

Miami-Dade County — Commercial

Mechanical Plan Review Checklist



2023 Florida Building Code · Code volume suffixes: Building (Bl) · Fuel/Gas (Gs) · Mechanical (Me)

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 mechanical 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.

General Regulations

	Requirement	Code Ref.
☐	Construction documents	107 (Bl)
☐	Efficient utilization of energy	301.2 (Me), FBC 2023 Energy Conservation
☐	Equipment approval	301.6-301.9 (Me)
☐	Prohibited location of fuel-fired appliances	303.3 (Me)
☐	Equipment installation	303.4-303.8, 304, 306 (Me); 301.8-301.15, 305 (Gs)

Ventilation

	Requirement	Code Ref.
☐	Ventilation required	401.1-401.2, 401.3, 403.2.6 (Me)
☐	Intake opening and exhaust outlet location	401.4, 501.3.1, 918.6 (Me), 618.5 (Gs)
☐	Intake opening protection	401.5 (Me)
☐	Means of natural ventilation	402.1 (Me)
☐	Minimum openable area	402.2 (Me)
☐	Adjoining spaces	402.3 (Me)
☐	Mechanical ventilation system	403.1 (Me)
☐	Ventilation rate / outdoor air requirements	403.3, Table 403.3 (Me)

	Requirement	Code Ref.
☐	Transfer air	403.2.2 (Me)
☐	System control	405.1 (Me)
☐	Public garages	404, 502.13 (Me)

FIELD INTEL — MasterBuild PE review notes

Outdoor-air ventilation rates (403.3, Table 403.3) get flagged constantly on commercial tenant build-outs when the final occupant load or space use changes after the base mechanical plan was designed — restaurants and assembly spaces are the most common offenders. Reconcile the ventilation rate calc against the final occupancy/occupant load right before submittal, every time the tenant scope changes.

Exhaust Systems — Required Systems

	Requirement	Code Ref.
☐	General	502.1, 502.2, 502.5, 502.10, 502.11, 502.14-502.17 (Me)
☐	Battery-charging areas	502.3, 502.4 (Me)
☐	Application of flammable finishes	502.7 (Me)
☐	Hazardous materials	502.8-502.10 (Me)
☐	Motor vehicle operation	502.14 (Me)
☐	Motors and fans	503 (Me)
☐	Clothes dryer exhaust	504 (Me), 614 (Gs)
☐	Domestic kitchen exhaust equipment	505 (Me)
☐	Hazardous exhaust systems	510 (Me)
☐	Dust, stock and refuse conveyor systems	511 (Me)
☐	Sub-slab soil exhaust systems	512 (Me)
☐	Smoke control systems	909 (B1), 513 (Me)
☐	Atrium buildings	404.5 (B1)
☐	Covered and open-space buildings	402.7.2 (B1)
☐	Group I-3	408.6, 408.8.4 (B1)
☐	High-rise buildings	403.4.7, 403.5.4 (B1)
☐	Stages	410.3.7.2 (B1)
☐	Standby power systems	909.11, 909.20.6.2, 2702.2.2 (B1)
☐	Underground buildings	405.5 (B1)
☐	Smoke vents	410.3.7.1, 910 (B1)
☐	Smoke partitions	710, 717 (B1)
☐	Smoke dampers	717.2-717 (B1)
☐	Smoke barriers	709, 714, 716, 717 (B1)

Commercial Kitchen Grease Ducts and Exhaust Equipment

	Requirement	Code Ref.
☐	Exhaust fans	506.5.1 (Me)
☐	Duct materials	506.3.1 (Me)
☐	Duct velocity	506.3.4, 507.13 (Me)
☐	Duct construction	506.2, 506.3.3 (Me)
☐	Cleanouts	506.3.8, 506.3.9 (Me)
☐	Duct enclosure	506.3.11 (Me)
☐	Clearance to combustibles	506.3.6 (Me)
☐	Exhaust outlets	506.3.13, 506.4.2 (Me)

FIELD INTEL — MasterBuild PE review notes

Grease-duct clearance to combustibles and required enclosure (506.3.6, 506.3.11) are the single most common commercial-kitchen field failure — a duct that was shown with proper clearance on the mechanical plan but gets boxed in tight by the finish-out contractor. Flag the required clearance and enclosure rating directly on the reflected ceiling plan, not just the mechanical drawing.

