# CHAPTER 8 CHANGE OF OCCUPANCY

#### SECTION 801 GENERAL

**801.1** *Rehabilitation* with no change of occupancy classification. Any *rehabilitation* work undertaken in connection with a change of *use* that does not involve a change of occupancy classification as described in the *Dallas Building Code* shall conform to the applicable requirements for the work as classified in Chapter 3 and to the requirements of Sections 802 through 811.

#### **Exceptions:**

- 1. Compliance with all of the provisions of Chapter 7 is not required where the change of occupancy classification complies with the requirements of Section 812.3.
- 2. As modified in Section 1005 for historic buildings.
- 3. As permitted in Chapter 12.

**801.2 Partial change of occupancy group.** Where a portion of an existing building is changed to a new occupancy group, Section 812 shall apply.

**801.3 Certificate of occupancy required.** A certificate of occupancy shall be issued where a change of occupancy occurs that results in a different occupancy classification as determined by the *Dallas Building Code*.

**801.4 Special uses or occupancies.** Special uses or occupancies as listed in Section 802.1 shall comply with the building code regardless of whether a change of occupancy group is involved.

# SECTION 802 SPECIAL USE AND OCCUPANCY

**802.1 Compliance with the building code.** Where the character or use of an existing building or part of an existing building is changed to one of the following special use or occupancy categories as defined in Chapter 4 of the *Dallas Building Code*, the building shall comply with the applicable requirements of the *Dallas Building Code*.

- 1. Covered mall buildings.
- 2. Atriums.
- 3. Motor vehicle related occupancies.
- 4. Aircraft related occupancies.
- 5. Motion picture projection rooms.
- 6. Stages and platforms.
- 7. Special amusement buildings.
- 8. Hazardous materials.

**802.2 Underground buildings.** An underground building in which there is a change of use shall comply with the requirements of *Section 405* of the *Dallas Building Code*.

# SECTION 803 BUILDING ELEMENTS AND MATERIALS

**803.1 General.** Building elements and materials in portions of buildings undergoing a change of occupancy classification shall comply with Sections *503.3* and 812.

#### SECTION 804 FIRE PROTECTION

**804.1 General.** Fire protection requirements of Section 812 shall apply where a building or portions thereof undergo a change of occupancy classification.

#### SECTION 805 MEANS OF EGRESS

**805.1 General.** Means of egress in portions of buildings undergoing a change of occupancy classification shall comply with Section 812.

#### SECTION 806 ACCESSIBILITY

**806.1 General.** Accessibility in portions of buildings undergoing a change of occupancy classification shall comply with Section 812.5.

#### SECTION 807 STRUCTURAL

**807.1 Gravity loads.** Buildings or portions thereof subject to a change of occupancy where such change in the nature of occupancy results in higher uniform or concentrated loads based on Tables 1607.1 and 1607.6 of the *Dallas Building Code* shall comply with the gravity load provisions of the *Dallas Building Code*.

**Exception:** Structural elements whose stress is not increased by more than 5 percent.

**807.2** Snow and wind loads. Buildings and structures subject to a change of occupancy where such change in the nature of occupancy results in higher wind or snow importance factors based on Table 1604.5 of the *Dallas Building Code* shall be analyzed and shall comply with the applicable wind or snow load provisions of the *Dallas Building Code*.

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**Exception:** Where the new occupancy with a higher importance factor is less than or equal to 10 percent of the total building floor area. The cumulative effect of the area of occupancy changes shall be considered for the purposes of this exception.

**807.3 Seismic loads.** Existing buildings with a change of occupancy shall comply with the seismic provisions of Sections 807.3.1 and 807.3.2.

**807.3.1** Compliance with the *Dallas Building Code*. When a building or portion thereof is subject to a change of occupancy such that a change in the nature of the occupancy results in a higher seismic factor based on Table 1604.5 of the *Dallas Building Code* or *when a* change of occupancy results in a building *being reclassified* to a higher hazard category as shown in Table 812.4.1 and a change of a Group M occupancy to a Group A, E, I-1, R-1, R-2, or R-4 occupancy with two-thirds or more of the floors involved in *reconstruction* work, the building shall conform to the seismic requirements of the *Dallas Building Code* for the new seismic use group.

#### **Exceptions:**

- 1. Group M occupancies being changed to Group A, E, I-1, R-1, R-2, or R-4 occupancies for buildings less than six stories in height and in Seismic Design Category A, B, or C.
- 2. Specific detailing provisions required for a new structure are not required to be met where it can be shown that an acceptable level of performance and seismic safety is obtained for the applicable seismic use group using reduced *Dallas Building Code* level seismic forces as specified in Section 508.1.1.3. The rehabilitation procedures shall be approved by the code official and shall consider the regularity, over-strength, redundancy, and ductility of the lateral-load-resisting system within the context of the existing detailing of the system.
- 3. Where the area of the new occupancy with a higher hazard category is less than or equal to 10 percent of the total building floor area and the new occupancy is not classified as Seismic Use Group III For the purposes of this exception, where a structure is occupied for two or more occupancies not included in the same seismic use group, the structure shall be assigned the classification of the highest seismic use group corresponding to the various occupancies. Where structures have two or more portions that are structurally separated in accordance with Section 1620 of the Dallas Building *Code*, each portion shall be separately classified. Where a structurally separated portion of a structure provides required access to, required egress from, or shares life safety components with another portion having a higher seismic use group, both portions shall be assigned the higher seismic use group. The cumulative effect of the area of occupancy changes shall be considered for the purposes of this exception.

