

EVALUATION OF A CHANGE IN OCCUPANCY FROM F-1 to R-2  
2005 CONNECTICUT STATE BUILDING CODE

PART B - CT Building Code

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EVALUATION OF A CHANGE OF OCCUPANCY FROM F-1 TO B  
2005 CONNECTICUT STATE BUILDING CODE

**Selected Relevant Code Sections (CSBC):**

**[EB] SECTION 3403 ADDITIONS, ALTERATIONS OR REPAIRS**

**3403.1 Existing buildings or structures.** Additions or alterations to any building or structure shall conform with the requirements of the code for new construction. Additions or alterations shall not be made to an existing building or structure which will cause the existing building or structure to be in violation of any provisions of this code. An existing building plus additions shall comply with the height and area provisions of Chapter 5. Portions of the structure not altered and not affected by the alteration are not required to comply with the code requirements for a new structure.

**Exception:** For buildings and structures in flood hazard areas established in Section 1612.3, any additions, alterations or repairs that constitute substantial improvement of the existing structure, as defined in Section 1612.2, shall comply with the flood design requirements for new construction and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design.

**3403.2 Structural.** Additions or alterations to an existing structure shall not increase the force in any structural element by more than 5 percent, unless the increased forces on the element are still in compliance with the code for new structures, nor shall the strength of any structural element be decreased to less than that required by this code for new structures. Where repairs are made to structural elements of an existing building, and uncovered structural elements are found to be unsound or otherwise structurally deficient, such elements shall be made to conform to the requirements for new structures.

**3403.2.1 Existing live load.** Where an existing structure heretofore is altered or repaired, the minimum design loads for the structure shall be the loads applicable at the time of erection, provided that public safety is not endangered thereby.

**3403.2.2 Live load reduction.** If the approved live load is less than required by Section 1607, the areas designed for the reduced live load shall be posted in with the approved load. Placards shall be of an approved design.

**3403.3 Nonstructural.** Nonstructural alterations or repairs to an existing building or structure are permitted to be made of the same materials of which the building or structure is constructed, provided that they do not adversely affect any structural member or the fire-resistance rating of any part of the building or structure.

**3403.4 Stairways.** An alteration or the replacement of an existing stairway in an existing structure shall not be required to comply with the **maximum riser height and minimum tread depth** requirements of a new stairway as outlined in Section 1009.3 where the existing space and construction will not allow a reduction in pitch or slope.

**(Add) 3403.5 Means of egress.** In addition to the requirements of this code, means of egress in existing buildings undergoing additions, alterations or repairs shall meet the requirements of the provisions of Part IV of the Connecticut State Fire Safety Code for the proposed occupancy.

**[EB] SECTION 3406 CHANGE OF OCCUPANCY**

**3406.1 Conformance.** No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancy or in a different group of occupancies, unless such building is made to comply with the requirements of this code for such division or group of occupancy. Subject to the approval of the building official, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all the requirements of this code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

**3406.1.1 Determination of hazard.** For the purposes of Section 3406.1, the determination of hazard category shall be made in accordance with Section 812.4.1 of the 2003 *International Existing Building Code*.

**812.4.1 Means of egress, general.** Hazard categories in regard to life safety and means of egress shall be in accordance with Table 812.4.1

Table 812.4.1  
HAZARD CATEGORIES AND CLASSIFICATIONS:  
LIFE SAFETY AND EXITS

RELATIVE HAZARD	OCCUPANCY CLASSIFICATION
1 (Highest Hazard)	H
2	I-2, I-3, I-4
3	A, E, I-1, M, R-1, R-2, R-4
4	B, F-1, R-3, S-1
5 (Lowest Hazard)	F-2, S-2, U

**3406.2 Certificate of occupancy.** A certificate of occupancy shall be issued where it has been determined that the requirements for the new occupancy classification have been met.

**3406.3 Stairways.** Existing stairways in an existing structure shall not be required to comply with the **maximum riser height and minimum tread** requirements of a new stairway as outlined in Section 1009.3 where the existing space and construction will not allow a reduction in pitch or slope.

(Add) 3406.4 Means of egress. In addition to the requirements of this code, means of egress in existing buildings undergoing change of occupancy shall meet the requirements of the provisions of Part IV of the Connecticut State Fire Safety Code for the proposed occupancy.

