

**HARYANA FIRE SERVICE
FIRE ADVISOR COMMITTEE**

Questionnaire for Highrise Building

The proposed Fire Fighting Scheme as per NBC- 2016

S.No.	DESCRIPTION	Requirement as Per NBC 2016	PROPOSED
1	Name of Building		COMMERCIAL COLONY AREA MEASURING 3.9625 ACRES (LICENCE NO. 47 DATED 18/04/2022) IN SECTOR-89, GURUGRAM BEING DEVELOPED BY SMART ARENA HOMETOWN LLP IN COLLABORATION WITH PEERRAGE BUILDWELL PVT. LTD.
2	Classification of building	Mixed Occupancy (as per clause 3.1.11 of NBC part IV)	Basement 2 - Parking & Services (Storage - H occupancy). Basement 1 - Parking & Services (Storage - H occupancy). Lower ground floor - Commercial/ Showroom (Mercantile F-1 & F2 occupancy) & Services (Storage -H occupancy) Upper Ground Floor - Commercial/ Showroom (Mercantile F-1 & F2 occupancy) Mezzanine floor - Commercial/ Showroom (Mercantile F-1 occupancy) First Floor - Commercial/ Showroom (Mercantile F-1 & F2 occupancy) Second Floor - Commercial/ Restaurant (Assembly D-6 occupancy) & Multiplex (Assembly D-6 occupancy) Third & Fourth floor - Multiplex (Assembly D-6 occupancy) The building has a mixed occupancy namely-Car parking , storage, shopping, restaurant, multiplex, The building has been designed for fire suppression system. For Assembly D-6 Occupancy (as per clause 3.1.11 of NBC part IV)
3	Address of Building		COMMERCIAL COLONY AREA MEASURING 3.9625 ACRES (LICENCE NO. 47 DATED 18/04/2022) IN SECTOR-89, GURUGRAM BEING DEVELOPED BY SMART ARENA HOMETOWN LLP IN COLLABORATION WITH PEERRAGE BUILDWELL PVT. LTD.
4	Name and address of builder/promoter		SMART ARENA HOMETOWN LLP IN COLLABORATION WITH PEERRAGE BUILDWELL PVT. LTD., 109 RING ROAD MALL PLOT NO-21, MANGALAM PLACE , SECTOR -3 ROHINI-110085
5	Name and address of Owner/occupiers of individual flats		SMART ARENA HOMETOWN LLP IN COLLABORATION WITH PEERRAGE BUILDWELL PVT. LTD., 109 RING ROAD MALL PLOT NO-21, MANGALAM PLACE , SECTOR -3 ROHINI-110085
6	Plot area		16035.643 sqm (3.9625 Acres)
7	Covered area (at grade Lvl)	16035.643 sqm @ 60% @ 9621.386 sq.m.	8342.330 sq.m(52.02%)
8	Height of building	Assembly -30mt & Unrestricted Height	Assembly - 23.25 mt
a	Overall height from grade level (top of machine room/ water tank coping)		29.25mt

Certified that fire Fighting Scheme is as per N.B.C. Part-IV, revised 2016

FSO Gurugram

GIAN P. MATHUR
ARCHITECT
B. Arch., M.C.A. I.I.A
CA No. 80/5769

Architect
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For Peerrage Buildwell Pvt Ltd

