

Miami-Dade County — Commercial

Electrical Plan Review Checklist



2023 Florida Building Code (8th Edition) · Code volume suffixes: Building (B1) · Mechanical (Me) · NFPA-70 (2020) / National Electric Code (NEC)

COURTESY REFERENCE

This checklist reproduces the code-requirement categories published by Miami-Dade County's Department of Regulatory and Economic Resources (RER), Permitting and Inspection Center, for commercial electrical plan review under the 2023 Florida Building Code. Use it as a self-review companion before submittal. Code requirements and county forms are updated periodically — always confirm the current version through the official Miami-Dade RER Plan Review Guidelines page before relying on this checklist for a live submittal. This is a general reference, not a substitute for a project-specific review by a licensed design professional.

HOW TO USE THIS CHECKLIST

Check off each line as your drawing set actually addresses it — not just as you read it. Any box left unchecked when you're ready to submit is a real redline risk. Boxes marked FIELD INTEL flag the categories that generate the most review comments on Miami-Dade submittals, based on standard plan-review practice.

Electrical Equipment, Appliances, Materials and Installations

	Requirement	Code Ref.
☐	Construction documents submitted	107 (B1)
☐	Equipment approval, listing and installation instructions	110.2-3 (NEC), 2701.1 (B1)

Wiring Methods and Materials

	Requirement	Code Ref.
☐	Required	300 (NEC)
☐	Shown	107 (B1)

Service

	Requirement	Code Ref.
☐	Number of services	230.2 (NEC)
☐	Conductor size/rating, overhead	230.23 (NEC)
☐	Conductor size/rating, underground	230.31 (NEC)
☐	Insulation of service conductors	230.22, 230.30, 230.41 (NEC)
☐	Available fault current	110.9, 110.10 (NEC)
☐	Working space	110.26, 110.32, 110.34 (NEC)
☐	Disconnecting means, identification requirements	230.70(A)(B)(C), 110.22 (NEC)

	Requirement	Code Ref.
☐	Number of disconnects	230.71 (NEC)
☐	Grouping of disconnects	230.72 (NEC)
☐	Ground fault protection	230.95 (NEC)
☐	Protection of conductors rated 800 amperes or less	240.4(B) (NEC)
☐	Protection of conductors rated over 800 amperes	240.4(C) (NEC)

FIELD INTEL — MasterBuild PE review notes

Working-space clearances around service equipment (110.26) are a routine field-inspection failure when an electrical room gets used for storage or another trade's equipment encroaches after the plan was approved. Dimension the required working space explicitly on the electrical room plan, and flag it as a keep-clear zone on the general contractor's coordination set.

Overcurrent Protection

	Requirement	Code Ref.
☐	Where required	230.90 (NEC)
☐	Location	230.91 (NEC)

Grounding

	Requirement	Code Ref.
☐	Grounded conductor to service equipment	250.24(B) (NEC)
☐	Electrode system	250 III (NEC)
☐	Conductors	250.66 (NEC)

FIELD INTEL — MasterBuild PE review notes

Grounding electrode system completeness (250 III) — every required electrode (rod, concrete-encased, metal water pipe where applicable) actually bonded together, not just one electrode shown — is a common inspection comment on commercial sets where the civil/structural grounding scope and the electrical scope aren't coordinated. Confirm the electrode system is fully detailed, not implied.

Separately Derived AC Systems

	Requirement	Code Ref.
☐	Grounding	250.20(D), 250.30, 450.5 (NEC)
☐	Transformer overcurrent protection, 600-volt nominal or less	450.3 (NEC)
☐	Primary/secondary	450.3(A)(B)(C) (NEC)
☐	Ventilation	450.9, 450.45 (NEC)
☐	Accessibility	450.13 (NEC)

Means of Egress

	Requirement	Code Ref.
☐	Exit signs and lights	1008, 1013 (Bl)
☐	Lighting	646.16, 646.17, 700.12 (NEC), 1008 (Bl)

Emergency Systems

	Requirement	Code Ref.
☐	Where required	2702 (Bl)
☐	Power source	700 III (NEC)
☐	Independent wiring	700.10(B) (NEC)
☐	Storage battery	700.12(A), 480 (NEC)
☐	Generator set	700.12(B) (NEC), 2702.1 (Bl)
☐	Separate service	700.12(D) (NEC)
☐	Unit equipment	700.12(E) (NEC)
☐	Signs	700.7, 701.7 (NEC)
☐	Loads on emergency branch circuits	700.15 (NEC)

FIELD INTEL — MasterBuild PE review notes

Independent wiring for emergency circuits (700.10(B)) — kept fully separate from normal-power raceways and boxes, not just labeled differently — is heavily scrutinized on life-safety plan review, and mixing emergency and normal conductors in a shared raceway is an automatic correction. Show emergency circuiting on its own dedicated riser, not layered onto the normal-power one-line.

