

2009 International Building Code Errata

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

TWELFTH PRINTING (Updated June 25, 2015)

CHAPTER 34 EXISTING STRUCTURES

TABLE 3412.8 MANDATORY SAFETY SCORES^a

OCCUPANCY	FIRE SAFETY (MFS)	MEANS OF EGRESS (MME)	GENERAL SAFETY (MGS)
A-1	46 <u>20</u>	27 <u>31</u>	27 <u>31</u>
A-2	49 <u>21</u>	30 <u>32</u>	30 <u>32</u>
A-3	48 <u>22</u>	29 <u>33</u>	29 <u>33</u>
A-4, E	23 <u>29</u>	34 <u>40</u>	34 <u>40</u>
B	24 <u>30</u>	34 <u>40</u>	34 <u>40</u>
F	20 <u>24</u>	30 <u>34</u>	30 <u>34</u>
M	49 <u>23</u>	36 <u>40</u>	36 <u>40</u>
R	47 <u>21</u>	34 <u>38</u>	34 <u>38</u>
S-1	45 <u>19</u>	25 <u>29</u>	25 <u>29</u>
S-2	23 <u>29</u>	33 <u>39</u>	33 <u>39</u>

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SEVENTH PRINTING (Updated October 3, 2012)

CHAPTER 34 EXISTING STRUCTURES

3412.6.9.1 Categories. The categories for fire alarm systems are:

1. Category a—None.
2. Category b—Fire alarm system with manual fire alarm boxes in accordance with Section ~~907.3~~ 907.4 of the *International Building Code* and alarm notification appliances in accordance with Section 907.5.2 of the *International Building Code*.
3. Category c—Fire alarm system in accordance with Section 907 of the *International Building Code*.
4. Category d—Category c plus a required emergency voice/alarm communications system and a fire command station that conforms to Section 403.4.5 of the *International Building Code* and contains the emergency voice/alarm communications system controls, fire department communication system controls, and any other controls specified in Section 911 of the *International Building Code* where those systems are provided.

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SECOND PRINTING (Updated March 22, 2010)

CHAPTER 34 EXISTING STRUCTURES

3403.4.1 Seismic. Seismic requirements for ~~alterations~~ additions shall be in accordance with this section. Where the existing seismic force-resisting system is a type that can be designated ordinary, values of R , Ω_0 and C_d for the existing seismic force-resisting system shall be those specified by this code for an ordinary system unless it is demonstrated that the existing system will provide performance equivalent to that of a detailed, intermediate or special system. *(Note: Add comma in last sentence.)*

3405.1 General. Buildings and structures, and parts thereof, shall be repaired in conformance with this section and Section 3401.2. Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the repair and shall not be subject to the requirements for alterations in this chapter. Routine maintenance required by Section 3401.2, ordinary repairs exempt from *permit* in accordance with Section 105.2, and abatement of wear due to normal service conditions shall not be subject to the requirements for repairs in this section.

3405.2.1 Evaluation. The building shall be evaluated by a *registered design professional*, and the evaluation findings shall be submitted to the code official. The evaluation shall establish whether the damaged building, if repaired to its pre-damage state, would comply with the provisions of this code for wind and earthquake loads. Evaluation for earthquake loads shall be required if the substantial structural damage was caused by or related to earthquake effects or if the building is in Seismic Design Category C, D, E or F.

Wind loads for this evaluation shall be those prescribed in Section 1609. Earthquake loads for this evaluation, if required, shall be permitted to be 75 percent of those prescribed in Section 1613. Values of R , Ω_0 and C_d for the existing seismic force-resisting system shall be those specified by this code for an ordinary system unless it is demonstrated that the existing system will provide performance equivalent to that of an intermediate or special system.

3408.4 Change of occupancy Seismic. When a change of occupancy results in a structure being reclassified to a higher occupancy category, the structure shall conform to the seismic requirements for a new structure of the higher occupancy category. Where the existing seismic force-resisting system is a type that can be designated ordinary, values of R , Ω_0 and C_d for the existing seismic force-resisting system shall be those specified by this code for an ordinary system unless it is demonstrated that the existing system will provide performance equivalent to that of a detailed, intermediate or special system.

Exceptions:

1. Specific seismic detailing requirements of ~~this code or~~ Section 1613 for a new structure shall not be required to be met where ~~it can be shown that the level of performance and seismic safety~~ the seismic performance is shown to be equivalent to that of a new structure. ~~Such analysis~~ A demonstration of equivalence shall consider the regularity, over strength, redundancy and ductility of the structure ~~within the context of the existing and retrofit (if any) detailing provided.~~
2. When a change of use results in a structure being reclassified from Occupancy Category I or II to Occupancy Category III and the structure is located in a seismic map area where the seismic coefficient $S_{DS} \leq \square$ is less than 0.33, compliance with the seismic requirements of ~~this code and~~ Section 1613 ~~is~~ are not required.

3412.6.2.1 Allowable area formula. The following formula shall be used in computing allowable area:

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$$A_a = (1 + I_f + I_s) \times A_t \quad \text{(Equation 34-2)}$$

where:

A_a = Allowable area.

A_t = Tabular area per story in accordance with Table 503 (square feet)

I_s = Area increase factor for sprinklers (Section 506.3).

I_f = Area increase factor for frontage (Section 506.2).

3412.6.16.1 Categories. The categories for mixed occupancies are:

1. Category a—Occupancies separated by minimum 1-hour fire barriers or minimum 1-hour horizontal assemblies, or both.
2. Category b—Separations between occupancies in accordance with Section 508.4.
3. Category c—Separations between occupancies having a *fire-resistance rating* of not less than twice that required by Section ~~508.3.3~~ 508.4.

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FIRST PRINTING (Updated April 20, 2009)

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3405.3.1 Lateral force-resisting elements. Regardless of the level of damage to vertical elements of the lateral force-resisting system, if substantial structural damage to gravity load-carrying components was caused primarily by wind or earthquake effects, then the building shall be evaluated in accordance with Section 3404.2.1 and, if noncompliant, rehabilitated in accordance with Section ~~3404.2.3~~ 3405.2.3.

3412.6.9.1 Categories. The categories for fire alarm systems are:

1. Category a—None.
2. Category b—Fire alarm system with manual fire alarm boxes in accordance with Section 907.3 and alarm notification appliances in accordance with Section ~~907.9~~ 907.5.
3. Category c—Fire alarm system in accordance with Section 907.
4. Category d—Category c plus a required emergency voice/alarm communications system and a fire command center that conforms to Section 403.8 and contains the emergency voice/alarm communications system controls, fire department communication system controls and any other controls specified in Section 911 where those systems are provided.

**TABLE 3412.6.15
MEANS OF EGRESS EMERGENCY LIGHTING VALUES**

NUMBER OF EXITS REQUIRED BY SECTION 1010 <u>1015</u>	CATEGORIES		
	a	b	c

(Portions of table not shown do not change)

3412.6.16 Mixed occupancies. Where a building has two or more occupancies that are not in the same occupancy classification, the separation between the mixed occupancies shall be evaluated in accordance with this section. Where there is no separation between the mixed occupancies or the separation between mixed occupancies does not qualify for any of the categories indicated in Section 3412.6.16.1, the building shall be evaluated as indicated in Section 3412.6 and the value for mixed occupancies shall be zero. Under the categories and occupancies in Table ~~3412.6.16~~ 3410.6.16, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.16, Mixed Occupancies, for fire safety and general safety. For buildings without mixed occupancies, the value shall be zero.