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The City Clerk of the City of Tulsa, OK, a Municipal Corporation, hereby certifies that the foregoing is a true and correct copy of attachment herewith set out as appears of record in the City Clerk's Office, 175 E 2nd Street, Suite 260, Tulsa, OK, this 28th day of February, 2014 by _____ Deputy City Clerk

(Published in the Tulsa Business & Legal News JAN. 17, 2014)

ORDINANCE NO. 23000

AN ORDINANCE AMENDING THE BUILDING CODE OF THE CITY OF TULSA, OKLAHOMA, TITLE 51 TULSA REVISED ORDINANCES, CHAPTER 2; AMENDING SECTIONS R109.4, R112.1, R112.1.1 AND R112.1.2 REPLACING THE BUILDING, HOUSING AND FIRE PREVENTION APPEALS BOARD AND VESTING AUTHORITY IN THE BOARD OF APPEALS AS CREATED IN TITLE 51, TULSA REVISED ORDINANCES, CHAPTER 1; REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HEREWITH; PROVIDING FOR SEVERABILITY; AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE CITY OF TULSA:

Section 1. That Title 51, Tulsa Revised Ordinances, Chapter 2 be and the same is hereby amended to read as follows:

"CHAPTER 2. ICC INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS, 2009 EDITION ADOPTED

Section 200. Adoption of the ICC International Residential Code For One- and Two-Family Dwellings, 2009 Edition and as amended hereinafter.

A certain document, three (3) copies of which are on file in the Office of the City Clerk, being marked and designated as the *International Residential Code for One- and Two-Family Dwellings,* 2009 Edition, as published by the International Code Council (ICC) and amended or revised as stated in Title 748 Uniform Building Code Commission—Chapter 20, is hereby adopted as a part of the Building Code of the City of Tulsa, Oklahoma, for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, or use of one- and two-family dwellings and townhouses not more than three (3) stories in height with separate means of egress in the City of Tulsa. Consistent with the adoption of this *International Residential Code,* 2009 Edition, there is hereby provided for the related issuance of permits and collection of fees. Each and all of the terms, conditions, regulations, and provisions of the *International Residential Code,* 2009 Edition, published by the ICC, as supplemented and

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amended, on file in the Office of the City Clerk of the City of Tulsa are hereby referred to, adopted and made a part of the Tulsa Revised Ordinances, as if fully set out in this chapter, with its amendments, as prescribed in Section 201 of this chapter and, as used in this Chapter 2, may be referred to as the "code."

Section 201. Amendments to the International Residential Code for One- and Two-Family Dwellings, 2009 Edition

The following provisions of the *International Residential Code for One- and Two-Family Dwellings,* 2009 Edition, are hereby added or amended to read as follows:

R101.1 Title—Amendatory. These provisions shall be known and may be cited as the Residential Code for One- and Two-Family Dwellings of the City of Tulsa" or as the "Tulsa Residential Building Code."

R103.1 Enforcement agency—Amendatory. The term "Department of Building Safety," as used within the *International Residential Code for One- and Two-Family Dwellings,* 2009 Edition shall mean the Development Services-Department of the City of Tulsa or other department, division or section of the City of Tulsa authorized and directed to enforce the provisions of this code.

R103.2 Appointment—Amendatory. The "building official" or "code official," as used in this chapter and *International Residential Code for One- and Two-Family Dwellings,* 2009 Edition, as adopted by the City of Tulsa, shall be the official in charge of the enforcement of this code as appointed or otherwise designated by the Mayor.

R103.4 Conflict of Interest Prohibited—Added. Code officials shall ascribe to and be guided in professional conduct as City of Tulsa representatives as provided in Title 12, Chapter 6 "Ethics Code," Tulsa Revised Ordinances.