[Signature]
Authorised Signatory

S.No.	DESCRIPTION	Requirement as Per NBC 2016	PROPOSED
b	Height up to the Terrace of highest occupied floor/ Level		23.25 mt
9	Number of basements (please indicate level below grade in each case)	Basement should not exceed beyond the setbacks (as per zoning).	TWO BASEMENTS:- Yes-Basement should not exceed beyond the setbacks (as per zoning).
	1st. Basement floor		-6.700 mts.
	2nd. Basement floor		-11.200 mts.
10	Number of floors (including ground floor)		2nd Basement +1st Basement +Lower Ground Floor +Upper Ground Floor + Mezzanine + 4 Floors
11	Area of each basement		TWO BASEMENTS:-
	Basement-1		11357.241 sq.m
	Basement - 2		11612.508sq.m.
12	If basement extends beyond the building line, please indicate the load bearing strength of the roof of basement	45 Ton (Fire tender load)	Provided - 60 Ton (Fire tender load)
13	Covered area of each. Floors	Permissible FAR @ 175% = 28062.375 sqmt	
	2nd Basement		11612.508 sq.m
	1st Basement		11357.241 sq.m
c	Lower Ground Floor		9163.282 sq.m
d	Upper Ground Floor		8342.330 sq.m
e	Mezzanine Floor		363.651 sq.m
f	First Floor		7840.733 sq.m
g	Second Floor		3342.840 sq.m
h	Third Floor		1948.714 sq.m
i	Fourth Floor		151.066 sq.m
j	Terrace (Mumty, Machine Room & O.H Water Tank)		894.451 sq.m
14	Occupancy		
	Sanction		
	1st Basement		Parking & Services (Storage - H occupancy).
	2nd basement		Parking & Services (Storage - H occupancy).
	Lower Ground floor		Commercial/ Showroom (Mercantile F-1&F2 occupancy) & Services (Storage -H occupancy)
	Upper Ground floor		Commercial/ Showroom (Mercantile F-1 &F2 occupancy)
	Mezzanine floor		Commercial/ Showroom (Mercantile F-1 occupancy)
	First floor		Commercial/ Showroom (Mercantile F-1 &F2 occupancy)
	Second floor		Commercial/ Restaurant (Assembly D-6 occupancy) & Multiplex (Assembly D-6 occupancy)
	Third & Fourth floor		Multiplex (Assembly D-6 occupancy)
15	Parking areas		
	Parking required	1 ECS for Every 50 sq.mt. of FAR area	FAR area =28061.915/50=561.238 ECS
	a) Total no. of parking required		561 ECS
	b) No. of covered parking required		
	Parking Provided		562 ECS
	a) No. of cars parked in open		
	b) No. of cars parked in basements		
	Total car parking provided		
16	Details of surrounding property / features		
	Compass directions in relations to the building		



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For Peerage Buildwell Pvt Ltd
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S.No.	DESCRIPTION	Requirement as Per NBC 2016	PROPOSED
	NORTH-EAST		
a.	Type of property		Other's Property
b.	Height in case of building		
c.	Distance (wall to wall from building)		
d.	Any other information		
	SOUTH-EAST		
a.	Type of property		12.00 M Wide Approach (Service) Road
b.	Height in case of building		
c.	Distance (wall to wall from building)		
d.	Any other information		
	SOUTH-WEST		
a.	Type of property		Other's Property
b.	Height in case of building		
c.	Distance (wall to wall from building)		
d.	Any other information		
	NORTH - WEST		
a.	NORTH - WEST		Other's Property
b.	Height in case of building		
c.	Distance (wall to wall from building)		
d.	Any other information		
17	Approach road to the building ,width of road & connecting roads if any	12.00 M Wide Road	12.00 M Wide - South East
18	Please give details of water supply available exclusively for firefighting.		
	a. Underground Fire Reserve	As per NBC- 2016, Part-IV (Table no.7) 200 KL required	Proposed 700 KLD. <i>as per NBC- 2016, Part-IV, revised 2016</i>
	b. Over Head Fire Reserve	As per NBC- 2016, Part-IV (Table no.7) Assembly Building-D6 20 KL	Over head tank 20KL X 2. <i>FSO Gurugram</i> <i>FSO Gurugram</i> <i>DSD Gurugram</i>
	Has wet risers (s) been provided? If so, please indicate the number of risers and internal dia of each.	As per NBC - 2016, 100mm dia wet riser required	Yes, Wet riser is provided of 150 mm dia
	2nd Basement	As Per IS Code- 3844 Distance Between Hydrant to Hydrant is not more than 50 mtr. Clause 5.2.2.	17 Nos. of 150 mm Dia
	1st Basement		16 Nos. of 150 mm Dia
	Lower ground floor		17 Nos. of 150 mm Dia
	Upper Ground Floor		18 Nos. of 150 mm Dia
	1st Floor		18 Nos. of 150 mm Dia
	2nd Floor		23 Nos. of 150 mm Dia
	3rd Floor		9 Nos. of 150 mm Dia
	Fourth floor		3 Nos. of 150 mm Dia
	Terrace floor		5 Nos. of 150 mm Dia
20	Has any dry riser been provided? if so, please give details	Not Required	Not Proposed
21	Has any down comer been provided? If so, please give details.	As Per NBC-2016, Table 7 : Not Required.	Not Proposed



