7-9-2008

#### ARKANSAS FIRE PREVENTION CODE

# TO THE PEOPLE OF THE STATE OF ARKANSAS:

The Arkansas Fire Prevention Code ("AFPC" or "Fire Code" or "Code") 2007 Edition, which supersedes the 2002 Edition, has been developed to assist in preventing and controlling fires in and outside of structures in the State of Arkansas. The proper use of this Code can result in saving lives and property through the prevention of fires in our state.

I encourage Arkansas cities and counties to join with the Arkansas State Fire Marshal's Office in our effort to enforce the AFPC by adopting the Fire Code as a local ordinance. The adoption of the AFPC 2007 Edition is important, and it is my hope that every citizen will use this Code to their fullest advantage in fire prevention.

#### ORDER

Pursuant to the authority vested in the Director of the Department of Arkansas State Police—by Section 6 of Act 254 of 1955 (A.C.A. §§ 12-13-105), as amended, I promulgate these rules for the prevention of fire hazards in the State of Arkansas. The Rules are set out in detail in the copy attached hereto.

IT IS THEREFORE ORDERED that said rules are to become effective August 1, 2008, in compliance with the Administrative Procedure Act of the State of Arkansas (A.C.A. §\$25-15-201 through §25-15-214), and shall be known as the "Arkansas Fire Prevention Code, 2007 Edition".

IN WITNESS WHEREOF, I have hereto affixed my signature as Director of the Department of Arkansas State Police, this **APRIL 25**,

SIGNED

Colonel Winford E. Phillips

Director, Arkansas State Police and

Arkansas State Fire Marshal

#### FOREWORD

The Arkansas Fire Prevention Code, 2007 Edition, was developed using the nationally and internationally recognized and accepted International Fire Code, International Building Code, and International Residential Code, with revisions based on recommendations from Arkansas-based subject matter experts.

There are countless individuals who contributed to the 2007 successful revision of the Arkansas Fire Prevention Code. The following Arkansans unselfishly devoted their time and expertise to serve on the informal Arkansas Fire Prevention Code Revision Committee. The State Fire Marshal's Office extends

its heartfelt thanks to everyone who participated in the revision process (below in alphabetical order): Paul Acre, Engineer, Health Facility Services Section, Arkansas Department of Health Wally Bailey, Fort Smith Building Official, Arkansas Chapter of ICC John Bufford, Acme Brick Company Barry Burke, Assistant Fire Marshal, Little Rock Fire Department Steve Cattaneo, Fayetteville Building Official Sharon Coates, Director, Arkansas Liquefied Petroleum Gas Board M. Brian Cotton, P.E., Arkansas Association of Health Care Engineering Charles Covington, Chief Electrical Inspector, Arkansas Department of Labor Jimmie Deer, Fort Smith Building Department, Arkansas Chapter of ICC James D. (Danny) Dial, Fire Marshal, Pine Bluff Fire Department Jim Engstrom, Engineer, H. James Engstrom & Associates, Structural Engineers Association of Arkansas (SEAoAR) Dennis Free, Assistant Fire Marshal, Little Rock Fire Department Terry Granderson, Division of Public School Academic Facilities and Transportation, Arkansas Department of Education David Griffin, Arkansas Department of Human Services, Child Care Licensing Division J. D. Harper, President, Arkansas Manufactured Housing Association Robert Higginbottom, Director, Protective Health Codes, Arkansas Department of Health Ann Hines, Executive Director, Arkansas Oil Marketers Association Chris Lorton, Fire Marshal, Bentonville Fire Department David McClymont, Department of Planning and Development, City of Little Rock Kevin McDonald, Fire Marshal, Springdale Fire Department Julie Mills, Executive Director, Arkansas Home Builders Association Steve Paggett, Simplex-Grinnell Company Robert Paullus, Jr., Engineer, Crafton, Tull, Sparks & Associates, Inc., (SEAoAR) Fred Perkins, Architect, Roark, Perkins, Perry, Yelvington, Architects Terry L. Perry, Arkansas Department of Environmental Quality Charlie Pope, Fire Marshal, Jacksonville Fire Department Emily Rucker, President, Arkansas Home Builders Association Marty Sanady, Code Enforcement Division, City of Jacksonville Steve Smith, Fire Marshal, North Little Rock Fire Department Ratha Tracy, Arkansas Department of Human Services, Child Care Licensing Division Maynard Vogelgesang, Arkansas Department of Human Services, Long Term Care Cara Walloch, Kareer Kids Child Development Center Phil Watkins, Fire Marshal, Searcy Fire Department Mark Whitaker, Division of Public School Academic Facilities and Transportation, Arkansas Department of Education Doug Williams, Arkansas Department of Human Services, Child Care Licensing Divison Larry Wilson, Simplex-Grinnell Company The intent of the Arkansas Fire Prevention Code, 2007 Edition, is to reduce the number of fires in Arkansas and reduce the number of other hazard-related concerns. The Arkansas Fire Prevention Code, 2007 Edition, establishes MINIMUM rules dealing with fire and building safety.

Written communications for the State Fire Marshal's Office should be directed to:

State Fire Marshal's Office Department of Arkansas State Police 1 State Police Plaza Drive Little Rock, AR 72209

The State Fire Marshal's Office can be contacted by telephone at 501-618-8624 (until further notice). The fax number for the State Fire Marshal's Office is 501-618-8621 (Until further notice).

SIGNED

Office

APRIL 25, 2008

Lt. Lindsey Williams State Fire Marshal's Department of Arkansas

State Police

DEPARTMENT OF ARKANSAS STATE POLICE

2007 ARKANSAS FIRE PREVENTION CODE RULES CHANGES

PROPOSED CHANGES TO VOLUME I OF III VOLUMES OF RULES

Definitions Page.

# STATE OF ARKANSAS ARKANSAS FIRE PREVENTION CODE RULES

#### 2007 EDITION

These Rules are promulgated by the Director of the Department of Arkansas State Police, who serves by operation of law as the Arkansas State Fire Marshal under the authority granted by Arkansas Act 254 of 1955, codified at A.C.A. §§ 12-13-101 to A.CA. §12-13-116, as amended. The purpose of these Rules is to aid in the implementation, interpretation, and enforcement of the Arkansas Fire Prevention Code (AFPC), 2007 Edition.

The International Fire Code, 2006 Edition, the International Building Code, 2006 Edition, and the International Residential Code, 2006 Edition, as published by the International Code Council and the rules, as amended and

adopted by the Arkansas State Fire Marshal, shall constitute the Arkansas Fire Prevention Code, 2007 Edition. These Rules shall be effective August 1, 2008.

The following shall be defined as:

INTERNATIONAL PLUMBING CODE shall mean the Arkansas State Plumbing Code.

INTERNATIONAL PRIVATE SEWAGE DISPOSAL CODE is replaced by "Arkansas Department of Health Rules Pertaining to Onsite Wastewater Systems".

INTERNATIONAL MECHANICAL CODE shall mean the Arkansas State Mechanical Code.

INTERNATIONAL FUEL GAS CODE shall mean the Arkansas State Gas Code.

INTERNATIONAL ENERGY CONSERVATION CODE shall mean the Arkansas Energy Code.

INTERNATIONAL FIRE CODE shall mean the Arkansas Fire Prevention Code, Volume I.

INTERNATIONAL BUILDING CODE shall mean the Arkansas Fire Prevention Code, Volume II.

INTERNATIONAL RESIDENTIAL CODE shall mean the Arkansas Fire Prevention Code, Volume III.

