

BUILDING PLAN - FIRE SAFETY GUIDE

BUSINESS OCCUPANCY - OFFICES

1	APPLICATIONS		GENERAL OFFICES / CITY/MUNICIPAL HALLS/ COURTHOUSES / DOCTORS/DENTIST OFFICES / MEETING ROOMS [<50 SEATING				
	OCCUPANCY USED FOR TRANSACTION	CAPACITY] / BARBER SHOPS/SALONS / SERVICE FACILITIES (NEWSSTAND, LUNCH COUNTERS) < 50 PERSONS / CLASSROOM/INSTRUCTIONAL LABORATORIES < 50 SEATING CAPACITY / BIRTH CENTERS/AMBULATORY OUT-PATIENT CLINICS < 4 PATIENTS					
П	OCCUPANCY CLASSIFICATION	BUILDING HEIGHT REQUIREMENTS BUILD			DING AREA REQUIREMENTS		
Α	LOW-RISE BUSINESS OCCUPANCY		≤ 15M			≤ 500M²	
		TYPE A - MEDIUM-RISE BUSINESS OCCUPANCY	BUSINESS OCCUPANCY > 15M TO ≤ 18M			> 500M² - ≤ 1000M²	
В	MEDIUM-RISE BUSINESS OCCUPANCY	TYPE B - MEDIUM-RISE BUSINESS OCCUPANCY	> 18M TO ≤ 28M			> 1000M²	
С	HIGH-RISE BUSINESS OCCUPANCY		> 28M			UL-UNLIMITED	
III	BUILDING AND SITE ACCESS FOR FIRE FIGHTING & RESCUE				•		
	FIRE SAFETY PROVISIONS	MINIMUM REQUIREMENTS	LOW-RISE OFFICES	MEDIUM-RISE OFFICES TYPE A TYPE B		HIGH RISE OFFICES	
Α	SITE ACCESS	4.0M MINIMUM CLEAR WIDTH	REQUIRED	DEC.	NUIDED.	BEOLUBED	
Α	SITE ACCESS	4.5M MINIMUM CLEAR HEIGHT	REQUIRED	REQUIRED		REQUIRED	
		4.0M MIN. WIDTH AND 24 TON LOAD CAPACITY		REQUIRED		REQUIRED	
В	ACCESS ROAD	WITHIN A TRAVEL DISTANCE OF 45M FROM EVERY POINT ON PROJECTED PLAN AREA OF ANY BUILDING.	REQUIRED				
	FIRE ENGINE HARDSTANDING	LENGTH OR NUMBER BASE ON THE GROSS FLOOR AREA OF THE BUILDING		REQUIRED		REQUIRED	
c		6M X 15M (MINIMUM), WITH LONGER SIDE PARALLEL TO THE FAÇADE OF THE BUILDING	REQUIRED WHEN BUILDING HABITABLE HEIGHT EXCEEDS 10M				
		POSITIONED SO THAT THE NEARER EDGE SHALL NOT BE LESS THAN 2M OR NOT MORE THAN 10M FROM THE CENTRE POSITION OF THE ACCESS OPENING, MEASURED HORIZONTALLY.		QUINED			
		HIGH-RISE BUILDING AND OTHER THAN HIGH-RISE WITH EMERGENCY VOICE COMMUNICATION SYSTEM AND/OR SMOKE CONTROL SYSTEM					
		9M ² MINIMUM AREA (LEAST DIMENSION 2.5M)	NOT REQUIRED		EN EITHER OF THE		
		AT LEAST WITH 1M CLEARANCE FROM ALL EQUIPMENT		EMERGENCY VOICE COMMUNICATION SYSTEM AND/OR SMOKE CONTROL SYSTEM WAS PROVIDED		REQUIRED	
D	FIRE COMMAND CENTER	2-HOURS ENCLOSURES (WALLS, OPENINGS & PENETRATIONS)					
		PROVIDED WITH PROMINENTLY MARKED EXTERIOR ENTRANCES					
		INSTEAD OF A DEDICATED FIRE RATED ROOM: LOBBIES OR OTHER SPACES ADJACENT TO THE MAIN ENTRANCE OF THE BUILDING	NOT APPLICABLE	PERI	MITTED	NOT PERMITTED	