Standby Systems

	Requirement	Code Ref.
☐	Where required	701 (NEC), 2702 (Bl)
☐	Capacity and rating	701.4 (NEC)
☐	Power source	701 III (NEC)
☐	Storage battery	480, 701.12 (NEC)
☐	Generator set & required signage	701.12(B), 701.7 (NEC), 2702 (Bl)
☐	Separate service	701.12(D) (NEC)
☐	Connect ahead of service disconnect	701.12(E) (NEC)
☐	Unit equipment	701.12(G) (NEC)

Miscellaneous Requirements

	Requirement	Code Ref.
☐	Wiring in ducts, plenums, and other air-handling spaces	300.22 (NEC), 602.2.1 (Me)
☐	Roof-top receptacle	210.63, 210.8 (NEC)
☐	Fixture supports	410 IV (NEC)

	Requirement	Code Ref.
☐	Identification	110.22 (NEC), 106.1 (BL)
☐	Conduit seals	300.7 (NEC)
☐	Penetrations	300.21 (NEC), 106.1, 712, 714 (BL)
☐	Appliance access	110.26, 422 (NEC)
☐	Boiler control requirements	1005, 1006 (Me), 422, 424 III (NEC)

Disconnect Means

	Requirement	Code Ref.
☐	Motors	430 IX (NEC)
☐	Appliances	422 III (NEC)
☐	Elevators	620 VI (NEC)

Wet Locations

	Requirement	Code Ref.
☐	Electric metallic tubing	358C (NEC)
☐	Conductors	310.8, Table 310.13 (NEC)
☐	Lighting fixtures	410.4(A) (NEC)

Electrical Fire Systems — Smoke Detection

	Requirement	Code Ref.
☐	Smoke alarms	101.4.6, 907, 909 (BL), 760 (NEC)
☐	Smoke control system, single/multiple-station smoke alarm	909, 2702, 907.2.11 (BL), 760 (NEC)

Fire Alarm and Detection System (by Occupancy)

	Requirement	Code Ref.
☐	Assembly	907.2.1 (BL)
☐	Business	907.2.2 (BL)
☐	Educational	907.2.3 (BL)
☐	Factory	907.2.4 (BL)
☐	High hazard	907.2.5 (BL)
☐	Institutional	907.2.6 (BL)
☐	Mercantile	907.2.7 (BL)
☐	Residential	907.2.8, 907.2.9 (BL)
☐	High-rise buildings	907.2.13 (BL)
☐	Atriums	907.2.14 (BL)
☐	Other buildings/areas	907.2.15-907.2.23 (BL)

FIELD INTEL — MasterBuild PE review notes

Fire alarm system scope by occupancy (907.2) is one of the most misapplied sections on mixed-occupancy commercial buildings — a plan reviewed and approved for a single occupancy classification often needs additional coverage once the actual tenant mix is finalized. Reconcile the fire alarm scope against the final occupancy classification for every tenant space, not just the shell classification.

SELF-SCORE YOUR SUBMITTAL

Count your checked boxes against the total line items above, category by category. A fully-checked category means your set is ready for that scope. Any category with unchecked boxes is your redline risk list — the exact items a Miami-Dade plan reviewer is most likely to flag first.

Source: Miami-Dade County Department of Regulatory and Economic Resources (RER), Permitting and Inspection Center, 11805 SW 26 Street, Miami, FL 33175-2474 — Commercial Plan Review Guidelines (Electrical Review). Reproduced as a courtesy reference; confirm the current published version at miamidade.gov before use on an active submittal.



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Found unchecked boxes? Want a second set of eyes before you submit? Request a Proposal.