INTERNATIONAL ELECTRICAL CODE shall mean the Arkansas (National) Electrical Code.

BUILDING OFFICIAL shall mean any governmental official having authority to enforce that aspect of the Code.

Dotted lines in the margin indicate Arkansas revisions.

Solid Stars in the margin indicate Arkansas deletions.

## Chapter 1, Administration

101.1 Title. These rules shall be known as the Arkansas Fire Prevention Code.

**101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted. Appendices B, C, D, E, F, and G are adopted by the State of Arkansas. Other appendices shall not apply unless adopted by local ordinance. Requests for exceptions to Appendix D may be appealed to the Arkansas State Fire Marshal (State Fire Marshal).

101.2.2 Locally Adopted Codes. Each district, county, municipality or other political subdivision of this state shall only adopt and enforce the provisions of the Arkansas Fire Prevention Code, 2007 Edition. The AFPC 2007 Edition shall be the only foundation document available for modification by local jurisdictions should they choose to adopt more stringent provisions. It shall be the responsibility of local authorities having jurisdiction to bring the proposed specific rule or provision up to the minimum standards of the AFPC 2007 Edition. The State Fire Marshal shall advise local jurisdictions of any requirement that is less stringent than the AFPC 2007 Edition.

102.3 Change of use or occupancy. No change shall be made in the use or occupancy of any structure that would place the structure in a different division of the same group or

occupancy or in a different group of occupancies, unless such structure is made to comply with the requirements of this Code and the Arkansas Fire Prevention Code Volume II. Subject to the approval of the fire code official, the use or occupancy of an existing structure shall be allowed to be changed and the structure is allowed to be occupied for purposes in other groups without conforming to all the requirements of this Code and the Arkansas Fire Prevention Code Volume II for those groups, provided the new or proposed use is less hazardous, based on life and fire risks, than the existing use.

102.4 Application of building code. The design and construction of new structures shall comply with the Arkansas Fire Prevention Code Volume II, and any alterations, additions, changes in use or changes in structures required by this Code, which are within the scope of the Arkansas Fire Prevention Code Volume II, shall be made in accordance therewith.

## 102.10 MEMORANDUM OF UNDERSTANDING-HEALTH CARE FACILITIES.

This Memorandum of Understanding will specify and serve as a method to resolve conflicts between the Arkansas Fire Prevention Code Rules, 2007 Edition (hereinafter "Arkansas Fire Prevention Code" or "AFPC") adopted and enforced by the Arkansas State Fire Marshal's Office, under the authority of the Director of the Department of the Arkansas State Police, and other federal or state rules governing Arkansas' health care and long-term care facilities, by law regulated by the Arkansas Department of Health and the Arkansas Department of Human Services, Division of Medical Services, Office of Long-Term Care, among others.

- 1. The Arkansas Department of Health and the Arkansas Department of Human Services, Division of Medical Services, Office of Long-Term Care will have inspectors and/or plan reviewers obtain training related to the implementation and application of the National Fire Protection Association Life Safety Code (NFPA 101) and the Arkansas Fire Prevention Code.
- 2. The Arkansas Department of Health will have concurrent authority to do Fire and Life Safety Code inspections in health care facilities regulated by the Arkansas Department of Health. The Arkansas Department of Human Services, Division of Medical Services, Office of Long-Term Care, will have concurrent authority to do Fire and Life Safety inspections in longterm care facilities regulated by the Arkansas Department of Human Services, Division of Medical Services, Office of Long-Term Care. The Arkansas Department of Health's authority and the authority of the Arkansas Department of Human Services, Division of Medical Services, Office of Long-Term Care will be concurrent with the current authority of any other relevant federal, state or local government agency having authority to do said inspections.
- 3. The Arkansas Fire Prevention Code is the fire prevention code for the State of Arkansas.
- 4. When there is a conflict between the Arkansas Fire Prevention Code and the National Fire Protection Association Life Safety Code (NFPA 101), New Health Care Occupancies Chapter, Existing Health Care Occupancies Chapter, New Ambulatory Health Care Occupancies Chapter, and Existing Ambulatory Health Care Occupancies Chapter, as adopted by the United States Department of Health and Human Services, Centers for Medicare Medicaid Services, per Title 42 Code of Federal Regulations, the aforementioned chapters in the Life Safety Code shall govern.
- 5. For new construction, when one of the affected agencies (Arkansas Department of Health, Arkansas Department of Human Services, Division of Medical Services, Office of Long-Term Care, local fire official, or local building official) determines or perceives that a conflict exists between the Arkansas Fire Prevention Code and the National Fire Protection Association Life Safety Code (NFPA 101), as it relates to types of construction or allowable area requirements, they shall provide written notification of the perceived conflict to the project architect or engineer and the other affected agencies. The agency alleging the conflict will convene a meeting with the other affected agencies to

resolve the conflict. The resolution of the conflict must be unanimous. If the group is unable to resolve the conflict unanimously, the issue will be referred to the Arkansas State Fire Marshal for final resolution.

Agreed to as evidenced by the signatures of the participating Parties for their respective offices or associations below:

Arkansas State Fire Marshal, and Director of Arkansas State Police or his designee

Colonel Winford E. Phillips, Director of Department of Arkansas State Police; and Lt. Lindsey Williams, Arkansas State Fire Marshal

Arkansas Hospital Association Mr. Phil E. Matthews, President and Chief Operating Officer

Arkansas Department of Health Dr. Paul Halverson, Director and State Health Officer

Arkansas Department of Human Services Mr. John Selig, Director, Arkansas DHS

Arkansas Fire Chiefs' Association Chief George Glenn

Arkansas Fire Marshals' Association Fire Marshal Travis Hollis

Code Officials of Arkansas Chapter of International Code Council ("ICC") Mr. Wally Bailey

# 104.3.2 State Fire Marshal jurisdiction.

(a) The State Fire Marshal's Office has statewide jurisdiction to inspect all places in Arkansas insofar as it is necessary for the enforcement of all laws, ordinance and law, or ordinances and lawful orders requiring any place to be safe from fire. The State Fire Marshal or his/her duly authorized representative(s) shall be charged with the enforcement of this Code as granted under the authority of Act 254 of 1955, as amended.

(b) The fire official shall have primary responsibility for the safety of places in his/her own district, city or county. Rules of the State Fire Marshal's Office establishing minimum standards, shall not prevent any district, city or county from enacting more stringent regulations; and the State Fire Marshal's Office shall cooperate with the fire official in enforcing all fire safety laws and ordinances of the state or its political subdivisions. Inspections of property in the territory served by the fire department shall be made as often as practicable or as often as the city or county legislative body or other political subdivision fire officials may direct.

(c) A written report of continued violations should be sent to the State Fire Marshal, who will cooperate with local authorities to secure compliance with the *Arkansas Fire Prevention Code* and other laws, ordinances and rules of the state and its political subdivisions relating to matters within the scope and jurisdiction of the State Fire Marshal's Office.

(d) Town, City or County Building Officials: when a jurisdiction establishes a building department and a building official as set out in Vol. II, Section 103 of the Code, the primary responsibility for administering and enforcing Vol. II (Building Code) of the AFPC shall fall to that established administrative authority. 104.10.2 Report of fire fatalities. Fire departments responding to fires resulting in a fatal injury shall report in writing such fatalities to the State Fire Marshal's Office within 3 business days of the occurrence.

104.10.3 Fire reports submitted to Arkansas Fire Academy. Fire departments responding to fires within their jurisdiction shall, by the 15<sup>th</sup> of the month following the occurrence of the fire, furnish to the Arkansas Fire Academy (AFA) for the National Incident Fire Reporting System (NFIRS), information about the fire, on forms provided by and approved by the Arkansas Fire Academy.