R105.1.1 By Whom Application is Made—Added. The application for a permit shall be made by the owner or lessee of the building or structure, or the agent of either or by the licensed engineer or architect employed in connection with the proposed work. ~~If an application is made by a person other than the owner in fee, it~~ shall be accompanied by an affidavit of the owner or the qualified applicant or a signed statement of the qualified applicant witnessed by the building official or designee informing that the proposed work is authorized by the owner in fee and that the applicant is authorized to make such application. The full names and addresses of the owner, lessee, applicant, and the responsible officers, if the owner or lessee is not a natural person, shall be stated on the application. The owner of the building or structure shall at all times retain ownership rights and authority for use and control of such application and any related subsequent permits issued pursuant to this code.

R105.1.2 Zoning Clearance Required—Added. The code official shall not issue a building permit for any building or other structure until and unless the code official is

furnished a Zoning Clearance Permit issued by the zoning official stating that the use or occupancy of such building or structure complies with, or, upon completion, will comply with applicable zoning ordinances of the City of Tulsa.

Exception: A Zoning Clearance Permit is not required for the remodeling of an existing building or structure, unless it will result in a change of the size or use of the building or structure.

R105.1.3 Fire Sprinkler Permit—Added. A permit shall be obtained before installing, altering or removing any portion of an automatic fire sprinkler system. The code official shall not issue a fire sprinkler permit for the installation of an automatic sprinkler system until the person, firm, corporation, or Limited Liability Company or other entity installing the same shall have on file with the City of Tulsa a surety bond in the amount of Two Thousand Five Hundred Dollars ($2,500.00). Such bond shall be on a form satisfactory to the City, guaranteeing payment of all obligations and guaranteeing installation in accordance with the provisions of this code. No person, firm, corporation, limited liability company or other entity shall install fire sprinkler systems unless licensed as provided in 59 O.S.2001, §§ 1800.1, *et seq.*, as amended, and related rules and regulations.

R105.3 Application for permit—Amendatory. To obtain a building permit, the applicant shall first file an application therefore in writing on a form furnished by the City of Tulsa for that purpose.
Such application shall:

1. Identify and describe the work to be covered by the permit for which application is made.

2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.

3. Indicate the use and occupancy for which the proposed work is intended.

4. Be accompanied by construction documents and other information as required in Section R106.1.

5. State the valuation of the proposed work.

6. Be signed by the applicant or the applicant's authorized agent.

7. Give such other data and information as required by the building official.

R105.3.(a)—License Added. All Electrical permits and required licensing shall be administered as described in Title 52, Tulsa Revised Ordinances. All Mechanical permits and required licensing shall be administered as described in Title 59, Tulsa

Revised Ordinances. All Plumbing and required licensing shall be administered as described in Title 56, Tulsa Revised Ordinances.

R105.3.3 Payment of Fees—Amendatory. Upon receipt of an application for a building permit, an application fee shall be paid. Upon approval the applicant shall then be notified the permit is ready and advised of what remaining fees are due. In order for the permit to be valid, it shall have been paid in full and posted at the job site prior to beginning construction. Payment for permits is due upon notification to applicant that the permit has been approved and is ready for issuance. Any permit not paid within thirty (30) days after notification may be deemed void by the code official and the application fee shall then be forfeited. An amendment to a permit shall not be released until the additional fee, if any, has been paid.

R105.7 Placement of Permit—Amendatory. A copy of the building permit shall be posted on the site of operations, visible from the street, and open to public inspection during the entire time of execution of the work and until the completion of the same.

R108.1.1 Accounts—Added. Every person or entity shall be issued an account number at the time of an initial permit application as established by Title 49, Tulsa Revised Ordinances.

R108.2 Schedule of Permit Fees—Amendatory. On buildings, structures, electrical, gas, mechanical and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the schedule as established by Title 49, Tulsa Revised Ordinances.

