

From Director General  
Fire Service, Haryana Panchkula  
To M/s Coral Realtors Pvt Ltd  
Plot No MPSITE Sector 55 and 56 Gurugram  
Memo No. FS/2020/4 dated : 19/02/2020

Subject : Approval of fire fighting scheme 15 mtrs. and Above from the fire safety point of view for Mixed Occupancy at Plot No MPSITE, Sector 55 56, Gurugram of M/s Coral Realtors Pvt. Ltd. :

Reference your Transaction Id 050261923004984 dated: 19/12/2019 on the subject cited above.

Your case for the approval of fire fighting scheme has been examined by the team of Fire Station Officers, Gurgaon Sector-29. The means of escape and Fire Protection system were checked and found as per the National Building Code of India, Part- IV guidelines. Therefore your proposed fire fighting scheme is hereby approved as per following detail from the fire safety point of view with the following conditions:-

Tower Name	Floor Detail	Terrace Height of Last Livable Floor(In Meters)	Ground Coverage
01	G to 05	29.60 Mt.	1717.13 Sq. Mt.
Tower Name	Basement Level	Basement Area	Basement Remarks
	OC Already Taken	OC Already Taken	OC Already Taken

- 1) The proposed fire fighting scheme is approved as submitted in the building plan subject to the approval of building plan by the competent authority.
- 2) The approval of fire scheme by this office doesn't absolve the firm from his responsibility from all consequences, in case of fire due to any deficiencies or anything left out in the scheme submitted by you.
- 3) Overhead & underground water tanks provided for firefighting shall be so constructed in such a way that the domestic water tank shall filled from overflow of the fire Water tanks.
- 4) As soon as the installations of fire fighting arrangements are completed, the same may be got inspected/ tested and clearance should be obtained from this office.
- 5) If the infringement of Byelaws remains un- noticed the Authority reserves the right to amend the Plans/Fire Fighting Scheme as and when any such infringement comes to notice after giving an opportunity of being heard and the Authority shall stand Indemnified against any claim on this account.
- 6) If you fail to comply with any of the above terms & conditions you will be liable to be punished as per Chapter-III Section 31 Sub-Section 1 & 2 of Fire Act 2009 i.e. imprisonment for a term which may extend to three month or fine which may extend to five thousand rupees or both.
- 7) The staircase shall be made with the specified material enabling it non-slippery.
- 8) If the gap between ceiling and false ceiling is more than 800 mm then upright sprinkler and detectors above false ceiling & pendent sprinkler below false ceiling shall be installed in the building

Remarks:- Application Updated



Certified Copy

*N. Bhardwaj*  
SP10 - **NITISH BHARDWAJ**  
Fire Station Officer  
Sector - 29, Gurugram

Deputy Director (Technical)-I,  
for Director General, Fire  
Service, Haryana  
Panchkula

Exercising the power of Director, Fire Services, Haryana



Digitally signed by GULSHAN  
KALRA  
Date: 2020.02.19 17:48:04 +05:30  
Reason: Digital Verification