		BUILDINGS EQUAL OR MORE THAN 28M HIGH ABOVE ENGINE ACCESS LEVEL OR EXCEEDING 9M BELOW THE LEVEL OF EXIT DISCHARGE	REQUIRED IF EXCEEDS 9M BELOW THE LEVEL OF EXIT DISCHARGE	REQUIRED IF EXCEED LEVEL OF EXIT		REQUIRED
	FIRE LIFT	SERVES ALL HABITABLE FLOORS				
E		CONTAINED WITHIN A DEDICATED PROTECTED SHAFT OR A COMMON PROTECTED SHAFT CONTAINING OTHER LIFTS SUBJECT TO SUCH OTHER LIFTS ARE SERVED AT EACH STOREY BY A FIRE FIGHTING LOBBY	REQUIRED IF EXCEEDS 9M BELOW THE LEVEL OF EXIT DISCHARGE	REQUIRED WHEN FIRE LIFT/S PROVIDED		REQUIRED
		APPROACHED BY FIRE FIGHTING LOBBY AT EACH STOREY				
		ADJACENT AND ACCESSIBLE TO AN EXIT STAIRCASE				
		TYPE AND MINIMUM REQUIRED NUMBERS: REFER TO NFPA 5000 (2012 Ed.) CHAPTER 54.	REQUIRED IF EXCEEDS 9M BELOW	REQUIRED IF EXCEEDS 9M BELOW	250,425	DEGUIDED.
		WHEN REQUIRED, AT LEAST ONE (1) FIRE LIFT FOR EVERY 900 SQM. FLOOR AREA	THE LEVEL OF EXIT DISCHARGE	THE LEVEL OF EXIT DISCHARGE	REQUIRED	REQUIRED
IV	MEANS OF EGRESS					
Α	MEANS OF EGRESS GENERAL REQUIREMENTS		LOW-RISE OFFICES	MEDIUM-RISE OFFICES TYPE A TYPE B		HIGH RISE OFFICES
1	SEPARATION OF MEANS OF EGRESS	COMPLYING WITH CHAPTER 7 NFPA 101	REQUIRED	REQUI	RED	REQUIRED
	EXIT ACCESS CORRIDORS	SERVING AN AREA HAVING AN OCCUPANT LOAD EXCEEDING 30	1-HR FRR*	1-HR FRR*		1-HR FRR*
	EVITE	CONNECTS 3 OR FEWER STORIES	1-HR FRR*	1-HR FRR*		1-HR FRR*
	EXITS	CONNECTS 4 OR MORE STORIES	2-HRS FRR*	2-HRS FRR*		2-HRS FRR*
	OPENING PROTECTIVE	FIRE DOOR ASSEMBLIES EQUIPPED WITH DOOR CLOSERS	REQUIRED	REQUIRED		REQUIRED
	CONSTRUCTION	LIMITED OR NON-COMBUSTIBLE MATERIALS	REQUIRED	REQUIRED		REQUIRED
	OPENINGS AND PENETRATIONS IN EXIT ENCLOSURE	COMPLYING WITH CHAPTER 7 NFPA 101	PERMITTED	PERMIT	TTED	PERMITTED
2	EXITS HEADROOM	NOT LESS THAN 2285MM	REQUIRED	REQUI	RED	REQUIRED
	HEADROOM ON STAIRS	NOT LESS THAN 2285MM	REQUIRED	REQUI	RED	REQUIRED
3	WALKING SURFACES IN THE MEANS OF EGRESS	COMPLYING WITH CHAPTER 7 NFPA 101	REQUIRED	REQUI	RED	REQUIRED
4	CHANGES IN LEVEL IN THE MEANS OF EGRESS	COMPLYING WITH CHAPTER 7 NFPA 101	REQUIRED	REQUI	RED	REQUIRED
5	GUARDS	PROVIDED AT THE OPEN SIDES OF MEANS OF EGRESS 760MM ABOVE THE FLOOR OR FINISHED GROUND LEVEL	REQUIRED	REQUI	RED	REQUIRED
6	IMPEDIMENT TO EGRESS		NOT PERMITTED	NOT PERM	MITTED	NOT PERMITTED
7	MEANS OF EGRESS RELIABILITY	CONTINUOUSLY MAINTAINED FREE OF ALL OBSTRUCTION OR IMPEDIMENTS	REQUIRED	REQUIRED		REQUIRED
	FURNISHING AND DECORATION	FURNITURES OR MOVABLE OBJECTS, MIRRORS, ETC.	NOT PERMITTED	NOT PERMITTED		NOT PERMITTED
В	MEANS OF EGRESS COMPONENTS					
1	FIRE DOORS	COMPLYING WITH CHAPTER 7 NFPA 101	REQUIRED	REQUI	RED	REQUIRED
	SIDE HINGE OF DIVOTED SWINGING TYPE	ANY DOOR ASSEMBLY IN A MEANS OF EGRESS	REQUIRED	REQUI	RED	REQUIRED
	SIDE-HINGE OR PIVOTED-SWINGING TYPE	MINIMUM DOOR LEAF WIDTH	810MM (32IN.)	810MM		810MM (32IN.)
	HORIZONTAL SLIDING DOORS	COMPLYING WITH CHAPTER 7 NFPA 101	PERMITTED	PERMIT	TTED	PERMITTED