R109.1.3 Finished Floor Elevation and Flood Vents—Amendatory. When a minimum finished floor elevation is specified in a permit, no additional work shall be performed after approval of the slab or floor until an elevation certificate, verifying the floor elevation, and the size and location of any required flood vents, has been received and approved by the code official. The elevation certificate shall be prepared by a land surveyor or engineer who is licensed by the state of Oklahoma, using an appropriate form provided by the code official.

R109.1.3.2 Final Floodplain Elevation Certificate—Added. Prior to the final inspection, a final elevation certificate shall be required for those structures located in areas prone to flooding, as established by Table R301.2(1) of this code. The certificate, as approved by the code official, shall confirm the finished floor elevation, the size and location of flood vents, and shall verify the lowest elevation of mechanical equipment. The certificate shall be prepared by a land surveyor or engineer licensed by the state of Oklahoma and shall be provided to the code official for approval.

R109.1.5.2 Placement of Erosion Control Inspection (PEC)—Added. After issuance of a permit for work that involves disturbance of earth, and before any other earthwork begins, the permit applicant or the applicant's authorized agent shall (1)

identify and mark property lines, easements and floodplains, (2) install erosion control in accordance with the approved site plan, and (3) request a Placement of Erosion Control Inspection (PEC). No other work may be performed until the building official authorizes further construction activity. All construction including development, excavation, grading, regrading, paving, landfilling, berming, and diking of land shall be conducted so as to minimize erosion and prevent the discharge of pollutants (including, but not limited to rock, sand, and soil) into the municipal storm sewer system or onto adjacent occupied property. Persons conducting construction shall implement and maintain acceptable structural and/or nonstructural barriers for controlling erosion. Failure to install and maintain adequate erosion control may result in issuance of a stop work order on all trades by the building official.

R109.1.6 Final Inspection—Amendatory. Final inspection shall be made after the permitted work is complete and prior to occupancy. It shall be unlawful and an offense for any person, firm, corporation, or limited liability company, whether as owner, lessee, sub-lessee, or occupant, to use or occupy any structure regulated by this code or part thereof, or cause same to be done, until all required final inspections on all open permits have been made, except as authorized by the IRC 2009, Section R110.4.

R109.4 Approval Required—Amendatory. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official upon notification shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official. Work that is covered or concealed, or a residence that is occupied without approval of the code official shall be in violation of this code and be penalized by the imposition of a civil fine in accordance with Title 49, Tulsa Revised Ordinances for each occurrence and may result in a hearing before the Board of Appeals as provided in Title 51, Chapter 1, Tulsa Revised Ordinances. The assessment or payment of this penalty shall not relieve any person, firm, corporation, or limited liability company from fully complying with all the requirements of this code nor shall such payment exempt the person, firm, corporation, or limited liability company or other entity from further penalty provided by law.

SECTION R112 BOARD OF APPEALS

R112.1 General—Amendatory. Appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, shall be made to the Board of Appeals as provided in Title 51, Chapter 1, Tulsa Revised Ordinances.

R112.3 Qualifications—Added. The Board of Appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction. The membership of the Board shall be as established in Title 51, Chapter 1 Tulsa Revised Ordinances.

R113.4 Violation—Penalties—Added. It shall be unlawful and an offense for any person, firm, corporation, limited liability company or other entity to violate any of the provisions of this code, fail to comply with any of the requirements thereof, or to erect, construct, alter, or repair any building or structure in violation of an approved plan or directive of the building official or of a permit issued under the provisions of this code. Any person, firm, corporation, limited liability company or other entity convicted of a violation of this code shall be guilty of a misdemeanor offense and shall be punished by a fine of not more than Five Hundred Dollars ($500.00), excluding costs, fees, and assessments, or by imprisonment in the City Jail for a period not exceeding ninety (90) days, or by both such fine and imprisonment. Each day, or portion thereof, during which a violation is committed, or continued, shall be deemed a separate offense.

CHAPTER 2 DEFINITIONS

SECTION R202 DEFINITIONS—Amendatory.

