur within three years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines and shall extend downwind for a distance of 1500 feet. For buildings located within a distance of 600 feet of inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more roof sheathing uplift and roof-to-wall uplift loads shall be increased by 20 percent.
2. BLDGS. 60 FT HIGH OR LESS, a=10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH CAN BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

BUILDING HEIGHT 60' OR LESS,
EXPOSURE C, ROOF ANGLE > 10°
TRIBUTARY AREA = 100 SQ. FT.

REVISION

REV	DESCRIPTION
A	
B	
C	
D	
E	

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

Roll-a-way
STORM AND SECURITY SHUTTERS
10601 OAK STREET N.E.
ST. PETERSBURG, FL. 33716

TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

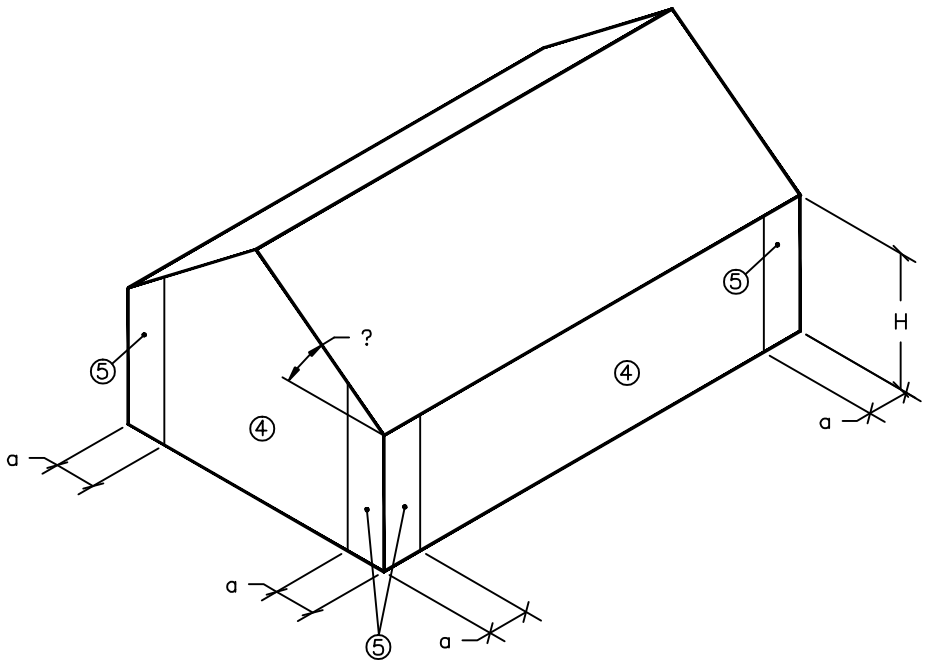
DRAWN:	PTW	DATE:	8-18-05
APPROVED:	DF	DATE:	8-31-05
EST. AREA:	#	EST. WT:	LBS

SIZE:	B
DRAWING NO:	3-01-022
REV:	-
SCALE:	NTS
SHEET	2 OF 2
FROM NO:	

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 110 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	26.4	28.6	35.3
20	28.0	30.4	37.5
25	29.4	31.9	39.3
30	30.5	33.1	40.9
35	31.5	34.2	42.2
40	32.4	35.2	43.4
45	33.2	36.1	44.5
50	34.0	36.9	45.5
55	34.7	37.6	46.4
60	35.3	38.3	47.3

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 120 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	31.4	34.0	42.0
20	33.3	36.2	44.7
25	35.0	37.9	46.8
30	36.3	39.4	48.6
35	37.5	40.7	50.2
40	38.6	41.9	51.7
45	39.6	42.9	53.0
50	40.4	43.9	54.2
55	41.3	44.8	55.2
60	42.0	45.6	56.3

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 130 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	36.8	40.0	49.3
20	39.1	42.5	52.4
25	41.0	44.5	54.9
30	42.6	46.2	57.1
35	44.0	47.8	59.0
40	45.3	49.1	60.6
45	46.4	50.4	62.2
50	47.5	51.5	63.6
55	48.4	52.5	64.8
60	49.3	53.5	66.0



BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	42.7	46.3	57.2
20	45.4	49.2	60.8
25	47.6	51.6	63.7
30	49.4	53.6	66.2
35	51.1	55.4	68.4
40	52.5	57.0	70.3
45	53.8	58.4	72.1
50	55.0	59.7	73.7
55	56.2	60.9	75.2
60	57.2	62.0	76.6

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE C - 150 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5	ZONE 4	ZONE 5
	+ (POSITIVE)	- (NEGATIVE)	- (NEGATIVE)
15	49.0	53.2	65.7
20	52.1	56.5	69.8
25	54.6	59.2	73.1
30	56.7	61.6	76.0
35	58.6	63.6	78.5
40	60.3	65.4	80.7
45	61.8	67.0	82.8
50	63.2	68.5	84.6
55	64.5	69.9	86.3
60	65.7	71.2	87.9

NOTES:

1. EXPOSURE C, IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 10 SQ. FEET.
   EXPOSURE C:OUTSIDE THE HIGH VELOCITY HURRICANE ZONE,Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet (182.9 m) and width greater than 150 ft. in the upwind direction. Short-term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development buildout will occur within three years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines and shall extend downwind for a distance of 1500 feet. For buildings located within a distance of 600 feet of inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more roof sheathing uplift and roof-to-wall uplift loads shall be increased by 20 percent.
2. 03. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
3. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
4. LOADS BETWEEN TABLES AT VARIOUS MPH CAN BE INTERPOLATED.
5. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
6. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW, OR ISP PERSONNEL PER SITE INSPECTION.
7. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18.
   FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
8. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

BUILDING HEIGHT 60' OR LESS,
EXPOSURE C, ROOF ANGLE > 10°
TRIBUTARY AREA = 10 SQ. FT.

REVISION		
REV	DESCRIPTION	
A	9-09-03, EXPOSURE "C" CLARITY	
B	4-21-04 ADD KD NOTE AND CLARITY	
C	8-16-05 ADDED SHEET 2, 100 SQ FT	
D	FBC 2007 UPDATE	
E		

THIRD ANGLE PROJECTION
CUSTOMER ADDRESS:

10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

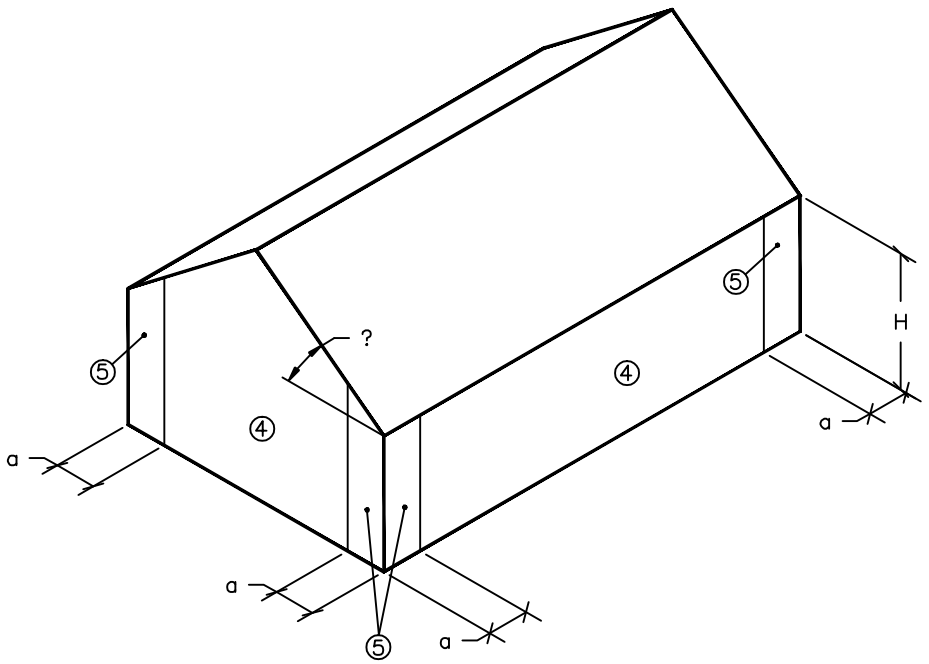
TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

DRAWN:	PHW	DATE:	3-13-02
APPROVED:	DN	DATE:	3-19-02
EST. AREA:	#	EST. WT:	LB/T
SIZE: B	DRAWING NO: 3-01-022	REV: D	
FROM NO:	SCALE: NTS	SHEET 1 OF 2	

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 110 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	20.5	22.5	24.6
20	21.8	23.9	26.1
25	22.8	25.1	27.4
30	23.7	26.0	28.5
35	24.5	26.9	29.4
40	25.2	27.7	30.2
45	25.8	28.4	31.0
50	26.4	29.0	31.7
55	26.9	29.6	32.3
60	27.4	30.1	32.9

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 120 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	24.4	26.8	29.3
20	25.9	28.5	31.1
25	27.1	29.8	32.6
30	28.2	31.0	33.9
35	29.1	32.0	35.0
40	30.0	32.9	36.0
45	30.7	33.8	36.9
50	31.4	34.5	37.7
55	32.1	35.2	38.5
60	32.6	35.9	39.2

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 130 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	28.6	31.5	34.4
20	30.4	33.4	36.5
25	31.9	35.0	38.3
30	33.1	36.4	39.8
35	34.2	37.6	41.1
40	35.2	38.7	42.3
45	36.1	39.6	43.3
50	36.9	40.5	44.3
55	37.6	41.4	45.2
60	38.3	42.1	46.0



BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	33.2	36.5	39.9
20	35.3	38.8	42.4
25	37.0	40.6	44.4
30	38.4	42.2	46.1
35	39.7	43.6	47.7
40	40.8	44.9	49.0
45	41.8	46.0	50.3
50	42.8	47.0	51.4
55	43.6	48.0	52.4
60	44.5	48.9	53.4

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 150 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	38.1	41.9	45.8
20	40.5	44.5	48.6
25	42.4	46.6	51.0
30	44.1	48.5	53.0
35	45.6	50.1	54.7
40	46.9	51.5	56.3
45	48.0	52.8	57.7
50	49.1	54.0	59.0
55	50.1	55.1	60.2
60	51.0	56.1	61.3

NOTES:
1. EXPOSURE C, IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET.
   EXPOSURE C: MEANS, EXCEPT IN THE HIGH VELOCITY HURRICANE ZONE, Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet (182.9 m) and width greater than 150 ft. in the upwind direction. Short-term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development buildout will occur within three years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines and shall extend downwind for a distance of 1500 feet. For buildings located within a distance of 600 feet of inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more roof sheathing uplift and roof-to-wall uplift loads shall be increased by 20 percent.
2. BLDGS. 60 FT HIGH OR LESS, a=10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH CAN BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18.
   FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

BUILDING HEIGHT 60' OR LESS,
EXPOSURE C, ROOF ANGLE < 10°
TRIBUTARY AREA = 100 SQ. FT.

REVISION		
REV	DESCRIPTION	
A		
B		
C		
D		
E		

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

Roll-a-way
SCREEN AND SECURITY SHUTTERS
10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

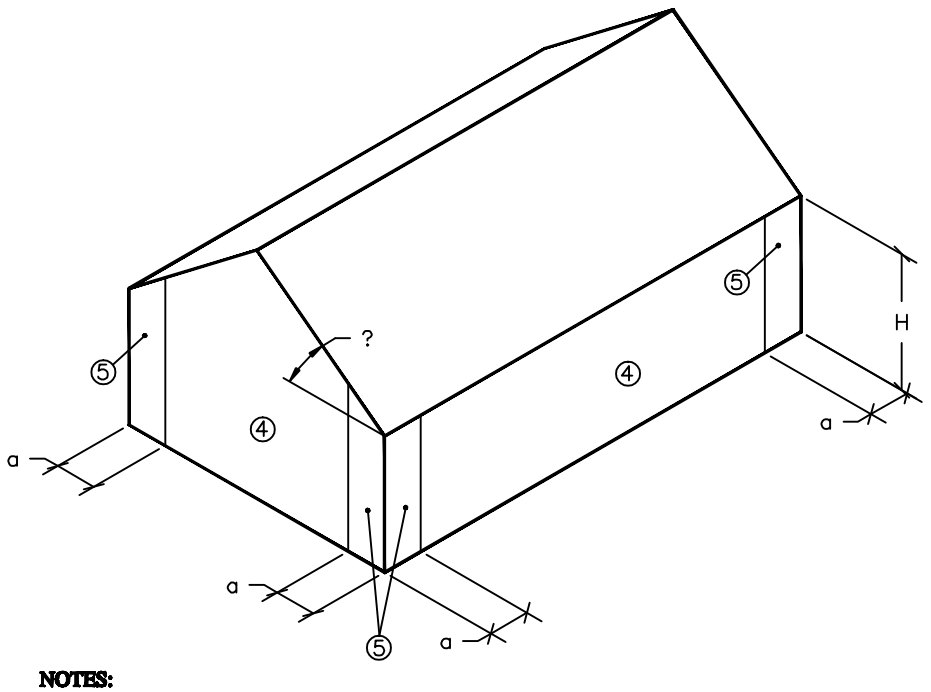
TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

DRAWN:	PHW	DATE:	8-18-05
APPROVED:	DF	DATE:	8-31-05
EST. AREA:	#	EST. WT:	LB/T
SIZE: B	DRAWING NO: 3-01-021	REV: -	
SCALE: NTS			
FROM NO:	SHEET 2 OF 2		