## Code Interpretation by ICC:

Code Interpretation No. 47/105/78

**QUESTION:** Does Section 3406.1 apply only to changes in occupancy involving special uses and occupancies identified in Chapter 4?

**ANSWER:** No. The intent of section 3406.1 is that the code official be notified of and act to approve or deny any change in occupancy. Change of occupancy is a change in the purpose or level of activity within a structure that involves a change in application of the requirements of this code. The extent of code compliance for the existing building involved in the change of occupancy depends on the code official's determination of the intent of the provisions of law for the new use and occupancy. The primary consideration is to determine that no greater hazard to public safety or welfare results because of a change in occupancy.

## Code Commentary by ICC:

**3406.1 Conformance:** A change in occupancy in an existing structure may change the level of inherent hazards that the code was initially intended to address.

Regardless of whether the change is to an occupancy considered to be more or less hazardous, this section applies the provisions of the code for new construction to an existing structure having a new occupancy. This is done so that the applicable code requirements adequately address the specific hazards of the new occupancy. For example, a change from an existing mercantile occupancy to a business occupancy renders all Group B provisions applicable to all portions of the structure where the occupancy has changed.

This section is one of the most frequently used provisions of the code for application to existing structures, since the occupancy in a building or structure is subject to change during the life of the building.

## Evaluation of Code Provisions:

Some code provisions are specifically identified as applicable to the occupancy group involved.

Note: The more restrictive requirement has been shaded and double bordered =>

SPECIAL PROVISION	REQUIREMENT FOR F-1	REQUIREMENT FOR R-2
106.1.2 Means of Egress - Number of Occupants to be designated on documents	Required	Not required
302.1.1 Incidental Use Areas - Protection/Separation	Required	Not required within dwelling units
302.3.2 Mixed Use Separation	Separation more restrictive than R-2 in most Occupancy groups, except H.	Less restrictive than F-1, except H and S-2 are more restrictive.
503 & T503 Height and Area Limitations (nic increases)	More restrictive than R-2 for all Construction Types except Type I and IIA.	Less restrictive than F-1 for all Construction Types except Type I and IIA.
T602 - Exterior Wall Fireresistance Ratings	2 hrs < 5 ft. 2 hr > 5 to < 10 for Type 1A	1 hr < 5 ft. 1 hr ≥ 5 to < 10 for Type 1A
705.4, T705.4 Fire Wall Fireresistance Ratings	3 hr.	3 hr except 2 hr in Type II or V
803.5, T803.5 Interior Wall & Ceiling Finish Classifications	Less restrictive than R-2	More restrictive in exits and corridors of non-sprinklered buildings.
903.2 (Automatic Sprinkler Systems) Where required	Throughout all buildings where fire area exceeds 12,000 s.f., or if more than 3 stories above grade, or if all F-1 fire areas exceed 24,000 s.f.	Throughout all buildings with R-2 Fire area. NFPA 13R system OK up to 4 stories above grade and 60 feet in height.
905 Standpipe Systems	Same as for R-2	Same as for F-1
907 Fire Alarm and Detection Systems	Manual Fire Alarm required if 2 or more stories and occupant load of 500 or more above or below lowest level of exit discharge. Exception for sprinklers.	Manual fire alarm required if 3 or more stories above lowest level of exit discharge, or more than 1 story below the highest level of exit discharge, or if building contains more than 11 dwelling or sleeping units. Some exceptions for sprinklers.
907.2.10 Single- and Multiple-Station Smoke Detectors	Not Required	Required in sleeping rooms, outside of sleeping rooms, and on each level.
1003.2 Ceiling Height	7 ft - 6 inches	7 ft. - 6 inches

