## FAQ's – Residential Code Information

The following represents frequently asked questions and/or violations of the 2006 International Residential Code with City amendments PLEASE SEE Ordinance 7101 for such amendments. The code book contains 655 pages, other code sections may apply, this list is a summary not intended to be all-inclusive, but as an aid to assist in the building process. **Building, Electrical, Mechanical, Plumbing work must comply with the Amarillo City Code any omissions or failure to identify violations during plan review does not permit violations of the code.** 

**R109.1.4** Masonry inspection required prior to installation of masonry veneer, after installation of base course of flashing and installation of weather resistant sheathing paper per R703.2

R303.6 Interior and exterior stairways shall be illuminated including stairs, landings, and treads.

**R308.4** Safety Glazing is required; in all doors, glazing within 24" of door, glazing enclosing / in building walls enclosing tub /showers, glass over 9 square feet of area w/ bottom edge within 18" of floor & top edge greater than 36" above floor and walking surface within 36", glazing within 60 inches horizontally of the bottom tread of a stairway and the glass is less than 60" above the nose of the tread.

**R309** Garage is required to be separated from the residence and its attic area with not less than  $\frac{1}{2}$ " gypsum board applied to the garage side,  $\frac{5}{8}$ " Type X on ceiling of garage with living above and the supporting structural members covered in minimum  $\frac{1}{2}$ " gypsum. Doors are required to be a minimum of 1  $\frac{3}{8}$ " thick – solid wood or honeycomb steel, or a 20-minute fire-rated door.

**R310** Emergency escape and rescue openings are required in every sleeping room. Openings shall have; minimum opening of 5.7 square feet (operational from inside without use of keys or tools, maximum sill height of 44" from finished floor, minimum 20" opening width, minimum 24" opening height. Basements over 400 square feet must comply with this section, less than 400 SF shall be designed as a storm shelter.

**R311** Landings are required on each side of exterior swinging doors, minimum of 36". Top and bottom of all ramps and where ramps change direction.

**R311.2.2** Under stair protection is required in enclosed accessible space under stairs with walls and under stair surface protected with a minimum  $\frac{1}{2}$ " drywall.

**R311.5** Stairways: Minimum width 36", Maximum riser height 7  $\frac{3}{4}$ " (max. variance  $\frac{3}{8}$ "), Minimum tread depth 10" (max variance  $\frac{3}{8}$ "), Minimum nosing  $\frac{3}{4}$ " – maximum 1  $\frac{1}{4}$ " on stairs with solid risers (open risers are permitted provided the opening does not permit the passage of a 4" diameter sphere). Minimum 6'8" headroom measured vertically from a sloped plane from floor surface to floor surface.

**R311.5.3.2** Stairs with winders are permitted provided the tread on the narrowest side 12 inches out is not less than 10 inches wide, and the minimum width of any tread is not less 6 inches.

**R311.5.6** Handrails are required on all stairs with four or more risers located between  $34^{\circ}-38^{\circ}$  in height measured vertically from nosing. Ends shall be returned to wall or terminate in newel post or safety terminal. Clear space between wall and handrail shall not be less than  $1\frac{1}{2}^{\circ}$  and shall be continuous (may be interrupted by newel post at a turn). Handrail cross-section  $1\frac{1}{4}^{\circ}$  minimum –  $2^{\circ}$  maximum or other equivalent grasping surface, edges with min.  $1/8^{\circ}$  radius.

**R312** Guards required on any walking surface over 30" from adjacent floor or grade, minimum 36" in height. Open sides of stairs with rise of 30" or more shall have guards minimum of 34" in height measured vertically from nosing. Openings in required guards shall not permit passage of a 4" sphere.

**R313** Smoke alarms required: Each sleeping room, immediate vicinity outside bedrooms, each story of dwelling including basement, and in the room adjacent to the top of any basement stairs within12" of the top tread (measured horizontally). All alarms shall be interconnected with battery backup. (Interior alterations, additions requires the dwelling unit comply with this section)

**R401.2** Concrete foundations will be designed by registered design professional licensed in the State of Texas or constructed in compliance with The Panhandle Residential Foundation Manual. Foundation illustrations are on file and available in the office of the Building Official.

**R401.3** Drainage of surface water shall not create a hazard; Lots shall be graded away from foundation minimum of 6 inches within the first 10 feet. Exception for lots unable to comply with 401.3 allows for a prescriptive 5% grade away from structure to a swale with a minimum 2% slope.

R403.1.4 Footing Depth of any structure over 600 square feet will be a minimum of 24".