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22	Please indicate the present arrangement for replenishment of water for fire fighting	As per NBC, clause 5.1.6 replenishment with alternate source	Proposed – HSVP supply for replenishment and 150 KL domestic water tank available (by connecting hydropneumatics pump outlet with motorised valve to fire water tank)
23	Is a public or other water storage facility available nearby?	Not Known	Not available
24	Please give any other information that you can, regarding availability of water supply for fire fighting.	Not mentioned	Not available
25	Have internal hydrants been provided? if so, please indicate.	One internal hydrant required in each floor including Terrace @50m distance apart.	Proposed
	a. No. of hydrants and dia on each floor including basement(s)	As Per NBC-2016, Required	Nos. of Internal Hydrant of 150mm Dia pipe as below
	2nd Basement	As Per IS Code- 3844 Distance Between Hydrant to Hydrant is not more than 50 mtr. Clause 5.2.2.	17
	1st Basement		16
	Lower ground floor		17
	Upper Ground & Mezanine Floor		18
	1st Floor		18
	2nd Floor		23
	3rd Floor		9
	Fourth floor		3
	Terrace floor		5
	b. Have these hydrants single or twin outlets	Single outlet	Single outlet
26	Have first aid hose reels been provided? If so, please indicate	Required	Yes, Proposed
	a. No. of Hose reels on each floor including basement(s).	One first aid hose reel required in each FHC as per IS-884.	Total= 121 Nos.
	2nd Basement	As per IS 3844:1998 A hose reel conforming IS:884 directly tapped from the down commmer pipe should also be provided on each floor/ landing.	17 Nos.
	1st Basement		16 Nos.
	Lower ground floor		17 Nos.
	Upper Ground & Mezanine Floor		18 Nos.
	1st Floor		18 Nos.
	2nd Floor		23 Nos.
	3rd Floor		9 Nos.
	Fourth floor		3 Nos.
	Terrace floor		0 Nos.
	b. Bore and length of hose reel tubing on each reel	Required (20mm & 30 m length)	Proposed 20mm dia & 30m Length
	c. Size (bore) and type of nozzle fitted to each hose reel	Required (5 mm shutoff nozzle)	Proposed- 5mm dia bore.
	d. If the hose reel connected directly to the riser or to the hydrant outlet?	Required	Proposed
27	Has fire hose been provided near each Hydrant , If so, please indicate	Required	Proposed
	a. The type of hoses	Required (RRL Type)	Proposed- 2 Nos. of RRL hose reel at Each FHC.
	b. The size(bore) of hoses	63mm dia	63mm dia
	c. The length of each hose	15 m	15 m
	d. Total No. of hoses provided near each hydrant	Two Nos.	Two Nos.