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 110 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	24.1	26.2	32.2
20	25.6	27.8	34.2
25	26.9	29.1	35.8
30	27.9	30.3	37.2
35	28.9	31.3	38.5
40	29.7	32.1	39.6
45	30.4	33.0	40.6
50	31.1	33.7	41.5
55	31.7	34.4	42.3
60	32.3	35.0	43.1

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 120 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	28.7	31.1	38.3
20	30.5	33.1	40.7
25	32.0	34.7	42.7
30	33.2	36.0	44.3
35	34.3	37.2	45.8
40	35.3	38.3	47.1
45	36.2	39.2	48.3
50	37.0	40.1	49.4
55	37.8	40.9	50.4
60	38.5	41.7	51.3

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 130 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	33.7	36.5	45.0
20	35.8	38.8	47.8
25	37.5	40.7	50.1
30	39.0	42.3	52.0
35	40.3	43.7	53.7
40	41.4	44.9	55.3
45	42.5	46.0	56.7
50	43.4	47.1	57.9
55	44.3	48.0	59.1
60	45.1	48.9	60.2



BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	39.1	42.4	52.1
20	41.5	45.0	55.4
25	43.5	47.2	58.1
30	45.2	49.0	60.3
35	46.7	50.6	62.3
40	48.1	52.1	64.1
45	49.3	53.4	65.7
50	50.4	54.6	67.2
55	51.4	55.7	68.5
60	52.4	56.7	69.8

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE C - 150 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	44.9	48.6	59.8
20	47.7	51.7	63.6
25	50.0	54.1	66.6
30	51.9	56.3	69.3
35	53.7	58.1	71.5
40	55.2	59.8	73.6
45	56.6	61.3	75.4
50	57.8	62.7	77.1
55	59.0	63.9	78.7
60	60.1	65.1	80.1

NOTES:
1. EXPOSURE C, IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 10 SQ. FEET.
   EXPOSURE C: MEANS, EXCEPT IN THE HIGH VELOCITY HURRICANE ZONE, Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet (182.9 m) and width greater than 150 ft. in the upwind direction. Short-term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development buildout will occur within three years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines and shall extend downwind for a distance of 1500 feet. For buildings located within a distance of 600 feet of inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more roof sheathing uplift and roof-to-wall uplift loads shall be increased by 20 percent.
2. BLDGS. 60 FT HIGH OR LESS, a=10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH CAN BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

BUILDING HEIGHT 60' OR LESS,
EXPOSURE C, ROOF ANGLE < 10°
TRIBUTARY AREA = 10 SQ. FT.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

REVISION		
REV	DESCRIPTION	
A	4-21-04 ADD KD NOTE AND CLARITY	
B	8-16-05 ADDED SHEET 2, 100 SQ FT	
C	FBC 2007 UPDATE	
D		
E		

THIRD ANGLE PROJECTION
CUSTOMER ADDRESS:

Roll-a-way STORM AND SECURITY SHUTTERS
10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

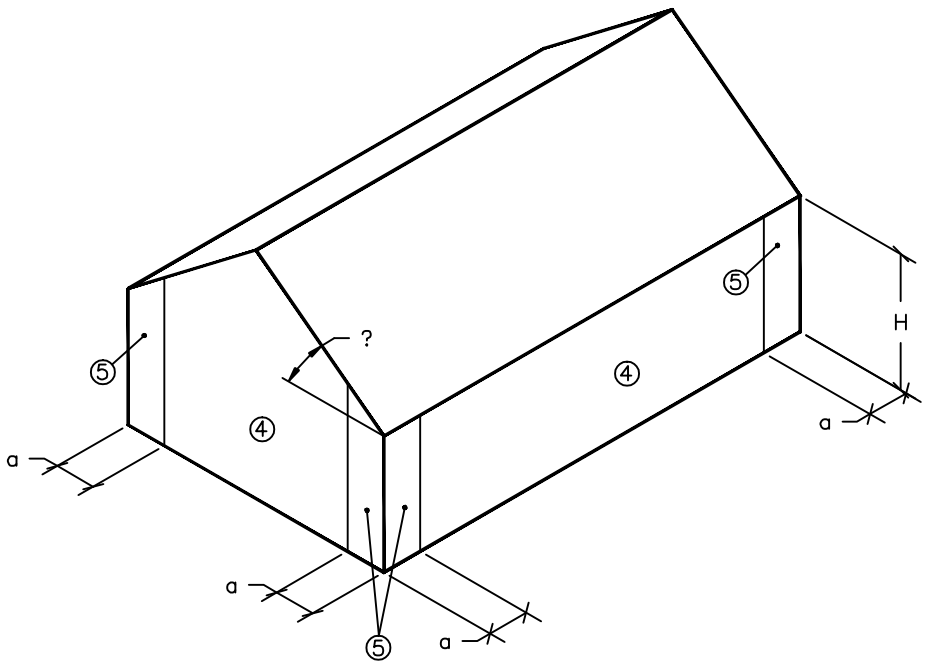
TITLE: WINDLOAD TABLES FOR COMPONENTS & CLADDING AS PER FLORIDA BUILDING CODE & ASCE 7

DRAWN:	PMW	DATE:	3-19-02
APPROVED:	DN	DATE:	3-19-02
EST. AREA:	#	EST. WT:	LB/FT
SIZE: B	DRAWING NO: 3-01-021		REV: C
FROM NO:		SCALE: NTS	SHEET 1 OF 2

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE B - 110 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	18.4	20.3	22.2
20	18.4	20.3	22.2
25	18.4	20.3	22.2
30	18.4	20.3	22.2
35	19.2	21.2	23.2
40	20.0	22.0	24.1
45	20.7	22.8	24.9
50	21.3	23.5	25.7
55	21.9	24.1	26.4
60	22.4	24.7	27.1

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE B - 120 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	21.9	24.1	26.4
20	21.9	24.1	26.4
25	21.9	24.1	26.4
30	21.9	24.1	26.4
35	22.9	25.2	27.6
40	23.8	26.2	28.7
45	24.6	27.1	29.7
50	25.4	27.9	30.6
55	26.1	28.7	31.4
60	26.7	29.4	32.2

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE B - 130 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	25.7	28.3	31.0
20	25.7	28.3	31.0
25	25.7	28.3	31.0
30	25.7	28.3	31.0
35	26.9	29.6	32.4
40	27.9	30.8	33.7
45	28.9	31.8	34.8
50	29.8	32.8	35.9
55	30.6	33.7	36.9
60	31.4	34.5	37.8



BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE B - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	29.8	32.8	36.0
20	29.8	32.8	36.0
25	29.8	32.8	36.0
30	29.8	32.8	36.0
35	31.2	34.3	37.6
40	32.4	35.7	39.0
45	33.5	36.9	40.4
50	34.5	38.1	41.6
55	35.5	39.1	42.8
60	36.4	40.1	43.9

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE B - 150 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	34.3	37.7	41.3
20	34.3	37.7	41.3
25	34.3	37.7	41.3
30	34.3	37.7	41.3
35	35.8	39.4	43.1
40	37.2	41.0	44.8
45	38.5	42.4	46.4
50	39.6	43.7	47.8
55	40.7	44.9	49.1
60	41.8	46.0	50.3