### QUESTIONNAIRE FOR HIGHRISE BUILDING

S.No.	Description	Requirement as Per NBC 2016	Proposed
1	Name of Building	N/A	Revised and proposed building of Multiplex at sector 55-56, Gurugram [METROWORLD MALL, HUDA Market Road, Block B, Sector-56, Gurugram] Being developed by: M/s Coral Realtors Pvt. Ltd.
1a.	Classification of building	NBC2016 Part 4 Clause 3.1.1 & Table-7	Group(F)- Mercantile(F-2), Group(D)-Assembly(D6)  <b>Major Adopted Building classification: D-6</b>
2	Address of Building	N/A	METROWORLD MALL, HUDA Market Road, Block B, Sector-56, Gurugram
3	Name and address of builder/promoter	N/A	M/s Coral Realtors Pvt. Ltd, A-50/2, Mayapuri Industrial Area, Phase-I, New Delhi-110064
4	Name and address of Owner / occupiers of individual flats	N/A	M/s Coral Realtors Pvt. Ltd, A-50/2, Mayapuri Industrial Area, Phase-I, New Delhi-110064
5	Plot area	N/A	2,700 sqm or 0.667 Acres
6	Covered area (at grade Level of each Tower)	N/A	<b>Existing Ground floor covered area (O.C. already taken) = 1717.13 sqm</b>
7	Height of building		<b>34.150m</b>
a.	Overall height (from grade level)	N/A	
b.	Height up to the Terrace of highest occupied floor/Level	N/A	29.605 m
8	Number of basements (please indicate level below grade in each case)	N/A	3 no. of Basement Basement-1 = -3.300m Basement-2 = -6.300m Basement-3 = -10.500m
9	Number of floors (including ground floor)	N/A	G+5 = 6 (SIX)
10	Area of each basement <i>certified copy</i> <i>X Bhardwaj</i> <b>NITISH BHARDWAJ</b> Fire Station Officer Sector - 29, Gurugram	<i>Certified that fire Fighting Scheme is as per N.B.C. Part IV, revised 2015</i> <i>Sum</i> Gurugram <i>PR</i> Gurugram	<b>Existing Basement floor covered area (O.C. already taken) = 2318 sqm.</b> Existing + Proposed Basement covered area = 2329.87 Achieved FAR in 1 <sup>st</sup> basement = 1118.50 sqm. Basement-02 = 2407.02 sqm Basement-03 = 2318.00 sqm.



Fire Consultant



Ventilation Consultant



Electrical Consultant



Owner/Auth. Signatory

*Amandeep*  
**AR. AMANDEEP GUPTA**

(CA/2000/26845)  
M/S DESIGN CREATION  
1876, SECTOR 29, GURGAON  
MOB. 9910352510



S.No.	Description	Requirement as Per NBC 2016	Proposed		
11	If basement extends beyond the building line, please indicate the load bearing strength of the roof of basement	45 Ton Fire Tender Load	NOT APPLICABLE No part of basement falls below fire tender path (100% GC permitted on the site as per license conditions)		
12	Covered area of typ. Floors	N/A	Existing + Proposed GF covered area = 1785.662 sqm[66.13% GC] 1st floor = 1724.35 sqm 2nd floor = 1513.31 sqm 3rd floor = 777.59 sqm 4th floor = 1267.56sqm (non habitable area) 5th floor = 404.92 sqm		
13	Occupancy Sanctioned 1. Basement 2. Ground 3. Upper Floor  Actual 1. Basement 2. Ground 3. Upper Floor	N/A	Type of Building	Sanctioned floor	Actual floor
			Basement1	Retail and &services	Retail &services
			Basement 2 and 3	Parking and services	Parking and services
			Ground, 1, 2, 3, 5 level	Mercantile(F2) & Assembly [D-6]	Mercantile(F2)& Assembly [D-6]
			Level 4	Service floor (non-habitable)	Service floor (non-habitable)
14	Parking areas	N/A	Basement-1	= Nil	
			Basement-2	= 1,540.49sqm	
			Basement-3	= 2,092.51sqm	

*Certified copy*  
*Signature*  
**NITISH BHARDWAJ**  
 Fire Station Officer  
 Sector - 29, Gurugram

