



# **RESIDENTIAL DWELLING CHECKLIST 2023 NEC** **(ROUGH-IN)**

*This checklist is a guideline of common code requirements but does not include all the requirements of the 2023 NEC. 2023 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 ampere 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)(2) – "If" a receptacle outlet is installed to serve an island or peninsula countertop, the receptacle shall be located on or above the countertop, but not more than 20 inches above. A receptacle outlet can no longer be installed below the countertop. A listed receptacle outlet assembly can be used on the countertop or work surface to accomplish installing a receptacle on the countertop. If the receptacle(s) on the island/peninsula are not installed, provisions shall be provided for future addition(s) of receptacles. Wiring would be required to be brought into the cabinets of the island/peninsula, then brought into a box that is covered for future extension.

\_\_\_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 406.9(C) – Receptacles shall not be installed within 3 feet horizontally and 8 feet vertically of the shower threshold or bathtub rim, **this includes the space outside the tub or shower stall below the zone. There is an**

exception for electronic toilets or personal hygiene devices. A single receptacle can be located on the opposite side of the toilet and shower for these items.

\_\_\_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 listed wall-mounted control device to control lighting outlet(s) shall be installed in every habitable room, kitchen, laundry, and bathroom near the entrance to the room. In other than kitchens, laundry, and bathrooms a receptacle controlled by a wall-mounted control device shall be permitted.

\_\_\_NEC 210.70(A) – At least one lighting outlet controlled by a listed wall-mounted control device 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 lighting outlet controlled by a listed wall-mounted control device shall be installed on the exterior of the dwelling unit by doors with access to grade.

\_\_\_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 the ceiling outlet box is in a location acceptable to the installation of a ceiling-suspended paddle fans.

\_\_\_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(A) – 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 1¼" 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 shall be protected from physical damage.

\_\_\_NEC 334.30 – Nonmetallic-sheathed cable shall be supported and secured at intervals not exceeding 4 ½ ft. between supports, and within 12 in. of each box. The NM Cable length between the box and support/strap shall not exceed 18 inches.

\_\_\_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. **The conductor shall be permitted to be spliced or unspliced.**

\_\_\_NEC 404.2(C) – Lighting switch locations for habitable rooms shall be provided with a grounded (neutral) conductor unless noted in 1-4 of this article.

\_\_\_NEC 250.148 – 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 **220.41** - 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 manufacturer's installation instructions. The cables shall be properly secured in place, and the cables shall be inspected and approved prior to covering.

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