NOTES:

1. EXPOSURE B, IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET.
   EXPOSURE B: Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B : Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
2. BLDGS. 60 FT HIGH OR LESS, a =10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH MAY BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW, OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

BUILDING HEIGHT 60' OR LESS,
EXPOSURE B, ROOF ANGLE > 10°
TRIBUTARY AREA = 100 SQ. FT.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

REVISION	
REV	DESCRIPTION
A	
B	
C	
D	
E	

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

10601 OAK STREET N.E.
ST. PETERSBURG, FL. 33716

Roll-a-way
STORM AND SECURITY SHUTTERS

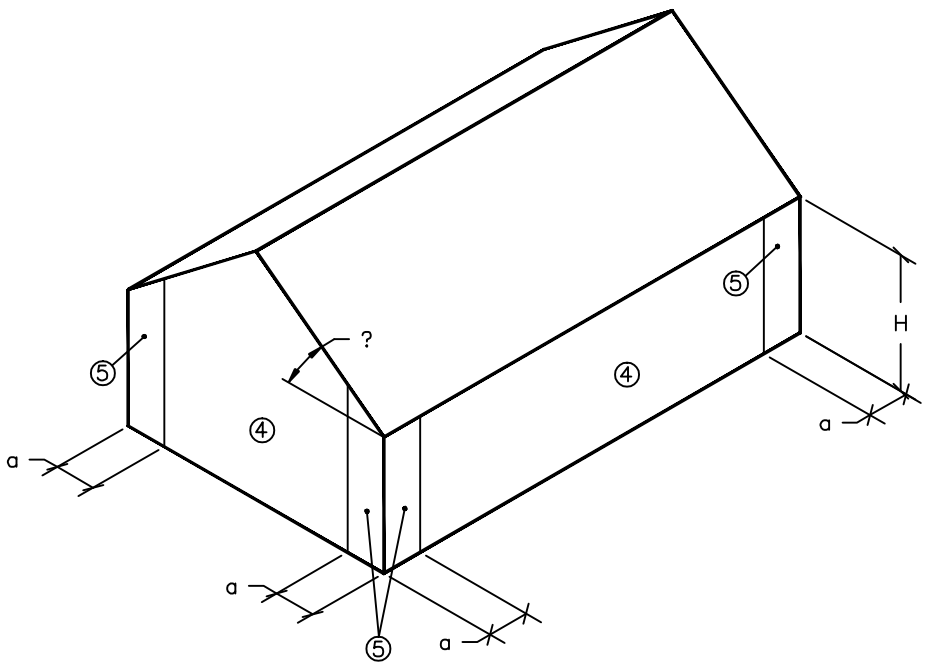
TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

DRAWN:	PTW	DATE:	08-16-05
APPROVED:	DF	DATE:	8-31-05
EST. AREA:		EST. WT:	LBS
SIZE:	B	DRAWING NO:	30-01-020
FROM NO:		REV:	-
SCALE:	NTS		
SHEET	2 OF 2		

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE B - 110 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	21.7	23.6	29.1
20	21.7	23.6	29.1
25	21.7	23.6	29.1
30	21.8	23.6	29.1
35	22.7	24.7	30.5
40	23.6	25.6	31.6
45	24.4	26.5	32.7
50	25.2	27.3	33.7
55	25.9	28.1	34.7
60	26.5	28.8	35.5

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE B - 120 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	25.9	28.1	34.7
20	25.9	28.1	34.7
25	25.9	28.1	34.7
30	25.9	28.1	34.7
35	27.1	29.4	36.2
40	28.1	30.5	37.7
45	29.1	31.6	38.9
50	30.0	32.5	40.1
55	30.8	33.4	41.2
60	31.6	34.3	42.3

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE B - 130 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	30.4	32.9	40.7
20	30.4	32.9	40.7
25	30.4	32.9	40.7
30	30.4	33.0	40.7
35	31.8	34.5	42.5
40	33.0	35.8	44.2
45	34.1	37.0	45.7
50	35.2	38.2	47.1
55	36.1	39.2	48.4
60	37.1	40.2	49.6



BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE B - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	35.2	38.2	47.2
20	35.2	38.2	47.2
25	35.2	38.2	47.2
30	35.3	38.2	47.2
35	36.8	40.0	49.3
40	38.3	41.5	51.3
45	39.6	42.9	53.0
50	40.8	44.3	54.6
55	41.9	45.5	56.1
60	43.0	46.6	57.5

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE > 10°			
DESIGN LOADS - PSF EXPOSURE B - 150 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	40.4	43.9	54.1
20	40.4	43.9	54.1
25	40.4	43.9	54.1
30	40.5	43.9	54.2
35	42.3	45.9	56.6
40	43.9	47.7	58.8
45	45.4	49.3	60.9
50	46.8	50.8	62.7
55	48.1	52.2	64.4
60	49.3	53.5	66.1

NOTES:

1. EXPOSURE B, IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 10 SQ. FEET.
   EXPOSURE B:Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
2. BLDGS. 60 FT HIGH OR LESS, a =10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH MAY BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW, OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

BUILDING HEIGHT 60' OR LESS,
EXPOSURE B, ROOF ANGLE > 10°
TRIBUTARY AREA = 10 SQ. FT.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

REVISION		
REV	DESCRIPTION	
A	4-21-02 ADD KD NOTE AND CLARITY	
B	6-16-05 ADDED SHEET 2, 100 SQ FT	
C	FBC 2007 UPDATE	
D		
E		

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

10601 OAK STREET N.E.
ST. PETERSBURG, FL. 33716

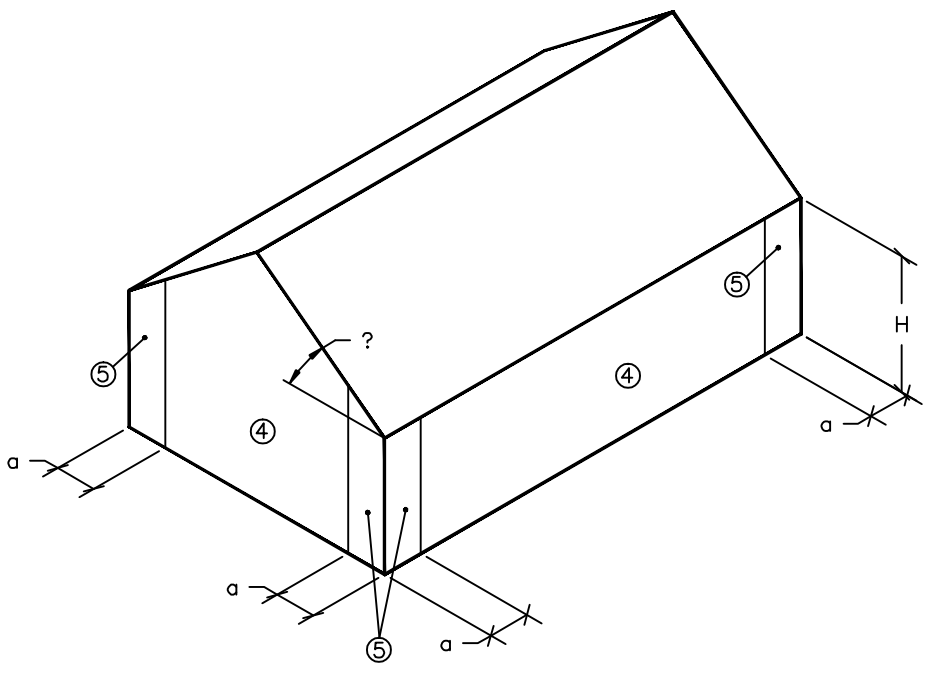
TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