- 4. When the new occupancy with a higher hazard category is within only one story of a building or structure, only the lateral-force-resisting elements in that story and all lateral-force-resisting elements below that story shall be required to comply with Section 807.3.1 and Exception 2. The lateral forces generated by masses of such upper floors shall be included in the analysis and design of the lateral-force-resisting systems for the strengthened floor. Such forces may be applied to the floor level immediately above the topmost strengthened floor and be distributed in that floor in a manner consistent with the construction and layout of the exempted floor.
- 5. Unreinforced masonry bearing wall buildings in Seismic Use Group *I* and in Seismic Use Groups *I* and *II* when in Seismic Design Categories A, B, and C shall be allowed to be strengthened to meet the requirements of FEMA 302, *1997 NEHRP Recommended Provisions for Seismic Regulations for New Buildings and Other Structures.*

**807.3.2** Access of Seismic Use Group III. Where the change of occupancy is such that compliance with Section 807.3.1 is rand the seismic use group is a Category *III*, the operational access to such Seismic Use Group *III* existing structures shall not be through an adjacent structure.

**Exception:** Where the adjacent structure conforms to the requirements for Seismic Use Group *III* structures.

Where operational access is less than 10 feet (3048 mm) from an interior lot line or less than 10 feet (3048 mm) from another structure, access protection from potential falling debris shall be provided by the owner of the Seismic Use Group *III* structure.

#### SECTION 808 ELECTRICAL

**808.1 Special occupancies.** Where the *character of use* of an existing building or part of an existing building is changed to one of the following special occupancies as described in the *Dallas Electrical Code*, the electrical wiring and equipment of the building or portion thereof that contains the proposed occupancy shall comply with the applicable requirements of the *Dallas Electrical Code regardless of* whether a change of occupancy group is involved:

- 1. Hazardous locations.
- 2. Commercial garages, repair, and storage.
- 3. Aircraft hangers.
- 4. Gasoline dispensing and service stations.
- 5. Bulk storage plants.
- 6. Spray application, dipping, and coating processes.
- 7. Health care facilities.
- 8. Places of assembly.
- 9. Theatres, audience areas of motion picture and television studios, and similar locations.

- 10. Motion picture and television studios and similar locations.
- 11. Motion picture projectors.
- 12. Agricultural buildings.

**808.2 Unsafe conditions.** Where the occupancy of an existing building or part of an existing building is changed, all unsafe conditions shall be corrected without requiring that all parts of the electrical system be brought up to the current edition of the *Dallas Electrical Code*.

**808.3 Service upgrade.** Where the occupancy of an existing building or part of an existing building is changed, electrical service shall be upgraded to meet the requirements of the *Dallas Electrical Code* for the new occupancy.

**808.4 Number of electrical outlets.** Where the occupancy of an existing building or part of an existing building is changed, the number of electrical outlets shall comply with the *Dallas Electrical Code* for the new occupancy.

#### SECTION 809 MECHANICAL

**809.1** *General* requirements. Where the *use* of an existing building or part of an existing building is changed such that the new *use* is subject to different kitchen exhaust requirements or to increased mechanical ventilation requirements in accordance with this section and Table 809.3 of this code, the materials and installation methods shall comply with Section 503.3 of this code.

**809.1.1 Ventilation requirements.** All spaces intended for human occupancy shall be provided with natural or mechanical ventilation. A building intended to be used as a public school shall be mechanically ventilated.

**809.2** Natural ventilation—general. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers or other openings to the outdoors. The minimum openable area to the outdoors shall be 4 percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least 8 percent of the floor area of the interior room or space, but not less than 25 square feet  $(2.3 \text{ m}^2)$ . The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

**809.3 Mechanical ventilation—general.** Spaces intended to be mechanically ventilated shall comply with the following:

- 1. If the occupancy of a building is changed and the new occupancy would require the same or a lesser amount of outdoor air based on the equations listed in Table 809.3.1, no change to the mechanical ventilation system is required.
- 2. If the occupancy of a building is changed and the new occupancy would require a greater amount of outdoor air based on the equations listed in Table 809.3.1, the HVAC system shall be upgraded to satisfy the requirements of Table 809.3 for the new occupancy. As an alternative to

providing the amount of outdoor air required by Table 809.3, the indoor air quality procedure of ASHRAE 62-2001 can be used.

- 3. Residential buildings that are intended to be mechanically ventilated shall be provided with the ventilation specified in the Dallas Mechanical Code.
- 4. When the use of a building is changed to a health care facility, mechanical ventilation shall be provided as required by the Dallas Mechanical Code.

**809.4 Cooking equipment ventilation.** A commercial hood and an automatic fire suppression system that comply with the Dallas Mechanical Code shall be required for commercial cooking equipment producing grease-laden vapors, except in Use Groups R-2, R-3 and R-4. No suppression system shall be required for completely enclosed ovens, steam tables or similar equipment.

*Exception:* Bed and breakfast homestay facilities, which are designed to accommodate five or fewer guests, shall not be required to comply with this provision.