Certified that Fire Fighting Scheme is as per N.B.C. Part 34, 2016

*Signature*  
 Gurugram

*Signature*  
 Gurugram

*Signature*  
 Gurugram



Fire Consultant



Ventilation Consultant



Electrical Consultant



Owner/Auth. Signatory Architect

*Signature*  
**ANAND K. GUPTA**

(CA/2000/26845)  
 M/S DESIGN CREATIONS  
 1875, SEC.-52, GURGAON  
 MOB. 9810352510

S.No.	Description	Requirement as Per NBC 2016	Proposed
15	Details of surrounding property/ features	N/A	
	Compass directions in relations to the building	N/A	
	North	N/A	18 m wide road
	South	N/A	5.5 m wide pavement
	East	N/A	30 m wide pavement
	West	N/A	13.75 m wide pavement+18 m wide road
16	Approach road to the building, width of road & connecting roads if any	12m wide road	18 m wide road connected to 18 m wide road
17	Please give details of water supply available exclusively for firefighting. a. Underground Fire Reserve  b. Over Head Fire Reserve	<u>Underground Fire Tank</u> For Assembly (D-6) buildings Min. 200 kL (<100 hydrants). Additional 1 hr basement water curtain pumping capacity storage to be provided, if provisioned.  <u>Overhead Fire Tank</u> For Assembly (D-6) buildings – 20 kL	<u>Underground Fire Tank</u> [Total number of hydrants in the project is 41 (35 internal and 6 yard hydrants)]  225kL provided. (1x200+1x24= 224kL required)  <u>Overhead Fire Tank : 20 kL</u>
18.	Has wet risers (s) been provided? If so, please indicate the number of risers and internal dia of each.	1 for every 1000 sqm floor area. Minimum 100 mm for heights upto 45 m  Certified that fire Fighting Scheme is as per N.B.C. Part-IV, revised 2016  FSO Gurugram FSO Gurugram ADFO Gurugram	Size of wet riser: 150 mm in superstructure of all buildings . 100 mm in basement (B2/B3).  3 number wet riser provided –next to each staircase. Connection to cinema foyer and auditorium taken from connecting two risers horizontally at 4 <sup>th</sup> floor (service floor)
19.	Has any dry riser been provided? If so, please give details.	Not required	Not applicable/Not provided

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*13/1/25*  
*SHASHI B. BHOWAL*  
*Fire Station Officer*  
*Sector - 29, Gurugram*



Fire Consultant



Ventilation Consultant



Electrical Consultant



Owner/Auth. Signatory

*Amanjeet*  
**AR. AMANDEEP GUPTA**  
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M/S DESIGN CRE  
1875, SEC.-52, GURGAON  
MOB. 9810352510

Architect



S.No.	Description	Requirement as Per NBC 2016	Proposed
20.	Has any down comer been provided? If so, please give details.	For Assembly; not required above 10 m height For mercantile; not required above 15 m	Not applicable/Not provided
21.	Please indicate the present arrangement for replenishment of water for fire fighting.	4 way fire brigade inlet connection (150 mm pipe) and fire brigade withdrawal connection (100 mm pipe with footvalve arrangement in UG tank) shall be provided. Depth of UG fire tank shall be limited to 7 m.	4 way fire brigade inlet connection (150 mm pipe) and fire brigade withdrawal connection (100 mm pipe with footvalve arrangement in UG tank) provided. Depth of UG fire tank limited to less than 7m. Also against NBC requirement of 200 KL, 225 KL capacity UG tank has been provided (catering for 1 hour water demand also).
22.	Is a public or other water storage facility available nearby?	None required.	Raw & treated water tanks available at 3 <sup>rd</sup> basement level plus fire pump tank.
23.	Please give any other information that you can, regarding availability of water supply for firefighting.	None mentioned	Raw & treated water tanks available at 3 <sup>rd</sup> basement level plus fire pump tank.
24.	Have internal hydrants been provided? if so, please indicate.	For Assembly, Required above 10 m height For mercantile, Required above 15 m	Provided in all buildings
a.	No. of hydrants and dia on each floor including basement(s)	1 for every 1000 sqm floor area, 100 mm for heights upto 15 m. To be provided on all floors including terrace	Internal hydrants provided on all floors including terrace as per details below: Internal hydrants provided on all floors including terrace as per details below: Basement 3 to 1 <sup>st</sup> floor: 3 on each level x 5 = 15 2 <sup>nd</sup> floor = 9 3 <sup>rd</sup> floor = 3 4 <sup>th</sup> floor = 3 5 <sup>th</sup> floor = 3 Terrace = 2  Total no. of internal hydrants = 35
b.	Have these hydrants single or twin outlets	Single headed landing valves required for all heights i/c basement	Single headed provided at all locations
25.	Have first aid hose reels been provided? If so, please indicate.	Required	Provided
a.	No. of Hose reels on each floor including basement(s)	1 for every 1000 sqm floor area. To be provided on all floors.	Provided on all floors including terrace as per details below: Basement 3 to 1 <sup>st</sup> floor: 3 on each level x 5 = 15 2 <sup>nd</sup> floor = 9 3 <sup>rd</sup> floor = 3 4 <sup>th</sup> floor = 3 5 <sup>th</sup> floor = 3 Terrace = 2  Total no. of FHRs = 35