DRAWN:	PTW	DATE:	3-13-02
APPROVED:	DN	DATE:	3-19-02
EST. AREA:		EST. WT:	LB/T
SIZE:	B	DRAWING NO:	3-01-020
		REV:	C
		SCALE:	NTS
FSCM NO:		SHEET	1 OF 2

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE B - 110 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	16.9	18.6	20.3
20	16.9	18.6	20.3
25	16.9	18.6	20.3
30	16.9	18.6	20.3
35	17.7	19.4	21.2
40	18.3	20.2	22.0
45	19.0	20.9	22.8
50	19.5	21.5	23.5
55	20.1	22.1	24.1
60	20.6	22.6	24.7

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE B - 120 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	20.1	22.1	24.2
20	20.1	22.1	24.2
25	20.1	22.1	24.2
30	20.1	22.1	24.2
35	21.0	23.1	25.2
40	21.8	24.0	26.2
45	22.6	24.8	27.1
50	23.3	25.6	28.0
55	23.9	26.3	28.7
60	24.5	27.0	29.5

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE B - 130 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	23.6	26.0	28.4
20	23.6	26.0	28.4
25	23.6	26.0	28.4
30	23.6	26.0	28.4
35	24.7	27.1	29.6
40	25.6	28.2	30.8
45	26.5	29.1	31.8
50	27.3	30.0	32.8
55	28.1	30.9	33.7
60	28.8	31.6	34.6



BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE B - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	27.4	30.1	32.9
20	27.4	30.1	32.9
25	27.4	30.1	32.9
30	27.4	30.1	32.9
35	28.6	31.5	34.4
40	29.7	32.7	35.7
45	30.8	33.8	36.9
50	31.7	34.8	38.1
55	32.6	35.8	39.1
60	33.4	36.7	40.1

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE B - 150 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	31.4	34.6	37.8
20	31.4	34.6	37.8
25	31.4	34.6	37.8
30	31.4	34.6	37.8
35	32.9	36.1	39.5
40	34.1	37.5	41.0
45	35.3	38.8	42.4
50	36.4	40.0	43.7
55	37.4	41.1	44.9
60	38.3	42.1	46.1

NOTES:

1. EXPOSURE B, IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET.
   EXPOSURE B:Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
2. BLDGS. 60 FT HIGH OR LESS, a=10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH CAN BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW, OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

BUILDING HEIGHT 60' OR LESS,
EXPOSURE B, ROOF ANGLE < 10°
TRIBUTARY AREA = 100 SQ. FT.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

REVISION		
REV	DESCRIPTION	
A		
B		
C		
D		
E		

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

10601 OAK STREET N.E.
ST. PETERSBURG, FL. 33716

Roll-a-way
STORM AND SECURITY SHUTTERS

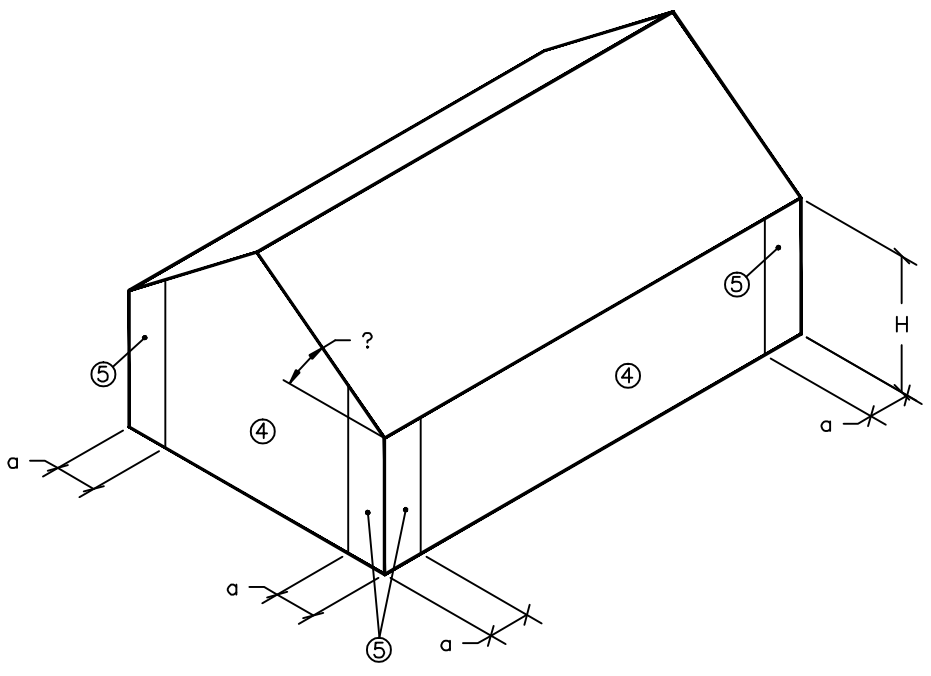
TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

DRAWN:	PTW	DATE:	08-16-05
APPROVED:	DF	DATE:	8-31-05
EST. AREA:		EST. WT:	
SIZE:	B	DRAWING NO:	3-01-019
FROM NO:		SCALE:	NTS
		SHEET	2 OF 2
		REV:	-

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE B - 110 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	19.9	21.6	26.5
20	19.9	21.6	26.5
25	19.9	21.6	26.5
30	19.9	21.6	26.6
35	20.8	22.6	27.8
40	21.6	23.4	28.8
45	22.4	24.2	29.8
50	23.1	25.0	30.7
55	23.7	25.7	31.6
60	24.3	26.3	32.4

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE B - 120 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	23.7	25.7	31.6
20	23.7	25.7	31.6
25	23.7	25.7	31.6
30	23.7	25.7	31.6
35	24.8	26.8	33.0
40	25.7	27.9	34.3
45	26.6	28.8	35.5
50	27.4	29.7	36.6
55	28.2	30.5	37.6
60	28.9	31.3	38.5

