Annexure: "A"

Occupancy Categorization of Buildings for Water and Other Requirement for Fire

Fighting

CDOLID "A" DEGIDENTELAL		Lever-III
GROUP "A": RESIDENTIAL	GROUP "A": RESIDENTIAL	GROUP "A": RESIDENTIAL
A1 Lodging and Rooming	A5 Hotels	F2 Shops and stores, etc. above
Houses		500 sq.mt. floor area
A2 One or two family private		F3 Underground shopping centers
dwelling		
A3 Dormitories		
A4 Apartment Houses	G "GM I de de la	
Group "B" Educational	Group "C" Institutional	Group "G" Industrial
B1 Schools up to higher	C1 Hospitals and Sanitoria	G3 High hazard Industries
secondary level	(More than 100 beds)	G5 Trigit nazard madstres
GROUP "C" INSTITUTIONAL	GROUP "D" ASSEMBLY	GROUP "H" STORAGE
	BUILDINGS	BUILDINGS
C1 Hospital & Sanitoria (upto		
100 beds)	D1 For more than 1000 persons	
C2 Custodial Institutions	with permanent stage and	
C3 Penal & mental Institutions	fixed seats	
	D2 For less than 1000 persons	
	with permanent stage and fixed seats	
GROUP "D" ASSEMBLY	GROUP "E" BUSINESS	GROUP "J" HAZARDOUS
BUILDINGS	BUILDINGS	BUILDINGS
BelEDITOS	BULLDINGS	BelEBITOS
D3 Upto 300 persons without	E1 Offices, Banks, etc.	
permanent stage and fixed	E2 Laboratories, Libraries, etc.	
seats	E3 Telephone Exchanges	
D4 Above 300 persons without		
permanent stage & fixed		
seats		
GROUP "E" BUSINESS	GROUP "F" MERCANTILE	
E2 Commutan Installations	E1 Chang Stories at a water 500	
E3 Computer Installations E5 Broadcasting stations	F1 Shops, Stores, etc. upto 500 m <sup>2</sup> floor area	
GROUP "G" INDUSTRIAL	GROUP "G" INDUSTRIAL	
	Shoot of hyberthine	
G1 Low hazard Industries		

Annexure: "B-I"

### Fire Protection Requirements for Buildings in Level-I Category

No.	Measures				Grou				ıp-C:		
			, , ,				ationa			tutiona	
		О	I	II	III	I	II	III	I	II	III
1	Access	P	P	P	P	P	P	P	P	P	P
2	Means of Escape	P	P	P	P	P	P	P	P	P	P
3	Compartmentation	P	P	P	P	P	P	P	P	P	P
4	Refuge Area	X	X	X	X	X	X	X	X	X	X
5	Emergency Lights	X	X	P	P	P	P	P	P	P	P
6	Exit Signs	P	P	P	P	P	P	P	P	P	P
7	PA System with Talk Back Facility	X	X	X	X	X	P	P	P	P	P
8	Moefa	X	X	X	P	X	P	P	P2	P	P
9	Extinguishers	P	P	P	P	P	P	P	P	P	P
10	Hose Reel	P3	P	P	P	P3	P	P	P	P	P
11	Yard Hydrant	X	X	X	P	X	P	P	X	P	P
12	Down Comer	X	X	X	P	X	P	X	P4	X	X
13	Wet Riser	X	X	P	X	X	X	P	X	P	P
14	Fire Detection System	X	X	X	X	X	P6	X	P2	P	P
15	Automatic Sprinkler System	S	S	S	S	S	S	FS	S	S	FS
16	Under Ground Tank	X	X	X	X	X	X	P	P2	P	P
17	Over Head Tank	P13	P	P	P	P	P	P	P	P	P
18	Fire Pumps	X	X	X	X	X	X	P	X	P	P
19	Booster Pumps	P3	P	P	P	P	P3	P	P	X	P
20	Auto D.G. Set	P3	X	P	P	P3	P	P	P	P	P
21	MCB/ELCB	P	P	P	P	P	P	P	P	P	P
22	Hose Boxes	X	X	X	P	X	P	P	P4	P	P
23	Fireman's Grounding Switch	P	P	P	P	P	P	P	P	P	P

Annexure: "B-I" (Contd.)

Fire Protection Requirements for Buildings in Level-I Category

No.	Measures	Grou Asser D4		D3,		Group-E: Business E3, E5		Grou	<b>p-G:</b> ]	Indust	rial G1	1
		I	II	III	I	II	III	IV	V	VI	VII	VIII
1	Access	P	P	P	P	P	P	P	P	P	P	P
2	Means of Escape	P	P	P	P	P	P	P	P	P	P	P
3	Compartmentation	P	P	P	P	P	P	P	P	P	P	P
4	Refuge Area	X	X	X	X	X	X	X	X	X	X	X
5	Emergency Lights	P	P	P	P	P	P	P	P	P	P	P
6	Exit Signs	P	P	P	P	P	P	X	X	P	P	P
7	PA System with Talk Back Facility	P1	P	P	X	P	P	X	X	X	X	P
8	Moefa	P1	P	P	X	P	P	X	X	P	P	P
9	Extinguishers	P	P	P	P	P	P	P	P	P	P	P
10	Hose Reel	P2	P	P	P	P	P	X	P	P	P	P
11	Yard Hydrant	X	P	P	X	P	P	X	X	X	P	P
12	Down Comer	X	X	P	P2	X	X	X	X	X	X	X
13	Wet Riser	X	P	P	X	P	P	X	X	X	P5	P
14	Fire Detection System	P7	P	P	P2	P8	P9	X	X	X	P	P
15	Automatic Sprinkler System	S7	FS	FS	S	S	FS	S	S	S	S	FS
16	Under Ground Tank	P7	P	P	X	P	P	X	X	P10	P11	P
17	Over Head Tank	P2	P	P	P	P	P	P5	P	P	P	P
18	Fire Pumps	P11	P	P	X	P	P	X	X	X	P5	P
19	Booster Pumps	X	X	X	P	X	X	P12	P	P	P	P
20	Auto D.G. Set	P7	P	P	P	P	P	X	X	P	P	P
21	MCB/ELCB	P	P	P	P	P	P	P	P	P	P	P
22	Hose Boxes	P	P	P	P2	P	P	X	X	X	P5	P
23	Fireman's Grounding Switch	P	P	P	P	P	P	P	P	P	P	P

#### Legend

- O Guest Houses/Lodging having up to 20 rooms or 40 beds and below
- I Height less than 15 mt.
- II Height 15 mt. and above up to 24 mt.
- III Height above 24 mt
- IV Height less than 15 mt. and plot area less than 250 sq.mt.
- V Height less than 15 mt. and plot area 251 sq.mt. and above up to 500 sq.mt.
- VI Height less than 15 mt. and plot area 501 sq.mt. and above up to 1000 sq.mt.
- VII Height less than 15 mt. and plot area more than 1001 sq.mt.
- VIII Height above 15 mt. and up to 18 mt.
- P To be provided.
- X Not to be provided.

- S Sprinklers to be provided if basement area is 200 sq.mt. or more.
- FS Fully sprinklered.
  - 1. To be provided if seating capacity exceed 750.
  - 2. To be provided if building is more than ground floor, first floor and total covered area exceed 1500 sq. mt.
  - 3. To be provided in building where total covered area exceeds 1000 sq. mt.

or

- Building is more than ground floor except group housing.
- 4. To be provided if building is ground floor, first floor and total covered area exceeds 300 mt.
- 5. To be provided if building is more ground floor.
- 6. To be provided in building except educational buildings.
- 7. In case seating capacity is 1000 persons minimum or covered area above 1500 sq.mt. or basement area 200 sq.mt. and more (other than places or worships).
- 8. To be provided fore E-4 and E-5 buildings but not required if building is fully sprinklered.
- 9. To be provided for E-4 and E-5 buildings.
- 10. 25,000 lt. capacity under ground water storage tank to be provided.
- 11. 50,000 lt. capacity under ground water storage tank to be provided.
- 12. To be provided where ever sprinklers are not installed.
- 13. Terrace tank of 5,000 lt. capacity to be provided, if sprinklers and installed. The capacity shall be accordingly increased.

Annexure: "B-II"

#### Fire Protection Requirements for Buildings in Level-II Category

No.	Measures		Group-A: Residential A5: Hotels			C2:	Hospital		·D: bly , D5
		I	II	III	IV	$\mathbf{V}$	VI	V	VI
1	Access	P	P	P	P	P	P	P	P
2	Means Of Escape	P	P	P	P	P	P	P	P
3	Compartmentation	P	P	P	P	P	P	P	P
4	Refuge Area	X	X	X	X	X	X	X	X
5	Emergency Lights	P	P	P	P	P	P	P	P
6	Exit Signs	P	P	P	P	P	P	P	P
7	PA System With Talk Back Facility	X	P	P	P	P	P	P	P
8	Moefa	X	P	P	P	P	P	P	P
9	Extinguishers	P	P	P	P	P	P	P	P
10	Hose Reel	P	P	P	P	P	P	P	P
11	Yard Hydrant	X	X	P	P	X	P	X	P
12	Down Comer	X	P2	X	X	X	X	X	X
13	Wet Riser	X	X	P2	X	P4	P	P5	P
14	Fire Detection System	X	P	P	P	P3	P	P	P
15	Automatic Sprinkler System	S	S	FS	F S7	S	FS	S8	FS
16	Under Ground Tank	X	X	P	P	P3	P	P8	P
17	Over Head Tank	P	P	P	P	P	P	P	P
18	Fire Pumps	X	X	P	P	P4	P	P8	P
19	Booster Pumps	P	P	P	X	P	X	P	X
20	Auto D.G. Set	P	P	P	P	P	P	P	P
21	MCB/ELCB	P	P	P	P	P	P	P	P
22	Hose Boxes	X	P	P	P	P4	P	P	P
23	Fireman's Grounding Switch	P	P	P	P	P	P	P	P

Annexure: "B-II" (Contd.)

