No.RB/CNV/BAR/AC-II/20/2015

Government of Goa, Office of the Collector, North Goa District, Panaji - Goa.

Dated :- 10/06/2015

Read:Application dated 01/01/2015 from Rainbow Infra represented by its partner and power of attorney holder Shri. Raghavendra R. Shetiya, r/o. Sri, Vanadevi, Salembhatt, Merces -Goa.

SANAD SCHEDULE-II

(See Rule 7 of the Goa, Daman and Diu Land Revenue (Conversion of use of land and non-agricultural Assessment) Rules, 1969).

Whereas an application has been made to the Collector of North Goa (Hereinafter referred to as "the Collector" which expression shall include any officer whom the Collector shall appoint to exercise and perform his powers and duties under this grant) under section 32 of the Goa, Daman and Diu Land Revenue Code, 1968 (hereinafter referred to as 'the said code which expression shall, where the context so admits include the rules and orders thereunder) Rainbow Infra being the occupants of the plot registered under P.T.Sheet No. 5, Chalta No.39 known as - Situated at Village Cunchelim [Mapusa] City in Bardez Taluka (hereinafter referred to as "the applicants, which expression shall, where the context so admits include his/her heirs, executors, administrators and assigns) for the permission to use the plots of land (hereinafter referred to as the "said plot" described in the Appendix I hereto, forming a part P.T.Sheet No. 5, Chalta No.39, admeasuring 1053.00 sq. mts. be the same a little more or less for the purpose of Residential use.

Now, this is to certify that the permission to use for the said plots is hereby granted, subject, to the provisions of the said code, and rules thereunder, and on the following conditions, namely:-

1. Levelling and clearing of the land-The applicants shall be bound to level and clear the land sufficiently to render suitable for the particular non-agricultural purpose for which the permission is granted to prevent insanitary conditions.

2.Assessment - The Applicants shall pay the non-agricultural assessment when fixed by the Collector under the said Code and rules there under with effect from the date of this sanad

3.Use – The applicants shall not use the said land and building erected or to be erected thereon

for any purpose other than Residential use, without the previous ganction of the Collector.

4.Liability for rates - The applicants shall pay all taxes, rates and cesses leviable of land. VORTH GOA, PAN

5.Penalty clause - (a) if the applicants contravenes any of the foregoing conditions the Collector may, without prejudice to any other penalty to which the applicants may be liable under the provisions of the said Code continue the said plot in the occupation of the applicant on payment of such fine and assessment as he may direct.

(b) Notwithstanding anything contained in sub-clause (a) it shall be lawful for the Collector to direct the removal or alteration of any building or structure erected or use contrary to the provisions of this grant within such time as specified in that behalf by the Collector, and on such removal or alteration not being carried out and recover the cost of carrying out the same from the applicant as an arrears of land revenue.

6.a)The Information, if any, furnished by the applicant for obtaining the Sanad is found to be false at later stage, the Sanad issued shall be liable to be withdrawn without prejudice to the legal action that may be taken against the applicant.

b) If any dispute arises with respect to the ownership of the land, the Sanad granted shall stand revoked and the Construction/Development carried out shall be at the cost and risk of the applicants c) The necessary road widening set-back to be maintained before any development in the land.

d) Traditional access passing through the plot, if any, shall be maintained.

e) No trees shall be cut except with prior permission of the competent authority.

-2-

7. Code provisions applicable -Save as herein provided the grant shall be subject to the provisions of the said Code and rules thereunder.

Sr.	Length and		Total	Forming	PENDIX - I BOUNDARIES				
No.	North to	The state of the s	to Superficial		September 1 and 1 and 1 and 1 and 1 and 1				Remarks
1	2	3	4	5	6				
				150	North	South	East	West	
1.	26.90 mts.	mts.	1053 m2	P.T.Sheet No. 5 Chalta No. 39	Road	P.T. Sheet No. 5 Chalta No. 41A	Road	P.T.Sheet No. 5 Chalta No.	NIL
507	a Viengi	City :- Cunchelim (Mapusa) City Taluka: Bardez			& Road		& 41A		

Remarks:-

- 1. The applicant has paid conversion fees of Rs.1,43,208/- (Rupees One Lakh Forty Three Thousand Two Hundred Eight Only) vide Challan No. 45/15-16 dated 25/05/2015.
- 2. The Conversion has been approved by the Town Planner, Town and Country Planning Department, Mapusa vide his report No. TPB/1505/ MAP/TCP-15/1350 dated 27/04/2015.
- 3. The development/construction in the plot shall be governed as per rules in force.
- 4. Mundkarial rights and Mundkarial area should not be disturbed and should be protected if any.