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE B - 130 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	27.8	30.1	37.1
20	27.8	30.1	37.1
25	27.8	30.1	37.1
30	27.8	30.1	37.1
35	29.1	31.5	38.8
40	30.2	32.7	40.3
45	31.2	33.8	41.7
50	32.2	34.9	42.9
55	33.1	35.8	44.1
60	33.9	36.7	45.2



BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE B - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	32.2	34.9	43.0
20	32.2	34.9	43.0
25	32.2	34.9	43.0
30	32.3	35.0	43.0
35	33.7	36.5	45.0
40	35.0	38.0	46.7
45	36.2	39.3	48.3
50	37.3	40.5	49.8
55	38.4	41.6	51.2
60	39.3	42.6	52.5

BUILDINGS EQUAL OR LESS THAN 60 FEET HIGH			
ROOF ANGLE < 10°			
DESIGN LOADS - PSF EXPOSURE B - 150 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
15	37.0	40.1	49.4
20	37.0	40.1	49.4
25	37.0	40.1	49.4
30	37.0	40.1	49.4
35	38.7	41.9	51.6
40	40.2	43.6	53.6
45	41.6	45.1	55.5
50	42.9	46.4	57.2
55	44.0	47.7	58.7
60	45.2	48.9	60.2

NOTES:

1. EXPOSURE B, IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 10 SQ. FEET.
   EXPOSURE B: Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
2. BLDGS. 60 FT HIGH OR LESS, a=10% OF MINIMUM WIDTH OR .4H, WHICHEVER IS SMALLER BUT NOT LESS THAN EITHER 4% OF MINIMUM WIDTH OR 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH MAY BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY SEG, CPL, RAW OR VALCO PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18. FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

BUILDING HEIGHT 60' OR LESS,
EXPOSURE B, ROOF ANGLE < 10°
TRIBUTARY AREA = 10 SQ. FT.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

REVISION		
REV	DESCRIPTION	
A	4-21-04 ADD KD NOTE AND CLARITY	
B	8-16-05 ADDED SHEET 2, 100 SQ FT	
C	FBC 2007 UPDATE	
D		
E		

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

10601 OAK STREET N.E.
ST. PETERSBURG, FL. 33716
roll-a-way
STORM AND SECURITY SHUTTERS
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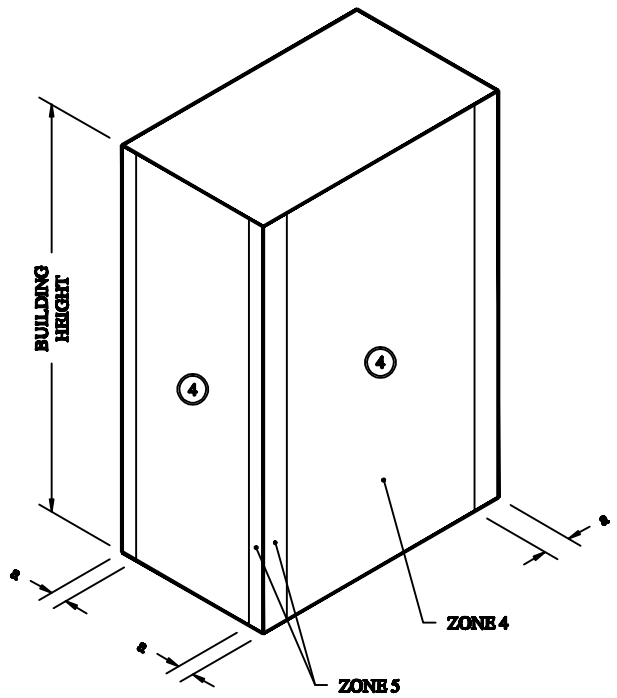
TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

DRAWN:	PTW	DATE:	3-13-02
APPROVED:	DN	DATE:	3-19-02
EST. AREA:		EST. WT:	#
SIZE:	B	DRAWING NO:	3-01-019
FROM NO:		REV:	C
		SCALE:	NTS
		SHEET	1 OF 2

BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE C - 110 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	28.4	29.4	47.4
70	29.7	30.2	48.8
80	30.1	31.1	50.2
90	30.8	31.9	51.5
100	31.5	32.6	52.6
120	32.7	33.9	54.7
140	33.8	35.0	56.5
160	34.8	36.0	58.1
180	35.7	36.9	59.5
200	36.5	37.7	60.9
220	37.2	38.5	62.1
240	37.9	39.2	63.3
260	38.5	39.9	64.3
280	39.1	40.5	65.3
300	39.7	41.1	66.3

BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE C - 120 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	33.8	35.0	56.4
70	34.8	36.0	58.1
80	35.8	37.0	59.7
90	36.7	38.0	61.2
100	37.5	38.8	62.6
120	39.0	40.3	65.1
140	40.3	41.7	67.2
160	41.4	42.9	69.1
180	42.4	43.9	70.9
200	43.4	44.9	72.5
220	44.3	45.8	73.9
240	45.1	46.7	75.3
260	45.9	47.5	76.6
280	46.6	48.2	77.8
300	47.3	48.9	78.9

BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE C - 130 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	39.7	41.1	66.2
70	40.8	42.3	68.2
80	42.0	43.5	70.1
90	43.1	44.6	71.9
100	44.0	45.6	73.5
120	45.7	47.4	76.4
140	47.3	48.9	78.9
160	48.6	50.3	81.1
180	49.8	51.6	83.2
200	50.9	52.7	85.0
220	52.0	53.8	86.8
240	52.9	54.8	88.4
260	53.8	55.7	89.9
280	54.7	56.6	91.3
300	55.5	57.4	92.6



BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE C - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	46.0	47.6	76.8
70	47.4	49.0	79.1
80	48.7	50.4	81.3
90	49.9	51.7	83.4
100	51.1	52.9	85.2
120	53.1	54.9	88.6
140	54.8	56.7	91.5
160	56.4	58.4	94.1
180	57.8	59.8	96.5
200	59.1	61.2	98.6
220	60.3	62.4	100.6
240	61.4	63.6	102.5
260	62.4	64.6	104.2
280	63.4	65.7	105.9
300	64.4	66.6	107.4

BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE C - 150 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	52.8	54.7	88.2
70	54.4	56.3	90.8
80	55.9	57.9	93.4
90	57.3	59.3	95.7
100	58.6	60.7	97.9
120	60.9	63.1	101.7
140	62.9	65.1	105.0
160	64.7	67.0	108.0
180	66.3	68.7	110.8
200	67.8	70.2	113.2
220	69.2	71.6	115.5
240	70.5	73.0	117.7
260	71.7	74.2	119.7
280	72.8	75.4	121.6
300	73.9	76.5	123.3

NOTES:
1. EXPOSURE "C", IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET.
   EXPOSURE "C", OUTSIDE THE HVHZ MEANS, Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet (182.9 m) and width greater than 150 ft. in the upwind direction. Short-term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development buildout will occur within three years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines and shall extend downwind for a distance of 1500 feet. For buildings located within a distance of 600 feet of inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more roof sheathing uplift and roof-to-wall uplift loads shall be increased by 20 percent.
2. BUILDINGS GREATER THAN 60 FT HIGH, a=10% OF MINIMUM WIDTH BUT NOT LESS THAN 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH, CAN BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW, OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18.
   FOR PRESSURE CALCUALTIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCUALTED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

BUILDING HEIGHT > 60',
EXPOSURE C
TRIBUTARY AREA = 100 SQ. FT.