VERTICAL ROLLING DOORS COMPLYING WITH CHAPTER 7 NFPA 101 PERMITTED PERMITTED REVOLVING DOORS/POWERED DOORS COMPLYING WITH CHAPTER 7 NFPA 101 PERMITTED PERMITTED SELF-CLOSING DEVICES IN ALL DOORS REQUIRED TO BE NORMALLY KEPT CLOSED REQUIRED REQUIRED 2 STAIRS COMPLYING WITH CHAPTER 7 NFPA 101 REQUIRED REQUIRED	PERMITTED PERMITTED
SELF-CLOSING DEVICES IN ALL DOORS REQUIRED TO BE NORMALLY KEPT CLOSED REQUIRED REQUIRED 2 STAIRS COMPLYING WITH CHAPTER 7 NFPA 101 REQUIRED REQUIRED	1 ENWITTED
2 STAIRS COMPLYING WITH CHAPTER 7 NFPA 101 REQUIRED REQUIRED	REQUIRED
	REQUIRED
	·
FEWER THAN 50 PERSON (CLEAR WIDTH) 915MM 915MM STANDARD STAIRS < 2000 PERSON (CLEAR WIDTH)	915MM 1120MM
	· · · · · · · · · · · · · · · · · · ·
≥ 2000 PERSON (CLEAR WIDTH) 1420MM 1420MM	1420MM
SPIRAL STAIRS COMPLYING WITH CHAPTER 7 NFPA 101 PERMITTED PERMITTED	PERMITTED
CURVE STAIRS COMPLYING WITH CHAPTER 7 NFPA 101 PERMITTED PERMITTED	PERMITTED
WINDERS COMPLYING WITH CHAPTER 7 NFPA 101 NOT PERMITTED NOT PERMITTED	NOT PERMITTED
GUARDS AND HANDRAILS COMPLYING WITH CHAPTER 7 NFPA 101 REQUIRED REQUIRED	REQUIRED
ENCLOSURE AND PROTECTION OF STAIRS COMPLYING WITH CHAPTER 7 NFPA 101 REQUIRED REQUIRED	REQUIRED
ALL INSIDE STAIR SERVING AS AN EXIT COMPONENT REQUIRED REQUIRED	REQUIRED
ENCLOSURES DOORS FPR** ≤3 STOREYS /≥3 STOREYS 1-HR FPR**FRP* / 1.5-HR	
ENCLOSURES FRR* ≤3 STOREYS /≥3 STOREYS 1-HR FRR* / 2-HRS FRR* 1-HR FRR* / 2-HRS FRR*	* 1-HR FRR* / 2-HRS FRR*
ENCLOSURE EXEMPTION PENETRATING ONE FLOOR LEVEL OR SERVING MEZZANINE ONLY PERMITTED PERMITTED PERMITTED	PERMITTED
EXPOSURES WALLS AND OPENINGS WITHIN 3050MM HORIZONTALLY OF AN EXTERIOR STAIRWAY ENCLOSURE 1-HR FRR* 1-HR FRR*	1-HR FRR*
USEABLE SPACE WITHIN EXIT ENCLOSURE NOT PERMITTED NOT PERMITTED	NOT PERMITTED
USEABLE SPACE UNDER STAIRS IN ACCORDANCE WITH NFPA 101 PERMITTED PERMITTED	PERMITTED
STAIRWAY IDENTIFICATION SERVING 3 OR MORE STOREYS REQUIRED REQUIRED	REQUIRED
EXIT STAIR PATH MARKINGS ALL STAIR COMPONENTS REQUIRED REQUIRED	REQUIRED
PERIMETER DEMARCATION MARKING COMPLYING WITH NFPA 101 REQUIRED REQUIRED	REQUIRED
LOCK, LATCHES & ALARM DEVICES COMPLYING WITH NFPA 101 PERMITTED PERMITTED	PERMITTED
RE-ENTRY PROVISIONS LOCKED STAIRS EXCEEDING 4 STOREYS NOT REQUIRED REQUIRED	REQUIRED
COMPLYING WITH CHAPTER 7 NFPA 101 PERMITTED PERMITTED	PERMITTED
3 RAMPS AS SECONDARY EXIT FOR ONE (1) BASEMENT LEVEL PERMITTED PERMITTED	PERMITTED
BUILDING EQUAL OR MORE THAN 4 STOREYS (G+3) OR REQUIRED REQUIRED	REQUIRED
4 ROOF ACCESS WHERE OPEN STAIR/S ARE PERMITTED AND PROVIDED IN NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE	NOT APPLICABLE
ONE AT EACH 9300M ² ROOF AREA OR FLAT ROOFS OR REQUIRED REQUIRED REQUIRED	REQUIRED
ROOF ACCESS COMPONENTS VENTILATORS OPENINGS ON OPPOSING WALLS (EACH WALL OPENING IS AT LEAST 10% OF ONE SIDE OF THE WALL ENCLOSING THE ROOF ACCESS ON THE ROOF LEVEL. NOT APPLICABLE	NOT APPLICABLE
STAIR ACCESS TO ROOF WITH OPERABLE DOORS REQUIRED REQUIRED	REQUIRED