In witness whereof the ADDITIONAL COLLECTOR - II North Goa District, has hereunto set his hand and the seal of his Office on behalf of the Governor of Goa and Shri. Raghavendra R. Shetiya, Partner and Power of Attorney holder of Rainbow Infra here also hereunto set his hands this 10 14 day of June, 2015.

(Shri. Raghavendra R. Shetiya) Partner and P.O.A.

Additional Collector-II

Signature and Designation of Witnesses

Complete address of Witnesses

We declare that Shri. Raghavendra R. Shetiya has signed this Sanad is, to our personal knowledge, the person who represents himself to be, and that he has affixed his signature hereto in our presence.

- 1. The Town Planner, Town and Country Planning Department Mapusa.
- 2. The Mamlatdar of Bardez Taluka.
- 3 The Inspector of Survey and Land Records, Mapusa.
- The Chief Officer, Mapusa Muncipal Council, Mapusa Goa.

GOVERNMENT OF GOA

Directorate of Settlement and Land Records
Inspector of surveys & land records.

MAPUSA - GOA

PLAN



OF THE LAND BEARING P.T. SHEET NO. 5, CHALTA NO. 39
SITUATED AT CUNCHELIM (MAPUSA) CITY OF BARDEZ TALUKA APPLIED
BY RAINBOW INFRA FOR CONVERSION OF USE OF LAND FROM
AGRICULTURAL INTO NON AGRICULTURAL PURPOSE, VIDE CASE NO.
RB/CNV/BAR/AC-II/20/2015 DATED 05-05-2015 FROM THE OFFICE OF THE
ADDITIONAL COLLECTOR-II, NORTH GOA COLLECTORATE, PANAJI - GOA.

SCALE: 1:1000

AREA APPLIED FOR CONVERSION. 1053 Sq. Mts.

K. S. PANGAM

Inspector of Surveys And Land Records

City Sugvey? Mapusa AND R.

MAYUSA-50A

Structure existing as per survey records are excluded from area to be converted

VERIFIED BY:

