



GUIDELINES FOR FIRE ALARM PLAN SUBMISSIONS		FA-01-2014		
<b>Note: For Strict Compliance</b> Each item is checked for completeness and compliance to NFPA Standards and General Directorate of Civil Defence, General Requirements. Check the applicable/required item/s & attached this document to each plan submission / re-submissions made.		PS-____-FA		
Item	DESCRIPTION	Provisions		
		Y	N	NA
<b>1.0</b>	<b>GENERAL</b>			
	a.) Drawings to be submitted through MOI Online Permit System Portal must be in ACAD file format, purge, bonded with corresponding model space & paper space layouts for review.			
	b.) Drawing layouts shall follow the standard format for Title Block.			
	c.) The consultant shall certify on every drawing layout that the fire safety plan submission is designed with the provision of NFPA 70, 72, 101,170, 5000, other applicable NFPA standards and Qatar Civil Defence requirements.			
<b>2.0</b>	<b>PLANS AND DOCUMENTS TO BE SUBMITTED</b>			
	a.) Detailed Design Report – A narrative report that provides the following (where applicable): - Description of the building, uses and occupancies of each spaces, passive and active fire alarm system that will work together with the smoke control system. - Design criteria and objectives.			
	b.) Floor Plans, Elevation, Sectional Drawings and Details			
	c.) Policy Plan (Indicating Location, PIN, & QARS (Areas/Street/Plot Numbers, application number).			
	d.) Urban Planning & Development Authority (UPDA) latest and updated registration of the Consultant & the Engineering Consulting Company.			
	e.) This document, the Guidelines for plan submission to serve as review checklist.			
	f.) Fire Safety provision shall be in accordance with the minimum requirements as prescribed by NFPA Standards and QCD General Requirements. Provisions in excess of the minimum requirements shall be confirmed by the design consultant with a letter from the owner/client.			
<b>3.0</b>	<b>STANDARD DETAILS TO BE SHOWN ON TITLE BLOCKS</b>			
	a.) Proper endorsement, drawing title & QCD space for stamps shall be provided.			
	b.) List applicable codes used in the design of the project shall be indicated with complete editions & date.			
	c.) Logo & stamp of the consultant/contractor firm complete with address and contact information shall be properly placed.			
	d.) Owner's name & other details such as address and contact nos. shall be indicated.			
	e.) Complete address of the project, Pin, area, plot & street nos. must be clearly provided.			
	f.) Indicate correct plan scale in each drawing page.			
	g.) Complete name of engineer shall be clearly shown.			
	h.) History of revisions must be provided.			
	j.) Sheet number and content title must be consistent with the drawing index.			
<b>4.0</b>	<b>COVER / FRONT PAGE</b> <i>Declaring, enumerating or tabulation of all the fire safety provisions required for the project.</i>			



<b>GUIDELINES FOR FIRE ALARM PLAN SUBMISSIONS</b>		<b>FA-01-2014</b>		
<b>Note: For Strict Compliance</b> Each item is checked for completeness and compliance to NFPA Standards and General Directorate of Civil Defence, General Requirements. Check the applicable/required item/s & attached this document to each plan submission / re-submissions made.		<b>PS-____-FA</b>		
<b>Item</b>	<b>DESCRIPTION</b>	<b>Provisions</b>		
		<b>Y</b>	<b>N</b>	<b>NA</b>
	a.) Drawing index with corresponding paper size and scale must be provided clearly and consistent with each page of the drawings.			
	b.) Area statement of every floor, level, room, area and/or occupancy.			
	c.) Project description shall be provided to indicate the intent and purpose of the submission, building classification, construction type, building occupancy and hazard classification, type of commodities and storage arrangement shall be included in the description. Such description shall be consistent with the design report.			
	d.) Scope of work: A summarized design intent (based from design report), proposed project details/activity must be clearly indicated.			
	e.) Design parameters / criteria with complete description of the system shall be properly declared and supported with engineering calculations. - Alarm Initiating/Notification/Indicating Devices, Mass Notification, Emergency Lighting and Signages, Two-way Communication System, Type of Fire Alarm System (Addressable, Conventional or Analogue/Addressable, EPSS class and type, type of emergency lighting system, self - contained battery pack or central battery system), class of wiring installed per NFPA 72. - Installation limitation and restrictions , max spacing, max. area coverage of detectors.			
	f.) Equipment Schedule: - Type of alarm initiating-indicating devices, notification devices, controllers, interface modules & panels schedule must be provided. - Quantity and tabulation with description of all fire alarm equipment / devices shall be provided. (quantity shall be consistent with the plans). This may be provided on a separate sheet (or included with battery calculation).			
	g.) General notes applicable for the project shall be provided.			
	h.) Provide only the applicable legends & symbols making sure that all floor plan layouts shall be consistent with the schematic riser diagrams.			
	i.) Brief material specification related equipment/devices, etc. shall be provided. (rating of audible / visible notification devices, lux level of emergency lighting system, wire & conduit specification).			
	j.) Specify all conduits / cable trays for fire safety application penetrating thru walls and slabs shall be sealed with fire retardant material with rating of not less than the fire rating of the wall or slab being penetrated.			
	k.) Provide declaration that a single fault on a pathway connected to the addressable devices shall not cause the loss of more than 50 addressable devices as per 23.6.1 as per NFPA 72, and system shall have a spare capacity. (where applicable , and reflect isolation modules on floor plans to be consistent with schematic diagram).			
	l.) Input / output matrix shall be provided (can be on a separate sheet) reflecting all the necessary interface modules. Sequence of operation with a narrative description and a system performance matrix (input / output). Refer to figure A.14.6.2.4 of NFPA 72 as a sample of a typical input / output matrix and update what is applicable to the project (include other emergency control functions declared).			
	m.) Declare interface modules / or other control panels interfaced with Fire alarm and detection system. (emergency power supply, smoke control, fire fighting ZCVs, fire pump			