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28	Have branch pipes been provided? If so, please indicate.	Required	Yes
	a. The type of branch pipe	Short brach pipe	Short brach pipe
	b. Size of nozzle fitted to each pipes	63mm dia & 20mm nozzle	63mm dia & 20mm nozzle
29	If the basement is used for car parking or storage, has it been sprinklered?	As per NBC-2016, Table: 7 required for basements > 200 sqm and on all upper floors)	Yes Proposed.
30	Weather separation/compartimentation of the Basement & upper floors has been provided. If so give detail	As per NBC 2016-Part4, clause-4.5 (Compartimentation) Basement car parking - Max. 3000 (Sq. Mtr.) Mercantile and Assembly building - Max. 2000 (Sq. Mtr.)	Yes, Fire Zones in basements are provided as per Latest NBC Norms-2016 covering maximum area up to 3000 has been provided in each basement details are mentioned below (Basement-2) Zone-1 - 2559 (Sq. Mtr) Zone-2 - 2050 (Sq. Mtr) Zone-3 - 2417 (Sq. Mtr) Zone -4- 2262 (Sq. Mtr) (Basement-1) Zone-1 - 3000 (Sq. Mtr) Zone-2 - 3000 (Sq. Mtr) Zone-3 - 2825 (Sq. Mtr) For Upper Floors,shops are physical segerated with bricks work, however common corridors are open to atmosphere ,so compartimentation is not given in common corridor
31	Is the building equipped with automatic fire detection and alarm system? if so, please indicate -	Required as per NBC for more than 15 Mtr. Height or above High rise building Automatic Fire Detection and Alarm	YES, Provided the system as per National Building Code of India 2016 Part 4 Clause 4.9 & Table -7 and IS 2189 : 2008
	a) The type of detectors used	NBC Clause no[4(18)], Table 23	Multi Criteria Detectors, Smoke Detectors, Heat Detector
	i) Basement		Multi Criteria Detectors,
	ii) Electrical Shaft, Electrical Room		Multi Criteria Detectors
	iv) Kitchen	As per IS code 2189:2008	Multi Criteria Detectors
	v) Shop, corridoor, restaurant		Smoke Detectors, AboveDetector shall be installed above false ceiling, if false ceiling level is 800mm or more than 800mm.
	vi) Multiplex	As per IS code 2189:2008	Beam Detectors, Above & Below false ceiling Detector shall be installed.
	b) The standard to which the detectors conforms	DFC, UL Standard 864 9th edition (UL 268), USA	IS : 11360 (Multi Criteria Detectors) IS : 2175 (Multi Criteria Detectors)"
32	Have manual call boxes been installed in the building for raising an alarm in the event of an outbreak of fire? If so, please give details.	Required as per NBC-IV, 6.4.8.5 fire and safety, Manual Call Box should be provided in central place of each platform.	Yes provided. Manual call points are provided on each staircase of each floor, basement and near Cinema Fire Exit. <i>Certified that fire Fighting Equipments are provided as per NBC-IV, revised 2016</i>
33	Has a public address system been installed in the building with loud speakers on each floors.	Required as per NBC-IV, fire and safety, Speaker or Hooter should be provided in central place of each platform.	Yes provided. Hooters are provided on each staircase of each floor. <i>FSO Gurugram</i>
34	Has an intercom system been provided between the various floors and the fire control room in the entrance lobby.	Required as per NBC-IV C-5. For 15 Mtr. Height or above High rise building shall be a Control Room on the Entrance Floor of The building with Communication System.	Yes, Communication system will be provided.



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35	Has a fire control room been provided in the entrance lobby of the building	Required As per NBC 2016 - part IV (Clause no. 3.4.12)	Yes, Fire Control Room is provided at the Lower Ground Floor (Area 16.20 sqmt). Direct Approach.
	a) Number of staircases	Min. 2 staircase for buliding above 15 mts.	Yes Provide as per norms
	1st Basement floor		06 Number with 2.000m width & 02 Number with 2.250m width
	2nd. Basement floor		06 Number with 2.000m width & 02 Number with 2.250m width
	Lower Ground floor		08 Number with 2.000m width & 02 Number with 2.250m width.
	Upper Ground Floor		08 Number with 2.000m width & 02 Number with 2.250m width.
	Mezzanine Floor		Saperate for Each Shop with 1.0m width
	First Floor		08 Number with 2.000m width & 02 Number with 2.250m width.
36	Second Floor		08 Number with 2.000m width & 02 Number with 2.250m width.
	Third floor		07 Number with 2.000m width & 02 Number with 2.250m width.
	Fourth floor		05 Number with 2.000m width
	Terrace		05 Number with 2.000m width
	a. The width of the Stairway	Min width= 1500 mm	2250mm ,2000 mm, 1200mm for DG & transformer Room
	b. The width of Treads	Not less than 300 mm (min.)	300 mm
	c. The height of risers	Not More than 150 mm(max.)	150 mm
	d. If the treads are of non- slip type	Required	Fired Granite stone / Anti skid tape for non-slippey
37	What is the average occupant load per floor?	As per NBC	Yes, Provided as per norms
a	Basement (Parking & Services)	30 Sq. Mt. per person	<p><i>Confirmed that Fire Fighting Scheme is as per N.B.C. Part-IV, revised 2016</i></p> <p><i>FSO Gurugram</i> <i>FSO Gurugram</i> <i>FSO Gurugram</i></p>
b	Mercantile (lower ground & ground floor	3 Sq. Mt. per person	
c	Mercantile (Upper floor level)	6 Sq. Mt. per person	
d	Circulation	6 Sq. Mt. per person	
e	Assembly	1.8 Sq. Mt. per person	
f	Audi Seat	1.2 m.times no of person	
g	Foyer Waiting area	0.3 Sq. Mt. per person	
	2nd Basement (Parking & Services)	Occupant Load Factor (m^2 /Person) =30	11612.508 /30 =387.08 Person Total =387 Person
	1st Basement (Parking & Services)	Occupant Load Factor (m^2 /Person) =30	11357.241 /30 =378.57 Person Total =379 Person
	Lower Ground Floor (Mercantile Circulation & Services)	Occupant Load Factor (m^2 /Person)=3, 6 & 30	6152.910 /3 =2099.51 Person 2126.942/6 = 354.49 Person 737.800/30 = 24.59 Person Total =2479 Person
	Upper Ground Floor (Mercantile & Circulation)	Occupant Load Factor (m^2 /Person)=3, & 6	5187.230 /3 =1729.08 Person 2425.600/6 = 404.27 Person Total =2133 Person
	Mezzanine Floor (Mercantile)	Occupant Load Factor (m^2 /Person)=3	363.651 /3 =121.28 Person Total = 121 Person
	First Floor (Mercantile & Circulation)	Occupant Load Factor (m^2 /Person)= 6	5802.260 /6 =967.04 Person 2038.473/6 = 339.75 Person Total =1307 Person
	Second Floor (Assembly, Audi waiting, Audi Foyer Area, Audi Seat50% & Circulation)	Occupant Load Factor (m^2 /Person) =1.8, 0.3 1.2 & 6	1408.530 / 1.8 =782.52 Person 75 x 0.3 =250 Person 702.310 /6 =117.05 Person 814 /2=407 x 1.2 =488.40 Person 1157.000/6 = 192.83 Person Total =1831 Person
	Third Floor (Audi Seat50% & Circulation)	Occupant Load Factor (m^2 /Person)= 1.2 & 6	814 /2=407 x 1.2 =488.40 Person 471.814 /6 =78.64 Person Total =567.04 Person

