2009 International Building Code Errata

(Portions of text and tables not shown are unaffected by the errata)

SECOND PRINTING (Updated October 3, 2012)

CHAPTER 16 STRUCTURAL DESIGN

TABLE 1609.6.2(2) NET PRESSURE COEFFICIENTS

Revise table as follows:

For "3.Components and cladding in areas of discontinuities-roofs and overhangs", under "Gable or hipped configurations at ridges, eaves and rakes", Flat<Slope<6:12, Positive, 100 square feet or more, under "Partially enclosed" revise table entry from 10.72 to 0.72.

2009 International Building Code Errata

(Portions of text and tables not shown are unaffected by the errata)

1st through 5th PRINTING (Updated August 2, 2011)

CHAPTER 16 STRUCTURAL DESIGN

Table 1609.6.2(2)

Revise table as follows:

For "3.Components and cladding in areas of discontinuities-roofs and overhangs", under "Gable or hipped configurations at ridges, eaves and rakes", Flat<Slope<6:12, Positive, 100 square feet or more, under "Partially enclosed" revise table entry from 10.72 to 0.72.

NET PRESSURE COEFFICIENTS, C _{net} ","					
STRUCTURE OR PART THEREOF	DESCRIPTION		C _{net} FACTOR		
3. Components and cladding in areas of discontinuities – roofs and overhangs	Roof Elements and slopes		Enclosed	Partially Enclosed.	
	Gable or Hipped Configurations at Ridges, Eaves and Rakes (Zone 2)				
	Flat < Slope < 6:12 (27°) See ASCE 7 Figure 6-11C Zone 2				
	Positive	10 SF or less	0.58	0.89	
		100 SF or	0.41	10.72 0.72	

TABLE 1609.6.2(2)NET PRESSURE COEFFICIENTS, Cnet

2009 International Building Code Errata (Portions of text and tables not shown are unaffected by the errata)

SECOND PRINTING (Updated March 22, 2010)

CHAPTER 16 STRUCTURAL DESIGN

Table 1609.6.2(1)

WIND VELOCITY STAGNATION PRESSURE (qs) AT STANDARD HEIGHT OF 33 FEET^a

(No change to table or notes)

Table 1609.6.2(2) NET PRESSURE COEFFICIENTS, C_{net}^{a,b}

ROOFS:				
Wind perpendicular to ridge				
Leeward roof or flat roof				
Windward roof slopes:				
$S_{1000} = 2.12 (10^{\circ})$	Condition 1			
Slope = 2:12 (10°)	Condition 2			
Slope = 4:12 (18°)	Condition 1			
Slope = 4.12 (10)	Condition 2			
Slope = 5:12 (23°)	Condition 1			
Slope = 5.12(25)	Condition 2			
$Sland - 6:12 (27^{\circ})$	Condition 1			
Slope = 6:12 (27°)	Condition 2			
Sland 7:12 (20%)	Condition 1			
Slope = 7:12 (30°)	Condition 2			
$S_{1000} = 0.12 (27^{\circ})$	Condition 1			
Slope = 9:12 (37°)	Condition 2			
Slope = 12:12 (45°)				
Wind parallel to ridge and flat roofs				

Item 1. Main wind-force-resisting frames and systems systems (No change to portions of table or notes not shown)

2009 International Building Code Errata

(Portions of text and tables not shown are unaffected by the errata)

FIRST PRINTING (Updated April 20, 2009)

CHAPTER 16 STRUCTURAL DESIGN

TABLE 1604.5 OCCUPANCY CATEGORY OF BUILDINGS AND OTHER STRUCTURES OCCUPANCY NATURE OF OCCUPANCY CATEGORY

 Buildings and other structures containing adult education facilities, such as college and university, with an occupant load greater than 500.

(Portions on table not shown remain unchanged. Added comma in the bulleted item above.)

General. Buildings and other structures and portions thereof shall be designed to resist:

- 1. The load combinations specified in Section 1605.2, 1605.3.1 or 1605.3.2,
- 2. The load combinations specified in Chapters 18 through 23, and
- The load combinations with overstrength factor specified in Section 12.4.3.2 of ASCE 7 where required by Section 12.2.5.2, 12.3.3.3 or 12.10.2.1 of ASCE 7. With the simplified procedure of ASCE 7 Section 12.14, the load combinations with overstrength factor of Section 12.14.3.2 or of ASCE 7 shall be used.

Applicable loads shall be considered, including both earthquake and wind, in accordance with the specified load combinations.

Each load combination shall also be investigated with one or more of the variable loads set to zero.

Where the load combinations with overstrength factor in Section 12.4.3.2 of ASCE 7 apply, they shall be used as follows:

- 1. The basic combinations for strength design with overstrength factor in lieu of Equations 16-5 and 16-7 in Section 1605.2.1.
- 2. The basic combinations for allowable stress design with overstrength factor in lieu of Equations 16-12, 16-13 and 16-15 in Section 1605.3.1.
- 3. The basic combinations for allowable stress design with overstrength factor in lieu of Equations 16-20 and 16-21 in Section 1605.3.2.

1610.1 General. Foundation walls and retaining walls shall be designed to resist lateral soil loads. Soil loads specified in Table 1610.1 shall be used as the minimum design lateral soil loads unless determined otherwise by a geotechnical investigation in accordance with Section 1803. Foundation walls and other walls in which horizontalmovement is restricted at the top shall be designed for at-rest pressure. Retaining walls free to move and rotate at the top shall be permitted to be designed for active pressure. Design lateral pressure from surcharge loads shall be added to the lateral earth pressure load. Design lateral pressure shall be increased if soils at the site are expansive. Foundation walls shall be designed to support the weight of the full hydrostatic pressure of undrained backfill unless a drainage system is installed in accordance with Sections 1805.4.2 and 1805.4.3.

Exception: Foundation walls extending not more than 8 feet (2438 mm) below grade and laterally supported by <u>at the top by flexible diaphragms shall be permitted to be designed for active pressure.</u>

<u>1614.4.2.4</u> <u>1614.4.3.4</u> Vertical ties. Vertical ties shall consist of continuous or spliced reinforcing, continuous or spliced members, wall sheathing or other engineered systems. Vertical tension ties shall be provided in bearing walls and shall be continuous over the height of the building. The minimum nominal tensile strength for vertical ties within a bearing wall shall be equal to the weight of the wall within that story plus the weight of <u>the</u> diaphragm tributary to the wall in the story below. No fewer than two ties shall be provided for each wall. The strength of each tie need not exceed 3,000 pounds per foot (450 kN/m) of wall tributary to the tie for walls of masonry construction or 750 pounds per foot (140 kN/m) of wall tributary to the tie for walls of cold-formed steel light-frame construction.