



DEVELOPMENT SERVICES

MECHANICAL PLAN REVIEW COMMERCIAL CHECKLIST

This checklist is provided as a reference tool and is not intended to be exhaustive of all possible requirements. It may also include more items than a specific set of plans may require.

Referenced Codes:

- 2024 International Mechanical Code with Local Amendments ([IMC](#))
- 2024 International Building Code with Local Amendments ([IBC](#))

#	GENERAL MECHANICAL REQUIREMENTS	✓	N/A
1.	Registered design professional's licenses to be listed per IB 103		
2.	Verify equipment is listed and labeled		
3.	Verify fuel fired appliances are not located in prohibited locations		
4.	Installation - Hazardous Locations - ignition sources – refueling and garages (304)		
5.	Roof guards to comply with 304.11		
6.	Access and service space for mechanical equipment shall comply with 306		
7.	Condensate disposal for evaporators and cooling coils		
	a. Condensate Pumps		
8.	Location and protection of intake openings and exhaust outlets (401.4, 401.5)		
9.	Fire or smoke rated construction within the building shall comply with the following:		
	a. Fire Walls		
	b. Fire Barriers - Shafts, Exit Enclosures, Mixed Use Occupancy Separations, Etc. (IBC 707)		
	c. Horizontal Assemblies (IBC 711)		
	d. Fire Partitions (IBC 708)		
	e. Smoke Barriers (IBC 709)		
	f. Smoke Partitions (IBC 710)		
	g. Fire resistance rated corridors (IBC 1020)		
	h. Other		

#	NATURAL VENTILATION	✓	N/A
10.	Area required to outdoors – 4% of floor area to comply with 402.2		
11.	Openings below grade – horizontal clear space to comply with 402.4		

#	MECHANICAL VENTILATION	✓	N/A
12.	Recirculation of excess air 403.2.1		
13.	Outdoor air flow rate (403.3 and Table 403.3.1.1)		
14.	Exhaust airflow to comply with Table 403.3.1.1		
15.	VAV has controls to regulate outdoor air		
16.	Mechanical ventilation for enclosed parking garages (404)		
17.	Automatic controls for air conditioning systems (405)		
18.	Ventilation of uninhabited spaces at 0.02 cfm per square foot of space (406)		

#	EXHUAUST SYSTEMS	✓	N/A
19.	Location and protection of exhaust outlets (501.3.1)		
20.	Exhaust system is provided for required uses (502)		
21.	Motors and fans (503)		
22.	Clothes dryer exhausts (504)		
23.	Domestic kitchen exhaust (505)		
	a. Domestic Kitchen makeup air (505.4, 505.7, 505.8)		
24.	Commercial kitchens – ventilation, ducts and exhausts (506)		
	a. Type I Hoods – grease ducts, clearances, cleanouts, exhaust outlet locations (506.3)		
	b. Type II Hoods – ducts, exhaust fans, outlet termination (506.4, 507.3)		
25.	Commercial Kitchen hoods – Type, materials, supports, clearances, capacity (507)		
26.	Fire Suppression System (509)		
27.	Commercial kitchen makeup air (506.3.1.2, 508)		
28.	Hazardous exhaust systems – locations, design, penetrations, duct construction (510)		
29.	Dust, stock, and refuse conveying systems (511)		
30.	Sub-slab soil exhaust systems (512)		
31.	Smoke control systems – Proposed mechanical system shall be clearly shown on construction documents; smoke control system report to be submitted (513)		
32.	Energy recovery ventilation systems (514)		

#	DUCT SYSTEMS	✓	N/A
33.	No air movement (601.2)		
34.	Return air plenums above corridors (601.2.1)		
35.	Exit enclosures – separation of equipment and ductwork (601.3)		
36.	Plenums – construction, materials, location/equipment within (602)		
37.	Ducts – materials, sealing, supports, protection, registers and grilles (603)		
38.	Insulation (604)		
39.	Air Filters (605)		
40.	Controls of smoke detection systems – location and controls (606)		
41.	Duct and transfer openings – fire and smoke protection (607)		
42.	Balancing (608)		

#	CHIMNEYS AND VENTS	✓	N/A
43.	Masonry chimneys (801.3)		
44.	Existing chimneys (801.18)		
45.	Clearances (801.18.4)		
46.	Vents – application, terminations, heights, supports and insulation (802)		
47.	Connectors – size and location, dampers, multi-appliances, construction and installation (803)		
48.	Direct vent, Integral vents, Mechanical Drafts (804)		
49.	Factory built chimneys (805)		

#	SPECIFIC APPLIANCES FIREPLACES SOLID FUEL BURNING EQUIPMENT	✓	N/A
50.	Cooling Towers (908.8)		
51.	Vented wall furnaces (909)		
52.	Floor furnaces (910)		
53.	Infrared Radiant Heaters (912)		
54.	Sauna heaters (914)		
55.	Forced air warm air furnaces (918)		
56.	Radiant Heating Systems (927)		

#	BOILERS	✓	N/A
57.	Clearances (1004.3)		
58.	Safety and pressure relief valves and controls (1006)		
59.	Low water cutoffs (1007)		
60.	Steam blowoff valves (1008)		
61.	Expansion Tanks (1009)		
62.	Gauges (1010)		

#	REFRIGERATION	✓	N/A
63.	General - factory built equipment (1101.2)		
64.	Refrigerant classification occupant classification and quantity/application (1103)		
65.	Machinery rooms – general and special requirements (1105, 1106)		
66.	Refrigerant piping and installation (1107-1109)		

#	HYDRONIC PIPING	✓	N/A
67.	Materials (1202)		
68.	Joints and connections (1203)		
69.	Pipe insulation (1204)		
70.	Valves (1205)		
71.	Piping installation (1206)		
72.	Transfer fluid (1207)		
73.	Embedded piping (1209)		

#	FUEL OIL PIPING AND STORAGE	✓	N/A
74.	Storage systems (1301.2)		
75.	Materials (1302)		
76.	Joints and connections (1303)		
77.	Installation (1305)		
78.	Oil Gauges (1306)		
79.	Fuel oil valves (1307)		