#### Fire Protection Requirements for Buildings in Level-II Category

No.	Measures	E1, E2, E4 M		Group-F: Mercan- tile	Grou	ıp-G. In	dustrial	G2		
		VII	VIII	IX	X	XI	XII	XIII	XIV	XV
1	Access	P	P	P	P	P	P	P	P	P
2	Means of Escape	P	P	P	P	P	P	P	P	P
3	Compartmentation	P	P	P	P	P	P	P	P	P
4	Refuge Area	X	X	X	X	X	X	X	X	X
5	Emergency Lights	P	P	P	P	X	X	P	P	P
6	Exit Signs	P	P	P	P	X	X	P	P	P
7	PA System with Talk Back Facility	X	P	P	X	X	X	X	X	P
8	Moefa	X	P	P	X	X	X	P	P	P
9	Extinguishers	P	P	P	P	P	P	P	P	P
10	Hose Reel	P	P	P	P1	P	P	P	P	P
11	Yard Hydrant	X	P	P	X	X	X	X	P	P
12	Down Comer	P3	X	X	X	X	X	P4	X	X
13	Wet Riser	X	P	P	X	X	X	X	P6	P
14	Fire Detection System	P3	P	P	X	X	X	X	X	P
15	Automatic Sprinkler System	S	S	FS	S	S	S	S	FS	FS
16	Under Ground Tank	X	P	P	X	X	P9X	P10	P	P
17	Over Head Tank	P	P	P	P1	P	P	P	P	P
18	Fire Pumps	X	P	P	X	X	X	X	P	P
19	Booster Pumps	P	P	P	P1	P	P	P	P	P
20	Auto D.G. Set	P	P	P	X	X	P	P	P	P
21	MCB/ELCB	P	P	P	P	P	P	P	P	P
22	Hose Boxes	P3	P	P	X	X	X	P	P	P
23	Fireman's Grounding Switch	P	P	P	P	P	P	P	P	P

#### Legend for Appendix "B-II"

- I. Height less than 15 mt. and area up to 300 sq. mt. on each floor.
- II. Height less than 15 mt. and area above 300 sq. mt. up to 1000 sq. mt. on each floor.
- III. Height less than 15 mt. and area above 1000 sq. mt. on each floor.
- IV. Height 15 mt. and above.
- V. Height less than 15 mt.
- VI. Height 15 mt. and above up to 30 mt.
- VII. Height less 15 mt.
- VIII. Height 15 mt. and above up to 24 mt.
  - IX. Height more than 24 mt.
  - X. Height less than 15 mt. and plot area up to 750 sq. mt.

- XI. Height less than 15 mt. and plot area less than 250 sq.mt.
- XII. Height less than 15 mt. and plot area 251 m2 and above up to 500 sq. mt.
- XIII. Height less than 15 mt. and plot area 501 m2 and above up to 1000 sq.mt.
- XIV. Height less than 15 mt. and plot area more than 1001 sq. mt..
- XV. Height above 15 mt. and up to 18 mt.
- P to be provided.
- X not to be provided
- S sprinklers to be provided if basement area is 200 m2 or more

#### FS fully sprinklered.

- 1. To be provided if building is more than one floor.
- 2. To be provided in buildings above two floors.
- 3. To be provided if the building is more than ground floor, first floor and covered area exceeds 1500 sq. mt.
- 4. To be provided if building is more than first floor and the covered area exceeds 300 sq. mt.
- 5. To be provided for more than storeyed buildings and above.
- 6. To be provided if building is ground floor, first floor and above.
- 7. Buildings to be fully sprinklered if height exceeds 15 mt.
- 8. To be provided if seating capacity exceeds 1000 persons.
- 9. 25,000 lt. capacity under ground tank to be provided.
- 10. 50,000 lt. capacity a ground tank to be provided if riser is not provided.

Annexure: "B-III"

Fire Protection Requirements for buildings in Level-III Category

Sl. No.	Measures	Group F m (F2,F3)	ercantil	e		up G ustria	l (G3)	)	Group H	I Storage	Group de Hazard	
7,00		H<15m A>750M <sup>2</sup>	H>15 m	UGS	I	II	III	IV	H<15m Single Storey	H<15m More than one Storey	H<15 m Single Storey	H<15 More than one Storey
1	Access	P	P	P	P	P	P	P	P	P	P	P
2	Means of Escape	P	P	P	P	P	P	P	P	P	P	P
3	Compartmentation	P	P	P	P	P	P	P	P	P	P	P
4	Refuge Area	X	X	X	X	X	X	X	X	X	X	X
5	Emergency Lights	P	P	P	X	P	P	P	X	P	P	P
6	Exit Signs	P	P	P	X	P	P	P	X	P	P	P
7	PA System with talk back facility	P1	P	P	X	X	X	X	X	X	P	P
8	Moefa	P1	P	P	X	X	X	P	X	X	P	P
9	Extinguishers	P	P	P	P	P	P	P	P	P	P	P
10	Hose Reel	P	P	P	P	P	P	P	P	P	P	P
11	Yard Hydrant	P	P	P	X	X	P	P	P2	P2	P	P
12	Down Comer	X	X	X	X	X	X	X	X	X	X	X
13	Wet Riser	P1	P	P	X	X	P3	P1	X	P3	X	X
14	Fire Detection System	X	P	P	X	X	P	P	X	X	P	P
15	Automatic Sprinkler System	FS	FS	FS	FS	FS	FS	FS	FS4	FS	FS	FS
16	Under Ground Tank	P	P	P	P5	P6	P7	P	P6	P	P	P
17	Over Head Tank	P	P	X	P	P	P	P	P	P	X	P
18	Fire Pumps	P	P	P	P	P	P	P	P4	P	P	P
19	Booster Pumps	X	X	X	X	X	X	X	X	X	X	X
20	Auto D.G. Set	P	P	P	P	P	P	P	P	P	P	P
21	MCB/ELCB	P	P	P	P	P	P	P	P	P	P	P
22	Hose Boxes	P1	P	P	X	P	P	P	X	P3	P	P
23	Fireman's Grounding Switch in Lifts	Р	P	P	P	P	P	P	X	Р	X	P

#### **Legend for Annexure "B-III"**

- U.G.S. Under ground shopping complex
- i) Height less 15 mt. shopping complex
- ii) Height less 15 mt. and plot area 251 sq. mt. and above up to 500 sq. mt.
- iii) Height less 15 mt. and plot area 501 sq.mt. and above up to 1000 sq.mt.
- iv) Height less 15 mt. and plot area more than 1001 sq.mt.

- P To be provided.
- X Not to be provided.
- S Sprinklers to be provided if basement area is 200 sq. mt. or more.
- FS Fully sprinklered.
  - 1. To be provided in building of more than one floor.
  - 2. To be provided if covered area exceeds 1000 sq.mt.
  - 3. To be provided in building above two floors.
  - 4. To be provided in buildings if covered area is more than 200 sq.mt.
  - 5. 50,000 lt. capacity underground state water storage tank to be provided.
  - 6. 1,00,000 lt. capacity underground state water storage tank to be provided.
  - 7. 2,00,000 lt. capacity underground state water storage tank to be provided.

Annexure: "C"

**1. Water Requirement Criterion:** Unless otherwise specified in Annexure B, water requirement for fighting in different categories of occupancies shall be based on following.

Occupancy Category	Sprinkler Design Discharge Density (lt./min/sq.mt.)	Sprinkler Design Area (sq.mt.)	Max. area coverage/ Sprinkler (sq.mt.)	No. of Hose Streams* Fully other Sprinkled	Duration of (Min.) Fully Sprinkled	Discharge Wet Riser
LEVEL-I	02.5	084	21	2 4	45	45
LEVEL-II	05.0	360	12	3 6	60	90
LEVEL-III	10.0	225	09	3 6	90	90

Note: The discharge through a standard hose stream shall be taken as 567 lt./min.

#### 2. Estimation of Total Water Requirements Fully Sprinklered Buildings

Occupancy Category	Sprinkler (lt.).	Riser (lt.)	Total (lt.)	Wet Riser cum Down Comer (lt.)
LEVEL-I	9,450	51,030	60,480 (60,000)	1,02060 (1,00,000)
LEVEL-II	1,08,000	1,02,060	2,10,060 (2,00,000)	2,04,120 (2,00,000)
LEVEL-III	2,02,500	1,02,060	3,04,560 (3,00,000)	3,06,180 (3,00,000)

#### 3. Water Storage Tanks

- 1. The design of the water storage tanks shall be as laid down in National Building Code of India.
- 2. The capacity of underground water storage tank shall not be more than 85% of the total water requirement.
- 3. The capacity of overhead tank shall not be less than 15% of the total water requirement.
- 4. The entire water requirement can be provided in over head tanks and pumping requirements shall be finalized in consultation with Chie Fire Officer.
- 5. Under ground water storage tank shall not be provided in the set back areas.

#### **Storage Requirements**

<b>Occupancy Category</b>	Under Ground	Static Tank	Over Head Tank			
	Fully Spkd. (lt.) Riser (lt.)		Fully Spkd. (lt.)	Riser (lt.)		
Level-I	50,000	85,000	10,000	15,000		
Level-II	1.70,000	1,70,000	30,000	30,000		
Level-III	2,50,000	2,50,000	50,000	50,000		

#### 4. Riser/Downcomer

- 1. The size of the riser/ downcomer shall be such that velocity of flow does not exceed 5 m/second subject to a minimum of 100 mm. diameter.
- 2. The number of riser/downcomer shall be calculated on the basis that if 30 mt. of delivery hose is laid, it reaches the farthest comer of the remotest compartment on the floor.
- 3. The riser/downcomer shall be provided in the staircase/staircase lobby in such a manner that it does not obstruct the means of escape.
- 4. Only single headed hydrants shall be used on the riser/downcomer.
- 5. The size of hose to be provided with the internal hydrants shall be 50 mm diameter and with 63 mm diameter instantaneous male/female couplings.
- 6. Diffuser branch shall only be provided in the hose boxes.
- 7. In case of partially sprinklered building tapping from the wet riser is permitted for sprinkler feed.
- 8. In case of fully sprinklered building separate rising mains and pumps shall be used for sprinkler system and wet riser.

#### **5.** Selection of Pumps

- 1. Pumping requirement shall be met by a single pump or combination of pumps.
- 2. If more than one pumps are installed to meet the pumping requirement they shall be so arranged that they come into operation one after another depending upon fall in pressure in the mains and the combined pumping capacity shall be 20% more than the actual pumping capacity needed.