104.10.4 Changes in fire department information. All fire departments shall submit on or before June 30<sup>th</sup> of each year the name of the officer in charge, the mailing address and electronic mailing address, telephone and facsimile numbers of the fire department and other information to the State Fire Marshal's Office on a form provided by the State Fire Marshal's Office. Any change in the pertinent information during the year shall be sent to the State Fire Marshal's Office in writing no later than thirty (30) days after the change occurs.

104.10.5 Reports of fireworks accidents. Accidents involving fireworks resulting in death, serious injury, or major property damage shall be reported immediately to the State Fire Marshal's Office by the responding fire or police department or the holder of a fireworks license or public display permit.

105.1 General. Fireworks licenses or public display permits. Permits shall be obtained as required below. Such permits will be issued when the requirements of the State Fire Marshal's office have been met; and they may be suspended or revoked if the requirements are violated. Application for "State Permits" required as follows, shall be made in writing, on forms required, to the State Fire Marshal, Arkansas State Police, 1 State Police Plaza Drive, Little Rock, AR 72209-2971. The State Fire Marshal's Office telephone number is 501-618-8624 until further notice.

1. **Fees.** No fee is required for a state fireworks license or public display permit except as prescribed for licenses relating to fireworks and except as hereafter otherwise provided by law and these rules.

2. **State Permits**. A permit or license shall be obtained from the State Fire Marshal for:

(a) Dealing in fireworks as set out in state fireworks laws;

(b) Public fireworks display permit for indoor and outdoor displays;

(c) Installation of aboveground storage tanks for combustible liquids, flammable liquids, and hazardous chemicals.

3. Local Permits. Where provisions are made by a municipality or county or other political subdivision of the state for the issuance of permits, and where such rules are at least as stringent as those of the State Fire Marshal, a permit from an authorized city or county official or other political subdivision official shall be obtained for the construction or substantial remodeling of any:

(a) Asylums, hospitals, nursing or convalescent homes, or other health care facilities, regardless of capacity.

(b) Schools and educational institutions having a capacity in excess of 50 pupils, and residence buildings, including dormitories, having sleeping accommodations for 50 or more persons.

(c) Auditoriums, theaters, indoor stadiums, gymnasiums, churches, or other places of assembly having a capacity in excess of 100 or more persons.

(d) Department stores or factories having a capacity in excess of 200 persons or for any other building if located within the city or county fire service jurisdiction or other political subdivision. A city, county, or other political subdivision of the state may, by ordinance, set out other permits that may be required for new or existing structures.

4. **Building Permits**. Where a jurisdiction has established a building department in accordance with Vol. II, Section 103 of the Code, permits within

and

the corporate limits of the jurisdiction for new construction or remodeling shall be required in accordance with Vol. II, Section 105 of the Code.

108.1 Board of appeals established. Any county or municipality or other political subdivision may establish a local board of adjustments and appeals, to review orders given by the local fire official; and to consist of 5 members appointed by the applicable governing body.

109.3 Violation penalties. Persons who shall violate a provision of this Code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this Code, shall be guilty of a Class A Misdemeanor, punishable by a fine of not more than \$1,000.00 dollars or by imprisonment not exceeding 1 year, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

111.4 Failure to comply. Any person who or other legal entity (corporation, limited liability company, limited liability partnership, etc.) which shall continue any work after having been served with a stop work order, except such work as that person or entity is directed to perform to remove a violation or unsafe condition, shall be subject to penalties imposed by the circuit or district court having jurisdiction.

# Chapter 2, Definitions.

[B] Educational Group E. Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12<sup>th</sup> grade. Religious educational rooms and religious auditoriums, which are accessory to places of religious worship in accordance with Section 508.3.1 of the Arkansas Fire Prevention Code, Volume II and have occupant loads of less than 100, shall be classified as Group A-3 occupancies.

Day care. The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than 5 children older than 2 ½ years of age shall be classified as an "E" occupancy. Day Care (Child Care) Facilities shall meet the provisions of NFPA 101, the Arkansas Fire Prevention Code, and the following:

- 1. Day care facilities that are licensed (or making application for a license) to have 16 or fewer children shall follow the guidelines for Day Care Homes as set out in NFPA 101, 2003 Edition.
- 2. Day care facilities that are licensed (or making application for a license) to have 17 children or more shall follow the guidelines for day care centers as set out in NFPA 101, 2003 Edition.
- 3. The staff-to-client ratios referred to in Chapters 16 and 17, NFPA 101, are amended to follow the ratios adopted by the Arkansas Department of Human Services, Division of Child Care and Early Childhood Education, Child Care Licensing (telephone 501-682-8590 until further notice):
  - A. Child Care Centers, 2006;
  - B. Day Care Family Homes, 2006; and
  - C. Minimum Licensing Standard for Child Welfare Agencies, 2006. (This includes Residential Care Child Care Facilities, Emergency Residential Child Care Facilities, Psychiatric Residential Treatment Facilities, and Sexual Offender Programs).
- 4. The fire authority retains the authority to enforce the more stringent ratio if it is determined the facility needs the more stringent ratios in

order to assure fast and safe evacuation of the facility in an emergency for life safety.

**Group I-4, day care facilities.** This group shall include buildings and structures occupied by persons of any age who receive custodial care for less than 24 hours by individuals other than parents or guardians, relatives by blood or marriage or adoption, and in a place other than the home of the person cared for. A facility such as the above with 5 or fewer persons shall be classified as Group R-3 or shall comply with the Arkansas Fire Prevention Code, Volume III in accordance with Section 101.2 of the Arkansas Fire Prevention Code, Volume II. Places of worship during religious functions are not included.

Adult care facility. A facility that provides accommodations for less than 24 hours for more than 5 unrelated adults and provides supervision and personal care services shall be classified as Group I-4.

**Exception:** Where the occupants are capable of responding to an emergency situation without physical assistance from the staff, the facility shall be classified as Group A-3.

Child care facility. A facility that provides supervision and personal care on less than a 24 hour basis for more than 5 children 2  $\frac{1}{2}$  years of age or less shall be classified as Group I-4.

**Exception:** A child day care facility which provides care for more than 5 but no more than 100 children 2  $\frac{1}{2}$  years or less of age, when the rooms where such children are cared for are located on the level of exit discharge and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group "E".

**Exception:** The definition of Day Care occupancies shall meet the provisions of the Arkansas Fire Prevention Code and NFPA 101, 2003 Edition. The definitions of day care occupancies as set out in NFPA 101, 2003 Edition shall be amended in accordance with any future changes per Department of Human Services Division of Child Care capacities.

Number of Occupants	Usage
Less than 6	R-3 Occupancy
6, but less than 11	Family Day Care Home, NFPA 101, 2003
	Edition
11, but less than 17	Group Day Care Home, NFPA 101, 2003
	Edition
More than 16, but less than 100	Day Care Occupancy, NFPA 101, 2003
	Edition
Any usage 100 or more	Group "E" or "I" Occupancy

# Chapter 3, General Precautions Against Fire

**303.10** At the end of day or work period, the roof work shall be scanned (checked) with a heat source meter or electronic scanner to determine any hot spots on wood curbs, cants, or roof projections on the completed roof which could smolder or combust after workers leave the job. An acceptable alternative to scanning the roof is to monitor the roof for three (3) hours' minimum before workers leave the job site.