**809.5 Special ventilation.** All newly introduced devices, equipment or operations that produce air-borne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities as to be irritating or injurious to health shall be provided with local exhaust in accordance with the Dallas Mechanical Code.

# SECTION 810 PLUMBING

**810.1 Increased demand.** Where the *use* of an existing building or part of an existing building is changed such that the new *use* is subject to increased or different plumbing fixture requirements *according to Table 810.6 of this code* or to increased water supply requirements, *materials and installation methods shall comply with Section 503.3 of this code*.

**810.2 Food handling occupancies.** If the new occupancy is a food handling establishment, all existing sanitary waste lines above the food or drink preparation or storage areas shall be panned or otherwise protected to prevent leaking pipes or condensation on pipes from contaminating food or drink. New drainage lines shall not be installed above such areas and shall be protected in accordance with the *Dallas Plumbing Code*.

**810.3 Interceptor required.** If the new occupancy will produce grease or oil-laden wastes, interceptors shall be provided as required in the *Dallas Plumbing Code*.

**810.4 Chemical wastes.** If the new occupancy will produce chemical wastes, the following shall apply:

- 1. If the existing piping is not compatible with the chemical waste, the waste shall be neutralized prior to entering the drainage system, or the piping shall be changed to a compatible material.
- 2. No chemical waste shall discharge to a public sewer system without the approval of the sewage authority.

**810.5 Group I-2.** If the occupancy group is changed to Group I-2, the plumbing system shall comply with the applicable requirements of the *Dallas Plumbing Code*.

#### CHANGE OF OCCUPANCY

OCCUPANCY	P/1,000 SQ.FT.	CFM/PERSON	OCCUPANCY	P/1000 SQ.FT.	CFM/PERSON
Correction Facilities			Hotels, Motels, Resorts, Dormitories		
Cells	20	20	Assembly Rooms	120	15
Dining Halls	100	15	Conference Rooms	50	20
Guard Stations	40	15	Dormitory Sleep Areas	20	15
			Gambling Casinos	120	30
			Lobbies	30	15
Dry Cleaner, Laundries			Offices		
Commercial Dry Cleaners	30	30	Conference Rooms	50	20
Commercial Laundries	10	25	Office Spaces	7	20
Coin-operated Dry Cleaners	20	15	Reception Areas	60	20
Coin-operated Laundries	20	15	Telecommunicatios Centers/Data Entry	60	20
Storage Pick-up	30	35			
Education			Public Spaces		
Auditorium	150	15	Corridors and Utilities		0.05
Classrooms	50	15	Elevators		1.0
Corridors		0.1	Locker & Dressing Rooms		0.5
Laboratories	50	20	Public Restrooms		75 cfm per water closet or urinal
Libraries	20	15			
Locker Rooms		0.5			
Music Rooms	50	15			
Training Shops	30	20			
Food & Beverage Service			Retail Stores, Sales Floors & Showroom Floors		
Bars & Cocktail Lounges	100	30	Basement & Street		0.3
Cafeteria, fast food	100	20	Dressing Rooms		0.2
Dining Rooms	70	15	Malls & Arcades		0.2
Kitchens (cooking)	20	15	Shipping & Receiving		0.15
Hospitals-Nursing & Convalescent Homes			Storage Rooms		0.15
Autopsy Rooms		0.5	Upper Floors		0.2
Med Procedure Rooms	20	15	Warehouses		0.05
Operating Rooms	20	30			
Patient Rooms	10	25			
Physical Therapy	20	15			
Recovery & ICU	20	15			

# TABLE 809.3 OUTDOOR AIR RATES BASED ON OCCUPANCY TYPE

OCCUPANCY	P/1000 SQ.FT.	CFM/PERSON		
Smoking Lounges	70	60		
Specialty Shops				
Automotive Service		1.5		
Barber	25	15		
Beauty	25	25		
Clothes & Furniture		0.3		
Florists	8	15		
Hardware, drug, fabric	8	15		
Pet Shops		1.0		
Reducing Salons	20	15		
Supermarkets	8	15		
Sports & Amusement				
Ballrooms & Discos	100	25		
Bowling Alleys (Seating Areas)	70	25		
Game Rooms	70	25		
Ice Arenas		0.5		
Playing Floors (gym)	30	20		
Spectator Areas	150	15		
Swimming Pools (pool & deck area)		0.5		
Storage				
Repair Garages/Public Garages		1.5		
Storage Warehouses	5	10		
Theatres				
Auditorium	150	15		
Lobbies	150	20		
Stages & Studios	70	15		
Ticket Booths	60	20		
Transportation				
Platform	100	15		
Vehicles	150	15		
Waiting Rooms	100	15		
Workrooms				
Bank Vaults	5	15		
Darkrooms		0.5		
Duplicating		0.5		
Meat Processing <sup>a</sup>	10	15		
Pharmacy	20	15		
Photo Studios	10	15		

# TABLE 809.3—continued OUTDOOR AIR RATES BASED ON OCCUPANCY TYPE

For SI: P/1000 sq.ft. = persons per 1000 square feet of building area,  $^{\circ}C = [(^{\circ}F) - 32]/1.8$ . a. Spaces unheated or maintained below 50°F are not covered by these requirements unless the occupancy is continuous.