FLOOD HAZARD AREA—Added. For all buildings or structures located inside the City's corporate limits, the flood hazard area, also called "areas prone to flooding", shall be as designated on the City of Tulsa's adopted Regulatory Flood Plain Maps and the currently effective Flood Insurance Rate Maps (FIRM).

FLOODWAY—Added. The channel of the river, creek or other watercourse and the adjacent land areas that must be reserved in order to discharge a base flood without cumulatively increasing the water surface elevation as prescribed by applicable City ordinances.

SUBSTANTIAL IMPROVEMENT—Added. Any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure, either before the improvement or repair is started or, if the structure has been damaged and is being restored, before the damage occurred. For purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term shall not, include:

1. Any project(s) for improvement of a structure to comply with existing state or local health, sanitary or safety code specifications which are solely necessary to assure safe living conditions, or

2. Any alterations of a structure listed on the National Register of Historic Places or State Inventory of Historic Places.

The cost used in the substantial improvement determination shall be the cumulative costs of all previous improvements for a specific building or structure occurring during the immediate past ten-year period.

CHAPTER 3 BUILDING PLANNING

TABLE 301.2(1)—Amendatory.

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUNDSNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP	ICE BARRIER UNDER-LAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	Speed (mph)	Topographic effects		Weathering	Frostline Depth	Termite					
10 PSF	90	N/A	BY ZONE A OR B[a]	MODERATE	18"	YES	12°F	No	See note b.	442	60.3

[a] The area North of State Highway 412 is Seismic Design Category A and the area south of State Highway 412 is Seismic Design Category B.

[b] Flood hazard areas (also called areas prone to flooding) shall be as designated on the currently adopted Flood Insurance Rate Map (FIRM) and the currently adopted City of Tulsa Regulatory Floodplain Map Atlas.

R302.1 Exterior walls.—Added. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1. Projections beyond the exterior wall shall not extend more than 12 inches (305 mm) into the areas where openings are prohibited.

Exceptions:

1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the fire separation distance.

2. Opposite facing walls of dwellings and accessory structures located on the same lot.

3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on

location on the lot. Projections beyond the exterior wall shall not extend over the lot line.

4. Detached garages accessory to a dwelling located within two (2) feet (610 mm) of a lot line are permitted to have roof eave projections not exceeding four (4) inches (102 mm).

5. Foundation vents installed in compliance with this code are permitted.

TABLE R302.1

EXTERIOR WALLS—Added as stated in Title 748 Uniform Building Code Commission–Chapter 20. Adopted Codes Subchapter 5. 748:20-5-6. IRC 2009 Chapter 3 Building Plans (1).

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	(Fire-resistance rated)	1 hour-tested in accordance with ASTM E 119 or UL 263 with exposure from both sides	< 3 feet
	(Not fire-resistance rated)	0 hours	≥3 feet
Projections	(Fire-resistance rated)	1 hour on the underside	≥2 feet to 3 feet
	(Not fire-resistance rated)	0 hours	>3 feet
Openings in walls	Not allowed	N/A	< 3 feet
	25% maximum of wall area	0 hours	3 feet
	Unlimited	0 hours	5 feet
Penetrations	All	Comply with Section R317.3	< 5 feet
		None required	5 feet

For SI: 1 foot = 304.8 mm.
N/A = Not Applicable.

R311.7.4.1 Riser Heights—Added. The maximum riser height shall be seven and three-quarters (7¾) inches (196 mm) and shall be measured during the rough-in inspection. The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed

the smallest by more than three-eighths (3/8) inch (9.5 mm) as measured during rough in inspection. Top and bottom riser may vary by three-fourths (¾) inch at final inspection, not to exceed seven and three-quarters (7¾) of an inch (196mm).

R313.2 One- and two-family dwellings automatic fire systems. This section has been moved to Appendix R, Automatic Fire Systems of the IRC 2009 and is not adopted as a minimum standard for residential construction within the State of Oklahoma.

