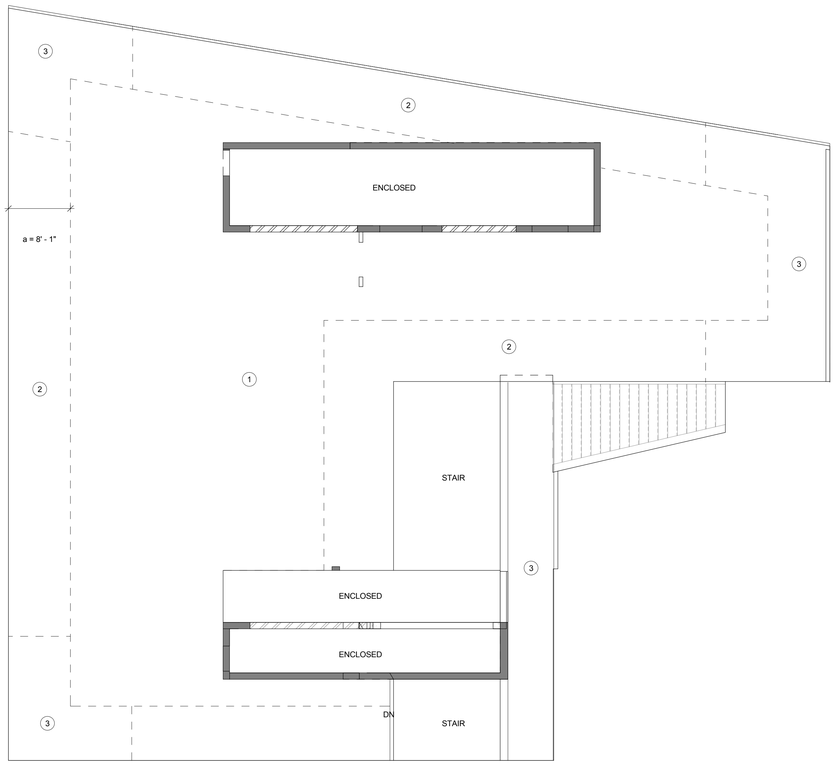
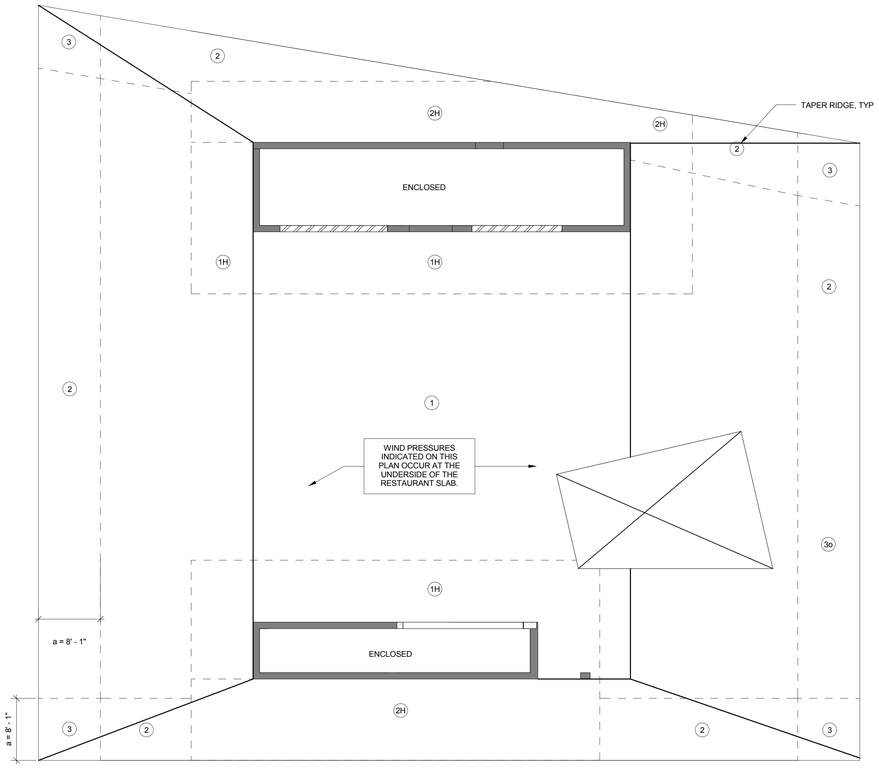