		ALL INSIDE STAIR SERVING AS AN EXIT COMPONENT	REQUIRED	REQUIRED	REQUIRED	
	STAIR ENCLOSURES	OPEN STAIR PENETRATING ONE (1) FLOOR/LEVEL ONLY	PERMITTED	PERMITTED	PERMITTED	
	FIRE FIGHTING LOBBY (F/F LOBBY)	IN EVERY FIRE LIFT PROVISIONS AT EVERY FLOOR LEVEL SERVED	REQUIRED IN EVERY PROVISIONS OF FIRE LIFT	REQUIRED IF BASEMENT LEVEL EXCEEDS 9M	REQUIRED TO 28M HEIGHT OR BASEMENT LEVEL EXCEEDS 9M	
		ADJACENT AND ACCESSIBLE TO AN EXIT STAIRCASE SERVES AS A COMMON LOBBY FOR BOTH FIRE LIFT/S AND THE ADJACENT EXIT STAIRCASE	REQUIRED IN EVERY PROVISIONS OF FIRE LIFT	REQUIRED WHEN FIRE LIFT/S PROVIDED	REQUIRED	
		6M ² MINIMUM WORKING SPACE/AREA WITH NO SIDE LESS THAN 2.0M. DIMENSION	REQUIRED IN EVERY PROVISIONS OF FIRE LIFT	NOT REQUIRED	REQUIRED WITH EACH SIDE HAVING A LEAST DIMENSION OF 2.0M	
		PROVISIONS AT THE LEVEL OF EXIT DISCHARGE	NOT REQUIRED IF EXITS COMPLIES WITH EXIT DISCHARGE REQ'TS	NOT REQUIRED IF EXITS COMPLIES WITH EXIT DISCHARGE REQUIREMENTS	NOT REQUIRED IF EXITS COMPLIES WITH EXIT DISCHARGE REQUIREMENTS	
	FIRE FIGHTING LOBBY DOORS & WALL ENCLOSURES	1.5-HR FPR** FIRE PROTECTION RATING/ FRR* FIRE RESISTANCE RATING	REQUIRED IN EVERY PROVISIONS OF FIRE LIFT	REQUIRED	REQUIRED	
		HIGH-RISE BUILDINGS WITH HABITABLE HEIGHT HIGHER THAN 28 METERS	NOT APPLICABLE	NOT APPLICABLE	REQUIRED	
ł		BASEMENT LEVEL/S EXCEED 9.0M METERS DEPTH	REQUIRED ON ALL FLOOR LEVELS	REQUIRED ON ALL FLOOR LEVELS	REQUIRED	
	SMOKE-STOP LOBBY (S/S LOBBY)	BUILDING EXCEEDS FIVE (5) STOREYS INCLUDING BASEMENTS & BELONGS TO AN ASSEMBLY OCCUPANCY REGARDLESS OF THE HABITABLE HEIGHT	NOT APPLICABLE NOT APPLICABLE		NOT APPLICABLE	
		3M ² MIN. AREA (LEAST SIDE DIMENSION 1.8M)	WHEN SMOKE-STOP LOBBY IS/ARE REQUIRED	REQUIRED	REQUIRED	
		PROVISIONS AT THE LEVEL OF EXIT DISCHARGE	NOT REQUIRED	NOT REQUIRED IF EXITS COMPLIES WITH EXIT DISCHARGE REQUIREMENTS	NOT REQUIRED IF EXITS COMPLIES WITH EXIT DISCHARGE REQUIREMENTS	
	SMOKE-STOP LOBBY DOORS & WALL ENCLOSURES	1.5-HR FPR** FIRE PROTECTION RATING/ FRR* FIRE RESISTANCE RATING	REQUIRED IN EVERY PROVISIONS OF FIRE LIFT	REQUIRED	REQUIRED	
6	HORIZONTAL EXITS	COMPLYING WITH CHAPTER 7 NFPA 101	PERMITTED	PERMITTED	PERMITTED	
7	EXIT PASSAGEWAYS	ENCLOSURE & SEPARATION FIRE RESISTANCE RATING COMPLYING WITH CHAPTER 7 NFPA 101 MINIMUM WIDTH NOT LESS THAN % OF THE WIDTH OF	REQUIRED	REQUIRED	REQUIRED	
		THE EXIT STAIR				
8	ESCALATORS & MOVING WALKS	AS PART OF THE REQUIRED MEANS OF EGRESS	NOT PERMITTED	NOT PERMITTED	NOT PERMITTED	
9	FIRE ESCAPE STAIRS	COMPLYING WITH CHAPTER 7 NFPA 101	PERMITTED	PERMITTED	PERMITTED	
10	FIRE ESCAPE LADDERS	COMPLYING WITH CHAPTER 7 NFPA 101	PERMITTED	PERMITTED	NOT PERMITTED	
11	SLIDE ESCAPES	COMPLYING WITH CHAPTER 7 NFPA 101	PERMITTED	PERMITTED	PERMITTED	
12	ALTERNATING TREAD DEVICES	COMPLYING WITH CHAPTER 7 NFPA 101	PERMITTED	PERMITTED	NOT PERMITTED	
13	AREAS OF REFUGE	COMPLYING WITH CHAPTER 7 NFPA 101	REQUIRED	REQUIRED	REQUIRED	
		AS PART OF THE REQUIRED MEANS OF EGRESS	NOT PERMITTED	NOT PERMITTED	NOT PERMITTED	
14	ELEVATORS	AS SECOND MEANS OF EGRESS FROM A TOWER AND COMPLYING WITH ASME A17.1/CSA B44	NOT APPLICABLE	NOT APPLICABLE	PERMITTED	
	ELEVATOR DOORS	OPENING INTO EXIT ENCLOSURES	NOT PERMITTED	NOT PERMITTED	NOT PERMITTED	