R313.2.1 Design and installation. This section has been moved to Appendix R, Automatic Fire Systems of the IRC 2009 and is not adopted as a minimum standard for residential construction within the State of Oklahoma.

R314.4 Power source.—Amendatory. Smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Smoke alarms shall be interconnected. All required smoke alarms in the individual unit shall be connected to the same luminaire circuit.

Exceptions:

1. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power.

2. Interconnection and hard-wiring of smoke alarms in existing areas shall not be required where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for hard wiring and interconnection without the removal of interior finishes.

R315.1 Carbon monoxide alarms.—Added. For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages.

Exception: If a residence with an attached garage has a sealed door between the residence and the garage; and no fuel burning appliances in the residence, then carbon monoxide detection is not required within the residence.

R322.2.1 Elevation Requirements—Amendatory.

1. Buildings and structures shall have the lowest floors elevated to or at least one (1) foot above the design flood elevation.

2. In areas of shallow flooding (AO Zones), buildings and structures shall have the lowest floor (including a basement) elevated at least as high above the highest adjacent grade as the depth number specified in feet (mm) on the FIRM plus one (1) foot, or at least three (3) feet if a depth number is not specified.

3. Basement floors that are below grade on all sides shall be elevated to or at least one (1) foot above the design flood elevation.

   Exception: Enclosed areas below the design flood elevation, including basements whose floors are not below grade on all sides, shall meet the requirements of Section R324.2.2 of this code.

4. Electrical systems, equipment and components, and heating, ventilation, air conditioning and plumbing appliances, plumbing fixtures, duct systems, and other service equipment shall be located at or least one (1) foot above the design flood elevation. If replaced as part of a substantial improvement, electrical systems, equipment and components, and heating, ventilation, air conditioning, and plumbing appliances, plumbing fixtures, duct systems, and other service equipment shall meet the requirements of this section. Systems, fixtures, and equipment and components shall not be mounted on or penetrate through walls intended to break away under flood loads.

R323.1 General—Amendatory. This section applies to the construction of storm shelters when constructed as separate detached buildings or when constructed as safe rooms within buildings for the purpose of providing safe refuge from storms that produce high winds, such as tornados and hurricanes. In addition to other applicable requirements in this code, such storm shelters shall be constructed in accordance with ICC/NSSA-500 or FEMA 320 or other equivalent engineered system.

R402.2 Concrete—Amendatory. Concrete shall have a minimum specified compressive strength of f_c, as shown in Table R402.2. Concrete subject to moderate or severe weathering as indicated in Table R301.2 (1) shall be air entrained as specified in Table R402.2. The maximum weight of fly ash, other pozzolans, silica fume, slag or blended cements that is included in concrete mixtures for garage floor slabs and for exterior porches, carport slabs and steps that will be exposed to deicing chemicals shall not exceed the percentages of the total weight of cementitious materials specified in Section 4.2.3 of ACI 318. Materials used to produce concrete and testing thereof shall comply with the applicable standards listed in Chapter 3 of ACI 318 or ACI 332.

Exception: Interior concrete slabs on grade and enclosed garage slabs are not required to be air entrained.

R403.1.1.1 Reinforcement of Footings—Added. A minimum of four (4) five-eighths (5/8) inch reinforcement bars shall be placed horizontally, two (2) at the top

and two (2) at the bottom in each continuous footing. The continuous footing shall extend through garage door openings, unless otherwise specified on approved plans designed by an engineer.

R403.1.1.2 Dowels in Footings—Added. A minimum of one-half (½) inch dowels at four (4) feet on centers shall extend from three (3) inches above the bottom of the footing to within three (3) inches of the top of the stem wall and turn into the slab a minimum of twenty-four (24) inches, unless otherwise specified on approved plans. These dowels shall be on the job site at the time of the footing inspection.

