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Residential Dwelling Unit 2017 NEC Checklist (Rough-in)

This checklist is a helpful guideline of common code requirements, but does not include all the requirements of the 2017 NEC.
2017 NEC revisions to this document in red.

___MN Rule 3801.3770 - All wiring must be inspected before it is concealed, the person responsible for concealing the wiring is responsible for all costs associated with removal and replacement of the covering material. All equipment grounding conductors and other conductors in boxes must be spliced and pigtailed before scheduling a rough-in inspection.

___MN Rule 3801.3780, NEC 110.3, and NEC 410.6 – All electrical luminaires and equipment shall be listed and labeled by a Nationally Recognized Testing Laboratory (NRTL), and installed in accordance with the manufacturer's listing instructions.

___ NEC Article 210.11 & 422.12 – In addition to the circuits required for general lighting loads in a dwelling unit, the following minimum circuit requirements apply:

1. Two 20 amp small appliance branch circuits serving kitchen, dining, pantry, and similar.
2. One 20 amp circuit for laundry receptacle.
3. One branch circuit for central heating equipment.
4. One 20 amp circuit for bathroom receptacles.
5. One 20 amp circuit for garage (with electric power) receptacle outlet(s).

___ NEC 210.52(A) – Receptacle outlets in habitable rooms shall be installed so that no point measured horizontally along the floor line in any unbroken wall space is more than 6 ft. from a receptacle outlet. A receptacle outlet shall be installed in each wall space 2 ft. or more in width.

___ NEC 210.52(B) – The two or more 20 amp small appliance branch circuits required by 210.11(C)(1) shall serve all wall, floor, and countertop outlets covered in 210.52(A) & (C), and receptacle outlets for refrigeration equipment. The small appliance branch circuits shall have no other outlets.

___ NEC 210.52(B)(3) – Receptacles installed in a kitchen to serve countertop surfaces shall be supplied by not fewer than two small-appliance branch circuits.

___ NEC 210.52(C) – Receptacle outlets serving countertops in kitchens, pantries, dining rooms or similar areas shall be installed so that no point along the wall is more than 24" measured horizontally from a receptacle in that space. A receptacle outlet shall be installed at each counter space 12 in. or wider. Countertops separated by range tops, refrigerators, or sinks shall be considered as separate counter spaces.

___ NEC 210.52(C) –At least one receptacle outlet shall be installed at each island or peninsula space with dimensions of 24 in. by 12 in. or greater.

___ NEC 210.52(D) - A receptacle outlet shall be installed within 3 ft. of each bathroom sink measured from the outside edge of the sink. The receptacle shall not be installed more than 12 in. below the top of the sink.

___ NEC 210.52(E) – At least one receptacle outlet shall be installed on the front and back exterior of the dwelling that is accessible from grade. The receptacle shall be no greater than 6 ½ ft. above grade.

___ NEC 210.52(E) – Decks, balconies, and porches accessible from inside a dwelling unit shall have at least one receptacle less than 6 ½ ft. above the floor.

___ NEC 210.52(H) – Hallways that are 10 ft. in length or more shall have at least one receptacle outlet.

___ NEC 210.52(I) – Foyers greater than 60 sq. ft. shall have a receptacle outlet on wall spaces greater than 3 feet in width.

___ NEC 210.70(A) – At least one wall switched lighting outlet shall be installed in every habitable room and bathroom. In other than kitchens and bathrooms a receptacle controlled by a wall switch shall be permitted.

___ NEC 210.70(A) – At least one wall switched lighting outlet shall be installed in hallways and stairways. Where a lighting outlet is installed for interior stairways, there shall be a wall switch at each floor level.

___ NEC 210.70(A)(2) – At least one wall switched-controlled lighting outlet shall be installed on the exterior of the dwelling unit by doors with access to grade.

(over)

___ NEC 314.23, 110.3(B) – Electrical boxes shall be rigidly secured to the building structure. Nonmetallic boxes shall be mounted as designed per their listing instructions.

___ NEC 314.27(A) – A ceiling outlet box used exclusively for lighting shall be listed to support a luminaire up to 50 pounds.

___ NEC 314.27(C) – A listed fan box shall be used where ceiling-suspended paddle fans are installed, or where spare conductors are installed to a location acceptable to a ceiling fan.

___ NEC 314.27(B) – A listed floor box shall be used for boxes mounted face-up on the floor for a receptacle outlet.

___ NEC 110.12(A) – Unused openings in boxes shall be properly closed. Non-metallic boxes shall be replaced if cable openings are punched out but not used.

___ NEC 314.29 – Junction boxes and conduit bodies shall be accessible without having to remove any part of the building or structure.

___ NEC 314.16 – Boxes shall be an approved size for the number of conductors and devices to be contained. Nonmetallic boxes are marked with their cubic inch capacity.

___ NEC 300.4 – Relocate NM Cable away from abrasive materials, such as gusset plates to protect cable from physical damage.

___ NEC 300.4(A)&(D) – NM Cable shall be protected from physical damage. Where installed through drilled holes in wood framing, the edge of the hole shall not be less than 1¼" from the face of the wood stud or joist. NM Cable when installed parallel to wood framing must also maintain 1 ¼" spacing from the face of the wood member. Where this distance cannot be maintained a steel plate (nail plate) at least 1/16 in. thick shall be used to protect the cable.

___ NEC 300.22(C) – NM Cable shall not be installed in plenum spaces, but may pass through a joist or stud space perpendicular to the long dimension of the plenum space.

___ NEC 334.15(B) - Exposed Nonmetallic-Sheathed Cable (Romex) shall be protected from physical damage.

___ NEC 334.30 – Nonmetallic-sheathed cable shall be supported and secured at intervals not exceeding 4 ½ ft. and within 12 in. of each box.

___ NEC 314.17(C) – The outer jacket of NM cable shall be secured to the box and extend into the box at least ¼ inch.

___NEC 300.14 – The minimum length of free conductors at all boxes, including the equipment grounding conductor, shall be at least 6" from where the conductors enter the box.

___ NEC 404.2(C) – Lighting switch locations for habitable rooms shall be provided with a grounded (neutral) conductor unless noted in 1-5 of this article.

___ NEC 250.148(B) – Where there is more than one equipment grounding conductor in a box all the grounding conductors shall be spliced together with a "pigtail" attached to the grounding terminal of the device.

___ NEC 250.134 – All non-current carrying metal parts of equipment, including raceways, and metal boxes shall be connected to the equipment grounding conductor.

___ NEC 410.116(B) – Thermal insulation shall not be installed above, or within 3 in. of a recessed luminaire, unless the luminaire is identified as Type IC.

___NEC 220.12, Table 220.12, 220.14(J) - The minimum number of lighting circuits shall be calculated by the floor area served at 3 watts per square foot (15 amps x 120V = 1800 VA divided by 3 watts per sq. ft. = 600 sq. feet. ; 20 amps x 120V = 2400 VA divided by 3 watts per sq. ft. = 800 sq. feet). These calculations are the bare minimum and the circuit may not provide sufficient capacity.

___NEC 424.44 – Installation of heating cables in poured floors shall be installed to the installation instructions. The spacing of cables shall not be less than 1 in. on center. The cables shall be properly secured in place, and the cables shall be inspected and approved prior to covering.