RESHMA R. DHARGALKAR

Head Surveyor

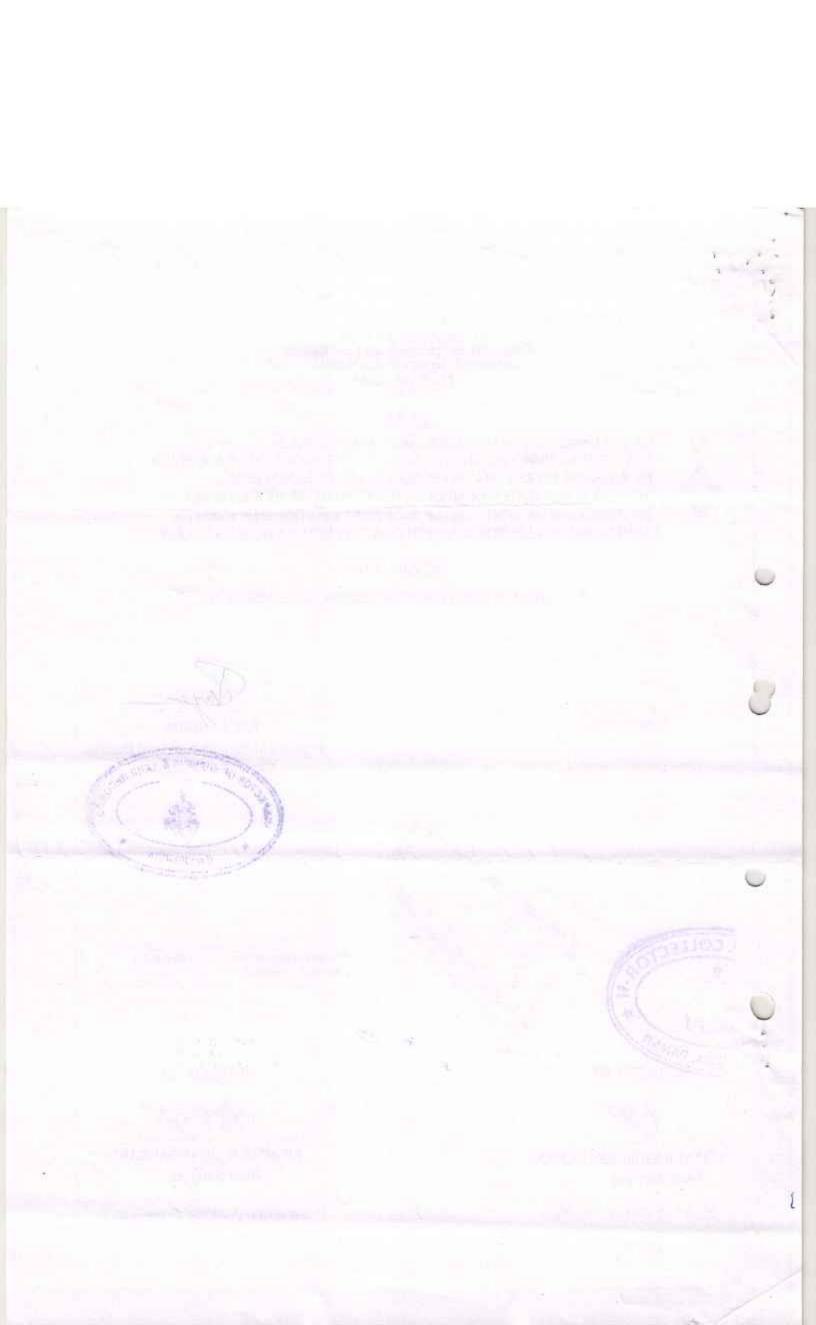
SURVEYED ON: 7/05/2015

CHANDRASHEKAR G. CHARI

Field Surveyor

PREPARED BY

FILE NO: 35/CNV/CITY/MAP/15





GOVERNMENT OF GOA OFFICE OF SUB-DIVISIONAL ENGINEER ELECTRICITY DEPARTMENT SUB-DIVISION I(U), MAPUSA-GOA.

1st Floor, Vidyut Bhavan, Division VI, Ansabhat, Mapusa Bardez, Goa. 403507.

No.: AE-I(U)/VI/O&M/2024-25/Tech-40/ 1903

Date: 17/01/2025.

Una Homes LLP, 18, Gera Imperium Star, Patto Centre, Panaji 403001

Sub: N.O.C. for Proposed Construction of Residential Building at bearing Chalta No.39 of P T Sheet No.5, at Cuchelim, Mapusa Goa.

Ref: Your letter at Inward No: 3082

Dated:13/01/2025.

Sir,

With reference to above cited letter, this is to inform you that this office has **No Objection** for proposed Construction of Residential Building at bearing Chalta No.39 of P T Sheet No.5, Situated at Cuchelim, Mapusa, Bardez – Goa, as there is no HT / LT line passing through the plot.

- 1). The minimum vertical and horizontal clearance between the Building / Structure and the Electrical line passing over or adjacent to the Building / Structure shall not be less than that specified in Rule 79 and 80 of Indian Electricity Rules 1956 amended time to time.
- 2). As per clause 4 (a) of condition of supply Electrical Energy where multiple connections are to be released the owner / promoter of the building should provide a build up premises of 2 x 3 Sq. mtr with locking arrangement. In addition, required open space should be provided for erection of overhead H.T / L.T lines and Transformer Centre if required.

One copy of the plan is retained in this office and the original plan is enclosed herewith.

Yours faithfully,

(Savio B) Fernandes)
Assistant Engineer,
Elect.Sub.Divn-I(U),

Mapusa Goa.

Copy to: The Junior Engineer, Section-III, Elect. SD-I (U), Mapusa Goa.

Umesh/duc/Tech-40

0 No.PWD/SDII/WS/F.10/ 748 /2024-25 Government of Goa, Office of the Assistant Engineer, Sub-Div. II, DXVII (WS), PWD, Mapusa – Goa.

Dated: - 22/01/2025

To,
Una Homes LLP,
Represented by its Partner,
Mr. Ashwin Suresh Narwekar,
Mr. Jasminder Singh Arora,
Off; 304, 3rd floor, Plot No. 506-A,
Doli Chambers, Bhaskrrao Kargutkar Marg,
Strand Cinema, Colaba, Mumbai- Maharashtra.

Sub: - Issue of Water Availability Certificate for Proposed Construction of Residential Building, Swimming Pool and Compound wall.