*Certified*  
**NITISH BHARDWAJ**  
 Fire Station Officer  
 Sector - 29, Gurugram

Certified Fire Station Officer  
 29/07/2016

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Architect



**AR. MANDEEP GUPTA**  
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 1875, SEC-52, Gurgaon  
 MOB. 9810352310

S.No.	Description	Requirement as Per NBC 2016	Proposed
b.	Bore and length of hose reel tubing on each reel	19 mm x 30 m	19 mm x 25 m
c.	Size(bore) and type of nozzle fitted to each hose reel	5 mm, jet spray type	5 mm, jet spray type with serrated ends
d.	If the hose reel connected directly to the riser or to the hydrant outlet?	Directly connected to the riser.	Directly connected to riser
26.	Has fire hose been provided near each Hydrant, If so, please indicate	Required	Provided
a.	The type of hoses	As per IS:636	Rubberized fabric reinforced rubber lined fire hose [IS:636 :88 type A]
b.	The size(bore) of hoses	63 mm	63 mm
c.	The length of each hose	15 m	15 m
	Total No. of hoses provided near each hydrant	2 nos. for each hydrant	2 nos. for each hydrant
27.	Have branch pipes been provided? If so, please indicate.	Required	Provided
a.	The type of branch pipe	As per IS:903	Standard size [IS:903]
b.	Size of nozzle fitted to each pipes	63 mm	63 mm stainless steel
28.	If the basement is used for car parking or storage, has it been sprinklered?	Required in basement area exceeding 200 sqm. Basement: K-80 standard response sprinkler heads @ 9 sqm coverage required	Basement car parking areas are sprinklered. K-80 standard response sprinkler heads provided at 9 sqm coverage. Entire basement is designed for Moderate Hazard Occupancy. AMAO of 360 sqm and design density of 5 lpm/sqm considered as per IS:15103.
29.	Whether separation/compartimentation of the Basement & upper floors has been provided. If so give detail	Compartmentation required wherever area exceeding 3000 sqm in basement	Provided - Basement car parking each basement level - less than 3000 sqm. 2 compartments has been provided in basement 2 and 3 [total car area exceeding 750 sqm]

*Certified Copy*

*N. Bhardwaj*  
**NITISH BHARDWAJ**  
 Fire Station Officer  
 Sector - 29, Gurugram

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

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**AR MANDEEP GUPTA**  
 (CA/2000/26848)  
 M & S DESIGN CREATIONS  
 1875, SEC.-52, GURGAON  
 MOB. 9810362510  
 Architect

Fire Consultant

Ventilation Consultant

Electrical Consultant

Owner/Auth. Signatory

Architect





S.No.	Description	Requirement as Per NBC 2016	Proposed
30.	Is the building equipped with automatic fire detection and alarm system? if so, please indicate -	Required	Automatic Fire Detection and Alarm System Provided as per Table 7 of NBC Part 4 Fire & Life Safety
	a) The type of detectors used	NBC2016 Part 4 Clause 4.9 & Table -7 and IS 2189 : 2008	Smoke detector - Retail, Cinema, Electrical Rooms, Lift lobbies, Transformer Room, Basement closed rooms, <i>Static Parking</i> , Multi criteria detectors-Service floor, Electrical shaft, <i>Beam detector in Audit Hall</i> , Heat Detector- DG plant Room, AC plant Rooms.
	b) The standard to which the detectors conforms	Smoke detector shall conform to requirement of IS: 11360 - 1985. Heat & detector shall conform to requirement of IS: 2175 - 1988	Provided : Smoke detector conformed to requirement of IS: 11360 - 1985.  Heat & detector shall conform to requirement of IS: 2175 - 1988
	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 NBC2016 Part 4 and IS 2189 : 2008 Clause (3.1.1)	Yes, Manual Call Point installed near every Fire Exit Staircase on Ground Floors / Upper Floors
32.	Has a public address system been installed in the building with loud speakers on each floors.	Required as per NBC2016 Part 4 And IS 2189 : 2008	Hooters installed near every Fire Exit Staircase on Ground Floor & Upper Floors Hooters installed at average spacing of 30 mtr in all Basements Hooters cum speaker Provided in Parking Area
33.	Has an intercom system been provided between the various floors and the fire control room in the entrance lobby.	Required as per NBC2016 Part 4; IS 2189 : 2008	Fire Fighter Telephone Points provided at all Landings of Fire Staircase
34.	Has a fire control room been provided in the entrance lobby of the building	Required in 120 min FRR room with direct access	Provided in 120 min FRR room at the Ground floor with direct access
35.	How many Staircases have been provided in the building?	Required	Provided: 3 nos.
	a. The width of the Stairway	Storage/Mercantile-1500mm  Assembly-2000mm	Staircases in basement: 3x1500 mm wide Staircases in superstructure: 3x2000 mm wide