- 3. Jockey pump shall be selected to give minimum 3% and maximum 5% of aggregate pumping requirement at the same pressure to that of the main pump subject to maximum discharge of 450 LPM.
- 4. Standard pumps shall only be used having discharge capacity as 1800 LPM, 2280 LPM 2850 LPM & 4550 LPM.
- 5. The pump shall be capable of giving the pressure as shown in the table below:

Occupancy Category	Pressure* At	Terrace Level
	Fully Spkd. (Kgf./Cm2)	Riser(Kgf./Cm2)
LEVEL-I	3.5	3.5
LEVEL-II	3.5	5.5
LEVEL-III	5.5	7.0

<sup>\*</sup> Orifice plates shall be installed at the hydrants on rising mains / yard hydrants to ensure that the pressure does not exceed 7 *Kgf./Cm2*.

#### Annexure-"D"

# Questionnaire for High Rise Buildings/Other Buildings Fire Service Headquarters

1.	Name of the building
2.	Address of the building
3.	Name and address of builder /promoter
4.	Name and address of owners /occupiers of individual flats
5.	Plot area
	(a) Title
	(b) Land use (in case of residential building indicate no. of dwelling
	units
6.	Covered Area (at grade level)
7.	Height of tile building
8.	a) Overall height (from grade level up to terrace level )
	b) Whether set back areas are conforming to unified building bye-laws
9.	a) Number of Basement(please indicate level below grade in each case)
	b) If basement extends beyond the building line, please indicate the load bearing
	strength of the roof of basement)
	c) Area of the basement
	d) Whether any piazza is proposed? if so, details of the level of piazza and ramp etc.
	be indicated
10.	Number of floors (including ground floor)
11.	Occupancy use (please mention separately, use for basement and floors)
12.	Covered area of typical floor
13.	Parking areas (please give details)
14.	Details of surrounding properties / features

_	eass direction lation to the ng	Type of Property/ feature	Height in case of building	Distance to wall building	wall from	Any other information
North						
South						
East						
West						
15.			ding width of the			
16.	Please give	details of wat	er supply availabl	e exclusive	ely for	the fire fighting
17.	Has wet riser(	(s) been provide	d? If so, please ind	icate the nur	mber of	risers and intern
18.	Has any dow	vn comer been	provided? If so,	please give	detail	s including pum
19.			t arrangement for			
20.	capacity and	distance from	torage facility availy your building ,	also please	indica	ate if it is easi
21.	_	•	mation regarding a	•		
22.	Have internal	hydrants on each	ch floor including b	asement (s)	and ter	race.
	,	of hydrants	on each floor		_	ement (s) an
	b) Bore a	and length of ea	ch floor including b	pasement(s)		
	c) Size (l	bore) and type o	of nozzle fitted to ea	ch hose reel	l	
			connected directly			-
23.	Has fire hose	been provided i	near each hydrant? i	if so, Please	indicat	e

	a)	The type hoses				
	b)	The size (bore) of hose				
	c)	The length of each hose				
24.	Have	e branch pipes been provided? if so, please indicate				
	a)	The type of branch pipe				
	b)	Size of nozzle fitted to each branch				
25	a)	If the basement is used for Car / Scooter parking or storage.				
		Has it been sprinkled?				
	b)	Whether any cubicles proposed in the basement? If so, the area of each				
		cubical be indicated?				
	c)	Whether segregation/compartmentation of the basement has been provided? If				
		so, please give details				
26.	Is the building equipped with automatic fire detection and alarm system? If so, please					
	indic	rate				
	a)	The type of detectors used				
	b)	The standard to which the detectors conform				
	c)	The code to which the installation conform				
27.	Have	e manual call boxes been installed in the building for raising an alarm in the event				
	of ou	ntbreak of fire? If so, please give details				
28.	Has	public address system been installed in the building with loudspeaker on each				
	floor	with talk back facility				
29.	Has	an intercom system been provided between the various floors and the fire control				
	roon	room in entrance lobby?				
30.	Has	a fire control room been provided in the entrance lobby of the building?				
31.	How	many staircases have been provided in the building? Please indicate in each				
	case	:-				
	a)	Width of the stairway				
	b)	Width of treads				
	c)	Height of risers				
	d)	If the treads are of the non-slip type				

32.	Wha	What is the average occupant load per floor?			
33.	Whether fire tower has been proposed?				
34.	How	many lifts have been installed in the building? Please indicate in each case:			
	a)	The floors between which the lifts runs			
	b)	The type of doors fitted to the lift Car and at each landing			
	c)	Fire resistance raring of lift Car and landing doors, if known			
	d)	d) Floor area of the lift car			
	e)	e) Loading capacity of the lift car			
	f)	Has communication system been installed in the lift car?			
	g)	Has a fireman's switch been installed in the lift for grounding it in the event			
		of fire			
35.	Have	Have any stationary fire pump (s) been installed or pressuring the wet riser? If so,			
	pleas	e indicate.			
	a)	a) The number of pumps			
	b)	The size of suction and delivery connection of each pump			
	c)	The output of each pump			
36.	Has	the building been protected with sprinkler system, If so, detail of sprinkler			
	pumj	D			
37.	Has	a standby source of power supply been provided? If it is through a generator,			
	pleas	e indicate.			
	a)	The capacity (output)			
	b)	The functions that can be maintained simultaneously by the use of the			
		Generator, such as operating lift(s); fire pumps, emergency lighting etc.			
		system; exit signs; PA system etc			
	c)	Is the generator automatic in action or has to be started manually?			
38.	Has a	any Yard hydrant been provided from the building's fire pump?			
39.	Whe	re more than one lifts are installed in a common enclosure have individual lifts			
٥,٠		separated by fire resisting walls or 2 hours fire rating?			
40.		the lift shaft(s) lift lobby or stairwell been pressurized? If so, give			
		ls			

41.	. Has the lift lobbies and staircase been effectively enclosed to prevent fire/smo			
	enteri	ng them from outside at any floor?		
42.	42. Have all exits and direction of travel to each exit been sign-posted with illum			
	signs	?		
43.	Has a	false ceiling been provided in any portion of the building? If so, please indicate		
	locati	on and also mention if the material used for the false ceiling is combustible or		
	non-c	ombustible		
44.	Is the	building centrally air-conditioned? if so, please indicate:		
	a)	The material used for construction of ducts and its fittings		
	b)	The type of lining used for ducts, if any		
	c)	The type of lagging used for ducts, if any for insulating any portion of the		
		duct; please also indicate how the lagging is secured		
	d)	If plenum is used for return air passage has it been protected with fire		
		detectors? Please give details		
	e)	Has a separate A.H.U. been provided for each floor?		
	f)	Whether automatic shutdown of A. H. U. is coupled with detection		
		system/sprinkler system		
	g)	Is the ducting for each floor effectively isolated or is it continuous on more		
		than one floor?		
	h)	Are the fire dampers being provided?		
45	Wher	e are the switchgear and transformer located? If inside the building please		
	indica	ate:		
	a)	If the switchgear and transformer (s) have been housed in separate		
		compartments, effectively separated from each other and other portions of the		
		building by a four-hour's fire resistive wall?		
	b)	What precautions have been taken to prevent a possible fire in the transformer		
		(s) from spreading?		
	c)	Are transformer protected by high velocity water spray system		
46	I)	Where electrical cables, telephone cables wet risers / down comers pass		
		through a floor or wall has the spaces (apertures) round the cables /pipes been		

		effectively	sealed/plugged	with	noncombustibl	e, fire	resistance
		material?				• • • • • • • • • • • • • • • • • • • •	•••••
	II)	Ventilation					
	a)	Whether natu	ral ventilation is r	elied up	on? If so, give	details of th	e vents for
		the stairwell l	ife shafts				
	b)	Whether mec	hanical ventilation	has bee	en proposed? If	so, give de	tails of the
		proposed sys	tem indicating the	number	of air changes	for the bas	sement and
		other floors					
	c)	Whether me	echanical ventilat	ion is	coupled with	automatic	detection
		system/sprink	der system? Please	give de	tails of the syste	m	
47.	Please	indicate the	number and typ	e of fir	e extinguishers	provided	at various
	locatio	ons and	the arrangemen	nt fo	r the mai	ntenance	of the
	exting	uishers					
48.	Please	indicate if all	fire extinguishers l	oear the	BIS mark		
49.	Wheth	er the refugee	area has been pro	vided?	If so, the floor of	on which pr	ovided and
	the tot	al area provide	ed floor-wise				
50.	Are the	e occupants of	the building syste	maticall	y trained in fire	prevention,	use of fire
	exting	uishers and	l emergency	proced	lures? If	so, plea	se give
	details	•••••		• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	
51.	Does a	an emergency	organization exist	in the b	uilding? If so, 1	olease give	details and
	append	d a copy of the	emergency (fire)	orders			••••
52.	Has a	qualified offic	er been appointed	for the	building either	individually	or jointly
	with o	ther building(s	)				
53.	Has th	e building bee	en protected again	st lightir	ng? If so, does	the lighting	protection
	confor	m to any code	e? Please indicate	details	provision of M	CB and EI	CB in the
	buildir	ng					
54.	The w	ork has not be	en started on site a	and cons	truction will be	started only	after final
	approv	al of the Author	ority / the position	of const	ruction at site is	given belov	w:
					•••••		

Name and address of the consultant with Registration No			
Owner's Signatures	Signature of the Applicant / Architect		
Name	Name		
(In block letters)	(In block letters)		
	Designation		
	Organization		
Signature of Fire Consultant			
Dated:			
Name			
(In block letters)			
•	proposal has been broadly examined. The above is permissible as far as development Authority is may be given below or attached):		
Service along with 3 sets of drawings whe Plan, and fire fighting regulations and prince involves relaxation in respect of height/s	Services at conceptual stage/is forwarded to Fire ich are according to bye-laws, Master Plan, Zonal policy instructions of Government. The proposal set backs/		
	Signature of Authority		
	Name:		
	Designation and office Seal:		

