

## ADVISORY COMMITTEE COMMENT FORM FOR PROPOSED CODE CHANGES

(This form must be submitted electronically)

SAC-3

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### Proposed Code Change - Language

#### **1303.2200 SIMPLIFIED WIND LOADS.**

**Section 2200.** Add Section 2200 as follows:

**Scope:**

1. This section applies to the wind loads for the main wind force-resisting systems only.
2. In order to utilize wind loads from this section, the building shall meet the following requirements:
  - a. 60 feet or less in height
  - b. Height not to exceed least horizontal dimension
  - c. Enclosed building
  - d. Roof shape – flat, gabled or hip
  - e. Roof slope of 45 degrees maximum
  - f. Simple diaphragm building
  - g. Not a flexible building
  - h. Regular shape and approximately symmetrical
  - i. No expansion joints or separations
  - j. No unusual response characteristics (i.e. vortex shedding, galloping or buffeting)

*(Continued)*

**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  $P_{alt}$ .

$$P_s = K_{zt} I_w (V_{alt}^2 / 115^2) P_{alt} \quad \text{(Equation } P_{alt}\text{)}$$

where:

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

~~$I_w$  = Importance factor as defined in Chapter 6 of ASCE 7.~~

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

**TABLE  $P_{alt}$**

***Horizontal and Vertical Pressure\****

Exp B	<del>15 psf</del> <u>25 psf</u>
Exp C	<del>19 psf</del> <u>30 psf</u>
Exp D	<del>22 psf</del> <u>35 psf</u>

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

***Overhang Vertical Pressure\****

Exp B	<del>-25 psf</del> <u>-40 psf</u>
Exp C	<del>-30 psf</del> <u>-48 psf</u>
Exp D	<del>-35 psf</del> <u>-56 psf</u>

\*Negative values are upward.

**Proposed Code Change – Need and Reason**

This change is necessary and reasonable in order to keep the Minnesota Building Code's simplified wind load procedure current with the procedural changes that have occurred in the International Building Code.

**Proposed Code Change – Cost/Benefit Analysis**

By maintaining the simplified wind load procedure, the cost of designing simple structures for wind loads is reduced.

**Other Factors to Consider Related to Proposed Code Change**

1. Is this proposed code change meant to:

change language contained in a published code book? If so, list section(s).

X change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s). 1303.2200

delete language contained in a published code book? If so, list section(s).

delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

neither; this language will be new language, not found in the code book or in Minnesota Rule.

2. Is this proposed code change required by a Minnesota Statute or new legislation? If so, please provide the citation to the Statute or legislation. No

3. Will this proposed code change impact other sections of a published code book or of an amendment in Minnesota Rule? If so, please list the affected sections or rule parts. No

4. Will this proposed code change impact other parts of the Minnesota State Building Code? If so, please list the affected parts of the Minnesota State Building Code. No

5. Who are the parties affected or segments of industry affected by this proposed code change? Building Owners, Contractors, Subcontractors, Architects, Professional Engineers and Code Officials

6. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result. No

7. Are you aware of any federal requirement or regulation related to this proposed code change? If so, please list the regulation or requirement. No