Chapter 4, Emergency Planning And Preparedness No changes

Chapter 5, Fire Service Features No changes

Chapter 6, Building Services And Systems No changes

Chapter 7, Fire-Resistance-Rated Construction No changes

Chapter 8, Interior Finish, Decorative Materials And Furnishings No changes

#### Chapter 9, Fire Protection Systems

**906.1 Where required.** Portable fire extinguishers shall be installed in the following locations:

1. In new and existing Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.

[Former exception to 906.1, Item 1, has been deleted]

**912.2.3 Proximity to hydrant.** Fire department connections for each sprinkler system or standpipe system shall be located not more than 100 feet from the nearest fire hydrant connected to an approved water supply.

#### Chapter 10, Means Of Egress

1001.1 General. Buildings or portions thereof shall be provided with a means of egress system as required by this chapter. The provisions of this chapter shall control the design, construction, and arrangement of means of egress components required to provide an approved means of egress from structures and portions thereof. Sections 1003 through 1026 shall apply to new construction. Sections 1027 and 1028 shall apply to existing buildings.

**Exception:** 1. Detached one- and two-family dwellings and multiple singlefamily dwellings (townhouses) not more than 3 stories above grade plane in height with a separate means of egress and accessory structures shall comply with the *International Residential Code*.

2. Residential Care/Assisted Living Occupancies. Existing residential care/assisted living occupancies shall comply with the existing board and care requirements of NFPA 101, 2003 Edition and the Child Welfare Agency Review Board of the Arkansas Department of Health and Human Services.

Chapter 11, Aviation Facilities No changes

Chapter 12, Dry Cleaning No changes

Chapter 13, Combustible Dust-Producing Operations No changes

Chapter 14, Fire Safety During Construction And Demolition No changes

Chapter 15, Flammable Finishes No changes

Chapter 16, Fruit And Crop Ripening No changes

Chapter 17, Fumigation And Thermal Insecticidal Fogging No changes

Chapter 18, Semiconductor Fabrication Facilities No changes

Chapter 19, Lumber Yards And Woodworking Facilities No changes

Chapter 20, Manufacture Of Organic Coatings No changes

Chapter 21, Industrial Ovens No changes

Chapter 22, Motor Fuel-Dispensing Facilities and Repair Garages

**2201.1 Scope.** Automotive motor fuel-dispensing facilities, marine motor fueldispensing facilities, fleet vehicle motor fuel-dispensing facilities and repair garages shall be in accordance with this chapter and the *Arkansas Fire*  Prevention Code, Vol. II, Arkansas Gas Code, and the Arkansas Mechanical Code. These facilities shall include both public and private operations.-

**2204.3 Unattended self-service motor fuel dispensing facilities.** Unattended self-service motor fuel-dispensing facilities shall comply with Sections 2204.3.1 through 2204.3.7. This section shall not apply to unattended fleet vehicle service stations as defined in Section 2202.1. All unattended (new and existing) self-service stations shall only be installed or continue service after having met the minimum guidelines and a permit issued by the State Fire Marshal with concurrence of the local building and fire official. Applications for an unattended self-service station shall be on a form provided by the State Fire Marshal.

**2204.3.6 Fire Suppression.** A fixed fire suppression system or approved sprinkler system shall be installed under the canopy and around the dispensing unit in accordance with NFPA 13, 17, 17A, or an equivalent system approved by the State Fire Marshal. Automatic fire (heat) detection shall be installed under the canopy per NFPA 72. A manual fire alarm station(s) per NFPA 72 shall be installed. The area around the parking space shall be such that it will have a catch basin to the side capable of preventing the runoff of spilled flammable liquids, and shall be approved by the authority having jurisdiction.

**2204.3.7 Quantity limits.** Dispensing equipment used at unsupervised locations shall comply with 1 of the following:

- Dispensing devices shall be programmed or set to limit uninterrupted fuel delivery to 35 gallons (133 Liters) for cars, pickups, vans, and similar small vehicles; and 100 gallons per transaction at facilities serving large trucks and requiring a manual action to resume delivery.
- 2. The amount of fuel being dispensed shall be limited in quantity by a preprogrammed card as approved.

# 2206.2.1.1 Inventory control for underground tanks. [Deleted in its entirety]

**2206.2.3 Above-ground tanks located outside, above grade.** Above-ground tanks shall not be used for the storage of Class I, II or IIIA liquid motor fuels except as provided by this section.

- 1. Above-ground tanks used for outside, above-grade storage of Class I liquids shall be designed, constructed, and maintained in accordance with 1 or more of the following nationally recognized engineering standards and be in accordance with Chapter 34. Such tanks shall be located in accordance with Table 2206.2.3.
  - A. Atmospheric tanks: API Standard 650, API Specifications 12B, 12D or 12F, UL 80, UL 142, UL 2080 or UL 2085.
  - B. Low-pressure tanks: ASME Boiler and Pressure Vessel Code, Section VIII or API Standard 620.
  - C. Pressure Vessels: ASME Boiler and Pressure Vessel Code, Section VIII.
- 2. Above-ground tanks used for above-grade storage of Class II or IIIA liquids are allowed to be protected above-ground tanks or, when approved by the fire code official, other above-ground tanks that comply with Chapter 34. Tank locations shall be in accordance with Table 2206.2.3.
- 3. Tanks containing fuels shall not exceed 12,000 gallons (45 420 L) in individual capacity or 48,000 gallons (181 680 L) in aggregate capacity. Installations with the maximum allowable aggregate capacity shall be separated from other such installations by not less than 100 feet (30, 480 millimeters).
- 4. 4. Tanks located at farms, construction projects, or rural areas shall comply with Section 3406.2.

Chapter 23, High-Piled Combustible Storage No changes

Chapter 24, Tents, Canopies, And Other Membrane Structures No changes

Chapter 25, Tire Rebuilding And Tire Storage No changes

Chapter 26, Welding And Other Hot Work No changes

Chapter 27, Hazardous Materials-General Provisions No changes

Chapter 28, Aerosols No changes

Chapter 29, Combustible Fibers No changes

Chapter 30, Compressed Gases No changes

Chapter 31, Corrosive Materials No changes

Chapter 32, Cryogenic Fluids No changes

Chapter 33, Explosives And Fireworks No changes

Chapter 34, Flammable and Combustible Liquids

**3404.2.13.2.2 Out of service for 90 days.** Above-ground tanks not used for a period of 90 days shall be safeguarded in accordance with Section 3404.2.13.1.2 or removed in accordance with Section 3404.2.14.

#### Exceptions:

- Tanks and containers connected to oil burners that are not in use during the warm season of the year or are used as a backup heating system to gas;
- 2. In-place, active fire protection (foam) system lines; and
- 3. Farm tanks used for irrigation wells or other farm uses.

Chapter 35, Flammable Gases No changes

Chapter 36, Flammable Solids No changes

Chapter 37, Highly Toxic And Toxic Materials No changes

Chapter 38, Liquefied Petroleum Gases Delete this chapter in its entirety. Refer instead to the Arkansas Liquefied Petroleum Gas Code.

Chapter 39, Organic Peroxides No changes

Chapter 40, Oxidizers No changes

Chapter 41, Pyrophoric Materials No changes

Chapter 42, Pyroxylin (Cellulose Nitrate) Plastics No changes

Chapter 43, Unstable (Reactive) Materials No changes

Chapter 44, Water-Reactive Solids And Liquids No changes

Chapter 45, Referenced Standards No changes

Appendix A Board Of Appeals Delete in its entirety

Appendix B Fire-Flow Requirements For Buildings No changes

Appendix C Fire Hydrant Locations And Distribution No changes

Appendix D Fire Apparatus Access Roads

**D101.1 Scope.** Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the *Arkansas Fire Prevention Code*, *Volume I*. Requests for exceptions to Appendix D may be appealed to the State Fire Marshal.