GUIDELINES FOR FIRE ALARM PLAN SUBMISSIONS		FA-01-2014		
<b>Note: For Strict Compliance</b> Each item is checked for completeness and compliance to NFPA Standards and General Directorate of Civil Defence, General Requirements. Check the applicable/required item/s & attached this document to each plan submission / re-submissions made.		PS-____-FA		
Item	DESCRIPTION	Provisions		
		Y	N	NA
	monitoring, other fire suppression equipment such as clean agent, elevator control function and other emergency control functions interfaced with FDAS). Please also be consistent with declaration, input / output matrix and throughout the plans.			
	n.) Provide declaration that contractor / consultant shall coordinate with other trades prior to installation. Any conflict / obstructions shall be resolved or provided with additional detectors (or relocation) if necessary (or other fire safety equipment where applicable).			
	o.) Declaration that zone Chart or Fire Evacuation Plan requirement, shall be as-built drawing plan of the building and required in each of every floor of the common area's (e.g. lift lobby, corridor, etc.) whereas noticeable to the occupant / tenant / public. The plan shall indicate all manual initiating device, exit sign, and other applicable fire measure.			
<b>5.0</b>	<b>SITE PLAN, Site Plan scaled to fit an A0 or A1 drawing sheet and shall indicate the following:</b>			
	a.) Means of access to the site and to the perimeter of each building for firefighting vehicle and equipment.			
	b.) For multiple buildings being served by a main fire alarm control panel, external cable routing with supervising station shall be shown in the site plan. For stand alone, declaration on the location of the fire alarm control unit/panel.			
	c.) Grid Line References (x, y) and shall be same with other floor plan drawings.			
<b>6.0</b>	<b>FLOOR PLANS (BASEMENT/S, GROUND, MEZZANINE, TYPICAL FLOORS, ROOF/SERVICE FLOOR)</b> - The proposed, existing use of every part or modified portions of the plan clearly identified and provided with a narrative description of the scope of work/activity. (Hatch existing part of the plan modifications / fit outs).			
	a.) Provision for alarm initiating/notification/indicating devices complete with wiring/conduit and labels to have consistency with the fire alarm schematic diagram.			
	b.) Interfacing modules shall be shown and identified for mechanical ventilation, firefighting and related emergency service purpose.			
	c.) Conduit layout shall show the starting and ending points and location of the up feed and down feed risers from and to the fire alarm control panel (pathway survivability). Pathway / conduit risers for FDAS (fire alarm and detection system) / EVES (emergency voice evacuation system) & CBS (central battery system) shall be indicated on plan layout.			
	d.) Location of the audible and visible notification devices (installation inside the staircase and at exit doors shall not be permitted-visual impairment hazard).			
	e.) Where emergency / two way communication is required. Two way fire telephone shall be provided on the following locations as per NFPA 72 (each floor level, each notification zone, elevator lobbies, elevator machine room, EPS room, fire pump room, on each stairway level, each elevator cab as required by NFPA 72) where applicable.			
<b>7.0</b>	<b>ELEVATION &amp; SECTIONAL DRAWINGS</b> Drawings shall be scaled to fit an A0 or A1 drawing sheet and shall indicate the following:			
	a.) Full height of each floor/storey and the depth of void spaces (raised floor or ceiling void) with respect to the Level of Exit Discharge (LED) incorporating the necessary fire safety equipment. Indicate the raised floors / cable trench / ceiling void subject for detection provision.			
	b.) Where no ceilings (exposed) / or waffle type ceilings / joist / sloping / or other special ceilings configurations are applicable to the project. The following shall be declared and shown			



