

**WIND DESIGN CRITERIA:**  
 FLORIDA BLDG. CODE 6TH EDITION (2017)

**ROOFTOP STRUCTURES AND EQUIPMENT**  
 (PER ASCE 7-10)

- BASIC WIND SPEED = 139 MPH (ULTIMATE)  
 = 108 MPH (ASD)
- RISK CATEGORY = II
- WIND EXPOSURE 'B'
- NET PRESSURE COEFFICIENTS:  
 HORIZONTAL: 1.9  
 VERTICAL: 1.5
- DESIGN PRESSURE:  
 HORIZONTAL = (+/-) 51.7 PSF (ULTIMATE)  
 = (+/-) 31.0 PSF (ASD)  
 VERTICAL = (-) 40.8 PSF (ULTIMATE)  
 = (-) 24.5 PSF (ASD)

**BUILDING DATA**

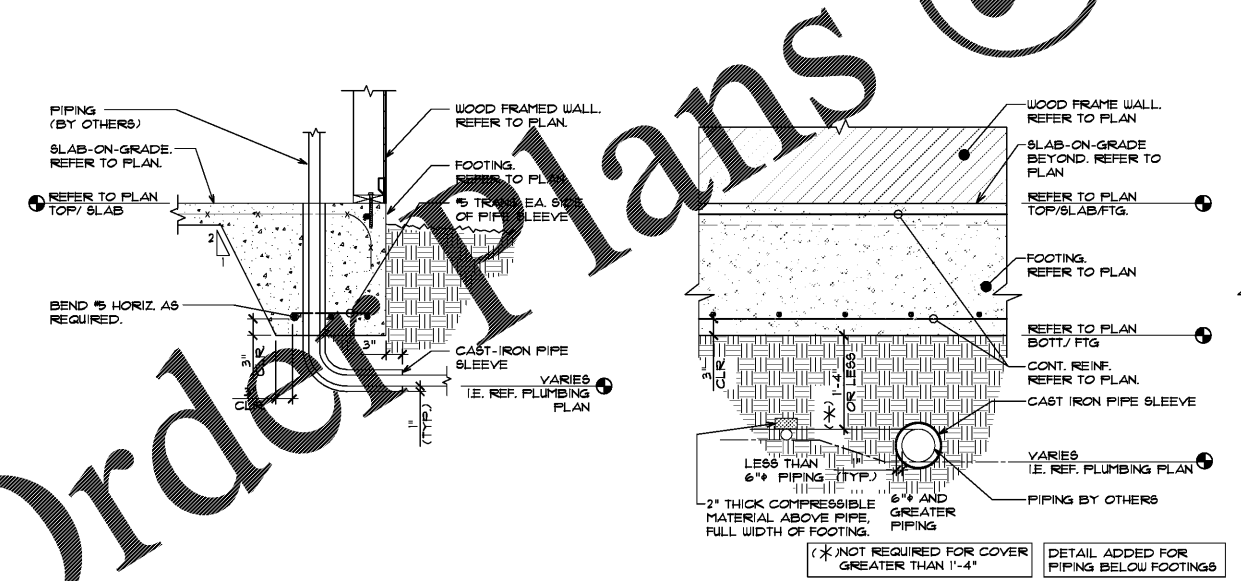
WIND VELOCITY: (Basic Wind Speed, 3 sec.)	139 mph (Ultimate) 108 mph (ASD)	INTERNAL PRESSURE COEFFICIENT: (Enclosed Building Per ASCE 7-10)	+/- 0.18
RISK CATEGORY:	II	WIDTH OF EDGE STRIP (FT):	3.0
ROOF ANGLE, A (degrees):	0.0 < A < 7.0	HEIGHT & EXPOSURE ADJUSTMENT COEFFICIENT:	1.0
WIND EXPOSURE CATEGORY:	B	ROOF DEAD LOAD RESISTING UPLIFT (psf):	18.0 (ULT.) 12.0 (ASD)