_						MEDIUM-R	RISE OFFICES		
С	CAPACITY OF MEANS OF EGRESS			LOW-RISE	OFFICES	TYPE A	ТҮРЕ В	HIGH RISE	OFFICES
1	OCCUPANT LOAD		NFPA 101 TABLE 7.3.1.2 OCCUPANT LOAD FACTORS	9.3M²/PERSON		9.3M²/PERSON		9.3M²/PERSON	
2	EGRESS CAPACITY		NFPA 101 TABLE 7.3.3.1 CAPACITY FACTORS	REQU	IIRED	REQI	UIRED	REQUIRED	
D	NUMBER OF EXITS								
			IN MEZZANINES WITH EXIT TRAVEL WITHIN COMMON PATH LIMIT	PERMITTED		PERMITTED		PERMITTED	
1			IN ANY SECTION WITH EXIT TRAVEL WITHIN COMMON PATH LIMIT	PERIVITIED					
1	SINGLE EXIT		SINGLE TENANTS SPACE OR BUILDING WITH 2 OR FEWER STORIES IN HEIGHT	PERMITTED COMPLYING WITH ALL SINGLE EXIT CONDITIONS*		PERMITTED COMPLYING WITH ALL SINGLE EXIT CONDITIONS*			
			IN ANY LEVEL OR STOREY	PERMITTED WITH CONDITIONS*		PERMITTED WITH CONDITIONS*	NOT PERMITTED	NOT PERMITTED	
	CONDITIONS*	1	OCCUPANT LOAD NOT EXCEEDING 50 OCCUPANTS PER FLOOR			REQUIRED		NOT APPLICABLE 2 EXITS REQUIRED	
	(REQUIRES COMPLIANCE TO ALL STATED CONDITIONS)	2	TRAVEL DISTANCE FROM THE MOST REMOTE AREA TO THE NEAREST EXIT ENCLOSURE DOES NOT EXCEED 23M.	REQUIRED	NOT APPLICABLE 2 EXITS REQUIRED				
		3	EXIT STAIRS ARE FULLY ENCLOSED						
		4	EXIT DISCHARGE DIRECT TO BUILDING EXTERNAL						
2	NOT LESS THAN 2 SEPARATE EXITS		50 - 500 OCCUPANTS	REQU	IIRED	REQU	UIRED	REQUI	RED
2	NOT LESS THAN 2 SEPARATE EXITS (CONTIN	UED)	ON EVERY STORY AND ACCESSIBLE FROM EVERY PART OF EVERY STORY	REQU	JIRED	REQUIRED		REQUIRED	
3	NOT LESS THAN 3 SEPARATE EXITS		EQUAL OR MORE THAN 500 OCCUPANTS	REQUIRED		REQI	UIRED	REQUI	RED
4	NOT LESS THAN 4 SEPARATE EXITS		EQUAL OR MORE THAN 1000 OCCUPANTS	REQUIRED		REQI	REQUIRED		RED
Е	ARRANGEMENT OF EXITS		(NS*-NOT SPRINKLERED / S**-SPRINKLERED)	FIRE PRO	TECTION	FIRE PRO	DTECTION	FIRE PROT	ECTION
-	ARRANGEMENT OF EXITS	(NS*-NOTS	(NS -NOT SPRINKLERED / S SPRINKLERED)	NS*	S**	NS*/S**	NS*/S**	NS*	S**
1	TRAVEL DISTANCE		NFPA 101 TABLE A.7.6	61M	91M	61M	91M	61M	91M
2	COMMON PATH LIMIT		NFPA 101 TABLE A.7.6	23M	30M	23M	30M	23M	30M
3	DEAD-END CORRIDOR		NFPA 101 TABLE A.7.6	6.1M	15M	6.1M	15M	6.1M	15M
4	EXIT DISCHARGE								
	EXTERIOR DISCHARGE (DIRECT TO BUILDING	EXTERNAL)	COMPLYING WITH NFPA 101	REQU	IIRED	REQUIRED		REQUI	RED
	THROUGH AREAS ON LEVEL OF EXIT DISCHARGE		MAXIMUM 10M TRAVEL DISTANCE TO BUILDING EXTERNAL	PERMITTED		PERMITTED	NOT PERMITTED	NOT PERMITTED	
			50% OF RQUIRED NUMBER OF EXITS & 50% OF REQUIRED EXIT CAPACITY IN BUILDINGS PROTECTED THROUGHOUT WITH SPRINKLER SYSTEM	PERMITTED		PERIV	NITTED	PERMIT	TED
5	EXTERIOR WAYS OF EXIT		COMPLYING WITH NFPA 101	PERMITTED		PERMITTED		PERMITTED	
6	ACCESSIBLE MEANS OF EGRESS		EXIT PROVISIONS FOR PEOPLE WITH SEVERE MOBILITY IMPAIRMENT (NOT LESS THAN 2 EXITS REQUIRED)	REQUIRED REQUIRED		UIRED	2 EXITS REQUIRED		
7	7 ILLUMINATION OF MEANS OF EGRESS		COMPLYING WITH CHAPTER 7 NFPA 101	REQUIRED		REQUIRED		REQUI	RED