**Appendix -A**(Bye laws 2.9.1)
(To be submitted in duplicate)

# Form for Application to Erect, Re-Erect or to make Material Alteration in any Place in a Building

То					
Comr	nission	er/Vice Chairman/Secretary			
Deve	lopmen	t Authority			
Sir,					
I here	by giv	e notice on behalf of Shri (owner) that the owner intends			
to er	ect/den	nolish or make alteration in the building number or to on/in Plot No			
		Block No House Nosituated at			
		Schemeand in			
accor	dance v	with the building Bye-law No			
and I	forwar	d herewith, the following plans and specification duly signed by me and by the			
owne	r.				
	1.	Site plan			
	2.	Building Plan			
	3.	Service Plan			
	4.	Parking and circulation plan.			
	5.	Landscape Plan			
	6.	General Specifications (in attached form)			
	7.	Ownership Title (Lease/Conveyance/Sale Deed, etc)			
	8.	Other document, as required			
ii)	The	building plan has been prepared strictly as per the approved building Byelaws.			
	The o	construction shall be carried out in accordance with the building plan and I shall			
	be co	ompletely accountable for any lapse on my part up to within 6 months after			
	obtaining completion certificate of the building.				

iii)	The Building permit fee as required under bye-laws 2.13 has been deposited vide						
	receipt Nodated.	(Photocopy enclosed).					
iv)	I am aware that in the event of building	ing being constructed in violation of the					
	sanctioned building plan approval, the A	uthority shall have the right to take fiction					
	against me as it may deem fit include	against me as it may deem fit including referring the matter to Council of					
	Architecture for taking disciplinary action	Architecture for taking disciplinary action against me.					
Signa	ture of the Owners	(Signature of Registered					
		Architect/Engineer/Supervisor)					
Name	e of owner(s)	Registration No. of the					
Addr	ess of the owner(s)	Architect/Engineer/Supervisor					
		Address of the Architect/Engineer/					
		Supervisor					
Encl:	As stated above	Dated:					

### Appendix A-1

(Bye laws 2.9.1)

#### Statement of the Proposal and Certificate

By the Owner and Registered Architect

Classification of t	he Proposal		•••••	. •
(To erect/re-erect/	demolition)			
•	s			
Area Statement				
Description	Permissible	Proposed	Remarks	
	sq.mt.	sq.mt.		
Max. Ground cov	erage			
Basement				
Ground Floor				
First Floor				
Second Floor				
Third Floor				
Total Floor area				
Floor Area Ratio				
No. of Dwelling U	Jnits			
Maximum height	(in meters)			
Setbacks	As per ap	proved	Proposed	
	Layout pl	an (mt.)	(mt.)	
Front				
Rear				
Left				
Right				

#### Parking (for above 250 sq.mt)

Equivalent Car	Open Parking	Ground Floor	Basement	Total
space @ 1.33 ECS		covered parking	parking	(sq.mt)
per 100 sq.mt of				
permissible built				
floor area				

Area in sq.mt	Area in sq.mt@ 23	Area in sq.mt @ 28 sq.mt.	Area in sq.mt @ 32 sq.mt.	Total (sq.mt)
	sq.mt per ECS	per ECS	per ECS	
1	2	3	4	5

#### ii) Fee & Charges

	a)	Building permit fee	Rs
b) Use of City Infrastructure Charges		Use of City Infrastructure Charges	Rs
c) Additional floor space charges (provisional)			Rs
	d)		
		Group IV CHBS	Rs
	e)	Any other charges (please specify)	Rs
Total aı	mount (	(as per the details above)	Rs
Receipt	No	Dated	

We hereby certify that

1. The plot in question forms part of the approved layout plan and its location size and area conform to the approved layout plan and lease/sale deed/NOC of the lease Administration Branch of concerned Development Authority.

2.	Plot is lying vacant and no construction shall be started before sanction.				
3.	The plot is free from all encumbrances (owner responsibility).				
4.	The period of construction valid up to As per the l				
	condition / further extension of	time for construction granted by the lessor is valid			
	up to	Time construction obtained from the lease			
	Administration Branch, Concern	ned Development Authority.			
5.	Size of each dwelling unit is not	more than 300 sq.mt.			
Signature	of Owner(s)	Signature of Registered Architect			
Name		Name			
(in block l	letters)	(in block letters)			
		Registration No			
Address		Address			
Dated:		Dated:			
	Auth	ority Letter			
I hereby	authorize Mr./Mrs	to collect the sanction			
whose sign	nature is verified below.				
Specimen	signature of signature	ture of the owner(s)/Registered architect			
Mr./Mrs					
Dated received Date					
(Signature of authorized person / owner / Registered Architect)					
Dated:		Remark, if any			

# Appendix A-2

(Bye laws: 2.10.7)

# Form for Specifications of Proposed Building

Th	e pur	pose (Res	idence, Offic	ce, Rest	aurant, H	lotel,	Dharm	shala, Sch	nool, H	ostel C	inema,
Sh	op,	Factory	Others)	for	which	it	is	intended	to	be	used
			• • • • • • • • • • • • • • • • • • • •								
• • •						• • • • • • •					•
De	tails o	of coverage	e on respectiv	e floor	are given	below	:				
1.	Base	ement Floo	r	E	Existing (s	q.mt)	Pro	posed (sq.	mt)	Γotal (s	q.mt)
2.	Grou	and Floor.									
2.	Mez	zanine Flo	or								
3.	First	Floor									
4.	Seco	ond Floor									
5.	Thir	d floor	•••••								
6.			•••••								
7.											
8.											
9.							ı				
	a	ı) App	proximate	numbe	er of	in	habita	nts pr	oposed	to	be
		acc	ommodated								
	b	) The	number	of	latrines,	Urir	nals,	Kitchens	, Bat	hs to	be be
		pro	vided								•••
	C	) The	source	of	wate	er	to	be	used	in	the
		con	struction								
	d	l) Dis	tance from pu	ıblic sev	ver						
			1								

Annexures	and	App	endices
		I I	

e)	The	materials	to	be	used	in	construction
Wall	ls/Columns	s/Foundations/R	oof/Floor	rs			
		Signatur	e of Regi	stered Ar	chitect/Eng	ineer/Sup	pervisor
		Name		• • • • • • • • • • • • • • • • • • • •			
		Registra	tion No			•••	
		Address					
						_	

# Appendix – A-3

(Bye laws:2.10.8)

# Form for Supervision

То
The Commissioner/Vice-Chairman/Secretary
Development Authority
Sir,
I hereby certify that erection/re-erection demolition or material alteration in / of Building
No
Block No situated at scheme
shall be carried out under my supervision and I certify that all the materials (type & Grade)
and workmanship of the work shall be generally in accordance with the general specification
submitted along with and the work shall be carried out according to the sanctioned plans
which also included the services like drainage, sanitary, water supply, and electrical.
Signature of Registered Architect Engineer/Supervisor
Name of Registered Architect/Engineer/Supervisor
(In block letters)
Registration No. of Architect/Engineer/Supervisor.
Address of Registered Architect/Engineer/Supervisor
Dated:

Appendix – A-4

(Bye laws: 2.13)

#### **Undertaking for Payment of Other and Peripheral Charges**

Note: It should be on non-judicial stamp paper of specified amount attested by Notary Public / First class Magistrate.

#### **Undertaking**

I
Years residents of Owner of Plot No
in Co-operative Housing Building Society Ltd
hereby undertake to pay the balance of peripheral and other charges as and when required by
the concerned Authority and in this regard Authority's decision will be finally binding or
me.
Executed by me as
Witness:
1
2

#### Appendix - A-5

(Bye laws No.2.9.4 J)

	Affidavit-cum-Undertaking
(Affidavit o	f Architect on Rs. 2/- Non-Judicial Stamp paper of specified amount to be Attested by Notary
Public/Metro	opolitan Magistrate)
т	an of Analitant ha
	son of
_	having office at
declare as	under:
1.	That I am a Licensed Architect/Engineer/Supervisor/Plumber duly registered with
	the Authority vide registration No.
	or
	That I am an Architect by profession and duly registered with the Council of
	Architecture vide Registration No
2.	That I have been engaged as an Architect for preparing the building plans and to
	supervise construction in respect of Plot No Block
	Nosituated at
3.	That I have prepared the building plans in respect of the aforesaid plot.
4.	That I have studied the layout plan of the colony and gone through the
	instructions, policy decisions and other relevant documents in respect of the plo
	and colony.
5.	That I have personally inspected the site. The plot under proposal forms part of
	the approved layout plan with respect to its location, size shape and area of the
	plot and proposed land use is also in conformity with the approved layout plan
	The plot has been demarcated at site and the size, shape and area of plot available
	at site tallies with the approved layout plan.
6.	That the ownership documents are in the shape of registered sale-deed/lease-deed

- in favour of the applicants and have been thoroughly examined and the ownership in favour of the applicant is in order.
- 7. That there is no construction in existence at the plot and no construction shall be started before sanction of the building plans.

- 8. That there is no encroachment on the Municipal land/road/other property and road widths as shown in the layout plan are available at site.
- 9. That the proposal are in conformity with the terms and condition of lease deed which is still valid and period of construction as per lease-deed and the extension granted by the lessor is valid up to......
- 10. That the proposal have been prepared strictly in accordance with the Building Bye-laws rules regulation and practice of the department and no misinterpretation on inference of provision of Building Bye-Law has been done while preparing the plans. The construction shall be carried out strictly in accordance with the sanctioned building plans and in case any deviation is carried out, I shall inform the concerned Authority within 48 hours.
- 11. That in case the owner dispenses with my services at any stage whatsoever, I shall inform the concerned Authority within 48 hours.
- 12. That the size of each dwelling unit is not more than 300 sq. mt.
- 13. That mandatory setbacks have been proposed and shall be maintained in accordance with the setbacks marked in the layout plan/Master Plan.
- 14. That before submission of the proposal, necessary information/clarification have been obtained from the concerned department of the concerned Authority. The plot is safe and is not affected in any scheme or the road widening. Building activities for residential use are allowed with number of storeys as per approved layout plan.
- 15. That no development/additional development/deficiency charges are payable, against this plot (in case development/additional development/deficiency charges are payable then its details be given in the separate para)
- 16. That no non-compoundable deviations shall be carried out during the course of construction.
- 17. That nothing has been concealed and no misrepresentation has been made while preparing and submitting the building plans.
- 18. That in case anything contrary to the above is found or established at any stage, the concerned Authority shall be at liberty to take any action as it may deem fit including revocation of sanction of building plans and debarring me for

submission of building plans with the Authority under the scheme and also lodge a complaint with the Council of Architecture for appropriate action.

