

Department of Labor and Industry

Proposed Permanent Rules Adopting Changes to Minnesota Provisions of the State Building Code

1303.2200 SIMPLIFIED WIND LOADS.

[For text of subpart 1, see Minnesota Rules]

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 Equation P_{alt} the following equation:

$$P_s = K_{zt} (V_{ult}^2 / 115^2) P_{alt} \text{ (Equation P}_{alt}\text{)}$$

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

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^{*b}

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

~~*For vertical pressure, the above values are negative (upward).~~

Overhang Vertical Pressure^{*c}

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

~~*Negative values are upward.~~

^aValues are for ultimate wind design (V_{ult}). Multiply by 0.6 for allowable stress design (ASD).

^bFor vertical pressure, the above values are negative (upward).

^cNegative values are upward.