8	EMERGENCY LIGHTING		THE BUILDING IS THREE (3) OR MORE STORIES IN HEIGHT OCCUPANCY SUBJECT TO 50 OR MORE OCCUPANTS ABOVE OR BELOW THE LEVEL OF EXIT DISCHARGE OCCUPANCY SUBJECT TO 300 OR MORE TOTAL OCCUPANTS	REQUIRED	REQUIRED	REQUIRED	
9	MARKINGS OF MEANS OF EGRESS		COMPLYING WITH CHAPTER 7 NFPA 101				
F	SPECIAL MEANS OF EGRESS PROVISIONS			LOW-RISE OFFICES	MEDIUM-RISE OFFICES TYPE A TYPE B	HIGH RISE OFFICES	
1	FIREMEN ACCESS PANELS		HABITABLE HEIGHT EXCEEDING 10M	REQUIRED	REQUIRED	REQUIRED	
2	REFUGE FLOORS		BUILDING EXCEEDING 30 STORIES	NOT APPLICABLE	NOT APPLICABLE	REQUIRED	
3	ELEVATORS FOR OCCUPANT CONTROLLED PRIOR TO PHASE I EMERGENCY RECALL OPE		COMPLYING WITH CHAPTER 7 NFPA 101	PERMITTED	PERMITTED	PERMITTED	
V	INTERIOR FINISH CONTENTS AND FURNISHIN	NG					
Α	INTERIOR FINISH		COMPLYING WITH CHAPTER 10 OF NFPA 101				
1	INTERIOR WALL & CEILING FINISHES		CLASS A OR CLASS B IN EXITS & EXIT ACCESS CORRIDORS	REQUIRED	REQUIRED	REQUIRED	
1	INTERIOR WALL & CEILING FINISHES		CLASS A OR CLASS B OR CLASS IN OTHER AREAS	REQUIRED	REQUIRED	REQUIRED	
2	INTERIOR FLOOR FINISHES		CLASS I OR CLASS II IN EXIT ENCLOSURE	REQUIRED	REQUIRED	REQUIRED	
VI	FEATURES OF FIRE PROTECTION (NFPA 5000 TABLES 7.2.1.1		, 7.3.2.1, 7.3.5 (a), (b), 7.3.5.5, 7.4.1)				
Α	CONSTRUCTION		COMPLYING WITH CHAPTER 7 & 8 OF NFPA 5000				
	CONSTRUCTION (NON-COMBUSTIBLE OR LIMITED COMBUSTIBLE MATERIALS)	TYPE I OR	EXTERIOR BEARING WALLS	HOURLY RATINGS BASED ON NFPA		LIQUIDLY DATINGS DASED ON NEDA FOOD	
1			FRAMING, COLUMNS, BEAMS, GIRDERS, TRUSSES	5000 HEIGHT & AREA REQUIREMENTS	HOURLY RATINGS BASED ON NFPA 5000 HEIGHT & AREA REQUIREMENTS	HOURLY RATINGS BASED ON NFPA 5000 HEIGHT & AREA REQUIREMENTS	
			FLOOR CONSTRUCTION				
В	COMPARTMENTATION / SUBDIVISION OF BI SPACES	UILDING	COMPLYING WITH NFPA 101 & NFPA 5000	REQUIRED	REQUIRED	REQUIRED	
1	FIRE BARRIES		COMPLYING WITH NFPA 101 & NFPA 5000	REQUIRED	REQUIRED	REQUIRED	
2	SEPARATION FROM OTHER OCCUPANCIES		COMPLYING WITH NFPA 101 TABLE 6.1.14.4.1 (a,), (b)	REQUIRED	REQUIRED	REQUIRED	
3	CORRIDORS RATED SEPARATION		REQUIRED SEPARATION	1-HR FRR*	1-HR FRR*	1-HR FRR*	
	REQUIRED SEPARATION EXEMPTION	1	EXITS ARE AVAILABLE FROM AN OPEN FLOOR AREA		NOT REQUIRED		
	(APPLIES TO ANY OF THE FOLLOWING)	2	WITHIN A SPACE OCCUPIED BY A SINGLE TENANT	NOT REQUIRED		NOT REQUIRED	
	(1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	3	FULLY PROTECTED WITH AUTOMATIC SPRINKLER SYSTEM				
4	SMOKE PARTITIONS/ SMOKE BARRIERS		COMPLYING WITH NFPA 101 & NFPA 5000	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED	
С	VERTICAL OPENINGS PROTECTION		PROTECTION COMPLYING WITH NFPA CODES	REQUIRED	REQUIRED	REQUIRED	
1	COMMUNICATING SPACES		COMPLYING WITH CHAPTER 8 NFPA 101	PERMITTED	PERMITTED	PERMITTED	
2	ATRIUMS		COMPLYING WITH CHAPTER 8 NFPA 101	PERMITTED	PERMITTED	PERMITTED	
3	CONVENIENCE OPENINGS		COMPLYING WITH CHAPTER 8 NFPA 101	PERMITTED	PERMITTED	PERMITTED	
4	4 SHAFTS		COMPLYING WITH CHAPTER 8 NFPA 101	PERMITTED	PERMITTED	PERMITTED	
			COMPLYING WITH CHAPTER 8 NFPA 101	PERMITTED	PERMITTED	PERMITTED	
5	5 MEZZANINES		AGGREGATE FLOOR AREA NOT MORE THAN ONE-THIRD OF THE ROOM OR SPACE IN WHICH THE LEVEL IS LOCATED	REQUIRED	REQUIRED	REQUIRED	