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S.No.	DESCRIPTION	Requirement as Per NBC 2016	PROPOSED
38	How many lifts have been installed in the building?	Minimum 1 No for Building above 15mtr	8 Lifts are provided.
	a. The floors between which the lift runs	All Floor	Lift no-1 - 2nd Basement to L.G+U.G+ 2nd Floor Lift no-2 (fire lift)- 2nd Basement to L.G+U.G+ 2nd Floor Lift no -3 (fire lift) - 2nd Basement to L.G+U.G+ 2nd floor Lift no -4 (fire lift) - 2nd Basement to L.G+U.G+3rd floor Lift no -5- 2nd Basement to L.G+U.G+3rd floor Lift no -6- 2nd Basement to L.G+U.G+3rd floor Lift no -7 (fire lift) - 2nd Basement to L.G+U.G+3rd floor Lift no -8 (fire lift) - 2nd Basement to L.G+U.G+3rd floor
	b. The type of doors fitted to the lift car and at each landing.	Required (stainless steel)	s.s. door centrally opened 1 hrs fire rated doors
	c. Fire resistance rating of lift car and landing doors, if known	1 Hr/ 1/2 hrs.	1 hrs fire rated doors
	d. Floors area of the lift car	1.4sq.m for car lift Sufficient for 8 persons	Lift no-1(20 per.)-2.65 x2.60 (6.89 sq.m) Liftno-2 fire lift (20 per.)-2.65 X 2.60 (6.89 sq.m) Lift no-3 fire lift (22 per.)- 2.7 X 2.6 (7.02 sq.m.) Lift no-4 fire lift (22 per.)- 2.6 X 2.7 (7.02 sq.m.) Lift no-5 (15 per.)- 2.4 X 2.45 (6.89 sq.m.) Lift no-6 (15 per.)- 2.4 X 2.45 (6.89 sq.m.) Lift no-7 fire lift (22 per.)- 2.6 X 2.7 (7.02 sq.m.) Lift no-8 fire lift (22 per.)- 2.6 X 2.7 (7.02 sq.m.)
	e. Loading capacity of the lift car.	Min 8 persons and 544 kg	20persons/1360kg for passenger (02 nos.) ,15persons/1020kg for passenger & 22persons/1500 kg for fire lift (04nos.)
	f. Has communication system been installed in the lift car.	Required	Yes, Proposed
	g. Has a fireman's switch been installed in the lift for grounding it in the event of a fire?	Required	Yes, Proposed
39	Have any stationery fire pumps(s) been installed for pressurizing the wet riser? If so, please indicate	As per NBC-2016, Table no.7	Yes, proposed <i>Certified that Fire Fighting Scheme is as per N.B.C. Part-IV, revised 2016</i>
	a. Number of pumps		Total Number of Pumps- 8 <i>FSO Gurugram</i>
	b. The size of suction and delivery connections of each pump	As per NBC -2016, Table-07	Main Fire Pump : Suction 200 mm dia & Delivery 150 mm dia, Main Water Curtain Pump : Suction 250 mm dia & Delivery 200 mm dia. Jockey Pump: Suction 50 mm dia & Delivery 40 mm dia.
	c. The output of each pump	As per NBC-2016:- a) Electric pump Hydrant 2850 lpm b) Electric pump Sprinkler 2850 lpm c) Diesel Stand by Pump 2850 lpm d) Electric Jockey pump 180 lpm	Proposed:- a) Electric pump Hydrant 2850 lpm x 1 Nos. b) Electric pump Sprinkler 2850 lpm x 1Nos. c) Diesel Stand by Pump 2850 lpm x 2 Nos. d) Electric Jockey pump 180 lpm x 2 Nos. e) Water Curtain pump 4500 lpm x 1 Nos. f) Water Curtain Diesel pump 4500 lpm x 1 Nos.
	d. The maximum head against which the pump can operate at the output Pressure mentioned at (c)	As per NBC-2016,	Maximum pupm Head is 85 M
	e. Is the pump automatic in action?	Required	Yes, Proposed