Ref:- (i) No. NGPDA/M/2035/2359/2025 dated 07th January 2025. (ii) Inward No. 1667 dtd 13-01-2025.

Sir,

With reference to the above cited subject, Water Availability Certificate for Proposed Construction of Residential Building, Swimming Pool and Compound wall bearing Chalta No.39, PT Sheet No. 05, situated atCunhelim, Mapusa. is issued as per your request and is subject to following:,,

- 1) The licensee shall notify this office of any underground utility is found to be passing through the property and the licensee shall arrange to get shifted at their cost any water pipe line passing through before taking up the construction.
- 2) The licensee shall ensure that there is no stagnation of water due to construction activity.
- 3) The licensee shall ensure that the septic tanks are constructed at safe distance from pipe lines carrying drinking water and that no potential for contamination of drinking water is created.
- 4) The overhead tank and plumbing for residential part of the building shall be distinct and separate.
- 5) The licensee shall notify this office 15 days in advance about the plumbing works intended to be carried out and start the same only after due approval.
- 6) The licensee shall abide by the provisions of water supply byelaws/Goa State Water Supply Act and / or rules framed there under.
- 7) The release of water connection to the Residential Building shall be subject to technical feasibility and availability of water.
- 8) It may be ensured that the sanitary plumbing is done to satisfactory gradient and the same may be tested in the presence of the authorized official from this office.
- 9) The applicant should lay separate new pipeline from distribution pipeline at his own cost and risk since the existing pipeline will not cater the said demand.
- 10) The pipeline should be laid as per the specification mentioned CPWD Manuel 2014 under the supervision of Engineer incharge. Necessary hydraulic testing to be done in the presence of Engineer incharge.
- 11) Where existing infrastructure is insufficient to release water supply as per demand, the water supply will be released only after installation of required addition infrastructure at the cost of Developer/applicant.
- 12) With present distribution system water supply cannot be given till the augmentation of water supply at Assonora Water treatment plant.,
- 13) The Applicant shall make his/her own arrangement of water for swimming pool.
- 14) Road cutting NOC shall be obtained before submission of Final NOC.
- 15) If at all any further development is to be done the applicant has to obtain fresh NOC from this office.
- 16) This Water Availability Certificate is issued subject to condition laid by North Goa Planning and Development Authority vide referred above.
- 17) The supply of water in this area is for a duration of 5to 6 hours per day.

Yours faithfully,

RW Assistant Engineer-II

ASSISTANT ENGINEER
SUB. DIV. O XVIII DUE

Copy to: -Mapusa Municipal Council, Mapusa - Goa ... For information please.





Government of Goa Form 'D' See Rule 7

Goa Land Revenue (City Survey) Rules, 1969

Property Card of Mapusa city

Page No. 1

Date 21/05/2025

				• •	· ·	Date 21/05/2	:025
Pt Sheet No) Ch	alta No	Area Sq.Mts	Tenure	Particulars of assessmen or rent paid to Governme and when due for revision	nt	gory
5		39	1,253.00	OCCUP, CLASS I			vate
Easements	ž)			brooms carry June			
Holders in t (So far as tra	ced) -			Nil			
[AND POSS	ESSION C	OF SHRI. MARC	OS MANUEL JUI	LIAO DE SOUZA]	R/O. MIRAMA	R PANAJI.	
Lessees -				Nil			
Other Enc	umbranc	es -		Nii	<u>=</u>		
Other Rema	ırks -			Nil			
	Mutation Number	Mutation Type	Name Remarks		Le En Ot	ew Holder (H), essee (L), ecumbrance(E) her Remarks(R) esements(A)	Area (Sq.Mts)
07/01/2015	211891	Deed of Sale	BRZ-BK1-03	Deed of Sale registered Bo	ok no 1 Document Registration ZD 702 on date 16-07-2014 in		1,253.00
11/10/2023	213842	Deed of Sale			3RZ-1-638-2023, Dated 08/02/2 sa, Bardez-Goa.	H 2023,	1,253.00





Government of Goa Form 'D' See Rule 7

Goa Land Revenue (City Survey) Rules, 1969

21/05/2025

Page No. 2

Date

Property Card of Mapusa city

Pt Sheet No	Chalta No	Area	Tenure	Particulars of assessment	Category
		Sq.Mts		or rent paid to Government and when due for revision	
5	39	1,253.00	OCCUP. CLASS I		Private

[]Bracketed entries indicate Deletion

For any further inquires, please contact the ISLR of the concerned city.