Deponent

#### Verification:

Deponent

Appendix: A-6

(Bye laws: 2.14.2 a)

<b>Building</b>	<b>Permit</b>
-----------------	---------------

File No	Dated
То,	
Subjec	t: Sanction u/s
Dear Sir o	r Madam,
erect/re-er the said in/at	eference to your application dated
1.	The plans are valid up to day
2.	The construction will be undertaken as per sanctioned plan only and no deviation from the bye-laws will be permitted without prior sanction. Any deviation done against the bye-laws is liable to be demolished and the supervising Architect engaged on the job will run the risk of being black listed.
3.	Violation of building bye-laws will not be compounded.
4.	It will be the duty of the owner of the plot and the Architect preparing the plans to ensure that the sanctioned plans are as per prevalent Master Plan/Zonal Plan/Building Bye-laws. If any infringement of bye-laws remain unnoticed, the concerned Authority reserves the right to amend the plans as

and when infringement come to the notice and concerned Authority will stand

indemnified against any claim on this account.

- 5. A notice in writing shall be sent to Authority before commencement of the constructions of the building as per bye-laws. Similar notice will be sent to Authority when the building has reached up to plinth level.
- 6. The owner shall not occupy or permit to occupy the building or use or permit to use the building or any part thereof affected by any such work until occupancy certificate is issued by the concerned Authority.
- 7. Concerned Authority will stand indemnified and kept harmless from all proceedings in court and before other authorities of all expenses /claims which the concerned Authority may incur or become liable to pay as a result or in consequences of the sanction accorded by it to these building plans.
- 8. The doors and window leaves shall be fixed in such a way that they shall not, when open project on any street.
- 9. The owner will not convert the house into more dwelling units on each floor then the sanctioned.
- 10. The building shall not be constructed within minimum distance as specified in Indian Electricity Rules from voltage lines running on side of the site.
- 11. The land left open as a consequence of the enforcement of the setback rule shall form part of the public street.
- 12. The sanction will be void if auxiliary conditions mentioned above and other conditions whatsoever imposed are not complied.
- 13. The owner will use the premises for the use, which has been sanctioned.
- 14. The owner will not proceed with the construction without having the supervision of an Architect/Engineer as the case may be. If he\she changes his Architect\Engineer, he\she shall inform the Authority about the appointment of new Architect\Engineer within 48 hours, with a proper certificate from him.

Yours Faithfully
For

Encl: A set of sanctioned plan.

Appendix: A-7

(Bye laws: 2.14.2a)

# Form for Refusal of Building Permit

То			
File No		Dated	
Sir.			
With reference to you	ur application No		dated
for the grant of sanction	for the erection of	building/execution	on of work in House
NoPlot	No	Block	No
Scheme	Situated at		I have you inform you
that building permit under re	elevant provisions of	the Act of	has
been refused on			
		22	
1			
2			
3			
4			
5			
			Yours faithfully
		Fo	r
			Authority.

# Appendix A- 8

(Bye laws: 2.14.3)

#### Form of Revalidation

File N	0	Dated
Shri /I	Madam	
•••••		
Subje	ct: Revalidation of Building Plans relating to plot N	Io Block
	NoScheme	•••••
Dear S	Sir / Madam,	
Block	No.	
1.	With reference to your application dated am directed to inform you that your building plan which	•
	vide file No have been revalidated up to	
2.	Original sanctioned plan submitted by you is also returned	ed herewith.
3	Please acknowledge receipt.	
		Yours Faithfully,
		•
		For
D., 1	A1	Authority
enci:	As above.	

Appendix: A-9

(Bye laws: 2.15.1 b)

#### Form for Notice for Commencement of Work

To,
The
Authority,
Dear Sir,
I hereby certify that the erection/re-erection/demolition of material alteration in/ o
building No on/in Plot No Block No
situated at scheme, will commence on as per you
permission vide office communication No dated under the
supervision of Architect/Engineer/Supervisor/Group, License
No and in accordance with the plans sanctioned.
Signature of owner
Name of Owner
Address of Owner
Dated

Appendix: A-10

(Bye laws: 2.15.3)

# Information for Intimation of Completion of Work up to Plinth Level

То	
The	
Autho	ority,
Sir,	
Building NoWard.	th/column up to plinth level has been completed in on/in Plot No
	Yours faithfully,
	Signature of Licensed Architect/Engineer/Supervisor
	Name
	(In Block letters)
	Address:
	Date:

Appendix: A -11

(Bye laws: 2.15.3)

# **Inspection Report**

Iworki	ng as awith
have carried out the inspection of	Building Noon/in Plot No
Scheme NoRoad/St	treet in accordance with
permission No da	ted The following deviation from the
sanctioned plans have been noticed	d which are against the provision of Master Plan / Bye-
laws are of non-compoundable natu	re.
Description of deviations noticed:	
You may not proceed with further	work till such time the deviations made are rectified and
construction brought in conformity	to sanction plans.
	Yours Faithfully
	For
	Competent Authority
Office No	
Office Stamp	
Date	

# Appendix: A-12

(Bye laws: 2.16)

# **Form of Notice of Completion**

(To be submitted along with prescribed fee for notice of completion and other relevant documents)

To	
The	
Authority,	
Dear Sir,	
I/We hereby give notice that I/We have completed the erection	of building/execution of the
works in Plot No Block No	Scheme
situated at in pursuance of the sanction granted	l by the Authority vide File
No	all reports of the Authority
inspection carried out during construction period.	
2. Permission to occupy or use the building may be granted.	
	Yours Faithfully,
Signature of o	Yours Faithfully,
	owner
Name of owr (In Block lett	owner
Name of owr (In Block lett Address of the	ownerers)
Name of owr (In Block lett Address of the	ownerers)

**Appendix: A-13** 

(Bye laws: 2.16)

# Form For Certificate of Architect/Engineer/Supervisor

(To be submitted along with notice of completion)

То
The
Authority,
Dear Sir.
We hereby certify that the erection, re-erection or material alteration in/at building
No
No
has been completed on according to the plans sanctioned, vide office
communication No dated The work has been completed to
our best satisfaction, the workmanship and all the materials (type & grade) have been used
strictly in accordance with general and detailed specifications. All the
drainage/Sanitary/Water Supply work has been executed under our supervision and as per
Building Bye-laws. No provisions of the Building Bye-laws and condition prescribed or
order issued there under have been transgressed in the course of the work. The building is fit
for use for which it has been erected /re-erected or altered/constructed and enlarged.

#### 2. Certificate:

- i) Certified that the building(s) has been constructed according to the sanctioned plan and structural design (one set of structural drawings as executed is enclosed) which incorporate the provisions of structural safety as specified in relevant prevailing IS codes standards/Guidelines.
- ii) Further certified that water harvesting as well as waste water re-cycling systems have been provided as per the sanctioned building plan.
- iii) It is also certified that construction has been one under our supervision and guidelines and adheres to the drawings submitted and the records of supervision have been maintained by us.

3. Pe	ermission to occupy of use the build	ing may b	e granted.
4. A	ny subsequent change from com	pletion d	rawings will be the responsibility of the
owne	er(s)		
a)	Signature of the owner	b)	Signature of the Architect
	with date		with date
	Name in Block letters		Name in Block letter, Licence No.
	Address		Address
c)	Signature of the Structural Engir	neer c)	Signature of Supervisor/Engineer/
	with date (for certificate 1)		Group/Engineer with date
	(as defined in NBC of India)		Name in Block letters, Licence No.
	Name in Block Letters		Address
	Address		

Dated :.....

Appen	dix:A-14
-------	----------

(Bye laws: 2.17.1)

File No						
Plan No		Dat	ed:			
Shri/Miss/Smt						
		•••				
	Comple	etion-cum-Occ	upancy Cert	ificate		
With reference to	your notice of	completion date	ed	I hereby certify	y that build	ding
as per descript	tion below	certified plan	n at Plot	No	Block	No
	Scheme		situated	at		
whose plans were	sanctioned vid	e No	ha	as been inspected	with refere	ence
to building bye-la	ws in respect	to the structur	al safety, fir	e safety, hygienic	and sani	itary
conditions inside	and in the sur	roundings and i	is declared fi	t for occupation a	and releas	e of
regular water and	electricity conr	nections. The de	scription of t	he construction w	ork compl	etec
is given as under:						

# Description of Construction Work Block Wise/Building Wise.

- 1. Block Building No.
- 2. Details of Completed Work floor wise.

Vice Chairman

Or

Commissioner of Authority

# Appendix:A-15

(Bye laws: 2.17.1)

# Form of Rejection or Compliance in Respect of Occupancy Certificate

File N	ło	Dated:
Sh/Sn	nt	
Subje	ct: Occupancy Certificate in respect	of Plot No
Dear S	Sir I Madam,	
1)	With reference to your letter dated	
2)	With reference to your notice of complet	ion dated
3)	In continuation of this office letter of ev	en Nodated on the subjec
	noted above, I am directed to inform	you that your case bas been examined and
	occupancy certificate is rejected for the r	easons as given below:-
		Yours Faithfully
		For
		Authority
1.		
2.		
3.		
4.		

Appendix: "B"

(Bye laws: 2.9.4. (a)

# Affidavit/Undertaking

# (For Handing Over Land Required For Road Widening)

That I/We have submitted building plans for construction of building on plot  No
I/We undertake to hand over the land required for road widening as shown on site plan to concerned Authority free of cost as and when asked byto do so.
I/We have already understood that theis granting sanction on the basis of my undertaking.
If I/We fail to do so, the sanction so accorded shall be revoked and construction done as consequence thereof shall be deemed to have done unauthorisedly and shall be actionable u/s
<b>DEPONENT</b> Verification
I/We verify that the contents of the above undertaking are correct to the best of my knowledge and belief and nothing material has been concealed there from.  DEPONENT

Appendix: B-1

(Bye laws: 2.9.4. (f) & 4.5.5)

# INDEMNITY BOND FOR BASEMENT

This I	ndemnity Bond is executed by Shri/SmtS/o, D/O, W/O
Shri/S	mt
Develo	opment Authority.
Where	as the executant has submitted to the concerned Authority the plans for, sanction of
basem	ent over Plot No under the provisions of the Act and lie bye- laws
made t	here under:-
. 1	
	whereas the concerned Authority has agreed to sanction the aforesaid construction
J	t to the conditions that the owner shall indemnify the concerned Authority in the event
of any	loss or damage being cause to the adjoining building on account of the construction of
the sai	d basement either at the time of digging of its foundations or in the course of its
constru	action or even thereafter and also against any claim of any concern thereto.
And w	hereas the executant has agreed to execute an indemnity bond to the above affect and
	abide by the terms imposed by the concerned Authority to the grant of sanction for
	action of the basement.
COHSTI	action of the basement.
Now tl	nis deed witnesses:
1.	That in consideration of the sanction of the plans by for
	construction of the basement the executant undertakes that he/she shall at all times
	keepharmless and free from any liability, loss or damages/ flowing
	from any injury or damage caused to the adjoining built-up properties or to any
	person as a consequence of the construction of at the time of digging of its
	foundations or during the course of its construction or at any time thereafter.