Appendix E Hazard Categories No changes

Appendix F Hazard Ranking No changes

Appendix G Cryogenic Fluids-Weight And Volume Equivalents No changes

Index No changes

### PROPOSED CHANGES TO VOLUME II OF III VOLUMES

Definitions Page.

## STATE OF ARKANSAS ARKANSAS FIRE PREVENTION CODE RULES 2007 EDITION

The following shall be defined as:

INTERNATIONAL PLUMBING CODE shall mean the Arkansas State Plumbing Code.

INTERNATIONAL PRIVATE SEWAGE DISPOSAL CODE is replaced by "Arkansas Department of Health Rules Pertaining to Onsite Wastewater Systems".

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BUILDING OFFICIAL shall mean any governmental official having authority to enforce that aspect of the Code.

Dotted lines in the margin indicate Arkansas revisions.

Solid Stars in the margin indicate Arkansas deletions.

#### Chapter 1, Administration

101.1 Title. The provisions of the following chapters shall constitute, be known, and be cited as the Arkansas Fire Prevention Code, Volume II, hereinafter known as "this Code".

#### 101.2 Scope.

**Exception:** Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than 3 stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the Arkansas Fire Prevention Code, Volume III.

**101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted. Appendices "D" and "E" are adopted by the State of Arkansas. Other appendices shall not apply unless adopted by local ordinance.

# 102.7 MEMORANDUM OF UNDERSTANDING-HEALTH CARE FACILITIES.

This Memorandum of Understanding will specify and serve as a method to resolve conflicts between the 2007 Arkansas Fire Prevention Code Rules (hereinafter "Arkansas Fire Prevention Code" or "AFPC") adopted and enforced by the Arkansas State Fire Marshal's Office, under the authority of the Director of the Department of the Arkansas State Police, and other federal or state rules governing Arkansas' health care and long-term care facilities, by law regulated by the Arkansas Department of Health and the Arkansas Department of Human Services, Division of Medical Services, Office of Long-Term Care, among others.

- 1. The Arkansas Department of Health and the Arkansas Department of Human Services, Division of Medical Services, Office of Long-Term Care will have inspectors and/or plan reviewers obtain training related to the implementation and application of the National Fire Protection Association Life Safety Code (NFPA 101) and the Arkansas Fire Prevention Code.
- 2. The Arkansas Department of Health will have concurrent authority to do Fire and Life Safety Code inspections in health care facilities regulated by the Arkansas Department of Health. The Arkansas Department of Human Services, Division of Medical Services, Office of Long-Term Care, will have concurrent authority to do Fire and Life Safety inspections in longterm care facilities regulated by the Arkansas Department of Human Services, Division of Medical Services, Office of Long-Term Care. The Arkansas Department of Health's authority and the authority of the Arkansas Department of Human Services, Division of Medical Services, Office of Long-Term Care will be concurrent with the current authority of any other relevant federal, state or local government agency having authority to do said inspections.
- 3. The Arkansas Fire Prevention Code is the fire prevention code for the State of Arkansas.
- 4. When there is a conflict between the Arkansas Fire Prevention Code and the National Fire Protection Association Life Safety Code (NFPA 101), New Health Care Occupancies Chapter, Existing Health Care Occupancies Chapter, New Ambulatory Health Care Occupancies Chapter, and Existing Ambulatory Health Care Occupancies Chapter, as adopted by the United States Department of Health and Human Services, Centers for Medicare Medicaid Services, per Title 42 Code of Federal Regulations, the aforementioned chapters in the Life Safety Code shall govern.
- 5. For new construction, when one of the affected agencies (Arkansas Department of Health, Arkansas Department of Human Services, Division of Medical Services, Office of Long-Term Care, local fire official, or local building official) determines or perceives that a conflict exists between the Arkansas Fire Prevention Code and the National Fire Protection Association Life Safety Code (NFPA 101), as it relates to types of construction or allowable area requirements, they shall provide written notification of the perceived conflict to the project architect or engineer and the other affected agencies. The agency alleging the

conflict will convene a meeting with the other affected agencies to resolve the conflict. The resolution of the conflict must be unanimous. If the group is unable to resolve the conflict unanimously, the issue will be referred to the Arkansas State Fire Marshal for final resolution.

Agreed to as evidenced by the signatures of the participating Parties for their respective offices or associations below:

Arkansas State Fire Marshal, and Director of Arkansas State Police or his designee

Colonel Winford E. Phillips, Director of Department of Arkansas State Police

Lt. Lindsey Williams, Arkansas State Fire Marshal

Arkansas Hospital Association Mr. Phil E. Matthews, President and Chief Operating Officer

Arkansas Department of Health Dr. Paul Halverson, Director and State Health Officer

Arkansas Department of Human Services Mr. John Selig, Director, Arkansas DHS

Arkansas Fire Chiefs' Association Chief George Glenn

Arkansas Fire Marshals' Association Fire Marshal Travis Hollis

Code Officials of Arkansas Chapter of International Code Council ("ICC") Mr. Wally Bailey

101.4.1 Electrical. The provisions of the Arkansas (National) Electric Code (NFPA 70) (Arkansas Department of Labor, Electrical Examiners Office, current phone 501-628-4548 until further notice) shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

101.4.2 Gas. The provisions of the Arkansas Gas Code, (Arkansas Department of Health, current phone 501-661-2642 until further notice), shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories as covered in the code. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.

101.4.3 Mechanical. The provisions of the Arkansas Gas Code, Arkansas Mechanical Code shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

101.4.4 Plumbing. The provisions of the Arkansas State Plumbing and Gas Code, (Arkansas Department of Health, current phone 501-661-2642 until further notice), shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system.

Section 101.4.5 Deleted in its entirety

101.4.6 Fire prevention. The provisions of the Arkansas Fire Prevention Code, Volume\_\_I, shall apply to matters affecting or relating to structures, processes, and premises from the hazard of fire and explosion arising from the storage, handling, or use of structures, materials or devices; from conditions hazardous to life, property, or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration, or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

101.4.7 Energy. The provisions of the Arkansas Energy Code shall apply to all matters governing the design and construction of buildings for energy efficiency.

102.6 Existing structures. The legal occupancy of any structure existing on the date of adoption of this Code shall be permitted to continue without change, except as is specifically covered in the Arkansas Fire Prevention Code, Volumes I and II, or as deemed necessary by the building official and/or fire official for the general safety and welfare of the occupants and the public.

103.1 Creation of enforcement agency. Local jurisdictions are authorized to establish a department to be called the Building Department and the person in charge shall be known as the Building Official.

103.2 Deleted in its entirety

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to appoint a deputy building official, related technical officers, inspectors, plan examiners, and other employees. Such employees shall have powers as delegated by the building official.

105.1 Required. Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this Code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit. If there is, no building official appointed, the owner, authorized agent, or contractor shall make application to the State Fire Marshal.

#### 105.2 Work exempt from permit. [Deleted all text after Item 13]

105.3.3 Permit issued on basis of an affidavit. Whenever a permit is issued in reliance upon an affidavit or whenever the work to be covered by a permit involves installation under conditions which, in the opinion of the building official, are hazardous or complex, the building official shall require that the architect or engineer who signed the affidavit or prepared the drawings or computations shall supervise such work. In addition, he or she shall be responsible for conformity with the permit, provide copies of inspection reports as inspections are performed, and upon completion make and file with the building official a written affidavit that the work has been done in conformity with the reviewed plans and with the structural provisions of the technical codes. In the event such architect or engineer is not available, the owner shall employ in his/her stead a competent person or agency whose qualifications are reviewed by the building official.