6	CONCEALED SPACES & DRAFSTOPS	COMPLYING WITH CHAPTER 8 NFPA 101	REQUIRED	REQUIRED	REQUIRED
	CONCERED SI ACES & DIVINISTOTS	FIRESTOPPED AT EACH FLOOR LEVEL, TOP STORY CEILING	negomes	negomes	negomes
	EXTERIOR & INTERIOR WALL & PARTITION	LEVEL & AT THE LEVEL OF SUPPORT FOR ROOFS	REQUIRED	REQUIRED	REQUIRED
	UNOCCUPIED ATTIC SPACES	DRAFSTOP INTO AREAS NOT EXCEEDING 280M ²	REQUIRED	REQUIRED	REQUIRED
	CONCEALED SPACES (CEILINGS & FLOORS)	DRAFSTOP INTO AREAS NOT EXCEEDING 93M ²	REQUIRED	REQUIRED	REQUIRED
	CONCEALED SPACES (FLOORS & ROOFS)	DRAFSTOP INTO AREAS NOT EXCEEDING 280M ²	REQUIRED	REQUIRED	REQUIRED
VII	FIRE PROTECTION				
Α	DETECTION ALARM AND COMMUNICATION SYSTEMS		LOW-RISE OFFICES	MEDIUM-RISE OFFICES TYPE A TYPE B	HIGH RISE OFFICES
1	FIRE ALARM SYSTEM		REQUIRED	REQUIRED	REQUIRED
В	EXTINGUISHING REQUIREMENTS	COMPLIANCE FROM INDIVIDUAL CODES & STANDARDS	REQUIRED	REQUIRED	REQUIRED
1	PORTABLE FIRE EXTINGUISHERS	TYPE AND RATING IN ACCORDANCE WITH NFPA 10	REQUIRED	REQUIRED	REQUIRED
2	FIRE BLANKETS	IN KITCHEN OR PANTRY	REQUIRED	REQUIRED	REQUIRED
3	STANDPIPE SYSTEM	BUILDING EXCEEDING 9M IN HEIGHT	REQUIRED	REQUIRED	REQUIRED
4	FIRE HOSE REELS	25MM DIAMETER HOSE	NOT REQUIRED	REQUIRED	REQUIRED
		THROUGHOUT PROTECTION	NOT REQUIRED	NOT REQUIRED	REQUIRED
	AUTOMATIC SPRINKLER SYSTEM	PROVIDED IN LIEU OF THE REQUIRED DRAFSTOPS IN CONCEALED SPACES	NOT REQUIRED	NOT REQUIRED	PERMITTED
5		ONE BASEMENT LEVEL USED AS CARPARK ONLY AND NOT EXCEEDING 1115 SQ.M.	NOT REQUIRED	NOT REQUIRED	REQUIRED
		ONE BASEMENT LEVEL USED AS MIXED OCCUPANCY	REQUIRED	REQUIRED	REQUIRED
		MORE THAN ONE BASEMENT LEVEL	REQUIRED	REQUIRED	REQUIRED
6	OTHER EXTINGUISHING EQUIPMENT	COMPLIANCE FROM INDIVIDUAL CODES & STANDARDS	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED
VIII	BUILDING SERVICES PROTECTION (ASS* AUTOMATIC SUPP	RESSION SYSTEM)			
Α	BUILDING UTILITIES	COMPLYING WITH CHAPTER 9 NFPA 101			
1	GAS EQUIPMENT & RELATED PIPING	PROTECTION AS PER NFPA 54 & NFPA 58	REQUIRED	REQUIRED	REQUIRED
2	ELECTRICAL SYSTEMS	COMPLYING WITH NFPA 70	REQUIRED	REQUIRED	REQUIRED
	ELECTRICAL ROOMS	AUTOMATIC SUPPRESSION SYSTEM or 2-HRS ENCLOSURE	REQUIRED	REQUIRED	REQUIRED
		ATTACHED TO OCCUPIED BUILDINGS REQUIRED PROTECTION	3-HRS FRR* or ASS*	3-HRS FRR* or ASS*	3-HRS FRR* or ASS*
	SUBSTATIONS & SWITCHGEARS	STANDALONE TRANSFORMER VAULT REQUIRED PROTECTION	3-HRS FRR* or 2-HRS FRR*with ASS	3-HRS FRR* or 2-HRS FRR*with ASS	3-HRS FRR* or 2-HRS FRR*with ASS
		EXPLOSION PROTECTION	ASS* & 2-HRS FRR* ENCLOSURE	ASS* & 2-HRS FRR* ENCLOSURE	ASS* & 2-HRS FRR* ENCLOSURE
3	COMMERCIAL COOKING EQUIPMENT	COMPLYING WITH NFPA 96	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED
	KITCHEN/PANTRY	ENCLOSURE FRR*	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED
	COOKING EQUIPMENT	EQUIPMENT USED ONLY FOR FOOD WARMING	PERMITTED	PERMITTED	PERMITTED
4	ELEVATORS, ESCALATORS & CONVEYORS	COMPLYING WITH ASME A17.1/CSA B44	REQUIRED	REQUIRED	REQUIRED
	FIRE FIGHTERS' EMERGENCY OPERATION	COMPLYING WITH NFPA 101.9 & ASME A17.1/CSA B44	NOT REQUIRED	NOT REQUIRED	REQUIRED
В	RUBBISH CHUTE, INCINERATORS & LAUNDRY CHUTES	COMPLYING WITH NFPA 82	REQUIRED	REQUIRED	REQUIRED