2 PIERHEAD ROOF LEVEL - WIND LOADING
1/8" = 1'-0"



1 PIERHEAD RESTAURANT LEVEL - WIND LOADING
1/8" = 1'-0"

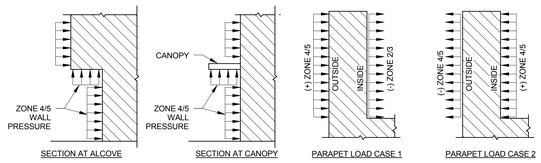
ALLOWABLE WIND PRESSURES (ASCE 7-10)

BUILDING	a (FT)	Vult (MPH)	Vasd (MPH)	A (SF)	ZONE 1 (PSF)	ZONE 2 (PSF)	ZONE 3 (PSF)	ZONE 4 (PSF)	ZONE 5 (PSF)	ZONE 2H (PSF)	ZONE 3H (PSF)
PATIO TERRACE	7'-6" 4'-0"	155	121	<10	+17.7 -43.5	+17.7 -73.0	+17.7 -109.9	+39.8 -43.1	+39.8 -53.1	+XX -XX	+XX -XX
				20	+16.6 -42.4	+16.6 -65.2	+16.6 -91.0	+38.0 -41.3	+38.0 -49.6	+XX -XX	+XX -XX
				50	+15.1 -40.9	+15.1 -55.0	+15.1 -66.1	+35.7 -39.0	+35.7 -44.9	+XX -XX	+XX -XX
				100+	+14.0 -39.8	+14.0 -47.2	+14.0 -47.2	+34.0 -37.3	+34.0 -41.3	+XX -XX	+XX -XX
RESTAURANT (OPEN)	10'-0"	155	121	<=a^2	-65.1	-102.2	-139.3	+44.5 -44.5	+44.5 -81.6	+XX -XX	+XX -XX
				2a^2	-61.5	-97.1	-132.7	+44.5 -44.5	+44.5 -81.6	+XX -XX	+XX -XX
				>4a^2	-56.7	-90.3	-124.0	+41.0 -42.2	+41.0 -72.2	+XX -XX	+XX -XX
ROOF DECK	10'-0"	155	121	<10	-65.1	-102.2	-139.3	+44.5 -44.5	+44.5 -81.5	+XX -XX	+XX -XX
				20	-61.4	-97.0	132.7	+44.5 -81.5	+44.5 -81.5	+XX -XX	+XX -XX
				50	-56.6	-90.3	-124.0	+41.0 -42.1	+41.0 -72.2	+XX -XX	+XX -XX
				100+	-53.0	-85.2	-117.4	+38.3 -40.4	+38.3 -65.1	+XX -XX	+XX -XX
MECHANICAL PENTHOUSE (VERTICAL CANOPY PRESSURES)	3'-0"	155	121	<10	-67.2	-105.5	-143.8	+46.0 -46.0	+46.0 -84.2	+XX -XX	+XX -XX
				20	-63.4	-100.2	-137.0	+46.0 -46.0	+46.0 -84.2	+XX -XX	+XX -XX
				50	-58.4	-93.2	-128.0	+42.3 -43.5	+42.3 -74.5	+XX -XX	+XX -XX
				100+	-54.7	-88.0	-121.3	+39.5 -41.7	+39.5 -67.2	+XX -XX	+XX -XX
CANOPY	10'-10"	155	121	<=a^2	+41.4 -43.6	+63.5 -65.8	+82.8 -130.8	See Mech. Penthouse Wall Pressures		+XX -XX	+XX -XX
				2a^2	+41.4 -43.6	+63.5 -65.8	+63.5 -65.8			+XX -XX	+XX -XX
				>4a^2	+41.4 -43.6	+41.4 -43.6	+41.4 -43.6			+XX -XX	+XX -XX

GROSS WIND PRESSURE PLAN NOTES:

1. WIND PRESSURE TABLE IS BASED ON FBC 2010 / ASCE 7-10 ALLOWABLE WIND SPEED. ULTIMATE PRESSURES MAY BE CALCULATED IN ACCORDANCE WITH FBC SECTION 1609.1.5 FOR COMPARISON WHERE TESTING FOR WIND LOAD RESISTANCE IS BASED ON ULTIMATE WIND LOADS.
   A - INDICATES TRIBUTARY AREA IN S.F.
   a - INDICATES END ZONE WIDTH IN FT.
   Vult - INDICATES ULTIMATE DESIGN WIND SPEED IN MPH
   Vasd - INDICATES NOMINAL DESIGN WIND SPEED IN MPH
2. GROSS PRESSURES ARE FOR JOISTS, WINDOWS, DOORS, VENEER, LIGHT GAGE METAL FRAMING, METAL DECK ATTACHMENTS, ROOFING, ROOFING ACCESSORIES AND OTHER BUILDING COMPONENTS AND CLADDING.
3. GROSS PRESSURES SHALL BE LINEARLY INTERPOLATED FOR (A) NOT SHOWN IN TABLE.
4. POSITIVE PRESSURES INDICATE PRESSURES ACTING TOWARD A PROJECTED SURFACE. NEGATIVE PRESSURES INDICATE PRESSURES ACTING AWAY FROM A PROJECTED SURFACE.
5. ROOF AND ZONES (1) THRU (3) . ROOF ZONES (1o) THRU (3o) INDICATE OPEN STRUCTURE PRESSURES
6. WALL ZONES (4) AND (5)
7. OVERHANG ZONES (2H) AND (3H) APPLY ONLY TO ROOF OVERHANGS WHERE THE COMPONENT OR CLADDING RECEIVES PRESSURE SIMULTANEOUSLY ON BOTH SIDES (UPWARD SUCTION ON TOP AND UPWARD PRESSURE ON BOTTOM, SUCH AS AT OPEN SOFFITS), AND IS CONTINUOUS WITH FIELD OF ROOF.
8. NET DESIGN ROOF PRESSURES SHALL BE CALCULATED USING THE SELFWEIGHT (DEAD LOAD) OF THE MATERIALS. HOWEVER, THE MAXIMUM REDUCTION OF WIND UPLIFT PRESSURES SHALL BE LIMITED TO THE SELF WEIGHT OF THE ROOF SYSTEM PLUS 5 PSF FOR SUPERIMPOSED DEAD LOADS.
9. INTERNAL PRESSURE COEFFICIENT FOR ENCLOSED BUILDING EQUALS +0.18 AND -0.18
   INTERNAL PRESSURE COEFFICIENT FOR OPEN STRUCTURE EQUALS +/- 0.00
   INTERNAL PRESSURE COEFFICIENT FOR PARTIALLY ENCLOSED STRUCTURE EQUALS +/- 0.55
10. ROOF TOP EQUIPMENT AT THE PIERHEAD BUILDING (RISK CAT III) SHALL BE DESIGNED FOR AN ALLOWABLE WIND SPEED LATERAL PRESSURE OF 89 PSF (148 PSF ULTIMATE WIND SPEED) AND A SIMULTANEOUS UPLIFT PRESSURE OF 70 PSF (117 PSF ULTIMATE WIND SPEED) PER ROOF TOP EQUIPMENT PER FBC SECTION 1609.8

    ROOF TOP EQUIPMENT AT AUXIALLARY STRUCTURES (RISK CAT II) SHALL BE DESIGNED FOR AN ALLOWABLE WIND SPEED LATERAL PRESSURE OF 65 PSF (107 PSF ULTIMATE WIND SPEED) AND A SIMULTANEOUS UPLIFT PRESSURE OF 51 PSF (85 PSF ULTIMATE WIND SPEED) PER ROOF TOP EQUIPMENT PER FBC SECTION 1609.8
11. AT ALCOVES AND CANOPIES, THE TOTAL UPLIFT PRESSURE ON THE ALCOVE SOFFIT OR CANOPY SHALL EQUAL THE WALL PRESSURE IN THAT AREA.
12. PARAPET DESIGN WIND PRESSURE LOAD CASES:
    LOAD CASE 1: (+) ZONE 4/5 PSF ON OUTSIDE FACE AND (-) ZONE 2/3 PSF ON INSIDE FACE
    LOAD CASE 2: (-) ZONE 4/5 ON OUTSIDE FACE AND (+) ZONE 4/5 PSF ON INSIDE FACE
    NOTE THAT CASE 1 & CASE 2 WIND PRESSURES ARE APPLIED INDEPENDENTLY.



SECTION AT ALCOVE | SECTION AT CANOPY | PARAPET LOAD CASE 1 | PARAPET LOAD CASE 2

TO THE BEST OF THE STRUCTURAL ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM CODES AS DETERMINED BY LOCAL AUTHORITY IN ACCORDANCE WITH CHAPTER 553, FLORIDA STATUES.

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CITY OF ST PETERSBURG
CITY PROJECT NO. 09227-019

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT CITY of ST. PETERSBURG

APPROVED BY:

100% CONSTRUCTION DOCUMENTS
WIND LOADING -
RESTAURANT/ROOF DECK

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