- 2. The owner agreed and undertakes that in the event of any claim being made by any person or persons against the concerned Authority either in respect of the sanction granted by the concerned Authority to the owner for the construction of basement or in respect of the construction or manner of construction of the basement by the owner or the consequences flowing from the said sanction the executant shall be responsible and liable and not the concerned Authority.
- 3. The executant agrees and undertake to indemnify the concerned Authority fully in respect of any amount which the concerned Authority may be required to pay to any person either by way of compensation or damages or on any other account as a result of any claim or suit or any other proceedings concerning the sanctioning of the construction of the basement of the making thereof and also in respect of the costs and expenses which the concerned Authority may incur on defending any action.
- Without prejudice to the above undertaking the executant hereby binds itself to pay to the concerned Authority to the full extent any amount which the concerned Authority may be required to pay to any person in connection with, relating to or concerning the sanctioning of the basement or the making thereof.
- 5 The owner further agrees and undertakes that this bond shall remain in full force and effect till the executant faithfully observes/performs the undertaking herein before contained.

Ir	n witness	whereof	the executar	nt above nam	ed has signe	d this bond	on this	 day
O	f		at	• • • • • • • • • • • • • • • • • • • •				 

Indemnifier

Witne	ss:
(Signa	tures)
1.	Name
	Full Address
	(Signatures)
2.	Name
	Full Address

# Appendix -"C"

(Bye laws: 2.14.1a)

#### PERFORMA TO BE SUBMITTED BY OWNER

- 1. Name, Status, and Address of the applicant
- 2. Name of the Architect with address with Registration number with Council of Architecture under the Architects Act, 1972.
- 3. Details of the property/plot
  - a) Location
  - b) Boundaries
  - c) Area in sq.mt. with dimensions (net plot area)
  - d) Width of the roads
- 4. Land use
  - a) Master Plan
  - b) Zonal Development Plan
  - c) Approved Layout Plan
- 5. Title
  - a) Free Hold
  - b) Leasehold under notification for acquisition if lease hold permission of lessor for construction under the leasehold condition obtained.
  - c) Whether under acquisition, if so give details.
- 6. Whether the plot/land is affected under the Urban Land (Ceiling & Regulation) Act, 1976. If so, copy of the NCO from the concerned Authority be furnished.
- 7. Proposals
  - a) Land Use
  - b) Coverage on each floor with proposed use of the floor space including basement.
  - c) FAR
  - d) Height
  - e) No. of floors.

	g)	Parking norms	
Encl:			
1.	Owner	ship title	
2.	Permis	sion to construct under the lease	
3.	Permis	sion under the Land Ceiling Act, 197	6.
4.	Site/Lo	ocation Plan	
5.	Tentati	ve proposals to explain the scheme	
Signatu	ıre of A	rchitect	Signature of the owner
Name.			Name
Reg. N	o		
Addres	ss		ADDRRESS

Envelope controls/set backs

f)

Appendix -"D"

(Bye laws: 5.3.2)

# Number and Type of Lifts Required for Different Occupancies and Space for Electrical Installations

1. The number and type of lifts required depending on the capacity of lift, desired speed nature of operation are as given in table below:

Table: Number and types of lifts for non-residential Multistoried Building

S.	No.	Capacity	No. of perso	No. of persons that can be carried by a lift								
No.	of	of lifts	Speed m/s	In 6	min	In 30 n	30 min. In 50		min.	In 60 1	In 60 min.	
	floors	in		Manually	Automatic	Manually	Auto	Manually	Automat	Manually	Automa	
		person		Operated		Operated	matic	Operated	ic	Operated	tic	
1	2	3	4	5	6	7	8	9	10	11	12	
1	7	6	0.6-0.75	17	-	102	-	170	-	204	-	
2	7	8	0.6-0.75	22	-	132	-	220	-	-	-	
3	7	10	0.6-0.75	26	-	156	-	260	-	312	-	
4	7	10	1.0	30	-	180	-	300	-	360	-	
5	7	13	1.0	37	-	122	-	370	-	444	-	
6	11	6	0.6-0.75	11	-	70	-	115	-	140	-	
7	11	8	0.6-0.75	15	ı	90	-	150	-	180	-	
8	11	10	0.6-0.75	18	-	108	-	180	-	216	-	
9	11	13	0.6-0.75	22	-	132	-	220	-	264	-	
10	11	10	1.0	21	-	126	-	210	-	252	-	
11	11	10	1.5	24	-	144	-	240	-	288	-	
12	11	13	1.5	28	-	156	-	260	-	312	-	
13	11	13	1.5	32	-	180	-	300	-	-	-	
14	16	10	1.0	17	-	100	126	170	210	-	252	
15	16	13	1.5	20	24	120	145	200	240	248	290	
16	16	13	1.5	23	30	138	180	230	300	-	360	
17	16	16	1.5	25	33	150	198	250	330	300	356	
18	21	10	1.5	18	32	108	132	180	220	214	264	
19	21	13	1.5	21	26	126	156	210	250	250	312	
20	21	14	1.5	23	28	138	168	230	280	-	-	

#### Note-1:

- a) for all non-residential buildings, the traffic cleared in 50 minutes is considered adequate and is approved by Authority. As such for calculation the number of lifts required, the rate of the clearance of traffic in column 9 and 10 and the population may be taken into consideration.
- b) In addition to total number of lifts required as above, provision of one lift of the same capacity may be considered to serve as stand-by.

Note-2: The population may be worked out on the basis of useful carpet area which the person occupy (excluding area of Verandah, Lobbies, Halls, Passages, Lavatory blocks, etc.)

Note-3: The population on ground and first floor may not be taken into consideration since these floors are not generally served by lifts.

Note-4 0.75 meter per sec. Equivalent to 150 ft. per Min.

1.00 meter per sec. Equivalent to 200 ft. per Min.

1.5 meter per sec. Equivalent to 300 ft. per Min.

Note-5 The height of buildings for lift installation i.e. the travel on the lift presumed in the above statements is as below:

7 floors 21.0 mt.
11 floors 33.0 mt.
16 floors 48.0 mt.
21 floors 64.0 mt.

Table: Number and types of lifts for Residential Building

S. No.	No. of floors	No	Passenger unit capacity Persons	Speed in m/s	Landing Gate Type	Central System	Service Lift No.	Capacity Persons	Type of Gate	Central System
1	5 to 8	2	6	0.0 to 0.5	*	Automatic push button operation both from car and landing	-	-	-	-
2	9 to 11	2	8	0.6 to 1	*	-Do	1	8		Push button car handle switch control
3	11 to 13	2	8	0.6 to 0.74	*	Do—and without collection system do	1	8	-	do
		1	6		Power operated doors					
4	13 to 19	2	8	1		do—	1	8		do
		2	8	1	power operated doors					

<sup>\*</sup> For buildings more than 15 mt. in height collapsible gates shall not be permitted. (see bye-law No. 7.9.1(f))

Appendix -"D-1"

(Bye laws: 5.3.2)

The dimensions and relevant information for lift installations like lift well, pit depth, machine room, clearance from top floor landing to machine room flooring is given in table below:

Dimensions and required information for Lift Installation in Building.

Carrying Capacity of lift (persons) Number	Load (kg)	Lift speed		t well depth	(Cm)	Leading Pit Entrance (Cm)	Dimension of Machine Room		Clearance from top floor landing to machine room flooring cm	Imposed load in tones on top of lift well due to installation. It may be noted that figures do not include weight of the machine from floors and well, etc.	
1	2	3	4	5	6	7	8	9	10	11	12
4	272	Up to & including 1 m/s	175	115	70	140	230	275	245	450	6.5
6	408	Do	195	135	80	140	230	335	275	450	7.0
8	544	Up to & including 1 m/s	200	170	80	150	245	395	275	450	8.5
10	680	Up to & including 1.5 m/s	225	170	90	150	245	395	305	470	10.5
13	884	do	235	188	90	150	245	425	335	470	13.0
16	1088	do	255	205	105	150	245	520	335	480	15.0
20	1360	do	255	220	105	150	245	520	335	480	15.0

Note: i) All lift well dimensions are minimum clear finished plumb requirements.

ii) Where more than one lift is located in the lift well, extra width of 10 cm. Separator beam should be provided.

iii) 1 m/s = 200 ft./min.

iv) The height of landing entrance should be 210 cm. (about 7 ft.) for all lifts.

# Appendix – D-2

(Bye laws: 5.3.3)

## **D.2** Spaces for Electrical Installations

The spaces required for different electrical installations are given at 3.1 to 3.3

**D.2.1 Electric Sub-station** – The norms given in 3.1.1 and 3.1.2 shall be adopted for provision of space for sub-station.

D.2.1.1 Area Requirements for Sub-Station for buildings

Sl.No.	Total covered Area (in	Transformer Capacity	S/Stn. Size Required
	sq.mt)	(In KVA)	(In sq.mt)
1	2500	1 X 400	70
2	4500	1 X 630	70
3	8000	2 X 630	100
4	10,000	2 X 630	130
5	15,000	4 X 630	160
6	20,000	5 X 630	175
7	25,000	6 X 630	200
8	30,000	7 X 630	220

Note:

- 1. For additional 1000 sq.mt. covered area, a load of 90 KVA will come up with 150 KVA TR. Capacity at 60 % loading.
- 2. For additional of one transformer as per covered area, a space of additional 16 sq.mt. is to be provided.
- 3. In case of any deviation in space size due to unavoidable circumstance, the same may be considered with the approval of Electricity Board.
- 4. The floor of the sub-station shall have cable trenches of 0.6 mt. depth, the layout for which will be given at the time of actual construction. For this purpose, a dummy floor of 0.6 mt. depth shall be provided to facilitate cutting/digging of floor for installation of equipment's and making subsequent changes in trenches. This floor shall be capable to withstand minimum load of 10 tones of each transformer mounted on flour wheels.