Commercial Kitchen Type I Hoods

	Requirement	Code Ref.
☐	Where required	507.1, 507.2 (Me)
☐	Capacity	507.5 (Me)
☐	Factory-built commercial kitchen hoods	507.1, 304.1 (Me)
☐	Clearance to combustibles	507.2.6 (Me)
☐	Grease filters	507.2.8 (Me)
☐	Canopy-type hoods	507.4 (Me)
☐	Non-canopy-type hoods	507.4.2 (Me)
☐	Make-up air	508 (Me)

Commercial Kitchen Type II Hoods and Ducts

	Requirement	Code Ref.
☐	Where required	507.1, 507.3 (Me)
☐	Duct construction	506.4 (Me)
☐	Hood construction	507.3 (Me)
☐	Capacity	507.5.5 (Me)

Fire Suppression Systems

	Requirement	Code Ref.
☐	Where required	509.1 (Me)
☐	Type of system	904.12 (Bl)

	Requirement	Code Ref.
☐	Actuation and interconnection	904.12.2 (B1)

Duct Systems

	Requirement	Code Ref.
☐	Plenums, general	602.1, 602.2, 602.3 (Me)
☐	Air movement in corridors	1020.5 (B1)
☐	Duct construction and insulation	603, 604 (Me)
☐	Flexible air ducts and air connections	603.6 (Me)
☐	Duct installation	603.7-603.17 (Me)
☐	Air filters	605 (Me)
☐	Duct smoke detectors	606 (Me)
☐	Fire and smoke dampers	302.2, 607, 717 (Me)
☐	Duct and transfer openings	607 (Me)
☐	Balancing	608 (Me)

FIELD INTEL — MasterBuild PE review notes

Fire/smoke damper locations (302.2, 607, 717) at every rated-wall or rated-floor penetration are cross-checked against the life-safety plan, and a mismatch between the mechanical duct routing and the fire-rated wall plan is one of the top commercial mechanical review comments. Overlay the ductwork plan on the life-safety/fire-rating plan before submittal to catch missed dampers.

Opening Protection

	Requirement	Code Ref.
☐	Penetration by air ducts and air transfer openings in fire-rated exterior walls	705.10 (B1)

Combustion Air

	Requirement	Code Ref.
☐	General	701 (Me), 304.1 (Gs)
☐	Appliance locations	304.2 (Gs)
☐	Draft hood / regulator location	304.3 (Gs)
☐	Make-up air provision	304.4 (Gs)
☐	Indoor combustion air	304.5 (Gs)
☐	Outdoor combustion air	304.6 (Gs)
☐	Combination indoor/outdoor combustion air	304.7 (Gs)
☐	Mechanical combustion air	304.9 (Gs)
☐	Louvers and grilles	304.10 (Gs)
☐	Combustion air ducts	304.11 (Gs)

	Requirement	Code Ref.
☐	Protection from fumes and gases	304.12 (Gs)

Chimneys and Vents — Factory-Built Chimneys, Liners, Vents & Connectors

	Requirement	Code Ref.
☐	General	801 (Me)
☐	Vents	802 (Me)
☐	Connectors	803 (Me)
☐	Direct-vent, integral vent and mechanical draft system	804 (Me)
☐	Factory-built chimneys	805 (Me)
☐	Metal chimneys	806 (Me)

Chimneys and Vents — Gas-Fired Appliances

	Requirement	Code Ref.
☐	Where required	503.2, 503.3 (Gs)
☐	Approval	502.1 (Gs)
☐	Vent application	502.3, 503.4 (Gs)
☐	Insulation	502.4-502.6 (Gs)
☐	Gas vent termination	503.6.4, 503.8 (Gs)
☐	Minimum vent height	503.6.5 (Gs)
☐	Single-wall vent	503.7 (Gs)
☐	Sizing of venting system for single gas appliance	503.6.9, 504.2 (Gs)
☐	Sizing of venting system for two or more gas appliances	504.3 (Gs)
☐	Multistory gas vents	503.6.10 (Gs)

Chimneys and Vents — Connectors (Gas-Fired Appliances)

	Requirement	Code Ref.
☐	Materials, size, location	504 (Gs)
☐	Connectors	503.10, 503.11 (Gs)
☐	Installation	503.6, 503.7, 503.8 (Gs)

Chimneys and Vents — Vents (Appliances Other Than Gas-Fired)

	Requirement	Code Ref.
☐	Vent application	802.2 (Me)
☐	Sizing and installation	802 (Me)
☐	Minimum vent heights	802.6 (Me)
☐	Multistory vents	801.19 (Me)

Chimneys and Vents — Connectors (All Appliances Except Gas-Fired)

	Requirement	Code Ref.
☐	Size / location	803.2, 803.3 (Me)
☐	Connectors serving two or more appliances	803.7 (Me)
☐	Construction	803.8, 803.9 (Me)
☐	Installation	803.5, 803.6, 803.10 (Me)
☐	Direct vent	804 (Me), 503.2.3, 503.8 (Gs)

Chimneys and Vents — Direct Vent, Integral Vent, Mechanical Vent & Ventilation/Exhaust Hood Venting

	Requirement	Code Ref.
☐	Appliances with integral vents	804.2 (Me), 503.2.4 (Gs)
☐	Mechanical draft systems	804.3 (Me)
☐	Ventilation/exhaust hood venting	505.1 (Gs)

Chimneys and Vents — Factory-Built Chimneys (Approval)

	Requirement	Code Ref.
☐	Approval and installation	805 (Me), 503.5, 506 (Gs)
☐	Solid fuel appliances	805.2 (Me)
☐	Factory-built fireplaces	2111.14.1 (B1), 903 (Me)