<b>GUIDELINES FOR FIRE ALARM PLAN SUBMISSIONS</b>				<b>FA-01-2014</b>
<b>Note: For Strict Compliance</b> Each item is checked for completeness and compliance to NFPA Standards and General Directorate of Civil Defence, General Requirements. Check the applicable/required item/s & attached this document to each plan submission / re-submissions made.				<b>PS-____-FA</b>
<b>Item</b>	<b>DESCRIPTION</b>	<b>Provisions</b>		
		<b>Y</b>	<b>N</b>	<b>NA</b>
	on section drawings, the slope, the ceiling height (H), width (W), beam depth (D) and spacing (W) of the beams. Designer should coordinate with archi, I.D., structural, ACMV or other trades ,these factors should be put in consideration for location / spacing of detectors to be compliant with NFPA 72.			
<b>8.0</b>	<b>SCHEMATIC DIAGRAMS</b>			
	a.) Schematic diagram showing all the alarm initiating / notification / indicating devices / interfacing modules with labels to have consistency with the wiring layout for all the floors of the proposed building.			
	b.) Schematic diagram showing emergency power supply system / central battery systems connected to life safety equipments.			
	c.) Schematic diagram for fire telephone / emergency communication systems / emergency voice evacuation systems.			
	d.) Block diagram for multiple buildings showing the external routing with supervising station being served by a main fire alarm control panel (as applicable).			
<b>9.0</b>	<b>FIRE COMMAND CENTER / FIRE PUMP ROOMS / GENERATOR ROOMS (IF PROVIDED)</b>			
	a.) Location of the Main Fire Alarm Control Unit/Panel, Main Indicating Mimic (Graphic Annunciation) Panel, Two-way Fire Telephone Communication Systems, Mass Notification (Public Address) System and related fire emergency systems.			
	b.) Heat detector shall be provided in fire pump room if there is a diesel driven fire pump; fire telephone directly connected to the Fire Command Center or near the fire alarm control panel.			
	c.) Provide blow up drawings for fire command and generator rooms reflecting FACP, panels and all necessary Fire alarm system equipment.			
<b>10</b>	<b>TYPICAL INSTALLATION DETAILS / MISCELLANEOUS DETAILS</b>			
	a.) Details on the cable trays or conduits penetrating walls.			
	b.) Submit only the required fire safety equipment details (alarm initiating-indicating devices, etc) that will be installed in the proposed building.			
<b>11</b>	<b>SUPPORTING DOCUMENTS AND OTHER TECHNICAL REQUIREMENTS</b>			
	a.) Fire Alarm Control Unit/Panel specification to verify allowable devices per loop or zone.			
	b.) Fire command center shall be provided with the following (where applicable / where required) Emergency voice / alarm communication unit, fire dept. communications unit, FDAS annunciator unit, annunciator unit visually indicating location of elevators, status indicators & controls for AHUs, required panel for smoke control, controls for un locking stairway doors, sprinkler valve / water detector display status, emergency & std. by status indicator, telephone for fire dept. use, bldg. plans.			
<b>12</b>	<b>CALCULATION REPORTS</b>			
	a.) Battery Load Calculation of all the alarm initiating-indicating devices to verify fire alarm control panel capacity.			
	b.) Provide calculation for audible and visible rating of devices.			

GUIDELINES FOR FIRE ALARM PLAN SUBMISSIONS		FA-01-2014		
<b>Note: For Strict Compliance</b> Each item is checked for completeness and compliance to NFPA Standards and General Directorate of Civil Defence, General Requirements. Check the applicable/required item/s & attached this document to each plan submission / re-submissions made.		PS-____-FA		
Item	DESCRIPTION	Provisions		
		Y	N	NA
	c.) Provide lux calculation for illumination requirements of emergency lighting system for exit access and staircase per NFPA 101.			
<hr/> <b>Name, Signature &amp; Stamp of Consultant Engineer</b>		<hr/> <b>Date</b>		