

3.1.2. Basic wind velocity

The basic wind velocity is the value of the 10-min. averaged wind velocities measured at 10-*m* height in an open field that has mean recurrence interval of 50 years (i.e., the annual probability of exceedance = 0.02). The basic wind velocity for Dubai has been estimated to be $V_b = 30 \text{ m/s}$ (108 *km/h*)., the basic wind velocity of 30 *m/s* calculated for averaging time of 10-min. corresponds to a basic wind velocity of 45 *m/s* (160 *km/h*) for averaging time of 3-*sec*. Although studies shows that dominant winds are from the north and the west, in light of all the other uncertainties that are discussed in the next section, the wind directionality is not considered as a factor in the calculation of wind loads.