

WIND SPEED DESIGN REQUIREMENTS

THIS BUILDING SHALL BE DESIGNED WITH IBC SEC 1609 AS A FULLY ENCLOSED BLDG USING THE FOLLOWING INFORMATION:

WIND DESIGN DATA:

DETERMINATION OF WIND LOADS SHALL BE IN ACCORDANCE WITH IBC SEC 1609.3 (1), (2), OR (3) DEPENDING ON THE RISK CATEGORY

WIND SPEED V_{ult} = 143 MPH (IBC FIG 1609.3(1))

NOMINAL DESIGN WIND SPEED V_{asd} = 111 MPH ($V_{ult} \times (0.6)^{\frac{1}{2}}$)

RISK CATEGORY: CATEGORY II BLDG SURFACE ROUGHNESS = B

TOPOGRAPHIC FACTOR = 1 EXPOSURE = C

INTERNAL PRESSURE COEFFICIENT (ASCE 7-10 TABLE 26.11-1): ± 0.18

LIVE LOADS (IBC SEC 1607)

STORAGE WAREHOUSE, LIGHT DUTY (IBC TABLE 1607.1): 125 PSF

OFFICE LOBBIES & CORRIDORS 1ST FLOOR 100 PSF

OFFICES (IBC TABLE 1607.1): 50 PSF

ROOF LIVE LOADS (IBC TABLE 1607.1): 20 PSF UNIFORM, 300 LB CONCENTRATED

SNOW LOADS (IBC SEC 1608):

GROUND SNOW LOAD (IBC FIG 1608.2): 5 PSF