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*N. Bhardwaj*  
**NITISH BHARDWAJ**  
Fire Station Officer  
Sector - 29, Gurugram

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

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Gurugram

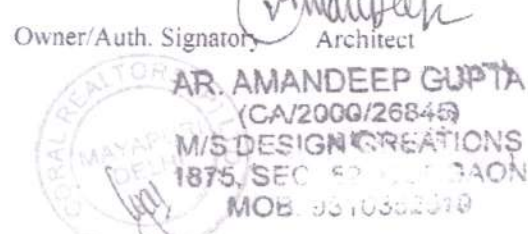
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**AR. AMANDEEP GUPTA**  
(CA/2000/26845)  
M/S DESIGN CREATIONS  
1875, SEC-52, GURGAON  
MOB. 9910352510



S.No.	Description	Requirement as Per NBC 2016	Proposed
35	b. The width of Treads	Minimum =300mm	300 mm width provided
	c. The height of risers	Maximum =150mm	150 mm height restricted
	d. If the treads are of non- slip type	Required	Yes, the treads are non- slip type [stone/kota/full body vitrified tiles 16mm thk (non slip)].
36.	What is the average occupant load per floor?	<b>Mercantile</b> Ground floor -3sqm/person & Upper floor -6sqm/person <b>Assembly</b> Assembly Occupancy having fixed seats, the occupants load shall be determined by multiplying the number of seats by 1.2. For waiting area- @0.3sqm/person Foodcourt-@1.8sqm/person	Refer attached staircase width calculation sheet. Summary of population given below  Basement 3- 77 persons Basement 2- 80 persons Basement 1- 413 persons Ground floor- 595 persons 1 <sup>st</sup> floor- 287 persons 2 <sup>nd</sup> floor- 499 persons 3 <sup>rd</sup> floor-591 persons 4 <sup>th</sup> floor-42 persons 5 <sup>h</sup> floor-225 persons
37.	How many lifts have been installed in the building?	NBC recommends desired 1 minute average waiting interval and 2.5 minutes handling capacity for an efficient vertical transportation. It also recommends one Fireman's lift in a building to serve all the floors.	Total : 4 lifts in building. 1 fire lift in fire fighting shaft (does not commute to basement) 3 additional lifts in one common bank (1Fire+1Passenger+1Service lift )- commute to all levels i/c basement
	Please indicate in each case -		
a.	The floors between which the lift runs	All Habitable floors	Fire lift in fire fighting shaft: GF to level 5 3 lifts in common lift bank: Basement 3 to level 5
b.	The type of doors fitted to the lift car and at each landing.	Non-collapsible doors required.	Centre opening power doors provided (Non-collapsible).
c.	Fire resistance rating of lift car and landing doors, if known	Lift landing door shall be 1 hour fire rated. No fire rating for lift car mentioned.	Lift landing door :1 hour fire rated. Lift car : Non-combustible. No fire rating provided.
d.	Floors area of the lift car	Fireman's lift : Min. 1.43 sqm	All lifts planned are having area of 1.43 sqm or more
e.	Loading capacity of the lift car.	Fireman's lift : Loading capacity of min. 544 kg (8	All lifts planned are having loading capacity of 8 persons or more.







