



DEVELOPMENT SERVICES
Department of Building Safety

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PLAN REVIEW CORRECTION SHEET

Review performed under 2015 I-Codes, 2014 NEC, as amended.

R106.1 Design drawings for all engineered/manufactured wood products shall be provided prior to building frame inspection.

R302.2.1 The fire-resistance-rated wall or assembly separating townhouses shall be continuous from the foundation to the underside of the roof sheathing, deck or slab. The fire-resistance rating shall extend the full length of the wall or assembly, including wall extensions through and separating attached enclosed accessory structures.

R302.2.2 "Parapet Exception" A parapet is not required when the roof is covered with a minimum class C roof covering, and the roof decking is noncombustible or approved fire-retardant-treated wood for a distance of 4' on each side of the separation wall/s, or one layer of 5/8" Type X gypsum board is installed directly beneath the roof decking, supported by a minimum of nominal 2-inch ledgers attached to the sides of the roof framing, for a distance of 4' on each side of the separation wall/s and there are no openings or penetrations in the roof within 4' of the separation wall/s.

R302.5.1 Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1³/₈ inches thick – solid wood or honeycomb-core steel, or a 20-minute fire-rated door, equipped with a self-closing device.

R302.6 Garage is required to be separated from the residence and its attic area with not less than 1/2" gypsum board applied to the garage side, **5/8" Type X on ceiling of garage with living above** and the supporting structural members covered in minimum 1/2" gypsum.

R302.11 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

R303.3 Bathrooms without an operable window requires mechanical ventilation, and shall discharge directly outdoor, not into the attic space per M1506.2.

R303.9 Every dwelling unit shall be provided with heating facilities capable of maintaining a minimum room temperature of 68 degrees F at a point 3 feet above the floor and 2 feet from exterior walls in all habitable rooms. Portable space heaters shall not be used to achieve compliance.

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.

R308.4.5 Safety glazing is required: where glazing is located in walls and fences enclosing swimming pools, hot tubs and spas where the bottom edge is less than 60 inches above a walking surface and within 60 inches horizontally of the water's edge.

R310 Emergency escape and rescue openings are required in every sleeping room. Openings shall have; minimum opening of 5.7 square feet, grade floor openings can be a minimum of 5.0 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.

R311.3 There shall be a floor or landing on each side of each exterior door.

R311.7 Stairways: Minimum width 36", Maximum riser height 7 3/4" (max. variance 3/8"), Minimum tread depth 10" (max variance 3/8"), Minimum nosing 3/4" - maximum 1 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. Handrails are required on all stairs with four or more risers located between 34"–38" in height measured vertically from nosing. Ends shall be returned to wall or terminate in newel post or safety terminal.

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.

R312.2.1 Where an operable window is located 72 inches above exterior finished grade, the lowest part of the clear opening shall be a minimum of 24 inches above finished floor. (fall protection)

R314 Smoke alarms required: Each sleeping room, immediate vicinity outside bedrooms, each story of dwelling including basement. All alarms shall be hard-wired, interconnected with battery backup. (Interior alterations, additions requires the dwelling unit comply with this section).

R315 Carbon monoxide alarms required: In the immediate vicinity of the bedrooms in *dwelling units with fuel-fired appliances* and in dwelling units that have attached garages (work requiring a permit require existing dwelling units to comply with this section). Approved alarms shall be installed in accordance with manufacturers installation instructions or located on the wall at a height 42 to 90 inches above floor, avoiding locations near heating/cooling vents or areas which provide turbulent airflow, and minimum 36 inches away from openings to areas of high humidity. Avoid installing CO alarms in kitchens or above fuel-burning appliances. All alarms shall be hard-wired with battery back-up. (Interior alterations, repairs or additions require the dwelling unit to comply with this section).

Your plans have been approved with corrections (HIGHLIGHTED); please ensure to address the corrections accordingly to avoid any delays during the construction phase. Receipt of the Approved Permit Package constitutes acknowledgement of the corrections. Plan Review 2015 I-Codes with City of Amarillo amendments and Municipal Code, failure to identify code violations during plan review does not constitute the right to violate the code.

R317.1.2 All wood in contact with the ground, embedded in concrete in direct contact with the ground or embedded in concrete exposed to the weather that supports permanent structures shall be approved pressure-preservative treated wood.

R401.2 Concrete foundations will be designed by registered design professional licensed in the State of Texas or constructed in compliance with The 2015 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.

R408.1 The under-floor space between the bottom of the floor joists and the earth shall have ventilation openings through foundation walls or exterior walls.

R408.4 Access shall be provided to all under-floor spaces. Openings through the floor shall be 18" x 24" or through a perimeter wall 16" x 24" minimum.