Where the ventilation rates in Table 809.3 are based on cfm/person		
(1) $OL_n x V_n$ is less than or equal to $OL_e x V_e$	No upgrade	
(2) $OL_n x V_n$ is greater than $OL_e x V_e$	Upgrade	
Where the ventilation rates in Table 809.3 are based on cfm/square footage		
(3) $SF_n x V_n$ is less than or equal to $SF_e x V_e$	No upgrade	
(4) $SF_n x V_n$ is greater than $SF_e x V_e$	Upgrade	
Where the ventilation rates in T	able 809.3 are based on cfm/square footage and cfm/person	
(5) $OL_n x V_n$ is less than or equal to $SF_e x V_e$ No upgrade		
(6) $OL_n x V_n$ is greater than $SF_e x V_e$	Upgrade	
(7) $SF_n x V_n$ is less than or equal to $OL_e x V_e$	No upgrade	
(8) $SF_n x V_n$ is greater than $OL_e x V_e$	Upgrade	

TABLE 809.3 —continued OUTDOOR AIR RATES BASED ON OCCUPANCY TYPE

Where:

 $OL_n$  = The occupant load of the proposed occupancy based on Table 809.3. When accepted by the administrative authority this occupant load can be reduced.  $OL_e$  = The occupant load of the existing occupancy based on Table 809.3.

 $SF_n = The square footage of the proposed occupancy.$ 

 $SF_e = The square footage of the existing occupancy.$ 

 $V_n$  = The ventilation rate for the proposed occupancy based on Table 809.3.

**810.6 Plumbing fixtures.** Plumbing fixtures shall be provided as follows: Where the Dallas Plumbing Code allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section.

**810.6.1 Plumbing fixture minimums.** Where the building currently exceeds the basic requirements of Table 810.6, the extent to which it exceeds shall not be reduced unless the building also exceeds the requirements of the Dallas Plumbing Code. In this case, the extent of compliance with the basic requirements may be reduced, but not below the requirements of the Dallas Plumbing Code.

# SECTION 811 OTHER REQUIREMENTS

**811.1 Lighting.** Lighting shall comply with the requirements of the *Dallas Building Code* for the new occupancy.

**811.2 Ventilation.** Ventilation shall comply with the requirements of Section 809 of this code for the new occupancy.

# SECTION 812 CHANGE OF OCCUPANCY CLASSIFICATION

**812.1 Compliance with Chapter 7.** The occupancy classification of an existing building may be changed, provided that the building meets all of the requirements of Chapter 7 applied throughout the building for the new occupancy group and complies with the requirements of Sections 802 through 812.

**812.1.1 Change of occupancy group without separation.** Where a portion of an existing building is changed to a new occupancy group and that portion is not separated from the remainder of the building with fire barriers having a fire-resistance rating as required in the *Dallas Building* 

*Code* for the separate occupancy, the entire building shall comply with all of the requirements of Chapter 7 applied throughout the building for the most restrictive *use* group in the building and with the requirements of this chapter.

**Exception:** Compliance with all of the provisions of Chapter 7 is not required when the change of occupancy group complies with the requirements of Section 812.3.

**812.1.2 Change of occupancy group with separation.** *When* a portion of an existing building is changed to a new occupancy group and is separated from the remainder of the building with fire barriers having a fire-resistance rating as required in the *Dallas Building Code* for the separate occupancy, *that portion* shall comply with all the requirements of Chapter 7 for the new occupancy group, and with the requirements of this chapter.

**Exception:** Compliance with all of the provisions of Chapter 7 is not required when the change of use complies with the requirements of Section 812.3

**812.2 Hazard category classifications.** The relative degree of hazard between different occupancy groups shall be as set forth in the hazard category classifications specified in Tables *812.2.2*, 812.4.1, 812.4.2 and 812.4.3 of Sections *812.2.2*, 812.4.1, 812.4.2 and 812.4.3.

**812.2.1 Change of occupancy classification to an equal or lesser hazard.** When a change of use is made to an equal or lesser relative use group hazard as shown in Table 812.2.2, the existing building shall comply with the applicable provisions of this code for the work as classified in Chapter 3 and the requirements of Sections 802 through 811, 812.2.2.1 and 812.3.

**Exception:** Compliance with all the provisions of Chapter 7 is not required where the change of occupancy group complies with the requirements of Section 812.3.

**812.2.2 General requirements in change of occupancy** classification to a higher hazard. An existing building or portion thereof may have its use changed to a higher relative group hazard as shown in Table 812.2.2, provided it complies with the provisions of Chapter 7 for the new occupancy group, applied throughout the building, or an applicable portion thereof.

**812.2.2.1 Specific requirements in change of occupancy classifications.** When Tables 812.4.1, 812.4.2 and 812.4.3 of Sections 812.4.1, 812.4.2 and 812.4.3 establish requirements that differ from Table 812.2.2, the most restrictive requirements shall govern.