The break-up spaces required for different installations in a sub-station are given as below:

- 1. Supply company's Switchgear room and or space of meters.
- 2. *Transformer Rooms:* The number and size of transformer rooms shall be ascertained from the total power requirements of the company. To determine

the size of transformer and clearance around a transformer, reference may be made to good practice (I.S.1887-1967 code of practice for installation and maintenance of Transformer). A 500 KVA transformer may be provided with a minimum space of 4 mt. X 4 mt.

If transformer is to be installed outdoor space shall be provided on similar considerations and adequate provision for safety enclosure is to be made. For transformer having large oil content (more than 2000 lt.) soak pits are to be provided in accordance with rule 64 of Indian Electricity Rules, 1956.

- 3. *High Voltage Switch Rooms* In case of sub-station having one transformer, the owner is required to provide only one high voltage switch. In the case of single point supply for two transformers, the number of switches required is 3 and for 'n' transformers the number of switches is n+1. The floor area required in case of a single switch will be roughly 4 mt. X 1mt. and for every additional switch the length should be increased by 1mt.
- 4. Low Voltage Switch Rooms The floor area requirement in respect of low voltage switchgear room cannot be determined by any formula.
- 5. Room for Stand-by-Generator A room space not less then 6 mt. X 9 mt. may be provided for housing a standby Generator set of 50 KW.

# **D.2.1.1.A:** Location of electric sub-station in basement of multistoreyed buildings:

- 1. The electric sub-station should be provided in the approved/sanctioned covered area of the buildings not below the first basement level and should be on the periphery of the building with clear independent round the clock approach having proper ramp with slope.
  - The ramp should be designed in such a manner that in case of fire no smoke should enter the main buildings. The exit from basement electric sub-station shall have self-closing fire/smoke check doors of 2 hours. F.R. near entry to ramp. Additional exit shall be provided if traveled distance from the farthest corner of the ramp is more than 15mt.
- 2. The electric sub-station should be totally segregated from rest of the basement having 4 hours. F.R. wall and should have adequate internal lighting and

ventilation. A perfect independent ventilation system of 30 air charges per hour linked with detection as well as automatic medium velocity water spray system for individual transformer shall be located outside the building at ground floor, fire control room shall be manned round the clock and shall also have and audio system in the basement as well as in the control room. No service such as water, sewer, air-conditioning, gas pipes or telegraphs services should pass through electric substation of the cable trench.

- 3. The rising mains should be of metal bus bars. The floor of electric sub-station should be 2 ft above the rest of basement floor and designed suitably to carry 10 tons of transformer weight on wheels also having provision of proper cable trenches 0.6 X 0.6 mt. depth. Dummy floor of 0.6 mt. depth be provided to facilitate laying of cables inside the building connecting to equipment. Fire retarding cables should be provided and cable trenches be filed with said cables. R.C.C. pipes at suitably places as required will be provided for cable entries to the sub-station spaces with suitable water proofing arrangement. A provision of 12 ft. clear height below beams should be made in the electric sub-station area along with adequate arrangement for fixing chain pulley block for a load of 15 tons. Provision of sumps shall be kept in the floor so that complete volume of transformer oil in the event of spillover could be accommodated. Sufficient arrangement to prevent spread of fire to oil pumps be made.
- 4. Transformers room and sub-station room shall be provided with steel shutters of 8' X 8' with suitable grills. Sufficient arrangement for pumping the water out, in case of flooding should be made to minimize loss to switchgear and transformer.
- In view of experience of installation of exhaust chimneys in the multistoreyed buildings at undesirable locations, proper provision in the form of vertical exhaust leading to above terrace level should be made for the substation.
- 6. Electric sub-station space should be made available free of cost by promoters and should be free of seepage/leakage of water. There should be no

combustible material kept in side or in the vicinity. Periodic inspection of electric sub-station shall be mandatory and violation of any bye-law will be dealt, sternly with penalty and immediate disconnection.

# **D.2.1.2.** Other Requirements for Sub-station

- 1. The sub-station will preferably be located on the ground level failing which it can be in the basement floor in no case at higher level.
- 2. The entire space will be provided at one floor in continuation.
- 3. The minimum width of the sub-station space shall not be less than 6 mt.
- 4. The areas given above in respect of the different categories of rooms hold good if they are provided with windows and independent access doors.
- 5. All the rooms should be provided with partition up to the Ceilings and shall have proper ventilation. Special care should be taken to ventilate the transformer rooms and where necessary, louvers at lower levels and exhaust fans at higher level shall be provided at suitable locations.
- 6. In order to prevent storm water entering the transformer and switch rooms through the soak pits, the floor level of the sub-station shall be at least 15 cm above the highest flood water level that may be anticipated in the locality.

#### **D.2.2** Cable Trenches Shafts Etc.

**D.2.2.1**Suitable number of vertical shafts, rising mains, distribution boxes, etc. shall also be provided as per the requirements at suitable location. Cable trenches with suitable handy covers for entry of the cables up to the substation onwards up to the street adjoining other building shall also be provided as per the requirements. These vertical shafts, rising mains, distribution boxes, cable trenches, etc. shall be so constructed as to be accessible only to authorized personnel. The rising mains and other installations in the vertical shafts, tap off boxes distribution boxes etc. required at each floor shall be provided, installed and maintained by the owner at their own cost.

Adequate enclosed space shall also be provided at each floor for installation of equipment's for distribution on respective floors such as distribution boxes, cut-out, and meter boxes and main switches.

- **D.2.2.2**Location of Switch Room: In large installations other than where a sub-station is provided, a separate switch room shall be provided. This shall be located as closely possible to the electrical load center and suitable ducts shall be laid with minimum number of bends form the point of entry of the supply to the position of the main switchgear. The switch room shall also be placed in such a position that rising ducts may readily be provided there from to the upper floors of the building in one straight vertical run. In larger building, more than one rising duct and horizontal ducts may also be required for running cables from the switch room to the foot of each rising main. Such cable ducts shall be reserved for the electrical services only, which may, however, include medium and low voltage installations, such as call bell systems. Telephone installation should be suitably segregated.
- **D.2.2.3**Location and Requirement of Distribution Panels: The electrical gear distribution panels and other apparatus, which are required on such floor may conveniently be mounted adjacent to the rising mains, and adequate space should be provided at each floor for this purpose.
- **D.2.2.4**Location and Requirement of PBX/PABX Room: Information regarding provision and location of PBX/PABX room, telephone outlets and riser shall be ascertained form the relevant Authority.

Adequate space should be provided for installation of Sub-Distribution Board.

# D.2.3. GENERAL

**D.2.3.1**The maintenance of the built up space for electric sub-station, distribution equipment, vertical shafts and enclosure at each floor shall be done by the owner.

The standby arrangement for electricity supply up to and including the sub-station equipment and distribution pillars at the sub-station shall be provided compulsorily.

Appendix – "E"

(Bye laws: 2.14.5)

# Qualification of Technical Personnel for Preparations of Schemes for Building Permit and Supervision

#### 1.0 General

The qualifications of the technical personnel and their competence to carry out different jobs for building permit and supervision for the purpose of licensing by the Authority shall be as given in 2 to 6. The procedure for licensing the technical personnel is given in 6.

#### 2.0 Town Planner

- **Qualification:** The qualification for the town planner shall be under graduate or post graduate degree or equivalent diploma in Town Planning from a recognized institution along with the valid membership of the Institute of Town Planners, India.
- **2.2 Competence:** As provided in Building Bye-laws 2.11.2.
- 3.0 Architect:
- **3.1 Qualification:** The qualification for architects shall be those who are holding bachelor degree or equivalent in Architecture and hold valid registration with the Council of Architecture under the Architects Act, 1972.
- **3.2 Competence:** The architect is competent to carry out work related to building permit as given below and shall be entit led to submit.
  - i) All plans and related information connected with building permit
  - ii) Certificate of supervision for all buildings.

#### 4.0 Engineer

- **Qualifications:** The qualification for Engineer shall be degree or equivalent qualification in Civil Engineering / Municipal Engineering with valid membership (Civil) of the Institution of Engineers, India.
- **4.2 Competence:** The Engineer is competent to carry out the work related to Building Permit as given below and shall be entitled to submit.
  - i) Structural details and calculations for all buildings,

- ii) Certificate of supervision for buildings as in (i) above,
- iii) Sanitary / water supply works for all types of buildings.

## 5.0 Structural Engineer

- **Qualification:** The qualification of a Structural Engineer shall be degree in Civil Engineering or equivalent with post graduate degree in Structural Engineering or equivalent with valid corporate membership of Institution of Engineers, India.
- **5.2 Competence:** The Structural Engineer is competent to carry out the work related to building permit as given below and shall be entitled to submit.
  - (i) Structural design /details and calculations for buildings according to sanction plan and structural design, which incorporates the provision of structural safety as a specified in prevailing BIS Code.
  - (ii) Certificate of structural supervision for buildings as in 5(i) above.

# 6.0 Supervisor

- **Qualifications:** The qualifications for licensing of supervisor will be:
  - i) Three Years Architectural Assistantship or intermediate in Architectures from a recognized Institution and with two yeas experience.
  - ii) Three years Diploma in Civil Engineering from a recognized institution and with minimum two years experience; or
  - iii) Civil Draftsmanship from I.T.I with five years experience under a qualified Architect / Civil Engineer.
- **6.2** Competence: The supervisor shall be entitled to
  - i) superwise construction of buildings on plots upto 100 sq. mt. for residential plots only.

#### 7.0 Plumbers

Plumbers shall be licensed by the concerned Authority through examination of the candidates having the following minimum qualifications:

# 7.1 Qualifications:

- i) A fair knowledge of English/Hindi/Urdu
- ii) Knowledge of working drawings and dimensioned sketches

- iii) Certificate of training from ITI for the trade, with minimum two years experience of execution of sanitary and plumbing works under any govt.

  Deptt./ Local body or a qualified Architect / Engineer.
- iv) Experience of sanitary and plumbing works under any Government Department/Local Bodies or a qualified Architect/Engineer for a period of five years.