R502.5 The allowable spans of girders/headers/beams shall not exceed the values of Table R502.5(1) or an engineered beam shall be specified.

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 prior to building frame inspection.

R602.3.1 Stud size, height and spacing shall be in accordance to Table R602.3.

R602.11 Braced wall line sills shall be anchored to concrete or masonry foundations in accordance with Section R403.1.6.

R602.7 The allowable spans of girders/headers/beams shall not exceed the values of Table R602.7(1), 607.1(2) and 607.1(3) or an engineered beam shall be specified.

R802.3.1 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 2x4 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 1x4) shall be connected in the upper third of the attic space not more than 4 feet on center.

R802.4 Spans for ceiling joists shall be in accordance with Tables 802.4(1) and R802.4(2).

R802.5 Spans for rafters shall be in accordance with Tables 802.5.1(1) through R802.5.1(8).

R802.5.1 When under sizing rafters, purlins shall be sized no less than the rafters that they support. Purlins shall be continuous and shall be supported by 2-inch by 4-inch braces installed to bearing walls or engineered beam at a slope not less than 45 degrees from horizontal. The braces shall be spaced not more than 4 feet on center and the un-braced length of braces shall not exceed 8 feet.

R806.1 Enclosed attics and rafter spaces shall have cross ventilation for each separate space by ventilating openings.

M1305.1.4.1. Outdoor mechanical equipment shall be raised at least 3 inches above finished grade and mfg. Installation instructions.

M1501.1 Air removed by every mechanical exhaust system shall discharge directly outdoor, not into an attic.

M2005.2 Water heaters located in a bedroom or bathroom shall be in a sealed enclosure so that combustion air will not be taken from the living space.

NEC210.8(A) Receptacles located in bathrooms, garages, accessory buildings, outdoors, crawl spaces, unfinished basements, kitchen countertops including islands, and within 6' of laundry, utility and wet bar sinks are required to have GFCI protection.

NEC210.12 Circuits supplying outlets shall be protected by a listed arc-fault interrupter.

NEC210.52 At least one receptacle shall be installed at each island countertop space and is required to be GFCI protected per NEC 210.8.

NEC210.52(A) Receptacles in all habitable rooms shall be installed such that no point measured horizontally along the floor line in any wall space is more than 6 feet from a receptacle outlet.

NEC210.52(C) Receptacle outlets for countertop spaces in kitchens, pantries, dining rooms and similar areas shall be installed such that no point measured horizontally is more than 24 inches from a receptacle outlet in that space. A receptacle outlet shall be installed at each countertop space that is 12 inches or wider.

NEC210.52(D) At least one receptacle outlet shall be installed in bathrooms within 3 ft. of the outside edge of each basin.

NEC210.52(E) At least one receptacle outlet shall be installed at grade level at the front and back of all one and two-family dwellings.

NEC210.52(G) At least one receptacle outlet, in addition to those for specific equipment, shall be installed in each basement, attached garage and detached garage with electrical power.

NEC210.52(H) Hallways of 10 feet or more in length shall have at least one receptacle outlet.

NEC210.63 A receptacle outlet shall be installed at an accessible location for the servicing of heating and air conditioning equipment. The receptacle shall be on the same level within 25' of the equipment.

NEC210.70 At least one wall switch-controlled lighting outlet shall be installed in every habitable room, bathroom, hallway, stairway, attached garage, detached garage and on the exterior side of outdoor entrances or exits.

NEC240.24 Branch-circuit over-current devices shall not be located in the vicinity of easily ignitable material, such as clothes closets or located in bathrooms.

NEC406.9(B)(1) Receptacles installed in a wet location shall have an enclosure that is weatherproof whether or not the attachment plug cap is inserted.

NEC406.12 Tamper-resistant receptacles in dwelling units specified in **NEC210.52**, below 5.5' from floor, shall be listed tamper-resistant.

Sec. 4-10-171(b)7g No openings for access, light, or air are permitted on the wall of any structure where the normal side yard requirement is not observed between such wall and the side lot line. (This does not prevent the use of glass block installed as masonry units).

NFPA 54, Sec. 9.20 Listed Outdoor Cooking Appliances shall be installed in accordance with their listing and the manufacturer's instructions. Unlisted Outdoor Cooking Appliances shall be installed with clearances to combustible materials of not less than 36" at the sides and not less than the 48" at the front. In no case shall the appliance be located under overhead combustible construction.

Thermal Envelope/Gas Fired Appliances Depending on placement/location of the building thermal envelope, enclosed attic spaces outside of the building thermal envelope are still required to be ventilated in accordance with R806.1. When gas fired heating units are installed within spray foamed building thermal envelopes (attic) are required to have sealed combustion chambers or the unit must be installed within its own enclosure (mechanical room) separate from attic space so that combustion air requirements are met in accordance with G2407.