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	ENCLOSURES	TRAVERSES EQUAL OR LESS THAN 3 STOREYS	1-HR FRR*	1-HR FRR*	1-HR FRR*	
	LINCLOSORES	TRAVERSES MORE THAN 3 STOREYS	2-HRS FRR*	2-HRS FRR*	2-HRS FRR*	
	OPENING PROTECTIVE	TRAVERSES EQUAL OR LESS THAN 3 STOREYS	1-HR FPR**	1-HR FPR**	1-HR FPR**	
	OPENING PROTECTIVE	TRAVERSES MORE THAN 3 STOREYS	1.5-HR FPR**	1.5-HR FPR**	1.5-HR FPR**	
С	EMERGENCY POWER SUPPLY SYSTEM	COMPLYING WITH NFPA 110	NOT REQUIRED	NOT REQUIRED REQUIRED	REQUIRED	
1	GENERATORS	ENCLOSURE	1-HR FRR*	1-HR FRR*	1-HR FRR*	
D	FIRE PUMP ROOM	COMPLYING WITH NFPA 20	REQUIRED	REQUIRED	REQUIRED	
		MORE THAN 15.3 M FROM ANY BUILDING	1-HR FRR*	1-HR FRR*	1-HR FRR*	
	ENCLOSURES	WITHIN 15.3M OR ATTACHED TO BUILDINGS	2-HRS FRR*	2-HRS FRR*	2-HRS FRR*	
		THROUGHOUT SPRINKLER (BUILDING/S & PUMP ROOM)	1-HR FRR*	1-HR FRR*	1-HR FRR*	
		EXTERNAL ACCESS WITHIN THE LEVEL OF DISCHARGE	REQUIRED	REQUIRED	REQUIRED	
	DIRECT SAFE ACCESS	WITHIN 3M FROM ANY EXIT THAT COMPLIES WITH DIRECT DISCHARGE REQUIREMENTS	PERMITTED	PERMITTED	PERMITTED	
	ACCESS COMPONENT (UNIDED COUND LOCATION)	STANDARD STAIR (OF ANY NON-COMBUSTIBLE MATERIAL)	REQUIRED	REQUIRED	REQUIRED	
	ACCESS COMPONENT (UNDERGOUND LOCATION)	CAT STEEL LADDER	NOT PERMITTED	NOT PERMITTED	NOT PERMITTED	
E	FIRE WATER TANKS	COMPLYING WITH NFPA 22	REQUIRED	REQUIRED	REQUIRED	
	WATER TANK MATERIALS	NON-COMBUSTIBLE MATERIAL	REQUIRED	REQUIRED	REQUIRED	
	DESIGN/COMPARTMENTATION	TWO (2) COMPARTMENTS	REQUIRED	REQUIRED	REQUIRED	
F	SMOKE CONTROL / EMERGENCY VENTILATION	COMPLYING WITH NFPA 92 & NFPA 204	NOT REQUIRED	REQUIRED	REQUIRED	
1	VENTILATION BY ANY OF THE FOLLOWING: 1.1. NATURAL VENTILATION;	EXIT STAIRCASES CONNECTS FIVE (5) STOREYS (LEVELS) INCLUDING THE BASEMENTS	NOT APPLICABLE	REQUIRED	REQUIRED	
	1.2. MECHANICAL VENTILATION BY POSITIVE VENTILATION (PRESSURIZATION) SYSTEM	AND/OR WHEN SMOKE STOP &/OR FIRE FIGHTING LOBBIES ARE REQUIRED	NOT APPLICABLE	NOT APPLICABLE	REQUIRED	
2	VENTILATION / SMOKE CONTROL SYSTEM BY ANY OF THE FOLLOWING:	BASEMENT LEVEL/S WITH FLOOR AREA (FA) EXCEEDING 500 SQ.M.	NOT APPLICABLE	REQUIRED	REQUIRED	
	1.1 NATURAL VENTILATION; 1.2 MECHANICAL VENTILATION & SMOKE CONTROL SYSTEM	VERTICAL OPENINGS, ATRIUMS & OTHER LARGE VOLUME OF SPACES	REQUIRED	REQUIRED	REQUIRED	
G	AIR-CONDITIONING & VENTILATION SYSTEM	COMPLYING WITH NFPA 90A & NFPA 90B AND OTHER RELEVANT, APPLICABLE NFPA CODES & STANDARDS	REQUIRED	REQUIRED	REQUIRED	

Note:

For further guidance, the user is referred to the NFPA Codes and Standards and the Qatar Fire Safety Standards (QFSS).

^{*}This Fire Safety Guide is prepared to determine the minimum required Fire Safety provisions for each Occupancy Type as referenced from GDCD's adopted National Fire Protection Association (NFPA) Codes & Standards and the Qatar Fire Safety Standards (QFSS).

^{**}Occupancy Classification: Unless both the height and area requirements / criteria are met, the next higher classification / category SHALL apply.

^{*}FPR*-FIRE RESISTANCE RATING *FPR**-FIRE PROTECTION RATING *ASS-AUMATIC SPRINKLER SYSTEM *SS-SMOKE-STOP LOBBY *FF-FIRE FIGHTING LOBBY