REVISION		
REV	DESCRIPTION	
A		
B		
C		
D		
E		

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

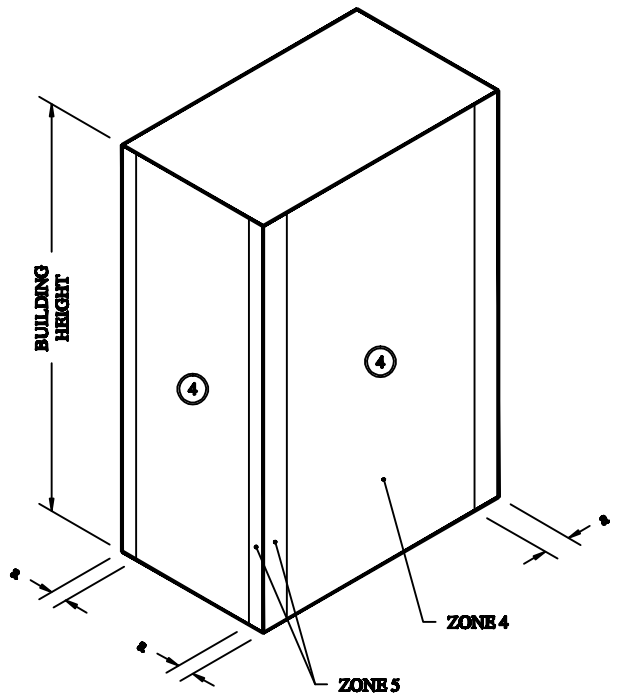
TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

DRAWN:	PTW	DATE:	08-23-05
APPROVED:	DF	DATE:	8-31-05
EST. AREA:	#	EST. WT:	LB/FT
SIZE: B	DRAWING NO: 3-01-018	SCALE: NTS	REV: -
	FROM NO:	SHEET 2 OF 2	

BUILDINGS GREATER THAN 60 FEET HIGH

DESIGN LOADS - PSF EXPOSURE C - 110 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	32.4	32.4	59.5
70	33.4	33.4	61.2
80	34.3	34.3	63.0
90	35.2	35.2	64.5
100	36.0	36.0	66.0
120	37.4	37.4	68.6
140	38.6	38.6	70.8
160	39.7	39.7	72.8
180	40.7	40.7	74.7
200	41.6	41.6	76.3
220	42.5	42.5	77.9
240	43.3	43.3	79.3
260	44.0	44.0	80.7
280	44.7	44.7	82.0
300	45.4	45.4	83.1



BUILDINGS GREATER THAN 60 FEET HIGH

DESIGN LOADS - PSF EXPOSURE C - 120 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	38.6	38.6	70.8
70	39.7	39.7	72.8
80	40.9	40.9	74.9
90	41.9	41.9	76.8
100	42.8	42.8	78.5
120	44.5	44.5	81.6
140	46.0	46.0	84.3
160	47.3	47.3	86.7
180	48.5	48.5	88.9
200	49.6	49.6	90.9
220	50.6	50.6	92.7
240	51.5	51.5	94.4
260	52.4	52.4	96.0
280	53.2	53.2	97.5
300	54.0	54.0	99.0

BUILDINGS GREATER THAN 60 FEET HIGH

DESIGN LOADS - PSF EXPOSURE C - 130 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	45.3	45.3	83.0
70	46.6	46.6	85.5
80	48.0	48.0	87.9
90	49.2	49.2	90.1
100	50.3	50.3	92.2
120	52.2	52.2	95.8
140	54.0	54.0	98.9
160	55.5	55.5	101.7
180	56.9	56.9	104.3
200	58.2	58.2	106.6
220	59.3	59.3	108.8
240	60.4	60.4	110.8
260	61.5	61.5	112.7
280	62.4	62.4	114.5
300	63.3	63.3	116.1

BUILDINGS GREATER THAN 60 FEET HIGH

DESIGN LOADS - PSF EXPOSURE C - 140 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	52.5	52.5	96.3
70	54.1	54.1	99.1
80	55.6	55.6	102.0
90	57.0	57.0	104.5
100	58.3	58.3	106.9
120	60.6	60.6	111.1
140	62.6	62.6	114.7
160	64.4	64.4	118.0
180	66.0	66.0	121.0
200	67.5	67.5	123.7
220	68.8	68.8	126.2
240	70.1	70.1	128.5
260	71.3	71.3	130.7
280	72.4	72.4	132.7
300	73.5	73.5	134.7

BUILDINGS GREATER THAN 60 FEET HIGH

DESIGN LOADS - PSF EXPOSURE C - 150 MPH

MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	60.3	60.3	110.6
70	62.1	62.1	113.8
80	63.9	63.9	117.1
90	65.5	65.5	120.0
100	66.9	66.9	122.7
120	69.5	69.5	127.5
140	71.8	71.8	131.7
160	73.9	73.9	135.5
180	75.7	75.7	138.9
200	77.4	77.4	142.0
220	79.0	79.0	144.8
240	80.5	80.5	147.5
260	81.8	81.8	150.0
280	83.1	83.1	152.4
300	84.3	84.3	154.6

NOTES:

1. EXPOSURE "C", IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET.
   EXPOSURE "C", OUTSIDE THE HVHZ MEANS, Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet (182.9 m) and width greater than 150 ft. in the upwind direction. Short-term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development buildout will occur within three years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines and shall extend downwind for a distance of 1500 feet. For buildings located within a distance of 600 feet of inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more roof sheathing uplift and roof-to-wall uplift loads shall be increased by 20 percent.
2. BUILDINGS GREATER THAN 60 FT HIGH, a=10% OF MINIMUM WIDTH BUT NOT LESS THAN 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH, CAN BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW, OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18.
   FOR PRESSURE CALCULATIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPLIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCULATED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

BUILDING HEIGHT > 60',
EXPOSURE C
TRIBUTARY AREA = 20 SQ. FT.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

REVISION		
REV	DESCRIPTION	
A	4-21-04 ADD KD NOTE AND CLARITY	
B	6-23-04 ADDED SHEET 2, 100 SQ. FT.	
C	FBC 2007 UPDATE	
D		
E		