*** END OF REPORT ***



The record is computer generated on 21/05/2025 at 5:51:10PM as per Online Reference Number - 100019771667. This record is valid without any signature as per Government of Goa Notification No. 26/13/2016-RD/8639 dated 13/09/2021. The latest copy of this record can be seen/verified for authenticity on the DSLR website https://dslr.goa.gov.in .



GOVERNMENT OF GOA DIRECTORATE OF HEALTH SERVICES URBAN HEALTH CENTRE, MAPUSA- GOA

E-mail: uhcmapusa2020@gmail.com

No:UHCM/NOC-Const./2024-25/ 1915

DATE: 17/01/2025

Provisional N.O.C. From Sanitation Point of View for Proposed Construction of Residential Building, Swimming Pool and Compound Wall.

With reference to your application dated 13/01/2025, Site inspection has been carried out by the undersigned on 15/01/2025 and it is to inform you that this Urban Health Centre Mapusa-Goa has NO OBJECTION to issue NOC from the SANITARY POINT OF VIEW of Proposed Construction of Residential Building, Swimming Pool and Compound Wall as per the enclosed approved plans in the property zoned as Settlement S-2 zone (150 FAR & 20.50mts height) based on the Government approval as per amendment rule 6.1.1(2) of Regulations 2023 zone as per Mapusa ODP-2021 and situated at Cunchelim, Mapusa bearing Chalta No.39 of P.T Sheet No. 5 as per NGPDA order No. NGPDA/M/2035/2359/2025 dated 07/01/2025 subject to the following conditions:

1. The construction shall be carried out as per the approved plan submitted.

2. The septic tank/soak pit shall be at a distance of more than 15 meters from the existing well if any.

3. The capacity of the septic tank/soak pit should correspond with the dimensions/capacity shown in the chart submitted to this office for 1 septic tank of 100 users.

4. Proper cleanliness and sanitation should be maintained at the construction site.

5. No health hazard or any other environmental pollution shall be created in the surrounding area.

6. The owner/contractor shall see to it that the natural rain water drain is not blocked or obstructed.

7. The owner/contractor shall co-operate with the Health and Pollution Control Authorities whenever they visit the site for inspection.

8. As per section 75 A of Goa Public Health Act all labourers shall possess valid health cards. renewable every three months from its date of issue. Whosoever contravenes the above provision shall be fined Rs.10000/- per labourer. Health cards should be available at the site for inspection.

9. All Sanitary facilities (Toilet/Soak pit for proper disposal of waste water, Mosquito nets) should be provided to the labourers at the construction site.

10. Adequate anti-larval measures shall be carried out at the construction site in consultation with the health authority.

11. The owner/contractor shall display the signboard at the site with details such as name of the Proprietor/Builder/Contractor, NOC details obtained from the various appropriate Authorities.

12. This office is not responsible for any court Litigation regarding the ownership and area of the property.

13. The N.O.C. is liable to be withdrawn if the conditions stipulated above are not complied with.

Dr. Dinesh Parab

Health Officer Urban Health Center Mapusa

Represented by its Partner,

Mr. Ashwin Suresh Narvekar,

Mr. Jasminder Singh Arora,

Mrs. Deeya Singh Arora,

Off: 304, 3rd floor, Plot No. 506-A,

Doli Chambers, Bhaskrrao Kargutkar Marg,

Strand Cinema, Colaba, Mumbai Maharashtra

Copy to: -

The Chief Officer, Mapusa Municipal Council, Mapusa - Goa.



Government of Goa Directorate of Fire & Emergency Services (ISO 9001:2015 & 45001:2018 Certified)

On the state of th

St. Inez, Panaji, Goa – 403 001 – India

File No.: DFES/FP/HB/176/24-25/288

Date: 27.02.2025.

Sub:- Provision of Fire Safety Measures for the proposed construction of Residential Building for M/s. Una Homes LLP on Plot bearing PT Sheet No./Chalta No.5/39 situated at Cunchelim Village, Mapusa, Goa.

Ref:- Your Online application No.FES2500985, dated; 12.02.2025.