d.	The maximum head against which the pump can operate at the output Pressure mentioned at (c)	Min. pressure of 3.5 kg/sqcm at the terrace level required	88 m
e.	Is the pump automatic in action?	Required-auto start.	Yes. All main pumps auto start and manual shut-off. Jockey pumps shall be auto on/off.
S.No.	Description	Requirement As Per NBC 2016	Proposed
39.	Has a standby source of power supply been provided? If it is through a generator, please indicate	Required for emergency services as per NBC2016 Part 4	Yes - 100% Power Back up Provided
	The capacity (output)	Required for emergency services as per NBC Part 4 Para C1.15	1000 kVA x 2 + 1 x 500 KVA Hsli
b.	The functions that can be maintained simultaneously by the use of generator, such as operating lift(s), fire pumps, emergency lighting etc.	Required for emergency services as per NBC Part 4 Para C1.15	100% Standby for all functions
	Is the generator automatic in action or has to be started manually?	Required	Automatic thru programmable logic controller
40.	Has any yard hydrant been provided from the building's fire pump	Required only for buildings exceeding 15 m in height; & required @ 45 m c/c.	Provided Yard Hydrant in the entire campus @ 45 m c/c. Total number of yard hydrants provided = 6
41.	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	Yes
42.	Has the lift shaft(s) lift lobby or stair wall been pressurized?		Yes, Lift lobbies in Basements & Stairwell GF to Basements only
43.	Have the lift lobbies and staircases been effectively enclosed to prevent fire/smoke entering them from outside at any floor?	Required	Yes
44.	Have all exits and directions of travel to each exit been sign posted with illuminated signs?	Required	Yes
45.	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 on non-combustible	Required, as per NBC2016, Clause 5.1.3 Automatic Sprinkler Installation	Yes, The False ceiling is made in Gypsum board (non-combustible). Sprinklers will be provided in false ceiling voids exceeding 800 mm. Automatic Sprinklers in accordance with IS:15105. and also smoke Detectors will be provided above False Ceiling Wherever Void exceeds 800mm

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

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NITISH BHARDWAJ  
Fire Station Officer  
Sector - 29, Gurugram

Fire Consultant

Ventilation Consultant

Electrical Consultant

Owner/Auth. Signatory

Architect



AR. AMANDEEP GUPTA  
ICA/2000/267-06  
M/S DESIGN CONSULTANTS  
1875, SEC 29, GURUGRAM  
MOB. 9810022100



S.No.	Description	Requirement As Per NBC 2016	Proposed
45.	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 on non-combustible.	Required	Design will be part of interior fitout. Sprinklers will be provided in false ceiling voids exceeding 800 mm. Automatic Sprinklers in accordance with IS:15105. and also smoke Detectors will be provided above False Ceiling Wherever Void exceeds 800mm
S.No.	Description	Requirement As Per NBC 2016	Proposed
46	Is the building centrally air conditioned?	Not mentioned	Corridors are naturally ventilated and individual retail area/Cinema are fully air-conditioned.
	The material used for construction of ducts and its fittings.	NBC 7.2.8.1	G.I
b.	The type of tinning used for ducts if any.	--	120 GSM
c.	Type of lagging used, if any for insulating any portion of the duct, please also indicate how the lagging is secured.	NBC 12.1.9.1 TO 12.1.9.4	FOR ACOUSTIC OPEN CELL WITH 10mm THICK <del>NITRILE RUBBER</del> WITH DENSITY 140-180 KG/M <sup>3</sup> <i>Fiber glass wool</i> FOR THERMAL INSULATION WITH 13mm THICK BY CROSS LINKED CLOSE CELL NITRILE RUBBER WITH DENSITY 40-60 KG/M <sup>3</sup>  <ul style="list-style-type: none"> <li>• A thin film of adhesive shall be applied on the back of the insulating material sheet and then on to the metal surface.</li> <li>• When adhesive is tack dry, insulating material sheet shall be placed in position and pressed firmly to achieve a good bond.</li> <li>• All longitudinal and transverse joints shall be sealed as per manufacturer recommendations.</li> </ul> The adhesive shall be strictly as recommended by the manufacturer.
d.	If false ceiling is provided please give information.	Required	The False ceiling to be made in Gypsum board- non combustible material.