TABLE 812.2.2 RELATIVE USE GROUP HAZARD

RELATIVE HAZARD	OCCUPANCY CLASSIFICATIONS
1 (Highest)	H-1, H-2, H-3
2	A-1, A-2. H-4, F-1, I-3, M, S-1
3	A-3, A-5, B, F-2, I-2, R-1, S-2
4	A-4, E, I-1, R-2 more than two stories in height or more than four dwelling units
5 (Lowest)	R-2, two stories or fewer in height and four dwelling units or less, R-3, R-4, U

**812.2.3 Change of occupancy classification to a higher hazard in all three hazard classifications.** An existing building may have its use changed to a higher hazard rating (lower number) in all three hazard category classifications designated in Tables 812.4.1, 812.4.2, and 812.4.3, provided it complies with this chapter or with Chapter 12.

**812.2.4 Change within Group H.** An existing building shall comply with all the applicable requirements of this chapter when the occupancy group is changed within a Group H occupancy.

**812.3 Change of occupancy classification to an equal or lesser hazard in all three hazard classifications.** A change of use to an occupancy group within the same hazard classification category or to an occupancy group within a lesser hazard classification category (higher number) in the three hazard category classifications addressed by Tables 812.4.1, 812.4.2, and 812.4.3 shall be permitted in an existing building or portion thereof, provided the provisions of Sections 812.3.1 through 812.3.5 are met.

**812.3.1 Minimum requirements.** Regardless of the occupancy group involved, the following requirements shall be met:

- 1. The capacity of the means of egress shall comply with the *Dallas Building Code*.
- 2. The interior finish of walls and ceilings shall comply with the requirements of the *Dallas Building Code* for the new occupancy group.

**812.3.2 Groups I-1, R-1, R-2 or R-4.** Where the new use is classified as a Group I-1, R-1, R-2 or R-4 occupancy the following requirements shall be met.

- 1. Corridor doors and transoms shall comply with the requirements of Sections 705.5.1 and 705.5.2.
- 2. Automatic sprinkler systems shall comply with the requirements of Section 704.2.
- 3. Fire alarm and detection systems shall comply with the requirements of Section 704.4.

**812.3.3 Group I-2.** Where the new use is classified as a Group I-2 occupancy, the following requirements shall be met:

- 1. Egress doorways from patient sleeping rooms and from suites of rooms shall comply with the requirements of Section 705.4.1.2.
- 2. Shaft enclosures shall comply with the requirements of Section 703.2.1.
- 3. Smoke barriers shall comply with the requirements of Section 703.3.
- 4. Automatic sprinkler systems shall comply with the requirements of Section 704.2.
- 5. Fire alarm and detection systems shall comply with the requirements of Section 704.4.

**812.3.4 Group I-3.** Where the new use is classified as a Group I-3 occupancy, the following requirements shall be met:

- 1. Locking of egress doors shall comply with the requirements of Section 705.4.5.2.
- 2. Shaft enclosures shall comply with the requirements of Section 703.2.1.
- 3. Automatic sprinkler systems shall comply with the requirements of Section 704.2.
- 4. Fire alarm and detection systems shall comply with the requirements of Section 704.4.

**812.3.5 Group R-3.** Where the new use is classified as Group R-3 occupancy, the following requirements shall be met:

- 1. Dwelling unit separation shall comply with the requirements of Section 703.6.
- 2. The smoke alarm requirements of Section 604.4.3 shall be met.

**812.4 Fire and life safety.** The fire and life safety provisions of this section shall be applicable to buildings or portions of buildings undergoing a change of occupancy classification.

**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.

A-1, A-4					
TOTAL OCCUPANCY	WATER CLOSETS MALE	WATER CLOSETS FEMALE	LAVATORIES	DRINKING WATER FACILITIES	SERVICE SINKS
1-50	1-Ur	iisex	1	1	1
51-100	1	1	l per sex	1	1
101 and over	Fixtures to be provided	as per Table 403.1 of t	he Dallas Plumbing Co	ode.	
A-2					
TOTAL OCCUPANCY	WATER CLOSETS MALE	WATER CLOSETS FEMALE	LAVATORIES	DRINKING WATER FACILITIES	SERVICE SINKS
1-25	l Un	nisex	1	0	0
26 and over	Fixtures to be provided	as per Table 403.1 of t	he Dallas Plumbing Co	ode.	
A-3	1. For auditoriums, mu	seums, libraries and sin	nilar facilities, plumbin	ng fixtures shall be provid	ed as follows:
TOTAL OCCUPANCY <sup>b</sup>	WATER CLOSETS MALE	WATER CLOSETS FEMALE	LAVATORIES	DRINKING WATER FACILITIES	SERVICE SINKS
1-50	1-Ur	iisex	1	1	1
51-100	1	1	l per sex	1	1
101 and over	Fixtures to be provided as per Table 403.1 of the Dallas Plumbing Code.				
A-3	2. For restaurants, plur	nbing fixtures shall be p	provided as follows:		
TOTAL OCCUPANCY <sup>b</sup>	WATER CLOSETS MALE	WATER CLOSETS FEMALE	LAVATORIES	DRINKING WATER FACILITIES	SERVICE SINKS
1-25	1 Unisex 1 0 0			0	
26 and over	Fixtures to be provided as per Table 403.1 of the Dallas Plumbing Code.				
A-3	3. For recreational fact provided as required by			s of Use Group A-3, plum	bing fixtures shall b
A-5, E, I, R	Plumbing fixtures shall	be provided as required	d by Table 403.1 of the	Dallas Plumbing Code.	
В, М					
	TOTAL OCCUPANCY <sup>b,c</sup>	WATER CLOSETS	LAVATORIES	DRINKING WATER FACILITIES	SERVICE SINKS
	1-15	1 Unisex	1	1	1
EMPLOYEES	16 and over	Fixtures to be provided	as per Table 403.1 of	the Dallas Plumbing Coa	le.
	1 25	1 11 .	1	1	1
	1-25	1 Unisex	1	1	1