Specific Appliances, Fireplaces and Solid Fuel-Burning Equipment

	Requirement	Code Ref.
☐	Factory-built fireplaces	903 (Me)
☐	Pellet fuel-burning appliances	904 (Me)
☐	Fireplace stoves and room heaters	905 (Me)
☐	Factory-built barbecue appliances	906 (Me)
☐	Decorative appliances, in vented fireplaces	602, 604 (Gs)
☐	Log lighters	603 (Gs)
☐	Incinerators and crematories	907 (Me), 606, 607 (Gs)
☐	Cooling towers, evaporative condensers and fluid coolers	908 (Me)
☐	Vented wall furnaces	909 (Me)
☐	Floor furnaces	910 (Me)
☐	Duct furnaces	911 (Me), 610 (Gs)
☐	Direct-fired gas air heaters	611, 612 (Gs)
☐	Infrared radiant heaters	912 (Me)
☐	Clothes dryers	913 (Me), 613, 614 (Gs)

	Requirement	Code Ref.
☐	Illuminating appliances	628 (Gs)
☐	Sauna heaters	914 (Me)
☐	Engine and gas-turbine-powered equipment and appliances	915 (Me), 616 (Gs)
☐	Pool and spa heaters	916 (Me), 617 (Gs)
☐	Cooking appliances	917 (Me), 623 (Gs)
☐	Forced-air warm-air furnaces	918 (Me), 618 (Gs)
☐	Conversion burners	919 (Me), 619 (Gs)
☐	Unit heaters	920 (Me), 620 (Gs)
☐	Room heaters	921 (Me), 621, 622 (Gs)
☐	Kerosene and oil-fired stoves	922 (Me)
☐	Small ceramic kilns	923 (Me), 629 (Gs)
☐	Stationary fuel cell power plants	924 (Me), 633 (Gs)
☐	Refrigerators	625 (Gs)
☐	Gas-fired toilets	626 (Gs)
☐	AC equipment	627 (Gs)
☐	Masonry heaters	925 (Me)
☐	Gaseous hydrogen systems	926 (Me)
☐	Radiant heating systems	927 (Me)
☐	Evaporative cooling systems	928 (Me)
☐	Unvented alcohol fuel-burning decorative appliances	929 (Me)
☐	Large-diameter ceiling fans	930 (Me)

Boilers, Water Heaters and Pressure Vessels

	Requirement	Code Ref.
☐	Water heaters	1002 (Me), 624 (Gs)
☐	Pressure vessels	1003 (Me)
☐	Boilers, approval/installation	1004 (Me), 631 (Gs)
☐	Boiler connections	1005 (Me)
☐	Safety and pressure relief valves and controls	1006 (Me)
☐	Low-water cutoff	1007 (Me)
☐	Steam blow-off valve	1008 (Me)
☐	Hot water expansion tank	1009 (Me)
☐	Gauges	1010 (Me)
☐	Test	1011 (Me)

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Boiler safety/pressure-relief valve discharge routing (1006) — piped full-size to an approved point of discharge, not reduced or trapped — is a life-safety item inspectors check by hand on-site, not just on paper. Confirm the relief valve discharge pipe size and termination point are both shown on the plan, matching the manufacturer's requirements for the specific unit.

Refrigeration

	Requirement	Code Ref.
☐	Factory-built equipment	1101.2 (Me)
☐	Refrigeration system classification	1103 (Me)
☐	Refrigerant classification	1103.1 (Me)
☐	Occupancy classification	1103.2 (Me)
☐	System application requirements	1104 (Me)
☐	Machinery room, general requirements	1105 (Me)
☐	Machinery room, special requirements	1106 (Me)
☐	Refrigerant piping	1107 (Me)

Hydronic Piping

	Requirement	Code Ref.
☐	Materials	1202 (Me)
☐	Joints and connections	1203 (Me)
☐	Pipe insulation	1204 (Me)
☐	Valves	1205 (Me)
☐	Piping installation	1206 (Me)
☐	Transfer fluid	1207 (Me)
☐	Embedded piping	1209 (Me)
☐	Plastic pipe ground-source heat pump loop systems	1210 (Me)

Fuel Oil Piping and Storage

	Requirement	Code Ref.
☐	Storage system	1301.2 (Me)
☐	Materials	1302 (Me)
☐	Joints and connections	1303 (Me)
☐	Fuel oil system installation	1305 (Me)
☐	Oil gauging	1306 (Me)
☐	Fuel oil valves	1307 (Me)

HVAC Design Requirements (Code of Miami-Dade County, Chapter 8, Sec. 8-10)

Requirement	Yes	No
Duct smoke detector		
Fire damper(s)		
Smoke damper(s)		
Fire-rated enclosure		
Fire-rated roof/floor-ceiling assembly		
Fire stopping		
Smoke control		

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 (Mechanical Review). Reproduced as a courtesy reference; confirm the current published version at miamidade.gov before use on an active submittal.



MasterBuild Consulting — MEP & Building Code Consulting

+1 (786) 398-6940 · osmany.portal@masterbuildconsulting.com · masterbuildconsulting.com

Found unchecked boxes? Want a second set of eyes before you submit? [Request a Proposal.](#)