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40	Has a standby source of power supply been provided? If it is through a generator, please indicate	Required as per NBC-IV 6.4.8.1. the provision of diesel pump can be dispensed with and instead, two electric pumps may be provided out of which at least one should have DG back-up. The jockey pump should also have DG back-up.	Yes, Provided Through Diesel Generators.
	a. The capacity (output)	Standby backup to be provided for essential loads	3 No. 910 kVA + 01 No. 750 kVA 415 Volts DG set. Yes, 100% backup for lifts, fire pumps common area lighting, complete fire fighting and evacuation system.
	b. The functions that can be maintained simultaneously by the use of generator, such as operating lift(s), fire pumps, emergency lighting etc.	Required as per NBC-IV 6.4.8.1. the provision of diesel pump can be dispensed with and instead, two electric pumps may be provided out of which at least one should have DG back-up. The jockey pump should also have DG back-up.	100 Percent power backup
	c. Is the generator automatic in action or has to be started manually?	Yes	Yes, Proposed with Automatic system
41	Has any yard hydrant been provided from the building's fire pump	Required @ 45m distance apart	Yes, proposed Total 13 nos. @ 45 m c/c <i>Certified that Fire Fighting Scheme is as per N.B.C. Part-IV, revised 2016</i>
42	Where more than one lifts are installed in a common enclosure, have individual lifts been separated by fire resisting walls of two hours fire rating?	Required as per NBC - 2016 clause 4.4.2.5(b) & E2, the pressure difference for staircase and lift well shall be 50 Pa. The pressure difference for lift lobby shall be between 25 Pa and 30 Pa	Yes provided. <i>FSO Gurugram</i> <i>FSO Gurugram</i> <i>DD(T) Gurugram</i>
43	Has the lift shaft(s) lift lobby or stair wall been pressurized?	Required as per NBC 2016,	All Lift wells are pressurized @ 50 Pa. Staircase are pressurized @ 50 Pa. only in basements however Staircase at upper floor are naturally ventilated. Except ST 05 & 10 All the lift lobbies in basement are enclosed and pressurization has been planned for lobbies, however, lift lobbies are opened at lower ground floor and above so, pressurization are not given Detail calculation has been provided in Fire report.
			Staircase 1-1 No. 17000 CFM Axial Fan
			Staircase 2-1 No. 17000 CFM Axial Fan
			Staircase 3-1 No. 17000 CFM Axial Fan
			Staircase 4-1 No. 17000 CFM Axial Fan
			Staircase 5-1 No. 21000 CFM Axial Fan
			Staircase 6-1 No. 17000 CFM Axial Fan
			Staircase 8-1 No. 17000 CFM Axial Fan
			Staircase 9-1 No. 17000 CFM Axial Fan
			Staircase 10-1 No. 19000 CFM Axial Fan
			Fire Lift Well-1-1 No. 15000 CFM Axial Fan
			Fire Lift Well-2-1 No. 15000 CFM Axial Fan
			P. Lift Well - 1-1 No. 14000 CFM Axial Fan
			P. Lift Well - 2-1 No. 14000 CFM Axial Fan
			P. Lift Well - 3-1 No. 15000 CFM Axial Fan
			Fire Lift Well-3-1 No. 14000 CFM Axial Fan