 TABLE 810.6

 NUMBER OF PLUMBING FIXTURES BASED ON OCCUPANCY TYPE<sup>a</sup>

continued

<i>F</i> , <i>H</i>					
LIGHT INDUSTRIAL	TOTAL OCCUPANCY	WATER CLOSETS	LAVATORIES	DRINKING WATER FACILITIES	SERVICE SINKS
	1-15	1 Unisex	1	1	1
	16 and over	Fixtures to be provided	as per Table 403.1 of t	he Dallas Plumbing Cod	le.
HEAVY INDUSTRIAL	Fixtures to be provided as per Table 403.1 of the Dallas Plumbing Code.				
S					
	TOTAL OCCUPANCY	WATER CLOSETS	LAVATORIES	DRINKING WATER FACILITIES	SERVICE SINKS
	1-15	1 Unisex	1	1	1
	16 and over Fixtures to be provided as per Table 403.1 of the Dallas Plumbing Code.			le.	

#### TABLE 810.6—continued NUMBER OF PLUMBING FIXTURES BASED ON OCCUPANCY TYPE<sup>a</sup>

For SI: 1 square foot =  $0.0929 m^2$ .

a. For purposes of determining the number of plumbing fixtures required, total occupancy shall be the anticipated occupancy of the building under normal use conditions. It is not necessarily the same as the total permitted occupant load based on egress capacity.

b. Requirements for employees and customers may be met with a single set of restrooms. The required number of fixtures shall be the greater of the required number for employees or customers.

c. Customer and employee facilities may be satisfied with a single unisex toilet facility where the number of employees does not exceed 15 and where the total occupancy does not exceed 25 or where the occupied floor area does not exceed 1,500 square feet.

OCCUPANCY CLASSIFICATIONS
Н
I-2, I-3, I-4
A, E, I-1, M, R-1, R-2, R-4
B, F-1, R-3, S-1
F-2, S-2, U

TABLE 812.4.1 HAZARD CATEGORIES AND CLASSIFICATIONS: LIFE SAFETY AND EXITS

**812.4.1.1 Means of egress for change to higher hazard category.** When a change of occupancy group is made to a higher hazard category (lower number) as shown in Table 812.4.1, the means of egress shall comply with the requirements of Chapter 10 of the *Dallas Building Code*.

#### **Exceptions:**

- 1. Stairways shall be enclosed in compliance with the applicable provisions of Section 703.1.
- 2. Existing stairways including handrails and guards complying with the requirements of Chapter 7 shall be permitted for continued use subject to approval of the code official.
- 3. Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.
- 4. Existing corridor walls constructed of wood lath and plaster in good condition or <sup>1</sup>/<sub>2</sub>-inch-thick (12.7 mm) gypsum wallboard shall be permitted.
- 5. Existing corridor doorways, transoms and other corridor openings shall comply with the requirements in Sections 705.5.1, 705.5.2 and 705.5.3.
- 6. Existing dead-end corridors shall comply with the requirements in Section 705.6.
- 7. An existing operable window with clear opening area no less than 4 square feet (0.38 m<sup>2</sup>) and with minimum opening height and width of 22 inches (559 mm) and 20 inches (508 mm), respectively, shall be accepted as an emergency escape and rescue opening.

**812.4.1.2 Means of egress for change of use to equal or lower hazard category.** When a change of occupancy group is made to an equal or lesser hazard category (higher number) as shown in Table 812.4.1, existing elements of the means of egress shall comply with the requirements of Section 605 for the new occupancy group. Newly constructed or configured means of egress shall comply with the requirements of Chapter 10 of the *Dallas Building Code*.

#### Exception:

1. Any stairway replacing an existing stairway within a space where the pitch or slope cannot

be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.

2. Compliance with Section 605 is not required where the change of occupancy group complies with the requirements of Section 812.3.

**812.4.1.3 Egress capacity.** Egress capacity shall meet or exceed the occupant load as specified in the *Dallas Building Code* if the change of occupancy classification is to an equal or lesser hazard category when evaluated in accordance with Table 812.4.1.

**812.4.1.4 Handrails.** Existing stairways shall comply with the handrail requirements of Section 705.9 in the area of the change of occupancy classification.

**812.4.1.5 Guards.** Existing guards shall comply with the *guardrail* requirements in Section 705.10 in the area of the change of occupancy classification.

**812.4.2 Heights and areas.** Hazard categories in regard to height and area shall be in accordance with Table 812.4.2.

TABLE 812.4.2 HAZARD CATEGORIES AND CLASSIFICATIONS: HEIGHTS AND AREAS

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

**812.4.2.1 Height and area for change to higher hazard category.** When a change of occupancy group is made to a higher hazard category as shown in Table 812.4.2, heights and areas of buildings and structures shall comply with the requirements of Chapter 5 of the *Dallas Building Code* for the new occupancy group.

