## 1303.2200 SIMPLIFIED WIND LOADS.

Subpart 1. Section 2200.

A. This section applies to the wind loads for the main wind force-resisting systems only.

B. In order to utilize wind loads from this part, the building shall meet the following requirements:

- (1) 60 feet or less in height;
- (2) height not to exceed least horizontal dimension;
- (3) enclosed building;
- (4) roof shape flat, gabled, or hip;
- (5) roof slope of 45 degrees maximum;
- (6) simple diaphragm building;
- (7) not a flexible building;
- (8) regular shape and approximately symmetrical;
- (9) no expansion joints or separations; and

(10) no unusual response characteristics (for example: vortex shedding, galloping, or buffeting).

Subp. 2. Simplified design wind pressures.  $P_s$  represents the net pressures (sum of internal and external) to be applied to the horizontal and vertical projections of building surfaces. For the horizontal pressures,  $P_s$  is the combination of the windward and leeward net pressures.  $P_s$  may be determined from the following equation:

$$P_s = K_{zt} (V_{ult}^2 / 115^2) P_{alt}$$

where:

 $K_{zt}$  = Topographic factor as defined in Chapter 26 of ASCE 7.

 $P_{alt}$  = Alternative simplified design wind pressure from Table  $P_{alt}$ .

## TABLE $P_{alt}^{a}$

## Horizontal and Vertical Pressure<sup>b</sup>

Exp B	25 psf
Exp C	30 psf
Exp D	35 psf

## **Overhang Vertical Pressure**<sup>c</sup>

Exp B	-40 psf
Exp C	-48 psf
Exp D	-56 psf

<sup>*a*</sup>Values are for ultimate wind design ( $V_{ult}$ ). Multiply by 0.6 for allowable stress design (ASD).

<sup>b</sup>For vertical pressure, the above values are negative (upward).

<sup>c</sup>Negative values are upward.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.02; 326B.101; 326B.106; 326B.13* **History:** *32 SR 10; L 2007 c 140 art 4 s 61; art 13 s 4; 39 SR 91; 44 SR 537* **Published Electronically:** *November 13, 2019*