S.No.	DESCRIPTION	Requirement as Per NBC 2016	PROPOSED
			Fire Lift Well-4-1 No. 16000 CFM Axial Fan
			Fire Lift Well-5-1 No. 16000 CFM Axial Fan
44	Have the lift lobbies and staircases been effectively enclosed to prevent fire/smoke entering them from outside at any floor?	Required	<p>As the lift lobbies in basement are enclosed and pressurization has been planned for lobbies, however, lift lobbies are opened at lower ground floor and above so, pressurization are not given</p> <p>Lift Lobby-Fire- 1 No. 27000 CFM Axial Fan Lift Lobby- Fire & Passenger 1 No. 27000 CFM Axial Fan Lift Lobby-Near ST 2 -1 No. 27000 CFM Axial Fan Lift Lobby-Near ST 3 -1 No. 27000 CFM Axial Fan Lift Lobby-Near ST 4 -1 No. 27000 CFM Axial Fan Lift Lobby-Near ST 5 -1 No. 27000 CFM Axial Fan</p>
45	Have all exits and directions of travel to each exit been sign posted with illuminated signs?	Required	Yes provided
46	Has a false ceiling been provided in any Public portion of the building? If so, please indicate location, Gap, Fire system above false ceiling and also mention if the material used for the false ceiling is combustible or non-combustible.	Required	False ceiling has been provided in all public corridor, toilet area lift lobbies and multiplex and as the gap between slab and false ceiling is more than 800 mm sprinkler & detector will be provided in void / above false ceiling and the material used for false ceiling will be non-combustible material.
47	Is the building centrally air conditioned?	As specified	No, centrally Water-cooled chilled water system shall be provided for foyer & Multiplex only. Restaurant & retail area shall be provided with Individual water cooled DX units and common areas are naturally ventilated
	a. The material used for construction of ducts and its fittings.	As specified	G.I. Sheets
	b. The type of lining used for ducts if any.	As specified	Glass Wool
	c. Type of lagging used, if any for insulating any portion of the duct, please also indicate how the lagging is secured.	As specified	Yes Proposed (Glass Wool)
	d. If false ceiling is provided please give information as at 46 above.	Fire & life safety Part - 4 Annex - C	False ceiling has been provided in all public corridor, toilet area lift lobbies and auditorium and as the gap between slab and false ceiling is more than 800 mm sprinkler will be provided in void / above false ceiling and the material used for false ceiling will be non-combustible material.
	e. If plenum is used as return air passage has it been protected with fire detectors? Please give details	As specified	Return air through ceiling void.
	f. Has a separate AHU been provided for each Floor?	As specified	Separate AHU shall be provided for foyer & auditorium, Restaurant & retail area shall be provided with Individual water cooled DX units.
	g. Is the ducting for each floor effectively isolated or is it continuous on more than on floors?	As specified	Yes, ducting is isolated.



S.No.	DESCRIPTION	Requirement as Per NBC 2016	PROPOSED
48	Where are the switchgear and transformers located, If in side the building, please indicate.	Fire & life safety Part - 4 Annex - C Clause - 1.16 @	11 KV Transformers (Dry Type), HT panel & LT panel are placed inside the building at 1st Basement. DG Set locaton is provided in 2nd basement due to requirement of double height area but direct access has been provided through staircase