*Certified Copy*  
*X Bhardwaj*  
**NITISH BHARDWAJ**  
 Fire Station Officer  
 Sector - 29, Gurugram

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

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Owner/Auth. Signatory Architect  
**AR. AMANDEEP GUPTA**  
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 1875, SEC-29  
 MOD. 931000010

S.No.	Description	Requirement As Per NBC 2016	Proposed
e.	If plenum is used as return air passage has it been protected with fire detectors? Please give details	Required if void exceeds 800 mm.	YES.
f.	Has a separate AHU been provided for each Floor?	Required	YES
g.	Is the ducting for each floor effectively isolated or is it continuous on more than on floors?	Vertical and horizontal compartmentation required.	YES. IT IS NOT RUNNING ON MORE THAN ONE FLOORS
47	Where are the switchgear and transformers located, If inside the building, please indicate.	Required As per NBC2016 Part 4	Transformers located at First basement, HT Panel at 1st Basement LT Panel at 2nd Basement
	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?	Required As per NBC2016 Part 4	Provided
	From each other and from other portions of buildings by a four hours fire resistive wall.	Required As per NBC 2016 Part 4	Provided
b.	What precautions have been taken to prevent a possible fire in the transformer(s) from spreading	Required As PER IS 2878 & IS 934	AFFF / ABC Type Fire Extinguisher shall be provided. MODULAR CO2/ABC MOUNTED 10kg ABC & CO2
48.	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.	Required NBC016 Part 4	Provided, area around the cables / pipes effectively sealed / plugged with non-combustible, fire resistant material
49.	Ventilation		
a	Whether the building is relied on natural ventilation, if so give details.	Natural or mechanical ventilation to be provided.	FANS ARE PROVIDED FOR VENTILATION
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.  Certified that fire Fighting Scheme is as per N.B.C. Part IV, revised 2016  Gurugram Gurugram Gurugram	NBC 4.4.2.5 ( FOR PRESSURIZATION OF STAIRCASE & LOBBIES ) NBC 4.6 (FOR SMOKE EXHAUSTION ABOVE & BELOW GROUND FLOOR) NBC 4.6.1 (FOR VENTILATION OF OTHER AREAS)  NITISH BHARDWAJ Fire Ventilation Officer Sector 29, Gurugram	YES. FOLLOWING ARE THE AREA WISE AIR CHANGES RATE • TOILET 6-10 ACPH • FIRE PUMP ROOM AC PLANT ROOM- 15 ACPH • UTILITY AREA- 15-30 ACPH • CAR PARKING AREA- 6 ACPH Normal and 12 ACPH Fire Operation. • F&B AREA- 15 ACPH • DG ROOM- 25 CFM KVA • STAIRCASE PRESSURISATION- 50Pa • LIFT LOBBY- 30Pa. • LIFTSHAFT-50Pa
c	Whether Mechanical ventilation is coupled with automatic detection system? Please give the detail of system.	• NBC 4.4.2.5 (Point F)	YES. Fire alarm panel wired to individual fire zone smoke extraction/pressurization MCC, as applicable.

Fire Consultant

Ventilation Consultant

Electrical Consultant

Owner/Auth. Signatory

Architect



AR. AMANDEEP GUPTA  
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MIS DESIGN OPERATIONS  
1875, SEC - 57  
MOB. 981122010



S.No.	Description	Requirement As Per NBC 2016	Proposed
57.	Whether refuge area is proposed if so give detail.	Required. For D-6 shall be provide at 18 m and 24 m levels and shall be 10% of the total floor area of that floor.	Provided on 5 <sup>th</sup> floor only since 4 <sup>th</sup> floor is non-habitable (service floor). Floor area of 5 <sup>th</sup> floor is 404.92 sqm only. Required refuge area is only 40.5 sqm.
58.	Is the Building Sprinklered	Required on all floors in high rise Business, Mercantile and Assembly occupancy.	All floors shall be provided with Automatic Sprinklers in accordance with IS:15105. Sprinklers will also be provided in false ceiling voids exceeding 800 mm.

Signature of the Fire Consultant  
With date & Stamps

Name GIRISH CHANDRA MISRA

(In Block Letters) Engineering Consultants Pvt. Ltd.