With reference to the above, the Architectural Plans and Fire Protection Plans for the proposed construction of Residential Building for M/s. Uno Homes LLP on Plot bearing PT Sheet No./Chalta No.5/39 situated at Cunchelim Village, Mapusa, Goa, has been vetted by this office for the in-built fire protection arrangements as per National Building Code Rules. Since the buildings comes under the category Group A – Residential Building, necessary Active and Passive Fire Protection Measures have to be incorporated in the building as stipulated in the Annexure 'A'.

In terms of section 15.2.2(d) of the Goa Land Development and Building Construction Regulations, 2010, you shall furnish an undertaking on Rs. 50/- stamp paper to abide by Fire Prevention and Fire Protection Measures recommended herewith in Annexure 'A' as amended from time to time.

(NITIN V. RAIKER)
DIRECTOR
FIRE & EMERGENCY SERVICES

Encl:- Annexure "A" & "B"

To,

M/s. Uno Homes LLP, Shop No. 18, Morombi-O-Piqueno, Patto – Plaza, Panaji, Goa.

rs/-

Phone Nos.: +91 (832) 2225500 / 2425101 Directorate of Fire & Emergency Services Fax No.: +91 (832) 2226100 www.dfes.goa.gov.in Email:dir-fire.goa@nic.in

ANNEXURE "A"

APPROACH FOR FIRE APPLIANCE:- The main entrance of the plot shall be of adequate width to allow easy access to the fire service vehicles and in no case it shall measures less than 6 meters. The entrance gate shall fold back against the compound wall of the premises, thus leaving the exterior access way within the plot free for movement of fire service vehicle. If the main entrance at the boundary wall is built over, the minimum clearance shall be 5 meters.

The width of the main street on which the building abuts shall not be less than 10 meters as per the requirements of Clause 15.1.2(a) of Goa Land Development and Building Construction (Amendment) Regulations, 2023.

II. <u>SET BACKS</u>:- The approach to the building and open spaces on all its sides shall be not less than 6 meters in width. A turning radius of atleast 9 meters shall be provided for movement of fire service vehicles. The open space shall be kept free of obstructions and shall be motorable, no projections shall be allowed in the open space. The approach and side setbacks to be provided for proposed building shall fulfill the requirements of Clause 15.1.2(b) of Goa Land Development and Building Construction (Amendment) Regulations, 2023.

III. EXIT STAIRCASE:-

- a) The Building shall be provided with Exit Staircases with adequate landing on every floor to the normal staircase as shown in the Architectural plan.
- b) The Exit Staircase indicated in the Architectural Plan submitted to this office shall be as per requirements of Clause 4.4.2.4.3, Sub Clause 4.4.2.4.3.2 of National Building Code of India, Part 4, Fire & Life Safety, 2016.
 - i) The Exit Staircase shall be constructed of non-combustible material and the doorway leading to it shall have Fire Resistant Door (FRD) with Panic Bar of 2 hours fire resistance to prevent spread of fire and smoke. The Exit Staircase shall terminate on the Ground Floor.
 - ii) The Exit Staircases shall be placed remote from each other and shall be arranged to provide direct access in separate directions from any floor.

- iii) The Exit Staircase shall have flight not less than 125 cms. wide with 25 cms. Treads and Risers not more than 19 cms. and should be limited to 12 per flight.
- iv) The floor indication board of size not less than 300 mm x 200 mm, indicating the location/ designated number of staircase, respective floor number and direction to exit discharge shall be placed inside the staircase, on the wall nearest to the fire door. Individual floors shall be prominently indicated on the wall outside the staircase and facing it.
- IV. <u>DOORWAYS:</u>- All Exit Doorways in the Highrise Building shall conform to the requirements of Clause 4.4.2.4.1 of National Building Code of India 2016, Fire & Life Safety (Part 4).
- V. <u>ROOM ENTRANCE</u>:- The Room entrance and kitchen doors shall be of solid core with fire resistance of not less than half hour (solid wood of 35 mm Shutter) finished thickness and the same shall be of self closing type.

VI. <u>LIFTS</u>:-

- The lifts in the building shall be provided with a minimum capacity for <u>Eight (8)</u>

 Passengers fully automated with emergency Switch on ground level and shall be equipped with inter communication equipments.
- b) Wall enclosing lift shall have fire resistance of not less than 2 hours.
- c) Shaft shall have permanent vents of not less than 0.2 sq. mtrs. in clear area immediately under machine room.
- d) Landing doors and lift car doors of the <u>lift shall be of steel shutters of fire</u> resistance of one hour. No collapsible shutters / gates shall be permitted.
- e) Grounding switch(es), at ground floor level, shall be provided on all the lifts to enable the fire service to ground the lifts. In case of emergencies the lift should cease at the ground floor.
- f) A sign shall be posted and maintained on every floor at or near the lift indicating that 'In case of fire, occupants shall use the stairs'.
- g) All the requirements of the Lifts shall comply with Part 8 'Building Services,
 Section 5 Installation of Lifts, Escalator and Moving Walks, Subsection 5A
 Lifts of National Building Code of India, 2016, Fire & Life Safety (Part-4).