Certified that fire Fighting Scheme is
as per N.B.C. Part-IV, revised 2016

FSO Gurugram FSO Gurugram DONT Gurugram



GIAN P. MATHUR
ARCHITECT
B. Arch., M.C.A. I.I.A
CA No. 80/5769

For Peerage Buildwell Pvt Ltd
Authorized Signator

S.No.	DESCRIPTION	Requirement as Per NBC 2016	PROPOSED
	a. If the switch gear and transformer(s) have been housed in separate compartments, effectively separated from each other and from other portions of the buildings by a four hour resistive wall?	As per NBC, when transformers housed inside the building, the transformer shall be of dry type and shall be cut off from the other portion of premises by walls/ door / cutout having fire resistance rating of 4 hr.	LT/HT Panel & Transformer Room are housed in basement with fire rated door (2 Hour Rated) & fire rated wall (4 Hour Rated)
	b. What precautions have been taken to prevent a possible fire in the transformer(s) from spreading	Required as per NBC-IV Planning of Electrical Equipment take all reasonable precautions to minimize the risk of fire associated with the equipment & sand bucket.	2 sets of Trolley Mounted 1-No. CO ₂ Gas Type capacity 22.5 kg + 1 No.- 60 ltr Mechanical Foam Type (AFFF) fire extinguishers are proposed near DG area. Gas flooding system (Clean Agent Fire Suppression system) has been provided for LT panel & HT panel and 2 Nos. 4.5 Kg CO ₂ gas type fire extinguishers shall be provided for LT and lift panels. Ceiling Mounted Modular type fire extinguishers shall be provided for transformer.
49	Where electric cables, telephone cables, Dry/wet risers/ down comers pass through a floor or wall have spaces (apertures) round the cables/pipes been effectively sealed plugged with non-combustible, fire resistive material.	All shafts to be sealed at every floor.	Yes, shall be sealed /plugged with non-combustible, fire resistive material.
50	Ventilation		
a	Whether the building is relied on natural ventilation, if so give details.	N/A	Atrium & corridors at upper floors are naturally ventilated from ground floor to terrace through railing and parapet wall. Staircase is natural ventilation through openable window, which has exposed wall.
b	Whether mechanical ventilation has been proposed? If so give details of the proposed system indicating the number of air changes for the basement and other floors.	Required as per NBC 2016,	Mechanical ventilation for car parking shall be designed @ 6 ACPH in normal case and @ 12 ACPH in case of fire. STP ventilation shall be @ 30 ACPH. PUMP, ESS, PANEL ROOM & SERVICE AREA shall be @ 15 ACPH. Anchor Store shall be @ 12 ACPH. Multiplex shall be @ 12 ACPH.
	Whether Mechanical ventilation is coupled with automatic detection system? Please give the detail of system.	Required as per NBC 2016,	Mechanical Ventilation System is coupled with fire alarm panel. The fan will be integrated with the help of control module of detection system which shall provide signal for the actuation of the fans as required.
51	Please indicate the number and type of fire extinguishers provided at various locations and arrangement for the maintenance of the extinguishers.	As per NBC - 2016 @200 sqm. Floor area and within radius of 15 m.	Fire extinguishers of suitable type e.g. ABC, ABC Type shall be provided in the building as per NBC norms @200 sqm. Floor area and within radius of 15 m. ABC type 6 kg extinguisher (in HT, LT and meter room) Foam type trolley mounted extinguisher (in DG room)
52	Please indicate if all fire extinguishers bear the ISI certification mark.	Required	Yes, ISI 15683 Gurugram
53	Are the occupants of the building systematically trained in the fire prevention use of fire extinguishers and emergency procedures? If so, please give details.	Required	Yes, training will be provided to the occupants & all the staff members and security guards before the building is occupied



S.No.	DESCRIPTION	Requirement as Per NBC 2016	PROPOSED
54	Does an emergency organization exists in the building? If so, please give details and append a copy of the emergency (fire) orders.	Required	Organisation shall be placed at before the building occupancy
55	Has a qualified Fire Officer been appointed for the building - either individually or jointly with other buildings(s)	Required	Yes, Fire officer will be appointed at the time of functioning of building.
56	Is the building protected against lightning? If so, does the lightning protection conform to any code? Please indicate details.	IS 2309 : 1989/ IEC 62561	Conventional lightning protection system as per IS-62305 & as per NBC-2016, volume-2, part-8, clause-11.3.4.
57	Is Fire Tender Movement Road of Minimum 6 mtrs wide duly marked on the Plans around every Tower.	Required	Yes, a fire tender path 6.0 m wide runs throughout the site. With Turning radius of 9 Mtr.
58	Refuge area has been provided ?	As per NBC 2016 clause no.-6.4.2.2 of part IV. i.e. mini. 10% of gross area for 18mt.	No, the refuge area has not been provided on the floor. The refuge area is required at 18.0mtr. but our terrace (Restaurant terrace) level is 17.250mtr. and the next level is Cinema terrace which level is 23.250mtr. @ 10 % open area proposed at terrace level 17.250 mtr.

Certified that Fire Fighting Scheme is as per L.B.C. Part-IV, revised 2016

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