**WIND DESIGN LOADS - COMPONENTS & CLADDING (ULTIMATE)**

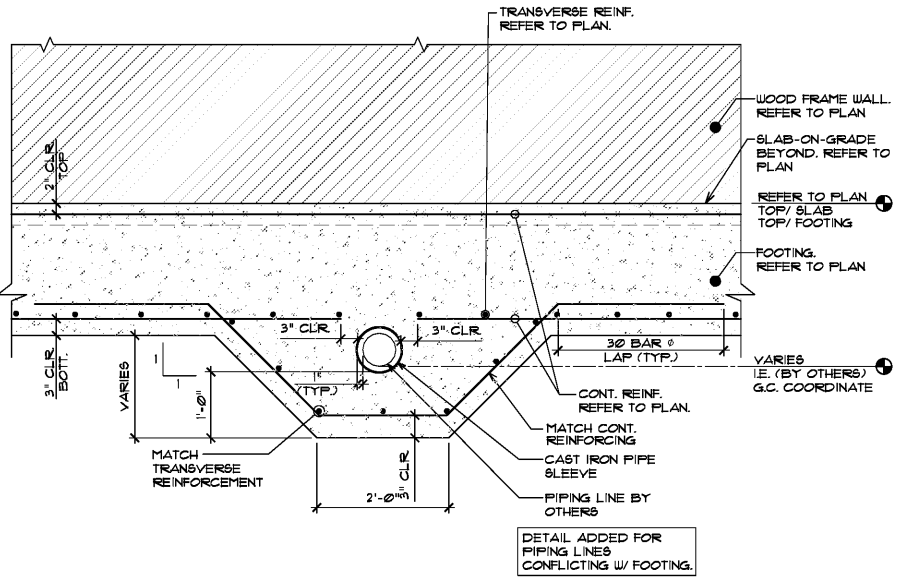
ZONE	AREA (ft²)	ROOF				WALLS, WINDOWS, DOORS			
		(Positive)	(Negative)	Net Uplift (ULT.)	Net Uplift (ASD)	ZONE	AREA (ft²)	(Positive)	(Negative)
1	10.0	14.3	-35.3	-17.3	10.0	4	10.0	35.3	-38.2
1	20.0	13.4	-34.4	-16.4	10.0	4	20.0	33.7	-36.7
1	50.0	12.3	-33.2	-15.2	10.0	4	50.0	31.6	-34.6
1	100.0	11.4	-32.3	-14.3	10.0	4	100.0	30.0	-33.0
2	10.0	14.3	-59.2	-41.2	-23.5	4	500.0	26.3	-29.3
2	20.0	13.4	-52.9	-34.9	-19.7	5	10.0	35.3	-47.2
2	50.0	12.3	-44.5	-26.5	-14.7	5	20.0	33.7	-44.0
2	100.0	11.4	-38.2	-20.2	-10.9	5	50.0	31.6	-39.8
3	10.0	14.3	-89.0	-71.0	-41.4	5	100.0	30.0	-36.7
3	20.0	13.4	-73.8	-55.8	-32.3	5	500.0	26.3	-29.3
3	50.0	12.3	-53.5	-35.5	-20.1				
3	100.0	11.4	-38.2	-20.2	-10.9				

Notes:  
 1) For effective areas between those given above the load may be interpolated, otherwise use the load associated with the lower effective area.  
 2) Plus and minus signs signify pressures acting toward and away from the building surfaces, respectively.  
 3) See pressure zone diagrams above for corresponding zones.  
 4) Roof coverings, finishes, etc. shall be design for the full negative design pressure.  
 5) Roof framing members shall be designed to resist the net uplift design pressure specified.  
 6) Net Uplift (ULT.) = 0.9 DL + 1.0 WL  
 Net Uplift (ASD) = 0.6 DL + 0.6 WL

1 WIND DESIGN CRITERIA



2 TYPICAL CONDUIT/PIPE DETAILS  
 SCALE: 3/4" = 1'-0"



DETAIL ADDED FOR PIPING LINES CONFLICTING W/ FOOTING.

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REVISIONS	BY

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Case No. 18-000002  
 New Building for  
**ARBY'S**  
 Store #6149  
 1055 Dunlawton Ave.  
 Port Orange, Florida

Date: 08.17.18  
 Scale: AS NOTED  
 Project Mgr: GEM  
 Drawn: RS  
 Job: 18-082  
 Sheet  
**S1.2**