VII. ELECTRICAL CABLE SHAFT AND ELECTRICAL METER ROOM:-

- a) The Electrical cable shafts shall be exclusively used for electrical cables and should not open in the staircase enclosures.
- b) The Inspection doors for the shaft if provided shall have two hours fire resistance.
- c) The Electrical shaft shall be sealed at each floor level with non-combustible material having fire resistance rating of not less than 1 hour.
- d) The Opening in walls or floors which are provided for the passage of all building services like cables, electrical wiring etc. shall be protected by enclosures in the form of Duct/Shaft with fire resistance of not less than 2 hours. The door of the Shaft shall be of 2 hours fire rating.
- e) The Electrical meter rooms shall be provided at ground floor level and they shall be adequately ventilated.
- f) The electrical installation should conform BIS:1646:1997 Code of Practice for Fire Safety of Buildings (General) Electrical Installation.
- g) All Electrical cables, particularly heavy cables should be coated with fire resistance paint. A band of fire resistance paint of 1m width at every 10m internal in horizontal plane; complete run of cable in vertical plane, 1m on either side of cable, when the cable is running from one room to another room through wall opening/conducts etc. should be provided.
- h) Linear Heat Sensors as per Indian Standard Specification shall be installed in the Cable tunnels & Cable trays.
- VIII. ESCAPE ROUTE LIGHTING:- Escape route lighting and Illumination of Means of Exit (Staircase and Corridor light) in the building shall be as per Clause 3.4.7 to 3.4.7.2 of National Building Code of India 2016, Fire & Life Safety (Part-4). The exit arrangements shall comply with IS:1644/1989 Code of Practice for 'Fire Safety of Building (General), Exit Requirements and Personal Hazard'.
- IX. <u>SERVICE DUCTS AND SHAFTS</u>:- All Openings in Separating Walls and Floors shall conform to the requirements of Clause 3.4.5.4 & 3.4.5.6 of National Building Code of India, 2016, Fire & Life Safety (Part-4).

- X. <u>PUBLIC ADDRESS SYSTEM</u>: The computerized public address system with 2-way communication facility should be provided at each floor near each staircase landing with its console at the control room located on the ground floor, which shall assess the fire situation and inform people in case of emergency.
- XI. <u>LIGHTING PROTECTION OF BUILDING</u>:- The building shall be protected from lighting as per Part 8 'Building Services' Section 2 Electrical and Allied Installations' Clause 11 of National Building Code of India 2016 and same shall conform to IS:2309/1989.

XII. FIRE FIGHTING REQUIREMENTS:-

- a) OVERHEAD (TERRACE WATER STORAGE TANK): A RCC tank of 25,000 liters capacity shall be provided on top of the terrace level of the building exclusively for fire fighting. The tank shall be connected to the Down Comer all through by a booster pump through a non-return valve and a gate valve as per fire fighting drawing No.UHL-FF-01 and UHL-FF-02.
- b) <u>DOWN COMER:</u> Down Comer of internal diameter of 10 cms. of GI 'C' class pipe shall be provided in the duct of the building on every floor with landing valve on each floors along with Hose Boxes and 2 Nos. of <u>Elastomeric Coated Delivery Hoses</u> of 70 mm diameter having a length of 15 mtrs. each with hand controlled Branch pipe and Hose Reel Hose of 30 mts length conforming to type 'A' 884-1985 on each floor in such a way as not to reduce the width of the corridor and no part of the floor is more than 6 mtrs. away from the nozzle when fully extended as per fire fighting drawing No. UHL-FF-01, UHL-FF-03, UHL-FF-04, UHL-FF-05, UHL-FF-06 and UHL-FF-07.
- Inlet Connection of 63 mm diameter standard coupling each shall be provided at the ground floor in the premises to connect the mobile pump of the fire service to the Down Comer as per fire fighting drawing No. UHL-FF-01 and UHL-FF-02.