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

Roll-a-way
10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

TITLE: WINDLOAD TABLES FOR COMPONENTS & CLADDING AS PER FLORIDA BUILDING CODE & ASCE 7

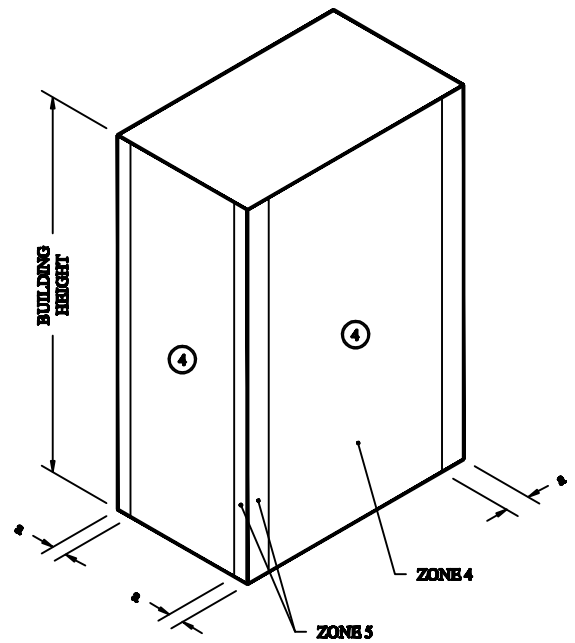
DRAWN:	PMW	DATE:	2-11-02
APPROVED:	DF	DATE:	2-14-02
EST. AREA:		EST. WT:	LAFT

SIZE:	DRAWING NO:		REV:
B	3-01-018		C
FSCM NO:	SCALE:	NTS	
	SHEET	1 OF 2	

BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE B - 110 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	21.3	22.1	35.7
70	22.2	23.0	37.1
80	23.1	23.9	38.5
90	23.9	24.7	39.8
100	24.6	25.5	41.1
120	25.9	26.8	43.3
140	27.1	28.0	45.2
160	28.7	29.1	47.0
180	29.1	30.1	48.6
200	30.0	31.0	50.1
220	30.8	31.9	51.5
240	31.6	32.7	52.7
260	32.3	33.5	54.0
280	33.0	34.2	55.1
300	33.7	34.9	56.2

BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE B - 120 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	25.4	26.3	42.4
70	26.4	27.4	44.1
80	27.5	28.4	45.9
90	28.4	29.4	47.4
100	29.3	30.3	48.9
120	30.8	31.9	51.5
140	32.2	33.4	53.8
160	33.5	34.7	55.9
180	34.6	35.9	57.8
200	35.7	36.9	59.6
220	36.7	38.0	61.2
240	37.6	38.9	62.8
260	38.5	39.8	64.2
280	39.3	40.7	65.6
300	40.1	41.5	66.9

BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE B - 130 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	29.8	30.9	49.8
70	31.0	32.1	51.8
80	32.2	33.4	53.8
90	33.3	34.5	55.7
100	34.4	35.6	57.4
120	36.2	37.5	60.4
140	37.8	39.2	63.2
160	39.3	40.7	65.6
180	40.7	42.1	67.9
200	41.9	43.4	70.0
220	43.1	44.6	71.9
240	44.1	45.7	73.7
260	45.2	46.7	75.4
280	46.1	47.8	77.0
300	47.0	48.7	78.5



BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE B - 140 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	34.6	35.8	57.8
70	36.0	37.3	60.1
80	37.4	38.7	62.4
90	38.7	40.0	64.6
100	39.9	41.3	66.5
120	42.0	43.5	70.1
140	43.9	45.4	73.3
160	45.6	47.2	76.1
180	47.2	48.8	78.7
200	48.6	50.3	81.1
220	49.9	51.7	83.4
240	51.2	53.0	85.5
260	52.4	54.2	87.5
280	53.5	55.4	89.3
300	54.6	56.5	91.1

BUILDINGS GREATER THAN 60 FEET HIGH			
DESIGN LOADS - PSF EXPOSURE B - 150 MPH			
MEAN ROOF ELEV FEET	ZONE 4 & 5 + (POSITIVE)	ZONE 4 - (NEGATIVE)	ZONE 5 - (NEGATIVE)
61	39.7	41.1	66.3
70	41.3	42.8	69.0
80	42.9	44.4	71.7
90	44.4	46.0	74.1
100	45.8	47.4	76.4
120	48.2	49.9	80.5
140	50.4	52.2	84.1
160	52.3	54.2	87.4
180	54.1	56.0	90.4
200	55.8	57.8	93.1
220	57.3	59.4	95.7
240	58.8	60.8	98.1
260	60.1	62.3	100.4
280	61.4	63.6	102.5
300	62.6	64.9	104.6

NOTES:
1. EXPOSURE "B", IMPORTANCE FACTOR 1.0, TRIBUTARY AREA USED 100 SQ. FEET.
   EXPOSURE "B", Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater. Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.
2. BUILDINGS GREATER THAN 60 FT HIGH, a=10% OF MINIMUM WIDTH BUT NOT LESS THAN 3 FT.
3. LOADS, POSITIVE AND NEGATIVE, ARE TAKEN AT MEAN ROOF HEIGHT AND APPLY TO ALL FLOORS.
4. LOADS BETWEEN ELEVATIONS SHOWN IN TABLE CAN BE INTERPOLATED.
5. LOADS BETWEEN TABLES AT VARIOUS MPH, MAY BE INTERPOLATED.
6. CIRCLE IN RED PEN THE APPROPRIATE DESIGN LOAD FOR THE CUSTOMER ADDRESS INDICATED.
7. THE MEAN ROOF HEIGHT WAS PROVIDED BY QMI, RAW, OR ISP PERSONNEL PER SITE INSPECTION.
8. CALCULATED MINIMUM DESIGN PRESSURES ABOVE ARE BASED ON A Kd OF 0.85 AND GCpi OF +/- 0.18.
   FOR PRESSURE CALCUALTIONS WHICH REQUIRE A Kd OF 1.0, ALL PRESSURES ABOVE MUST BE MULTIPIED BY 1.18.
9. DESIGN PRESSURES DO NOT INCLUDE INCREASE FOR WIND SPEED-UP OVER HILLS, RIDGES, OR ESCARPMENTS. SUCH CONDITIONS WILL BE CALCUALTED SEPARATELY IF ALL THE CONDITIONS OF SECTION 6.5.7, TOPOGRAPHIC EFFECTS, ARE MET.

BUILDING HEIGHT > 60',
EXPOSURE B
TRIBUTARY AREA = 100 SQ. FT.

D.L. Fowler
Professional Engineer
Florida License No.
PE0050458

REVISION	
REV	DESCRIPTION
A	
B	
C	
D	
E	

THIRD ANGLE PROJECTION

CUSTOMER ADDRESS:

10601 OAK STREET N.E.
ST. PETERSBURG, FL 33716

TITLE:
WINDLOAD TABLES FOR
COMPONENTS & CLADDING AS PER
FLORIDA BUILDING CODE & ASCE 7

DRAWN:	PTW	DATE:	8-18-05
APPROVED:	DF	DATE:	8-31-05
EST. AREA:		EST. WT:	LB/T
SIZE: B	DRAWING NO: 3-01-017	REV: -	
FSCM NO:	SCALE: NTS	SHEET 2 OF 2	