106.1 Submittal documents. Construction documents, statement of special inspections, and other data shall be submitted in one or more sets with each permit application. The construction documents shall be prepared by a

registered design professional where required by the Code or statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional. The design professional shall be an architect or engineer legally registered under the laws of this state regulating the practice of architecture or engineering and shall affix his or her official seal to said drawing, specifications and accompanying data, for the following:

- 1. All Group A, E, and I occupancies, except Group A occupancies with an occupant load less than or equal to 50;
- 2. Buildings and structures 3 or more stories in height; and
- 3. Buildings and structures 5,000 square feet or more in area.

For all other buildings and structures, the submittal shall bear the certification of the applicant that some specific state law exception permits its preparation by a person not so registered.

**Exception:** The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional,

if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this Code.

106.1.4 Structural and fire resistance integrity. Plans for all buildings shall indicate how required structural and fire resistance integrity will be maintained where a penetration of a required fire resistant wall, floor, or partition will be made for electrical, gas, mechanical, plumbing and communication conduits, pipes and systems. Such plans shall also indicate in sufficient detail how the fire integrity will be maintained where required fire resistant floors intersect the exterior walls and where joints occur in required fire resistant construction assemblies.

106.1.5 Hazardous occupancies. The building official may require the following:

1. **General site plan.** A general site plan drawn at a legible scale which shall include, but not be limited to, the location of all buildings, exterior storage facilities, permanent access ways, evacuation routes, parking lots, internal roads, chemical loading areas, equipment cleaning areas, storm and sanitary sewer accesses, emergency equipment and adjacent property uses. The exterior storage areas shall be identified with the hazard classes and the maximum quantities per hazard class of hazardous materials stored within.

2. Building floor plan. A building floor plan drawn to a legible scale which shall include, but not be limited to, all hazardous materials storage facilities within the building and shall indicate rooms, doorways, corridors, exits, fire rated assemblies with their hourly rating, location of liquid-tight rooms, and evacuation routes. Each hazardous material storage facility shall be identified on the plan with the hazard classes and quantity range per hazard class of the hazardous materials stored within.

106.1.6 Plans and specifications. Plans and specifications shall be submitted to the State Fire Marshal and their approval secured before construction or substantial remodeling of any of the following classes of building is started, or before a change in occupancy to one of the following classes is made, if not approved by the local authority having jurisdiction:

1. Asylums, hospitals, nursing or convalescent homes, or other health care facilities, regardless of capacity;

2. Schools and educational institutions having a capacity in excess of 50 pupils, and residence buildings, including dormitories, having sleeping accommodations for 50 or more persons;

3. Auditoriums, theaters, indoor stadiums, gymnasiums, churches, or other places of assembly having a capacity in excess of one hundred (100) or more persons; or

4. Department stores or factories having a capacity in excess of 200 persons.

106.1.7 Cover Sheet and plan certification requirements. Plans and specifications shall contain the following items and information when submitted to the State Fire Marshal's Office or Authority Having Jurisdiction:

1. An architect's stamp and signature or engineer's stamp and signature shall be placed on the front page of each plan submitted and an architect's stamp or engineer's stamp shall be placed on each subsequent page of the plans. Architects and engineers must be registered by the State of Arkansas.

2. The following paragraph shall be placed on the front page of the plans and blueprints with the registered architect's or engineer's signature:

> "I hereby certify that these plans and specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these plans and specifications are as required by law and in compliance with the Arkansas Fire Prevention Code for the State of Arkansas."

On the front page of the plans or blueprints, the following 3. information is to be noted regarding the project:

(A) The occupancy classification(s) and occupancy loads (existing and proposed) (Chapter 5, volume II);

(B) The Type of Construction (existing and proposed) (Chapter 6, volume II) includes sprinkled or non-sprinkled;

(C) Allowable height and building area per floor (Table 503, Chapter 5 Volume II);

(D) Floor areas (existing and proposed), as follows:

a. Area, gross floor (Chapter 2 Volume II) for each floor of all buildings.

b. Area, net floor (Chapter 3 Volume II) for the following occupancies;

1. Assembly occupancies;

- Bowling alleys;
  Restaurants;
- All educational occupancies (including uses above the 4.

12th Grade);

5. Library reading rooms.

When mixed occupancies exist, all occupancies; floor areas will be calculated and listed separately in accordance with the above guidelines;

(E) Separation distances for each exterior wall to assumed and common property lines (Chapter 2 Volume II); and

(F) Exit access corridor protection requirements.

4. In accordance with Arkansas Act 1100 of 1991 (A.C.A. §\$12-80-101 through \$12-80-106 as amended), the structural plans of each public building and structure shall bear the following:

(A) Licensed Arkansas Engineer's seal and signature;

(B) A statement of reference to what seismic zone the structure is designed to satisfy; and

(C) Information required by Chapter 16 of Volume II of the Arkansas Fire Prevention Code.

106.3.4.3 Affidavits. The building official may accept a sworn or affirmed affidavit from a registered architect or engineer stating that the plans submitted conform to the technical codes. For buildings and structures, the affidavit shall state that the plan conform to the laws as to egress, type of construction, and general arrangement and, if accompanied by drawings, show the structural design and that the plans and design conform to the requirements of the technical codes as to strength, stresses, strains, loads and stability. The building official may without any examination or inspection accept such

affidavit, provided the architect or engineer who made such affidavit agrees to submit to the building official copies of inspection reports as inspections are performed; and submits copies of inspection reports upon completion of the structure, electrical, gas, mechanical or plumbing systems with his/her a certification that the structure, and each electrical, gas mechanical or plumbing system has been erected in accordance with the requirements of the technical codes. Where the building official relies upon such affidavit, the architect or engineer shall assume full responsibility for the compliance with all provisions of the technical codes and other pertinent laws or ordinances.

107.3 Temporary power. The building official is authorized to give permission to-temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the Arkansas (National) Electrical Code (NFPA 70).

#### Chapter 2, Definitions

#### Section 202. Definitions

**FIRE OFFICIAL.** The officer or other designated authority, or his/her duly authorized representative, charged with the administration and enforcement of the Fire Prevention Code.

## Chapter 3, Use and Occupancy Classification

**305.2 Day care.** The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than 5 children older than 2 ½ years of age shall be classified as an "E" occupancy. Day Care (Child Care) Facilities shall meet the provisions of NFPA 101, the Arkansas Fire Prevention Code, and the following:

- 1. Day care facilities that are licensed (or making application for a license) to have 16 or fewer children shall follow the guidelines for Day Care Homes as set out in NFPA 101, 2003 Edition.
- 2. Day care facilities that are licensed (or making application for a license) to have 17 children or more shall follow the guidelines for day care centers as set out in NFPA 101, 2003 Edition.
- 3. The staff-to-client ratios referred to in Chapters 16 and 17 are amended to follow the ratios adopted by the Arkansas Department of Human Services, Division of Child Care and Early Childhood Education, Child Care

Licensing (current phone 501-682-8590 until further notice):

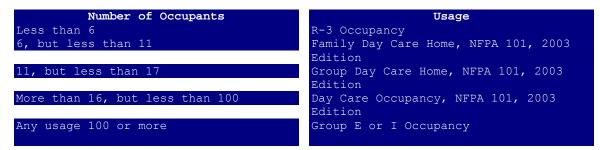
- a. Child Care Centers, 2006;
- b. Day Care Family Homes, 2006; and
- c. Minimum Licensing Standard for Child Welfare Agencies, 2006. (This includes Residential Care Child Care Facilities, Emergency Residential Child Care Facilities, Psychiatric Residential Treatment Facilities, and Sexual Offender Programs)
- 4. The fire authority retains the authority to enforce the more stringent ratios if it is determined the facility needs the more stringent ratios in order to assure fast and safe evacuation of the facility in an emergency for life safety.