**Exception:** A one-story building changed to Group E shall not be required to meet the area limitations of the *Dallas Building Code*.

**812.4.2.2 Height and area for change to equal or lesser hazard category.** When a change of *use* is made to an equal or lesser hazard category as shown in Table 812.4.2, the height and area of the existing building shall be deemed acceptable.

**812.4.2.3 Fire barriers.** When a change of occupancy group is made to a higher hazard category as shown in Table 812.4.2, fire barriers in separated mixed-use buildings shall comply with the fire resistance requirements of the *Dallas Building Code*.

**Exception:** Where the fire barriers are required to have a 1-hour fire-resistance rating, existing wood lath and plaster in good condition or existing 1/2-inch-thick (12.7 mm) gypsum wallboard shall be permitted.

**812.4.2.4 Construction type.** For the purpose of determining the construction type, the fire-resistance rating of the following structural elements shall be considered: exterior load-bearing walls; interior load-bearing walls; columns; girders; trusses and framing; floor construction, including beams; and roof construction, including beams, trusses and framing, arches and roof decks.

**812.4.3 Exterior wall fire-resistance ratings.** Hazard categories in regard to fire-resistance ratings of exterior walls shall be in accordance with Table 812.4.3.

TABLE 812.4.3 HAZARD CATEGORIES AND CLASSIFICATIONS: EXPOSURE OF EXTERIOR WALLS

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

**812.4.3.1 Exterior wall rating for change of occupancy classification to a higher hazard category.** *Where* a change of occupancy group is made to a higher hazard category as shown in Table 812.4.3, exterior walls shall have fire resistance and exterior opening protectives as required by the *Dallas Building Code*. This provision shall not apply to walls at right angles to the property line.

**Exception:** A 2-hour fire-resistance rating shall be allowed where the building does not exceed three stories in height and is classified as one of the following groups: A-2 and A-3 with an occupant load of less than 300, B, F, M, or S.

**812.4.3.2 Exterior wall rating for change of occupancy classification to an equal or lesser hazard category.** When a change of occupancy group is made to an equal or lesser hazard category as shown in Table 812.4.3, existing exterior walls, including openings, shall be accepted.

**812.4.3.3 Opening protectives.** Openings in exterior walls shall be protected as required by the *Dallas Building Code*. *When* openings in the exterior walls are required to be protected due to their distance from the property line, the sum of the area of such openings shall not exceed 50 percent of the total area of the wall in each story.

#### **Exceptions:**

- 1. Where the *Dallas Building Code* permits openings in excess of 50 percent.
- 2. Protected openings shall not be required in buildings of Group R occupancy that do not exceed three stories in height and that are located not less than 3 feet (914 mm) from the property line.

- 3. Where exterior opening protectives are required, an automatic sprinkler system throughout may be substituted for opening protection.
- 4. Exterior opening protectives are not required when the change of occupancy group is to an equal or lower hazard classification in accordance with Table 812.4.3.

**812.4.4 Enclosure of vertical shafts.** Enclosure of vertical shafts shall be in accordance with Sections 812.4.4.1 through 812.4.4.4.

**812.4.4.1 Minimum requirements.** Vertical shafts shall be designed to meet the *Dallas Building Code* requirements for atriums or the requirements of this section.

**812.4.4.2 Stairways.** When a change of occupancy group is made to a higher hazard category as shown in Table 812.4.1, interior stairways shall be enclosed as required by the *Dallas Building Code*.

#### **Exceptions:**

- 1. In other than Group I occupancies, an enclosure shall not be required for openings serving only one adjacent floor and that are not connected with corridors or stairways serving other floors.
- 2. Unenclosed existing stairways need not be enclosed in a continuous vertical shaft if each story is separated from other stories by 1-hour fire-resistance-rated construction or approved wired glass set in steel frames and all exit corridors are sprinklered. The openings between the corridor and the occupant space shall have at least one sprinkler head above the openings on the tenant side. The sprinkler system shall be permitted to be supplied from the domestic water-supply systems, provided the system is of adequate pressure, capacity, and sizing for the combined domestic and sprinkler requirements.
- 3. Existing penetrations of stairway enclosures shall be accepted if they are protected in accordance with the *Dallas Building Code*.

**812.4.4.3 Other vertical shafts.** Interior vertical shafts other than stairways, including but not limited to elevator hoistways and service and utility shafts, shall be enclosed as required by the *Dallas Building Code* when there is a change of use to a higher hazard category as specified in Table 812.4.1.

# **Exceptions:**

- 1. Existing 1-hour interior shaft enclosures shall be accepted where a higher rating is required.
- 2. Vertical openings, other than stairways, in buildings of other than Group I occupancy and connecting less than 6 stories *in height* shall not be required to be enclosed in the entire building

is provided with an approved automatic sprinkler system.

**812.4.4 Openings.** All openings into existing vertical shaft enclosures shall be protected by fire assemblies having a fire-protection rating of not less than 1 hour and shall be maintained self-closing or shall be automatic closing by actuation of a smoke detector. All other openings shall be fire protected in an approved manner. Existing fusible link-type automatic door-closing devices shall be permitted in all shafts except stairways if the fusible link rating does not exceed 135°F (57°C).

**812.5 Accessibility.** Existing buildings or portions thereof that undergo a change of group or occupancy classification shall *comply with Section 506*.