SPECIAL PROVISION	REQUIREMENT FOR F-1	REQUIREMENT FOR R-2
1004.1.2, T1004.1.2 - Occupant Load	100 gsf per person	200 gsf per person
1005.1, T1005.1 - Egress Width per Occupant	Same as for R-2	Same as for F-1
1008.1.8.6 Delayed egress locks	Same as for R-2	Same as for F-1
1008.1.8.3 Locks & Latches	F-1 allows main exterior doors to be locked with conditions.	R-2 allows security locks for dwelling unit entry door if operable from inside.
1010.5.1 (Egress Ramp) Width	Same as for R-2	Same as for F-1
1012.3 (Guard) Opening Limitations	Areas not open to the public can have 21" sphere not pass	4" sphere not pass
1013.3 Common path of egress travel	F-1 allows 100 feet in a sprinklered building.	R-2 allows 75 feet.
1014.1, T1014.1 - Spaces with One Means of Egress	F-1 allows 50 occupants.	R-2 allows 10- occupants.
1015.1, T1015.1 - Length of Exit Access Travel	200 / 250 ft unsprinklered / sprinklered	200 / 250 ft unsprinklered / sprinklered
1016.1, T1016.1 - Corridor Fire Resistance Rating	F-1 greater than 30 occupants - 1 hour or 0 hour w/ sprinklers	R-2 greater than 1- occupants - ½ hour with sprinklers.
1016.2 Corridor Width	Same as for R-2	Same as for F-1
1018.1, T1018.2 - Buildings with One Exit	F-1: 2 stories, 30 occupants and 75 ft. travel	R-2: 1 story, 10 occupants and 75 ft. travel OR 2 story, 4 d.u. and 50 ft. travel, with sprinklers.
1019 Vertical Exit Enclosures	Same as for R-2	Same as for F-1
Chapter 11, Accessibility	F-1 required based on scope of work	R-2 special requirements Type A and Type B dwelling units.
1203.1 Mechanical Ventilation / Mechanical Code T-403.3	Not generally regulated except for some specific occupancies.	R-2 Specific requirements more restrictive than for F-1
1301.1 Energy Conservation	Per International Energy Conservation Code 2006	Per International Energy Conservation Code 2006
1607.0, T1607.1 Live Loads	Light Mfg. - 125 psf Heavy Mfg. - 250 psf	Private rooms and corridors serving them - 40 psf Public rooms and corridors serving them - 100 psf
1607.0, T1607.1 Concentrated Loads	Light - 2000 lbs. Heavy - 3000 lbs.	None

SPECIAL PROVISION	REQUIREMENT FOR F-1	REQUIREMENT FOR R-2
1616.2, T1604.5 (footnote a) Seismic Use Group	Seismic Use Group I Exceptions - see Table 1604.5	Seismic Use Group I Exceptions - see Table 1604.5
2902.1, T2902.1 Minimum Number of Plumbing Facilities	wc - 1 / 100 occupants	wc - 1 / d.u.
	lav - 1 / 100 occupants	lav - 1 / d.u.
	df - 1 / 400 occupants	df - none
3004.1 (Hoistway Venting) Requirements	F-1 - not required in sprinklered building	R-2 - Required for hoistways penetrating more than 3 stories, even if sprinklered.

## Summary and Conclusions:

1. The 2005 Connecticut State Building Code specifically addresses Change of Occupancy in Section 3406.1, and requires both the Code Official's approval; and his/her certification that the structure meets code provisions applicable to the proposed new occupancy, and that the Change of Occupancy does not result in any greater hazard to public safety or welfare.
2. If the requirements for the new Use Group or occupancy are *less* restrictive than those for the old (pre-existing) Use Group or occupancy, then no change is required.
3. If the requirements for the new Use Group or occupancy are *more* restrictive than those for the old (pre-existing) Use Group or occupancy, then that aspect of the building or structure must be altered or changed to comply with the more restrictive requirement for the new Use Group or occupancy.
4. In a Change of Occupancy from Use Group F-1 to Use Group R-2, where specific requirements for Use Group R-2 are more restrictive than those for Use Group F-1, the requirements for Use Group R-2 must be met whether or not the requirement relates directly to an item of new work.
5. In a Change of Occupancy from Use Group F-1 to Use Group R-2, where requirements for both Use Groups are the same, there is no requirement to retroactively invoke the specific requirement in an existing non-conforming building, unless the requirement relates directly to an item of new work. (The requirements of the 2005 Connecticut State Fire Safety Code are retroactive for existing buildings and would apply regardless of whether any particular provision relates to an item of new work or simply to the existing building.)

END OF EVALUATION