**R403.1.6** Foundation anchorage: Minimum  $\frac{1}{2}$ " bolts spaced maximum 6' on center and located within 12" from the ends of plates, embedded a minimum of 7" into masonry. Anchor straps spaced as required to provide equivalent anchorage to  $\frac{1}{2}$ "-inch bolts.

**R502.3.3** Cantilever maximum shall not exceed nominal depth of joist or Table R502.3.3 (1) or Table R502.3.3 (2).

**R502.8.2** Engineered wood products (Trusses, LVL's, I-Joists, etc.) shall not have cuts notches or holes drilled without documentation of the effects on the design.

**R502.11** Wood trusses shall be installed to manufacturer's instructions / design drawings and truss design drawings are required on job site and made available for inspection.

**R506.2.4** Slab-on-grade reinforcement must be supported to remain in place from the center to upper third of the slab for the duration of the pour.

**R602.3.1** Stud size, height and spacing shall be in accordance to Table R602.3 (5) and stud length shall be in accordance to Table R602.3.1

**R602.6** Stud walls may not have holes drilled within 5/8" of edge and may not be cut or notched to a depth exceeding 25% of its width.

**R602.6.1** Drilling or notching top plate exceeding 50% requires a galvanized metal tie .054" thick-1.5" wide fastened with not less than eight 16d nails to each side of opening.

**R602.8** Fire blocking required in concealed spaces at 10-foot horizontal intervals and vertical at ceiling and floor levels etc. and at openings around pipes, ducts, cables, and wires at ceiling and floor level.

**R613.1** Windows shall be installed and flashed in accordance with the manufacturers written installation instructions as provided with each window.

**R613.2** Where an operable window is located 72 inches above finished grade outside the lowest part of the clear opening shall be a minimum of 24 inches above finish floor. (fall protection)

R613.9.1 Mullions shall be tested in accordance with AAMA 450 or engineered.

**R702.4.2** Cement, Fiber-Cement, and Glass Mat shall be used as backers for wall tile in tub and shower areas. Use of "Green-board" or green gypsum board in these locations is prohibited.

**R703.1/R703.2** Weather-resistive exterior envelope required, and a means of draining water within the assembly. Weather resistive barrier is required to be installed horizontally lapped over the lower course a minimum of 2" and joints lapped a minimum of 6" under all siding materials.

**R703.8** Approved corrosion-resistant flashing applied shingle fashion and extending to face of wall finish is required at all exterior door and window openings, intersections of chimneys with framed or stucco walls, above all projecting wood trim, wall and roof intersections.

**802.3.1** Ceiling joist and Rafter Connections Ceiling joists and rafter shall be connected in accordance with table R802.5.1(9) and nailed to the top plate, where ceiling joists are not connected to the rafters at the top plate, minimum  $2\times4$  joists shall be installed higher as continuous rafter ties, such rafter ties shall be installed in the lower one-third of the attic height or the ridge must be supported by a girder designed to support all loads. To resist uplift Collar ties or ridge straps (minimum  $1\times4$ ) shall be connected in the upper third of the attic space not more than 4 feet on center.

**R907.3** Asphalt shingles must be removed prior to application of new roof coverings.

**N1101.8** A permanent certificate shall be posted inside the electrical distribution panel and shall list the predominant R-values of insulation installed in walls, ceilings, foundation, ducts outside condition spaces; U-factors for fenestration (SHGC). List the type and efficiency of heating, cooling, and service water heating equipment.

**M1305.1** Appliance Access for inspection, service, repair, and replacement shall provide a level working space at least 30" x 30" in front of the control side to service equipment.

**M1308.3** Outdoor mechanical equipment shall be raised at least 3 inches above finished grade and mfg. Installation instructions.

M1506.2/1506.2 Air removed by every mechanical exhaust system shall discharge directly outdoor, not into an attic.

**M1502.6** Maximum length of any dryer vent is 25 feet and shall be reduced by 5 feet for each 90-degree bend.

**P906.1** Distance of trap from vent. The developed length of the fixture drain from the trap weir to the vent fitting for self-siphoning fixtures, such as water closets, shall be limited to 6 feet maximum.

**P2713.3** Bathtub and Whirlpool bathtubs require temperature limiting device valve – maximum temperature of  $120^{\circ}$ F

**P3114.3** Individual, branch and circuit vents shall be permitted to terminate with connection to an air admittance valve where approved by the code official.

**NEC210.8** Additional required GFCI protection: receptacles within 6' of laundry/utility room sinks and all garage receptacles

NEC210.12 Arch-fault protection expanded to all non-GFCI protected outlets inside house

**NEC406.11** Tamper-resistant receptacles required in all outlets (This section deleted: products not readily available)