d) <u>COURTYARD HYDRANT:</u> - 02 Nos. Courtyard Hydrants shall be located in the courtyard of the premises with a minimum size of the main being not less than 150 mm. which shall be pillar post type with 63 mm single outlet conforming to BIS:908 as per fire fighting drawing No. UHL-FF-01 and UHL-FF-02.

e) FIRE PUMP:-

- i) The Electric Fire Pump of 900 litrs/Min each giving a pressure of not less than 3.5 Kg/cm. at the topmost hydrant outlet of the Down Comer shall be provided at terrace level of the building.
- ii) The Electric supply to this pump shall be on independent circuit.
- iii) The Electric Main of the Terrace Pump shall be provided on the ground floor.

f) FIRE DETECTION AND ALARM SYSTEM: -

- i) MANUALLY OPERATED ELECTRIC FIRE ALARM SYSTEM: The building shall be provided with the above system conforming to BIS:2189/1999 with the main control panel at ground floor and pill boxes, hooters at each side of the upper floors. The Layout shall be in accordance with Indian Standard Specification as per fire fighting drawing No. UHL-FF-01, UHL-FF-03, UHL-FF-04, UHL-FF-05, UHL-FF-06 and UHL-FF-07.
- ii) The entire building shall be provided with Analogue addressable type Automatic Fire Alarm system conforming to BIS:2189/1999.
- iii) The Fire Detection & Alarm System shall be integrated with the Voice Evacuation System having Hindi, English and Vernacular languages using pre-recorded messages for alerting the zone of life.
- iv) Visual Warning Arrangement through Visual Strobes/Beacons shall be installed in the building to ensure visual as well as alarm for persons with hearing impairment.
- g) GAS BASED DETECTION CUM SUPPRESSION SYSTEM: All the Electrical Panels, Server Room and UPS Battery Room shall be provided with Gas Based Detection cum Suppression System.

h) <u>ALTERNATE SOURCE OF POWER SUPPLY</u>: - Independent Secondary Circuit fed by Secondary source of Power supply with appropriate change over switch shall be provided for the Fire Protection Systems viz. Corridor Lighting, Fire Alarm system, Fire Pump, Lift in the building.

The installation of Alternate Source of Power Supply in the Premises shall conform to the requirements of Clause 3.4.6.4 of National Building Code of India 2016, Fire & Life Safety (Part-4).

- i) <u>PORTABLE FIRE EXTINGUISHERS</u>: The type/distribution of Fire Extinguishers shall be in accordance with BIS:2190/2010 in the building. All Fire Extinguishers shall confirm to IS:15683/2006.
- j) <u>DIRECTIONAL EXIT & FIRE SAFETY</u>, <u>BARRIER FREE ACCESS</u>

 <u>SIGNAGES</u>: The Directional Exit, Fire Safety & Person with disability Signages shall be installed at appropriate places on all the floors of the building the Signages shall correspond to the specimen and size enclosed in Annexure "B".

(NITIN V. RAIKER)
DIRECTOR
FIRE & EMERGENCY SERVICES

ANNEXURE "B"

The colour of the Directional and Fire Safety signages shall be **RED** with Graphic symbol in **WHITE** colour and the colour of the Emergency escape signages shall be **GREEN** with Graphic symbol in **WHITE** colour as per IS 9457:2005.

Sr. No.	DESCRIPTION	SIZE (mm)	IMAGES
	Emergency Exit Signages (Photoluminescent)		
1	Exit Signage	100 X 300	
2	Staircase Identification Signage (Photoluminescent)	100 X 300	产学之
3	Staircase Identification Signage (Photoluminescent)	100 X 300	オー・・・
4	Fire Alarm Signage	200 X 250	Fire alarm call point
5	Fire Extinguisher Signage	200 X 250	Fire
6	Hose Reel Hose Signage	200 X 250	Fire hose reel
7	Assembly Point Signage	600 X 600	

The colour of the Signages will be BLUE with Graphic symbol in WHITE colour as per IS 9457:2005.

Sr. No.	DESCRIPTION	SIZE (mm)	IMAGES
	Signages (Photoluminescent)		
1	Access symbol	200 X 200	G
2	Ramp	200 X 200	3
3	Lift	200 X 200	E
4	Parking	200 X 200	E
5	Directional Signs	200 X 200	医信息

(NITIN V. RAIKER)
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