R403.1.6 Foundation anchorage.—Added. Sill plates and walls supported directly on continuous foundations shall be anchored to the foundation in accordance with this section. Wood sole plates at all exterior walls on monolithic slabs, wood sole plates of braced wall panels at building interiors on monolithic slabs and all wood sill plates shall be anchored to the foundation with anchor bolts spaced a maximum of six (6) feet (1,829 mm) on center. Bolts shall be at least one-half (½) inch (12.7 mm) in diameter and shall extend a minimum of seven (7) inches (178 mm) into concrete or grouted cells of concrete masonry units. A nut and washer shall be tightened on each anchor bolt. There shall be a minimum of two (2) bolts per plate section with one (1) bolt located not more than twelve (12) inches (305 mm) nor less than seven (7) bolt diameters from each end of the plate section. Interior bearing wall sole plates on monolithic slab foundation that are not part of a braced wall panel shall be positively anchored with approved fasteners. Sill plates and sole plates shall be protected against decay and termites where required by Sections R317 and R318. Cold-formed steel framing systems shall be fastened to wood sill plates or anchored directly to the foundation as required in Section R505.3.1 or R603.3.1.

Exceptions:

1. Foundation anchorage, spaced as required to provide equivalent anchorage to one-half (½) inch-diameter (12.7 mm) anchor bolts.

2. Walls twenty-four (24) inches (610 mm) total length or shorter connecting offset braced wall panels shall be anchored to the foundation with a minimum of one (1) anchor bolt located in the center third of the plate section and shall be attached to adjacent braced wall panels at corners as shown in Figure R602.10.4.4(1).

3. Connection of walls twelve (12) inches (305 mm) total length or shorter connecting offset braced wall panels to the foundation without anchor bolts shall be permitted. The wall shall be attached to adjacent braced wall panels at corners as shown in Figure R602.10.4.4(1).

4. Wood sole plates of braced wall panels at building interiors on monolithic slabs may be anchored using connector(s) with a shear capacity of two

thousand three hundred (2,300) pounds and a tensile capacity of eight hundred (800) pounds over a maximum span of six (6) feet.

R406.2 Concrete and masonry foundation waterproofing.—Added. In areas where a high water table or other severe soil-water conditions are known to exist, exterior foundation walls that retain earth and enclose interior spaces and floors below grade shall be waterproofed from the top of the footing to the finished grade. Walls shall be waterproofed in accordance with one (1) of the following:

1. Two-ply hot-mopped felts.

2. Fifty-five (55) pound (25 kg) roll roofing.

3. Six-mil (0.15 mm) polyvinyl chloride.

4. Six-mil (0.15 mm) polyethylene.

5. Forty-mil (1 mm) polymer-modified asphalt.

6. Sixty-mil (1.5 mm) flexible polymer cement.

7. One-eighth inch (3 mm) cement-based, fiber-reinforced, waterproof coating.

8. Sixty-mil (0.22 mm) solvent-free liquid-applied synthetic rubber.

9. Bentonite

Exception: Organic-solvent-based products such as hydrocarbons, chlorinated hydrocarbons, ketones and esters shall not be used for ICF walls with expanded polystyrene form material. Use of plastic roofing cements, acrylic coatings, latex coatings, mortars and pargings to seal ICF walls is permitted. Cold-setting asphalt or hot asphalt shall conform to type C of ASTM D 449. Hot asphalt shall be applied at a temperature of less than two hundred (200) degrees F (93°C). All joints in membrane waterproofing shall be lapped and sealed with an adhesive compatible with the membrane.

R506.2.3 Vapor retarder.—Added. A six (6) mil (0.006 inch; .1524 mm) polyethylene sheeting, other industry accepted vapor retarder products installed per manufacturer specifications or approved vapor retarder with joints lapped not less than six (6) inches (152 mm) shall be placed between the concrete floor slab and the base course or the prepared subgrade where no base course exists.

Exception: The vapor retarder may be omitted:

1. From detached garages, utility buildings and other unheated accessory structures.