**308.5.2 Child Care facility.** A facility that provides supervision and personal care on less than a 24-hour basis for more than 5 children 2  $\frac{1}{2}$  years of age or less shall be classified as Group I-4.

**Exception:** A child day care facility that provides care for more than 5 but no more than 100 children 2  $\frac{1}{2}$  years or less of age, when the rooms where such children are cared for are located on the level of exit discharge and each of

these child care rooms has an exit door directly to the exterior, shall be classified as Group  $\ensuremath{``\text{E}''}.$ 

**Exception:** The definition of Day Care occupancies shall meet the provisions of the Arkansas Fire Prevention Code and NFPA 101, 2003 Edition. The definitions of day care occupancies as set out in NFPA 101, 2003 Edition shall be amended per Department of Human Services Division of Child Care capacities.



Chapter 4, Special Detailed Requirements Based On Use And Occupancy No changes

Chapter 5, General Building Heights And Areas No changes

- Chapter 6, Types Of Construction No changes
- Chapter 7, Fire-Resistance-Rated Construction No changes
- Chapter 8, Interior Finishes No changes
- Chapter 9, Fire Protection Systems No changes
- Chapter 10, Means Of Egress No changes
- Chapter 11, Accessibility No changes
- Chapter 12, Interior Environment No changes
- Chapter 13, Energy Efficiency No changes
- Chapter 14, Exterior Walls No changes
- Chapter 15, Roof Assemblies And Rooftop Structures No changes
- Chapter 16, Structural Design

1613.1 Scope. Exception.

5. Buildings and other structures of a Category I or II occupancy as described in Table 1604.5 of this chapter, or in ASCE 7-05, Table 1-1, may be designed to alternative provisions found in Appendix L of the Arkansas Fire Prevention Code, Volume II, 2007 Edition so long as Appendix L has been adopted by local ordinance in the locality in which the building or other structure is to be constructed.

## Section 1613.7 Modifications to ASCE 7

The text of ASCE 7 shall be modified as indicated in Sections 1613.7.1 through 1613.7.2.

1613.7.1 ASCE 7, Section 12.8.1 Calculation of Seismic Response Coefficient. Modify equation 12.8-5 as follows:

C<sub>s</sub> = 0.044S<sub>DS</sub>I ≥0.01 (Eq. 12.8-5)

# 1613.7.2 ASCE 7, Section 15.4.1(2). Modify subsection (2) as follows:

2. For non-building systems that have an R value provided in Table 15.4-2, the seismic response coefficient  $(C_s)$  shall not be taken less than

$C_s$	=	0.044S <sub>DS</sub> I	2
0.03		(15.4-1	

and for non-building structures located where  $S_1 \geq$  0.6g,  $C_s$  shall not be taken less than

# (15.4 - 2)

**EXCEPTION:** Tanks and vessels that are designed to AWWA D100, AWWA D103, API 650 Appendix E, and API 620 Appendix L as modified by this standard, shall be subject to the larger of the minimum base shear values defined by the reference document or the following equations:

$C_s$	=	0.044S <sub>ds</sub> I	$\geq$
0.01			
(15.4-3)			

and for non-building structures located where  $S_1 \geq$  0.6g,  $C_s$  shall not be taken less than

#### (15.4 - 4)

Minimum base shear requirements need not apply to the convective (sloshing) component of liquid in tanks.

Chapter 17, Structural Tests And Special Inspections No Changes

Chapter 18, Soils And Foundations No changes

Chapter 19, Concrete No changes

Chapter 20, Aluminum No changes

Chapter 21, Masonry No changes

Chapter 22, Steel No changes

Chapter 23, Wood No changes

Chapter 24, Glass And Glazing No changes

Chapter 25, Gypsum Board And Plaster No changes

Chapter 26, Plastic No changes

Chapter 27, Electrical No changes

Chapter 28, Mechanical Systems No changes

Chapter 29, Plumbing Systems No changes

#### Chapter 30, Elevators and Conveying Systems

**3006.5 Shunt trip.** Where elevator hoistways or elevator machine rooms containing elevator control equipment are protected with automatic sprinklers, a means installed in accordance with NFPA 72, Section 3-9.4, Elevator Shutdown, shall be provided to disconnect automatically the main line power supply to the affected elevator prior to or upon the application of water. This installed means shall not be self-resetting. The activation of sprinklers outside the hoistway or machine room shall not disconnect the main line power supply.

Chapter 31, Special Construction No changes

Chapter 32, Encroachments Into The Public Right-Of-Way No changes

Chapter 33, Safeguards During Construction No changes

Chapter 34, Existing Structures

**3401.3 Compliance with other codes.** Alterations, repairs, additions, and changes of occupancy to existing structures shall comply with the provisions for alterations, repairs, additions, and changes of occupancy in the Arkansas Fire Prevention Code, Volume I, Arkansas State Gas Code, Arkansas State Mechanical Code, Arkansas State Plumbing Code, Arkansas Department of Health Rules and Regulations Pertaining to Onsite Wastewater Systems, Designated Representatives and Installers, Arkansas Fire Prevention Code, Volume III, and Arkansas (National) Electrical Code.

**3401.4 International Existing Building Code (IEBC).** The provisions of the *International Existing Building Code*, including Appendix A but not including Appendix B, are allowed to be substituted in their entirety in lieu of the requirements found in Chapter 34 of this Code. The owner or his/her registered design professional must provide written notification to the building official stating which option is being used. The mixing of requirements found in Chapter 34 of this Code and requirements found in the *International Existing Building Code* is prohibited. The chosen option shall also be listed on the plans at the time permits are issued. If the *International Existing Building Code* is chosen as the compliance option, Resource A, contained in the *International Existing Building Code*, may be used as a guideline by the registered design professional(s) and the building official(s) for determination of fire ratings of archaic materials and assemblies.

NOTICE: Resource A is not adopted as part of the Arkansas Fire Prevention Code.

**3410.2 Applicability.** Structures existing prior to November 1, 1958, in which there is work involving additions, alterations, or changes of occupancy shall be made to conform to the requirements of this section or the provisions of Sections 3403 through 3407. The provisions in Sections 3410.2.1 through 3410.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, M, R, S and U. These provisions shall not apply to buildings with occupancies in Group H or I.

Chapter 35, Reference Standards No changes

Appendix A, Employee Qualifications Delete in its entirety

Appendix B, Board of Appeals Delete in its entirety Appendix C, Group U-Agricultural Buildings Delete in its entirety Appendix D, Fire Districts No changes Appendix E, Supplementary Accessibility Requirements No changes Appendix F, Rodent-proofing Delete in its entirety Appendix G, Flood-Resistant Construction Delete in its entirety Appendix H, Signs Delete in its entirety Appendix I, Patio covers Delete in its entirety Appendix J, Grading Delete in its entirety Appendix K, ICC Electrical Code Delete in its entirety Appendix L, Alternate Seismic Design Requirements For Category I and II Buildings

#### APPENDIX L

# ALTERNATE SEISMIC DESIGN REQUIREMENTS FOR CATEGORY I AND II BUILDINGS

#### SECTION L101

**L101.1 Scope.** This Appendix provides an alternative to seismic design requirements found in Chapter 16 regarding buildings and other structures classified as Category I and II occupancies meeting the criteria outlined in Section L102. The provisions in this Appendix shall not apply unless specifically adopted by local ordinance.

