

Errata to ASCE 7-98
Minimum Design Loads for Buildings and Other Structures

Updated: April 19, 2001

The following typographical errors are contained in the 1998 Edition of ASCE 7-98. This list will be periodically updated as warranted. The corrections are presented in strike-out and underline format for clarity.

Section 1: Table 1-1

1. The third bullet of the first section of Category III should read: "Buildings and other structures with elementary or secondary school facilities with capacity greater than ~~450~~ 250."
- b. The designation for Category IV applies only to the last section in the table which begins "Buildings and other structures designated as essential facilities..."
- c. The fifth section of the table should read: "Buildings and other structures that are equipped with secondary containment of toxic, explosive or other hazardous substances (including, but not limited to double wall tank, dike of sufficient size to contain a spill, or other means to contain a spill or a blast within the property boundary of the facility and prevent release of harmful quantities of contaminants to the air, soil, ground water, or surface water) or atmosphere (where appropriate)) shall be eligible for classification as a Category II structure. This reduced classification shall not be permitted for seismic loads."

(Note: Table 1-1 with these corrections incorporated is presented below.)

Section 2:

Revise Section 2.4.3 as follows:

2.4.3 Load Reduction: When structural effects due to two or more loads in combination with dead load, ~~but excluding earthquake load,~~ are investigated in load combinations of Sections 2.4.1 and 2.4.2, the combined effects due to the two or more loads multiplied by 0.75 plus effects due to dead loads shall not be less than the effects from the load combination of the dead load plus the load producing the largest effects.

Increases in allowable stress shall not be used with these loads or load combinations unless it can be demonstrated that such an increase is justified by structural behavior caused by rate or duration of load.

The load combinations including earthquake loads shall follow the requirements in Section 9.

Section 4: The english version of equation 4-1 and the metric equivalent are reversed.

Section 6: The title of Table 6-3B is "~~Net Pressure Coefficients~~ Design Wind Pressures"

Section 9:

1. On page 198 in Section A.9.9.6.2.1, the variables γ_1 through γ_7 need to be changed to Ψ_1 through Ψ_7 .
2. On page 201 in Eq. A.9.9.6-7a, the λ needs to be deleted.
3. On page 202 in Eq. A.9.9.6-9a, c_1 needs to be changed to c_{\min} .
4. On page 204 in Eq. A.9.9.6-18b, the leading 7 needs to be changed to 8 and the λ needs to be deleted.
5. On page 204 in Eq. A.9.9.6-19, Ψ_4 needs to be changed to Ψ_5 .
6. On page 204 in Section A.9.9.6.6.2.7, $\Psi=1.4$ needs to be changed to $\Psi_7=1.4$.
7. On page 205 in Section A.9.9.6.7.1, $\phi N_n > N_u$ needs to be changed to $\phi N_n \geq N_u$.
8. On page 205 in Section A.9.9.6.7.2, $N_u < 0.2\phi N_n$ needs to be changed to $N_u \leq 0.2\phi N_n$.
9. On page 205 in Section A.9.9.6.7.2, $\phi V_n > V_u$ needs to be changed to $\phi V_n \geq V_u$.

These corrections will bring this Section of ASCE 7-98 into agreement with Section 1913 of the 2000 IBC and Appendix A of the PCA publication "Strength Design of Anchorage to Concrete".

A.9.8.1.2 Allowable Stress Design

Second paragraph : The increase in allowable stress given in Part ~~2~~ III

Third paragraph : For structural members designed using Ref. 9.8-2, Section ~~A9.8.1.3.1~~ A9.8.1.3

A.9.8.1.3 Structural Steel Seismic Requirements

When using the provisions of Ref. 9.8-2 to compute the capacity of members to resist seismic forces, allowable stresses shall be converted into design strengths using the provisions of Part ~~H~~ III, Sections ~~3.2~~ 4.2 and ~~3.3~~ 4.3 of Ref 9.8-3

Also, Section ~~8.2C~~ 9.2c of Ref. 9.8-3 shall be deleted and replaced with the following: ~~8.2C~~ 9.2c Connection Strength

develop the strength criteria in Section ~~8.2a~~ 9.2a considering the expected value of yield strength and strain hardening.

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Revise Equations 5-7 and 5-8 as follows:

$$P_{\max} = C_p \gamma_w d_s + \underline{1.2 \gamma_w d_s} \quad (\text{Eq. 5-7})$$

$$F_t = 1.1 C_p \gamma_w d_s^2 + \underline{1.9 \gamma_w d_s^2} \quad (\text{Eq. 5-8})$$

Table 1-1
Classification of Buildings and Other Structures for Flood, Wind,
Snow, and Earthquake Loads

| Nature of Occupancy | Category |
|--|----------|
| Buildings and other structures that represent a low hazard to human life in the event of failure including, but not limited to: | I |
| <ul style="list-style-type: none"> § Agricultural facilities § Certain temporary facilities § Minor storage facilities | |
| All buildings and other structures except those listed in Categories I, III and IV | II |
| Buildings and other structures that represent a substantial hazard to human life in the event of failure including, but not limited to: | III |
| <ul style="list-style-type: none"> § Buildings and other structures where more than 300 people congregate in one area § Buildings and other structures with day-care facilities with capacity greater than 150 § Buildings and other structures with elementary school or secondary school facilities with capacity greater than 250 § Buildings and other structures with a capacity greater than 500 for colleges or adult education facilities § Health care facilities with a capacity of 50 or more resident patients but not having surgery or emergency treatment facilities § Jails and detention facilities § Power generating stations and other public utility facilities not included in Category IV | |
| Buildings and other structures containing sufficient quantities of toxic, explosive or other hazardous substances to be dangerous to the public if released including, but not limited to: | |
| <ul style="list-style-type: none"> § Petrochemical facilities § Fuel storage facilities § Manufacturing or storage facilities for hazardous chemicals § Manufacturing or storage facilities for explosives | |
| Buildings and other structures that are equipped with secondary containment of toxic, explosive or other hazardous substances (including, but not limited to double wall tank, dike of sufficient size to contain a spill, or other means to contain a spill or a blast within the property boundary of the facility and prevent release of harmful quantities of contaminants to the air, soil, ground water, or surface water) or atmosphere (where appropriate) shall be eligible for classification as a Category II structure. This reduced classification shall not be permitted for seismic loads. | |
| In hurricane prone regions, buildings and other structures that contain toxic, explosive, or other hazardous substances and do not qualify as Category IV structures shall be eligible for classification as Category II structures for wind loads if these structures are operated in accordance with mandatory procedures that are acceptable to the authority having jurisdiction and which effectively diminish the effects of wind on critical structural elements or which alternatively protect against harmful releases during and after hurricanes. | |
| Buildings and other structures designated as essential facilities including, but not limited to: | IV |
| <ul style="list-style-type: none"> § Hospitals and other health care facilities having surgery or emergency treatment facilities § Fire, rescue and police stations and emergency vehicle garages § Designated earthquake, hurricane, or other emergency shelters § Communications centers and other facilities required for emergency response § Power generating stations and other public utility facilities required in an emergency § Ancillary structures (including, but not limited to communication towers, fuel storage tanks, cooling towers, electrical substation structures, fire water storage tanks or other structures housing or supporting water or other fire-suppression material or equipment) required for operation of Category IV structures during an emergency § Aviation control towers, air traffic control centers and emergency aircraft hangers § Water storage facilities and pump structures required to maintain water pressure for fire suppression § Buildings and other structures having critical national defense functions | |