WIND PRESSURES

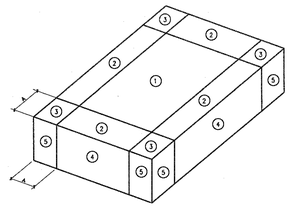
BASIC WIND SPEED (3-SECOND GUST) = 90 MPH
WIND IMPORTANCE FACTOR, I = 1.0
WIND EXPOSURE = B
MEAN ROOF HEIGHT= 49.75 FT MAX
INTERNAL PRESSURE COEFFICIENT, GCpi = 0.18
WIND PRESSURE q= 14.7 PSF

Kz= 0.81
Kzt= 1.00
Kd= 0.85

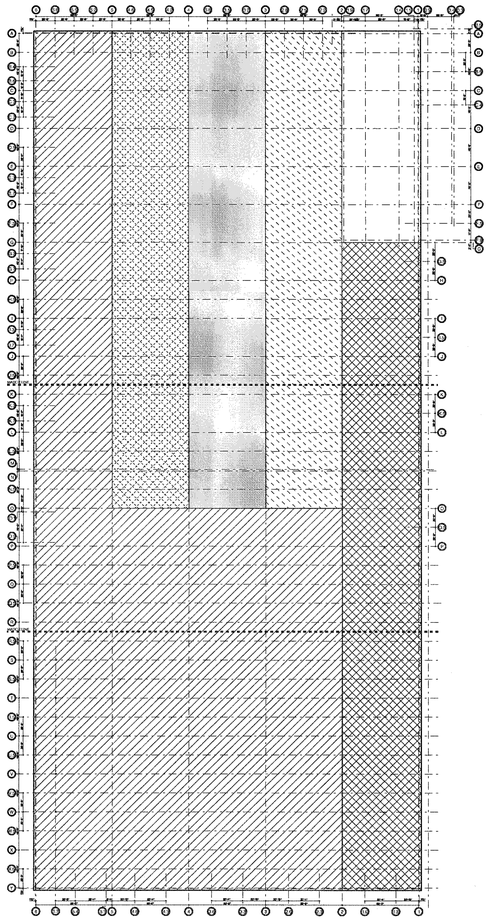
LEAST HORIZ. DIMENSION= 400.0 FT
EAVE HEIGHT= 49.33 FT
a= 20 FT

TYP. COMPONENTS & CLADDING WIND PRESSURES ON WALLS AND ROOFS							
POSITIVE			NEGATIVE				
AREA (SQ.FT.)	ZONE 4 (PSF)	ZONE 5 (PSF)	ZONE 1 (PSF)	ZONE 2 (PSF)	ZONE 3 (PSF)	ZONE 4 (PSF)	ZONE 5 (PSF)
10	17	17	-17	-29	-44	-19	-23
20	17	17	-17	-26	-36	-18	-22
50	16	16	-16	-22	-26	-17	-20
100	15	15	-16	-19	-19	-16	-18

1.) POSITIVE AND NEGATIVE SIGNS INDICATE PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACE, RESPECTIVELY.
2.) ZONES 1, 2, AND 3 ARE FOR ROOFS. ZONES 4 AND 5 ARE FOR WALLS.
3.) VALUES GIVEN ARE FOR 50 YEAR MRI(MEAN RECURRENCE INTERVAL) AS REQUIRED FOR STRENGTH CALCULATIONS.



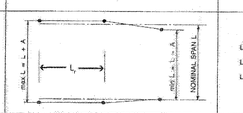
WIND PRESSURE ZONES



SLAB ON GRADE/LOADING DIAGRAM SCHEDULE				
DISCRIPTION	PRODUCT	WEIGHT (POUNDS)	VEHICLE FOOTPRINT	CONCENTRATED FLOOR LOAD
	MOTOR GRADER	38,000	6 TIRES	4,600 LBS
	PUMP TRUCK	108,000	22 TIRES	7,400 LBS
	FUTURE	N/A	TIRES	7,400 LBS
	EXCAVATOR	67,000	2 TRACKS	1,400 PLF
	PROTOTYPE	N/A	TIRES	7,400 LBS
	OFFICE	N/A	N/A	N/A

SLAB ON GRADE/LOADING DIAGRAM

TABLE 1.4.2-1

ITEM	FIGURE	OVERALL TOLERANCE	MAXIMUM RATE OF CHANGE
CRANE SPAN (L)		L<50' A=3/4" L>50'<100'A=1" L>100' A=1 1/4"	1/4" IN 20'-0"
STRAIGHTNESS (B)		B=3/4"	1/4" IN 20'-0"
ELEVATION (C)		C=3/4"	1/4" IN 20'-0"
RAIL-TO-RAIL ELEVATION (D)		L<50' D=±3/8" L>50'<100'D=±1/2" L>100' D=±5/8"	1/2" IN 20'-0"

CRANE RUNWAY TOLERANCES

1. CRANE RUNWAY STEEL HAS BEEN FABRICATED TO STANDARD AISC TOLERANCES.
2. SEE SPECIFICATION 05 21 00-3.15 FOR ADDITIONAL INFORMATION.

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Assembly Building Component & Cladding Wind Presure Diagrams

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