**812.6 Seismic loads.** Existing buildings with a change of occupancy classification shall comply with the seismic provisions of Section 807.3.

#### 812.7 Fire protection.

**812.7.1 Fire suppression.** The following fire suppression system requirements apply in changes of use:

TABLE 812.7.1 HAZARD CATEGORIES AND CLASSIFICATIONS: FIRE SUPPRESSION

RELATIVE HAZARD	USE CLASSIFICATION	
l (Highest Hazard)	Н,1	
2	A-2, R-1, R-2	
3	A-1, A-3	
4	F-1, M, S-1	
5	A-4, E	
6 (Lowest)	B, F-2, R-3, R-4, S-2, U	

**812.7.2** Maximum fire area and the change to a higher hazard category. When a change of use is made to a higher hazard category as shown in Table 812.7.1, the building shall be provided with an automatic fire suppression system as required by the following sections of the Dallas Building Code:

- 1. Section 903.2.1 for Group A-1, A-2, A-3, A-4 and A-5 occupancies;
- 2. Section 903.2.2 for Group E occupancies;
- 3. Section 903.2.3 for Group F-1 occupancies;
- 4. Section 903.2.4 for Group H occupancies;
- 5. Section 903.2.5 for Group I occupancies;
- 6. Section 903.2.6 for Group M occupancies;
- 7. Section 903.2.7 for Group R-1 occupancies;
- 8. Section 903.2.8 for Group R-2 occupancies;
- 9. Section 903.2.10 for Group S-1 occupancies; and
- 10. Section 903.2.12.1 for windowless stories or basements if the story or basement is created by the work being performed or any existing windowless basement or story in which the work area is sub-

stantively equal to 51 percent of the gross enclosed floor area of the windowless story.

**812.7.3** Change to portion of building with a separation. When a portion of a building is changed to a higher hazard category and the proposed use as a fire area is separated from the existing use(s) by assemblies in accordance with Table 302.3.3 of the Dallas Building Code, an automatic fire suppression system as required above shall be installed only in the portion changed.

**812.7.4 Maximum fire area and the change to an equal or lesser hazard category.** When a change of use is made to an equal or lesser hazard category as shown in Table 812.7.1, there is no requirement to install a suppression system except in areas where work being performed in connection with the change of use includes a requirement for suppression and in windowless stories or basements in accordance with Section 903.2.12 of the Dallas Building Code.

**812.7.5 Maximum building area.** When a change of occupancy classification is made, a suppression system is required in accordance with Section 903.2.15.1 of the Dallas Building Code.

**812.7.6 Fire system supervision.** When the use group of a building is changed to Use Group A, E, H, I, M or R and a fire suppression system is required by this section, the fire suppression system shall be supervised in accordance with Section 903.4 of the Dallas Building Code.

**812.7.7 Change in sprinkler standard hazards.** Notwithstanding the relative hazard as determined by Table 812.7.1, when a change in the character of the use is made to a higher degree of hazard as defined by NFPA 13 (Light Hazard, Ordinary Hazard Group 1, Ordinary Hazard Group 2, Extra Hazard Group 1, Extra Hazard Group 2 and special occupancy hazards), the sprinkler system shall be evaluated and, where required by NFPA 13, altered to conform to the required density and maximum sprinkler protection area per head for the proposed occupancy.

**812.8 Fire alarm/detection system.** When a building or portion thereof changes in use, a fire alarm system shall be installed in accordance with Section 907 of the Dallas Building Code. A fire alarm system shall be installed throughout the building in accordance with the Dallas Fire Code, unless the proposed use is separated from the other use(s) in the building by assemblies with the appropriate fire-resistance rating in accordance with Table 303.3.3 of the Dallas Building Code, in which case only the portion changed shall comply.

**812.9 Carbon monoxide alarms.** When the use of a building is changed to Use Group I-1, R-1, R-2, or Use Group R-3 when the dwelling unit is located in any building regulated by Chapter 53, "Dallas Building Code," of the Dallas City Code single-station carbon monoxide detectors shall be installed and maintained in full operating condition in the immediate vicinity of each sleeping area in any room or dwelling unit in a building that contains a fuel-burning appliance or has an attached garage.

**Exception:** Rooms or dwelling units that do not contain a fuel-burning appliance or have an attached garage but are located in a building with a fuel-burning appliance or an attached garage need not be provided with single-station carbon monoxide alarms, provided that:

- 1. The room or dwelling unit is located more than one story above or below any story that contains a fuelburning appliance or an attached garage;
- 2. The room or dwelling unit is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance or to an attached garage; and
- 3. The building is provided with a common area carbon monoxide alarm system. Individual alarms shall be located in the immediate vicinity of the room(s) containing a fuel-burning appliance and in the immediate vicinity of any ventilated shaft, including but not limited to stair shafts, elevator shafts, ventilation shafts on the story containing the fuel-burning appliance and any story within two stories above or below said story. All such common area alarm devices shall be connected to an alarm monitoring station or shall be interconnected.

**812.9.1 Standards.** Carbon monoxide alarms shall be manufactured, listed and labeled in accordance with UL 2034 and shall be installed in accordance with the requirements of this section and NFPA 720. Carbon monoxide alarms shall be battery operated, hard wired or of the plug-in type.