

PLAN REVIEW

COMMERCIAL FIRE 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 encompass.

Referenced Codes:

- 2024 International Fire Code (IFC)
- 2024 International Building Code (IBC)
- 2021 International Energy Conservation Code (<u>IEBC</u>)
- COSA Chapter 11 Amendments (<u>IFC Amendments</u>)

#	GEI	NERAL REQUIREMENTS	/	N/A
1.	Ver	ify status of registered design professional and licenses and registration per IB 103.		
2.		s a Preliminary Plan Review (PPR) meeting held (<u>IB 116</u>)? If so, please include sumentation or PPR number.		
3.	me	s a Code Modification Request (CMR) for an alternative material, design and/or thod of construction requested for this project (IB 114)? If so, please include tumentation.		
4.	Sub	mit plans and calculations identifying room use and/or process on floor plans.		
5.	occ	vide code analysis which includes code year, actual and allowable floor area, upancy group, type of construction, height and number of stories, occupant load, protection systems, etc.		
6.	If re	emodel, provide verification of code the design is proposed under – IBC or IEBC		
7.		emodel, provide verification of whether proposed remodel is a change in use by ating existing C of O and/or permit history		
8.		xisting Building Code is being used, verify which method of compliance will be used design:		
	a.	Prescriptive Method		
	b.	Work Area Compliance Method		
	C.	Performance Method		

	#	OCCUPANCY	>	N/A
9	9.	Provide Occupancy Classification and Occupancy Load.		
	10.	For mixed use occupancies, provide verification of whether mixed uses are separated, non-		
		separated, and/or accessory as per IBC Ch.3 and Ch. 5.		

#	SITI	E ACCESS	✓	N/A
11.	App	roved fire department vehicle access roads		
		Provide verification of minimum 5-foot clear route around building as per COSA IFC		
	a.	Amendments 504.1.1		
		If Fire Department access crosses lot lines, provide verification that adequate		
		platted ingress/egress easement(s) and/or platted notes are provided on		
	b.	approved plat. (COSA IFC AMENDMENTS 503.1.1.1)		
	c.	Aerial apparatus access roads (D105) and multiple access points (D104)		
12.	Pro	vide verification of fire lane signage on plans per SAFD amendment (503.3, D103.6)		
13.	Pro	vide verification of security gates (direction of swing) and Knox boxes (503.6, 506,		
	D10	03.5)		
14.	Pro	vide verification of fire lane turnarounds – dimensions and frequency (503, D103)		
15.	Pro	vide verification of fire access road is designed to support an apparatus weighing		
	85,	000 lb. gross vehicle weight (D102.1)		
16.	Pro	vide verification of fire access road is an all-weather driving surface such as asphalt		
	or o	concrete. Alternate fire lane surface permitted per COSA IFC Amendment 503.2.3		
17.	Pro	vide verification of grading not to exceed 12% (503.2.7)		
18.	Ma	ximum dead ends (503.2.5)		
19.	Tur	ning radii (503.2.4)		

#	SITE WATER	\	N/A
20.	Required fire flow (gpm) at 25 psi (IFC Amendments B105.1, B105.2 & Table B105.1)		
21.	Provide fire flow calculation (ft²)		
22.	Provide type of building construction		
23.	Fire flow test showing minimum fire flow uploaded into Accela		
24.	If new water mains required, hydraulic calculations proving minimum fire flow per		
	COSA IFC Amendments		
25.	Minimum number of fire hydrants (Table C102.1)		
26.	Fire hydrant spacing and minimum distance from structures		
27.	Fire hydrant hose lay coverage (COSA IFC Amendments 507.5.1.1, 507.5.1.2)		

#	FIRE PROTECTION SYSTEMS		N/A
28.	Requirements for automatic fire sprinkler system (903)		
29.	Fire department connection(s) – number and location (IFC 912 and COSA IFC Amendments 912)		
30.	Required separation from non-sprinklered areas (COSA IFC Amendments 903.7)		
31.	Fire sprinklers porte-cocheres (COSA Amendments 903.2.13)		
32.	Requirements for alternative automatic fire-extinguishing systems (904)		
33.	Requirements for standpipe system (905)		
34.	Requirements for portable fire extinguishers (906)		
35.	Requirements for fire alarm and detection systems (907)		
36.	Single and multiple-station smoke alarms in R1, R2, R3, R4 and I1 Occupancies (IFC 907.2.10)		
37.	Requirements for emergency alarm systems (908)		

38.	Requirements for smoke control systems (909)	
39.	Smoke control report and drawings per <u>IB 185</u>	
40.	Requirements for smoke and heat vents (910)	
41.	Requirements for fire command center (IFC 508 & 2018 IBC 911)	
42.	Requirements for explosion control (2009 IFC 911)	
43.	Requirements for fire pumps (913)	
44.	Fire protection based on special detailed requirements of use and occupancy (914)	