Designation Principal Consultant

Organization

Signature of the HVAC Consultant  
With date & Stamps

Name MOHAN LAL SHARMA

(In Block Letters)

Designation PROP.

Organization AD CONSULTANTS

Continued Copy  
NITISH BHARDWAJ  
Fire Station Officer  
Sector - 29, Gurugram

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

Place: -

Gurugram

Gurugram

Gurugram

Dated: -

Signature of the Architect  
with date & Stamps

Name

(In Block Letters)

Designation

Organization

AR. AMANDEEP GUPTA

(CA/2000/23845)

M/S DESIGN CONSULTANTS

1875, SECTOR 18, GURGAON

MOB. 981002510

Signature of the Electrical and Fire Detection  
with date & Stamps

Name Harishankar Debnath

(In Block Letters)

Designation HOD (Elect. Dept.)

Organization AD CONSULTANTS

CORAL REALTORS (P) LTD.

Signature of the APPLICANT/OWNER'S

Name VIJENDER KUMAR JAIN

Director

(In Block Letters)

Designation DIRECTOR

Organization CORAL REALTORS (P) LTD

Fire Consultant

Ventilation Consultant

Electrical Consultant

Owner/Auth. Signatory

Architect



AR. AMANDEEP GUPTA  
(CA/2000/23845)  
M/S DESIGN CONSULTANTS  
1875, SECTOR 18, GURGAON  
MOB. 981002510

S.No.	Description	Requirement As Per NBC 2016	Proposed
50.	Please indicate the number and type of fire extinguishers provided at various locations and arrangement for the maintenance of the extinguishers.	1 Type I-A fire extinguisher for every 140 sqm (Ordinary hazard) required	Fire extinguishers of suitable type e.g. CO2, Foam, and ABC powder type conforming to IS:15683 shall be provided in the building. 1 no. CO2 4.5 kg and 1 no. ABC powder type 4 kg shall be provided with each fire hose cabinet at each level including basement and terrace. Additional as per IS:2190 shall be provided in basement car parking, plant rooms and superstructure by tenants.
51.	Please indicate if all fire extinguishers bear the ISI certification mark.	Required	All portable fire extinguishers shall be IS:15683 marked. All wheeled type (trolley mounted) fire extinguishers shall be IS:16018 marked.
52.	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	All occupants will be trained as per NBC 2016 Part 4 Annex D 'Guidelines for Fire Drills and Evacuation Procedures for High Rise Buildings'
53.	Does an emergency organization exists in the building? If so, please give details and append a copy of the emergency (fire) orders.	Required	Will be done as per requirements of Fire Norms and recommendations
54.	Has a qualified Fire Officer been appointed for the building - either individually or jointly with other buildings(s)	Required	Yes. Will be appointed
55.	Is the building protected against lightning? If so, does the lightning protection conform to any code? Please indicate details.	Required as per NBC2016 Part 4	Provided as per IS / IEC 62305 : 2015
56.	Is Fire Tender Movement Road of Minimum 6 mtrs wide duly marked on the Plans around every Tower	Required	Yes marked on drawings 6 metre wide.

*Certified copy*  
**NITISH BHARDWAJ**  
 Fire Station Officer  
 Sector - 29, Gurugram

Certified that the Fire Fighting Scheme is as per NBC 2016 Part 4 required 2016

*Sumit*  
 FSO  
 Gurugram

*X*  
 FSO  
 Gurugram

*Q*  
 FSO  
 Gurugram

THE PROJECT IS SANCTIONED WITH 100% GROUND COVERAGE OPEN PAVEMENT & SECTOR ROADS EXIST ON ALL FOUR SIDES OF BUILDING TO PROVIDE 6M DRIVEWAY WITH 9M TURNING RADIUS FOR FIRE TENDER.

Fire Consultant

Ventilation Consultant

Electrical Consultant

Owner/Auth. Signatory

Architect



*Amandeep*  
**AR. AMANDEEP GUPTA**  
 (CA/2000/26845)  
 M/S DESIGN CONSULTANTS  
 1875, SEC-44  
 MOB. 9810000000