#### SECTION L102

**L102.1 Criteria.** Projects electing to use this alternative must be buildings or other structures classified as Category I or II occupancies as described in Table 1604.5, Arkansas Fire Prevention Code, Volume II, 2007 Edition, or in ASCE 7-05, Table 1-1, and must be constructed for manufacturing or industrial occupancy or for public works.

#### SECTION L103

#### L103.1 Structural Design Requirements.

In the case of eligible projects, the mapped 0.2-second and 1.0-second spectral response accelerations shown in IBC 2006 Figures 1613.5(1), 1613.5(2), 1613.5(7), and 1613.5(8) [ASCE 7-05 Figures 22-1, 22-2, 22-7, and 22-8], which reference a 2% probability of exceeding the design seismic event in a 50-year period may be substituted with mapped 0.2-second and 1.0-second spectral response accelerations documented in the "1997 NEHRP Recommended Provisions for Seismic Regulations for New Buildings", which reference a 10% probability of exceeding the design seismic event in a 50-year period.

# L103.2 Designed Spectral Acceleration Parameters.

If Alternate mapped spectral response accelerations as noted in Section L103.1 are used, the following equations shall be substituted for equations 16-39 and 16-40 in IBC 2006 [equations 11.4-3 and 11.4-4 in ASCE 7-05].

SDS = 2/3 SMS (Equation 16-39, IBC 2006) [(11.4-3), ASCE 7-05]

 $SD1 = \frac{2}{3} SM1$  (Equation 16-40, IBC 2006) [(11.4-4), ASCE 7-05]

#### L103.3 Seismic Base Shear.

If Alternate mapped spectral response accelerations as noted in Section L103.1 are used, the design seismic base shear, V, in any given direction, shall not be less than that determined in accordance with the requirements of Section 1607 of the 1997 edition of the Standard Building Code.

#### PROPOSED CHANGES TO VOLUME III OF III VOLUMES

# Definitions Page.

# STATE OF ARKANSAS ARKANSAS FIRE PREVENTION CODE RULES 2007 EDITION

The following shall be defined as:

INTERNATIONAL PLUMBING CODE shall mean the Arkansas State Plumbing Code.

INTERNATIONAL PRIVATE SEWAGE DISPOSAL CODE is replaced by "Arkansas Department of Health Rules Pertaining to Onsite Wastewater Systems".

INTERNATIONAL MECHANICAL CODE shall mean the Arkansas State Mechanical Code.

INTERNATIONAL FUEL GAS CODE shall mean the Arkansas State Gas Code.

INTERNATIONAL ENERGY CONSERVATION CODE shall mean the Arkansas Energy Code.

INTERNATIONAL FIRE CODE shall mean the Arkansas Fire Prevention Code, Volume I.

INTERNATIONAL BUILDING CODE shall mean the Arkansas Fire Prevention Code, Volume II.

INTERNATIONAL RESIDENTIAL CODE shall mean the Arkansas Fire Prevention Code, Volume III.

INTERNATIONAL ELECTRICAL CODE shall mean the Arkansas (National) Electrical Code.

BUILDING OFFICIAL shall mean any governmental official having authority to enforce that aspect of the Code.

Dotted lines in the margin indicate Arkansas revisions.

Solid Stars in the margin indicate Arkansas deletions.

#### Chapter 1, Administration

**R101.1 Title.** These provisions shall be known as the *Arkansas Fire Prevention Code*, *Volume III* of Arkansas, and shall be cited as such and will be referred to herein as "this Code".

**R101.2 Scope.** The provisions of the Arkansas Fire Prevention Code, Volume III shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures.

**R102.5 Appendices.** Provisions in the appendices shall not apply unless specifically referenced in the adopting ordinance. Appendices A through Q are **NOT** adopted by the State of Arkansas and shall not apply unless adopted by a local ordinance.

R112.2.1 Determination of substantial improvement in areas prone to flooding. Delete in its entirety

**R112.2.2 Criteria for issuance of a variance for areas prone to flooding.** Delete in its entirety

#### Chapter 4, Foundations

**R408.3 Unvented crawl space.** Ventilation openings in under-floor spaces specified in Sections R408.1 and R408.2 shall not be required where:

- Exposed earth is covered with a continuous vapor retarder. Joints of the vapor retarder shall overlap by 6 inches (152 mm) and shall be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches (152 mm) up the stem wall and shall be attached and sealed to the stem wall: and
  - 2. The unvented crawl space is provided with a mechanical exhaust and supply air system. The mechanical exhaust rate shall be not less than 0.02 cfm per square foot (0.00001 m3/s x m squared) of horizontal area and shall be automatically controlled to operate when the relative humidity in the space served exceeds 60 percent: alternatively, for crawl spaces, the mechanical exhaust shall be automatically controlled to operate when the absolute moisture content of the outside air is less than or equal to the moisture content in the served space but shall not operate when the outside temperature is below 32 degrees F (0 degrees C).

**R408.3.1 Supply air.** The use of a crawl space for a supply air plenum is prohibited.

Part IV-Energy Conservation

**Chapter 11, Energy Efficiency.** Entire chapter deleted *in toto*. Refer to Arkansas Energy Code.

Part V-Mechanical.

Chapter 12, Mechanical Administration. Delete Chapters 12 through 23 in their entirety. Refer to Arkansas Mechanical Code.

#### Part VI-Fuel Gas

Chapter 24, Fuel Gas. Delete Chapter 24 in its entirety. Refer to Arkansas Gas Code.

Part VII-Plumbing

Chapter 25, Plumbing Administration. Delete Chapters 25 through 32 in their entirety. Refer to Arkansas Plumbing Code.

Part VIII-Electrical

Chapter 33, General Requirements. Delete Chapters 33 through 42 in their entirety. Refer to Arkansas National Electrical Code.

Appendices. Delete Appendices A through Q in their entirety

Appendix A, Sizing And Capacities Of Gas Piping Delete in its entirety

Appendix B, Sizing Of Venting Systems Serving Appliances Equipped With Draft Hoods, Category I Appliances, And Appliances Listed For Use With Type B Vents, Delete in its entirety

Appendix C, Exit Terminals Of Mechanical Draft And Direct-Vent Venting Systems Delete in its entirety

Appendix D, Recommended Procedure For Safety Inspection Of An Existing Appliance Installation Delete in its entirety

Appendix E, Manufactured Housing Used As Dwellings Delete in its entirety

Appendix F, Radon Control Methods Delete in its entirety

Appendix G, Swimming Pools, Spas And Hot Tubs Delete in its entirety

Appendix H, Patio Covers Delete in its entirety

Appendix I, Private Sewage Disposal Delete in its entirety

Appendix J, Existing Buildings And Structures Delete in its entirety

Appendix K, Sound Transmission Delete in its entirety

Appendix L, Permit Fees Delete in its entirety

Appendix M, Home Day Care-R-3 Occupancy Delete in its entirety

Appendix N, Venting Methods Delete in its entirety

Appendix O, Gray Water Recycling Systems Delete in its entirety

Appendix P, Sprinkling Delete in its entirety

Appendix Q, ICC International Residential Code Electrical Provisions/National Electrical Code Cross-Reference Delete in its entirety

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