#	GEN	IERAL FIRE COMPLIANCE REQUIREMENTS	/	N/A
45.	GEI	NERAL REQUIREMENTS		
	a.	Dumpsters inside of buildings – IFC 304.3		
	b.	Powered industrial trucks and equipment – ventilation required for battery-		
		charging areas IFC 309.3		
	C.	Vehicle impact protection (guards, bollards, etc.) – IFC 312		
46.	EM	ERGENCY PLANNING AND PREPAREDNESS		
	a.	Fire safety and evacuation plans (IFC 404)		
47.	BU	LDING SERVICES AND INTERIOR FINISHES		
	a.	Fuel fired appliances (603)		
	b.	Emergency and standby power systems		
48.	ELE	CTRICAL ENERGY STORAGE SYSTEMS		
	a.	Stationary storage battery systems (IFC 1206.2)		
	b.	Safety caps (IFC 1206.2.10.6)		
	c.	Spill control method and materials are detailed		
	d.	When ventilation is required, calcs should be provided to verify ventilation rate maintains the room atmosphere to 1% by volume of hydrogen or a minimum ventilation rate of 1 cfm/ft ² of the floor area of the room. Also, verify that mechanical ventilation system is supervised per (IFC 1206.2.11.3).		
	e.	Provide room smoke detection (IFC 1206.2.11.2).		
49.	COI	MMERCIAL KITCHEN HOODS AND ADEQUATE FIRE PROTECTION SYSTEM (IFC 607)		
50.	PRO	OVIDE INTERIOR WALL, CEILING AND FLOOR FINISHES		

#	ELEVATORS AND CONVEYING SYSTEMS (606)	\	N/A
51.	Emergency operations		
52.	Fire service access elevator (IBC 3007)		

#	SPEC	CIAL CONSTRUCTION & MISCELLANEOUS ITEMS	>	N/A
53.	occ	CUPANCY CLASSIFICATION LETTER (OCL) PER <u>IB 192</u>		
	a.	Medical gases and med gas letter for medical facilities <u>IB 175</u>		
	b.	For pools and spas, verify maximum quantity and type of pool chemicals <u>IB 200</u> -		
	υ.	Table 5003.1.1(1) Subnote K		
54.	Avia	tion facilities (IFC Ch. 20)		
55.	Dry	cleaning (IFC Ch. 21)		
56.	Flan	nmable finishes (Ch. 24)		

57.	Sem	niconductor fabrication facilities (Ch. 27)		
58.		ber yards and woodworking facilities (Ch. 28)		
59.		cor Fuel-dispensing facilities and repair garages (Ch. 23)		
60.		n-piled combustible storage (Ch. 32)		
61.	Haz	ardous Materials (Ch 50)		
62.	Con	nbustible dust producing operations (Ch. 22) – Explosion protection		
63.	Frui	t and Crop Ripening (Ch. 25) – Explosion protection		
	a.	Ethylene Gas – location and dispensing valves		
	b.	Electrical wiring – coordinate with Electrical reviewer		
	c.	Ethylene generators and generator rooms		
64.	Furr	nigation and thermal insecticidal fogging (Ch. 26)		
65.	Mar	nufacture of organic coatings (Ch. 29)		
66.	Indu	ustrial ovens (Ch. 30)		
	a.	Provide specification listing furnace class of proposed oven		
	b.	Ventilation		
	c.	Insulation and ventilation of combustible roofs and floors		
	d.	Verify shutoff valve(s) provided		
	e.	Verify interlocks are provided for Class A ovens		
	f.	Required fire protection		
67.	Tent	ts and other membrane structures (Ch. 31)		
68.	Tire	rebuilding and tire storage (Ch. 34)		
	a.	Tire rebuilding buffing operations room		
	b.	Verify out-door storage requirements and limitations		
	c.	Fire department access		
	d.	Fencing		
	e.	Fire Protection		
	f.	Indoor storage		
69.	Wel	ding and other Hot Work (Ch. 35)		
	a.	Non-combustible partitions segregating hot work areas from other areas of the	1 T]
		building		
	b.	Non-combustible surfaces for floors for hot work areas		
	c.	Emergency disconnect provided for fixed electric welders and control equipment		
	٦	- coordinate with Electrical reviewer as needed	1	
	d.	Minimum room volume, ceiling height and protection against freezing for rooms containing acetylene generators		
	e.	Location of oxygen manifolds		
70.		rinas (Ch. 36)		
70.	ivial	11103 (011. 30)		

#	CON	STRUCTION REQUIREMENTS FOR EXISTING BUILDINGS (CH. 11)	✓	N/A
71.	Prov	ride verification that proposed work area/modifications meet Ch. 11 requirements		
	as w	rell as applicable IEBC and IBC requirements.		
	a.	Construction requirements – elevator operation; vertical openings; escalators		
	b.	Fire sprinkler and systems		
	c.	Fire alarm systems		

d.	Single and multiple- station smoke detectors	
e.	Means of egress	
f.	Outdoor operations	