## 7.2 Competence

A plumber shall be competent to do the following jobs

- a) Submission of sanitary plans up to 500 sq mt. plot size and 4 storeyed buildings.
- b) Execution / supervision of sanitary works up to 500 sq mt. plot size and 4 storeyed buildings.
- **8.0 Electrician:** As prescribed by the concerned electricity company.
- **9.0** Fire Consultant: As prescribed by Chief Fire Officer, Town/City Fire Service,

Appendix: "E-1"

(Bye laws: 2.11.1)

## **Empanelment of Architect – Rules**

- **1. Definition:** In these rules, unless the context otherwise requires:
  - a) "Act" the Act of the concerned Local Body/Authority
  - **b) "Empanel Architect"** A person empanelled by the Authority as per rules under these bye-laws as authorized person to sanction building plans of residential buildings up to 15 mt. in height and for plot size up to one hectare, forming part of an approved lay-out plan.
  - c) "Person Authorized" means a qualified and duly registered Architect having a degree in Architecture or equivalent qualification and registered with the Council of Architects, India with minimum 5 years experience.
  - **Sanctioned Building Plans** means a building plan of a building/premises to be constructed on a plot and approved by the Competent Authority/ Architect in accordance with the provisions of Master Plan/Zonal development plan and Building Bye-laws.
  - **e)** "**Fee**" means a fee to be charged by the Authority/Architect for sanction of building plans.
- 2. For the empanelment, the qualified Architect shall submit list of projects handled with proof and credentials along with recommendations form the Council of Architects, India.
- **3. The empanelment of an Architect** shall be for a period of two years and can be extended from time to time subject to review by the Authority at the end of every two years.
- 4. The Architect shall be empowered to sanction building plans of residential building up to 15 mt. height and for plot size up to one hectare, forming part of approved layout plan.
- 5. In respect of sanction of building plans of Government buildings, the plans shall be sanctioned by the Chief Architect of the concerned Department of the

- Government, provided it conform to Master Plan/Zonal Development Plan, approved layout plan and Building Bye-laws.
- on the Architect shall charge building application fee, other charges as prescribed under Building Bye-laws and other charges as prescribed form time to time. He will be permitted to retain 50% of the building application fee towards his service charges and balance amount along with other charges shall be deposited with the Authority along with two sets of building plans and other required documents. If the Authority wants to raise any objection, the same shall be communicated to the Architect with in 30 days of filing the application with the Authority. The Architect while sanctioning the building plans shall take due cognizance of the objections raised by the Authority.
- 7. **Before sanction of building plans,** the Architect shall ensure and satisfied himself that various permissions as required the law from different Authorities have been obtained.
- 8. The Empanelled Architect shall also ensure at the time of sanction of building plans as well as during the inspections at construction stage and also at the time of giving completion certificate that there is no violation of Master Plan/Zonal Development Plan, Approved Layout Plan and Building Bye-laws and other related rules and regulations in force.
- 9. In case it is found that there had been a violation of Master Plan/Zonal Development Plan, approved layout plan and Building Bye-laws and other related rules and regulations in force at the time of sanction of building plans/ construction stage / issue of completion certificate, action for penalising the Architect shall be taken including removal from the panel and referring the matter to the Council of Architects of India for appropriate action.
- 10. The Empanelled Architect shall be required to file a quarterly return of building plans received for sanction, fee received, etc. to the Concerned Authorities. His work shall be monitored to check the backlog and performance.
- 11. Before issue of a completion certificate a joint inspection is to be carried out by the officer authorized by the Authority in this behalf and the empanelled Architect. Within 30 days of the joint inspection, the Architect shall be informed about the non-

- compoundable deviations to be removed and composition fee to be charged for minor deviations under the rules.
- 12. The Architect shall issue the completion certificate after having satisfied himself that non-compoundable deviations have been removed form the building and necessary composition fee has been deposited with the concerned Authority.

Appendix: "F"

(Bye laws: 6.11)

# Penal Action for violation of provisions of Development Code of Master Plan, Zonal Regulation and Building Bye-laws.

# (A) Non-Compoundable Items

Any deviations except those set in para "AA" hereunder, from the maximum, minimum prescribed limits regarding:

- 1. Coverage,
- 2. F.A.R.
- 3. Setbacks,
- 4. Open spaces,
- 5. Total height of the building
- 6. No. of floors,
- 7. No. of DUs & density
- 8. Parking norms,
- 9. Light and Ventilation provisions,
- 10. Use
- 11. All other provisions of these bye-laws except item given in para 'B' below shall not be compounded/regularized and shall have to rectified by altering/ demolition at the risk and cost of owner. Besides this any other action as per terms and conditions of lease and provisions of Act shall proceed.

### (A.A) Compounding Excess Coverage/FAR

i) Deviations in the coverage/FAR to the extent of 5% of the permissible coverage/FAR or 13.5 sq.mt. whichever is less in building(s) use premises, other than building(s) use premises where 100% ground coverage and fixed height is allowed as per Architectural control forming part of comprehensive schemes like District Centre, Community Centres, Cluster Court Housing etc. may be compounded after levying penalty at the following Rates:

Rates of excess coverage/floor area:

Up to 5% of excess coverage/FAR a one time compounding fee equivalent to the land rated in the concerned locality applicable at the time of the application for compounding.

ii) For excess coverage / FAR for above 5%

Any excess coverage above 5% or 13.5 sq.mt whichever is applicable would be liable to demolish to that extent.

iii) Compounding at set back Infringements

The infringements of the set backs maximum to the extent of 30 cm (1 ft.) may be compounded by way of levying compounding fee at the following rates:

Infringements	Residential Buildings	Non-Residential Buildings
Upto 15 cm (6 inch)	Rs. 1000 per sq.mt. of	Rs. 2500 per sq.mt. of
	area infringing the set	area infringing the set
	back	back
Above 15 cm (6 inch)	Rs. 2000 per sq.mt of	Rs. 5000 of area of the
	area infringing the set	infringing the set back
	back	

# (B.B) Compoundable Items

If a building or part thereof has been constructed unauthorized, i.e. without obtaining the requisite building permit from the concerned Authority as required under the building byelaws, the same shall be compounded at the following rates provided the building or part thereof so constructed other wise conforms to the provisions contained in the Building Byelaws and Master/Zonal Plan regulations. For this party shall have to submit the request for building permit in the prescribed procedure.

#### Rates:

- a) Rs. 50 per sq.mt. of the covered area constructed unauthorized in residential building up to 500 sq.mt. Plot size.
- b) Rs. 100 per sq.mt of the covered area constructed unauthorized in the building categorized below:
  - All Govt. Public and Semi-Public and Utility Buildings.
  - Religious, Institutional and Educational Buildings.
- c) Rs. 250 per sq.mt. of the covered area constructed unauthorisedly

- Residential Building above 500 sq.mt. plot size, Group Housing and Guest Houses.
- Industrial Buildings:
- Storage buildings (underground or above ground)
- d) Rs. 1000 per sq.mt. of covered area constructed unauthorisedly.
  - Cinema and Theatre Building.
  - Petrol Pumps (Filing / Service Station)
  - Hazardous Buildings.
  - Commercial / Business Buildings
- The building not covered specifically under the above categories shall be compounded as decided by the Authority, considering the merit of each Individual case.
- 2. Items which are exempted form the calculations of the coverage and FAR e.g. cupboards, canopy, basement, and mezzanine, loft, watchman cabins, etc. but constructed unauthorisedly without obtaining prior permission from the Authority, but within the permissible limits shall also be compounded/regularized at the rate prescribed above.
- ii) Deviations of the building bye-laws other than specified in (A) (Non-compoundable) Deviation up to the maximum extent of 10% from the maximum/minimum prescribed limit (as prescribed by the building bye-laws) shall be compounded at the following rates:
  - a) In case of deviations of areas of various components of the building, the rate of penalty will be @ Rs. 50/- per 1% deviation.
  - b) For deviations in terms of height the penalty shall be @ Rs. 50/- per 1% of deviation for every 10 sq.mt. or part thereof of the affected area.
  - c) Deviations from the prescribed limit of width, length, penalty shall be @ Rs. 50/- per 1% of the deviation for every 10 sq.mt. or part thereof of the affected area.

#### Notes:

1) Notwithstanding the provisions above, no penalty shall be levied for the first 3% of deviation but in case the deviation limit exceed 3% penalty shall be levied at above rates for the total deviation up to 10%.

- 2) The penalties of the above rates as given in (ii) (a), (b), and (c) shall be charged for each deviation and for every component of the building separately.
  - d) In case of increase in size of canopy in front open space form the prescribed limits of byelaws the same shall be charged @ Rs. 100/- per sq.mt.
  - e) End walls up to 0.9 mt. in width in a terrace type construction constructed purely as an architectural feature Rs. 50/- each.
  - f) Enclosing of front balcony with jail wall which is being used as a part of stair case Rs. 500/sq.mt.
  - g) (i) An open Urinal Wall up to 1.7 mt. height ------ No Penalty.
    (ii) Water storage Tank over open urinal with walls up to 1.70 mt. in height ----- No Penalty, if sanctioned. If not sanctioned, Rs. 500/- each.
  - h) All roof projections beyond permissible limit of bye-laws as specified shall be counted towards FAR calculations if other wise the same do not infringe up to any other bye-laws.
  - i) Plinth steps in setback portion ----- Rs. 100 each.
  - j) Extra slab in mumty constructed without sanction shall be compounded at the rate given in (B) (compoundable item) provided it does not infringe upon the provision of any other byelaws.
  - l) Partition wall provided without sanction at any floor if the same are not infringing upon the provision of any other bye-laws ------- Rs. 50 per sq.mt. of the surface area of the wall (i.e. length X height)
  - Projections/sunshade/(not more than 0.45 mt. in width on public streets/roads over window opening above first floor shall be objected. However, at Ground Floor these shall be not permitted.

#### Note:

The Authority if satisfied that there are other deviations of general nature, which are not described above, may fix rates for compounding such deviations. However, there shall be no further relaxation in FAR and coverage over that permitted above.

# Appendix - "G"

(Bye laws: 6.8)

# To Provide Facilitates in the Public Building excluding Domestic Buildings for Handicapped Persons

#### 1. Definitions

Ambulant Disabled People: Disabled who are able to walk but who may depend on

prostheses (Artificial Limbs) orthoses (Calipers),

Sticks, crutches or walking aids.

Non-Ambulant Disabled People: Disabled people with impairments that confine them to

wheelchair.

Wheel Chair: Chair used by disabled people for mobility.

(i) Size of small wheel chair: 750 x 1050 mm

(ii) Size of large wheel chair: 800 x 1500 mm

## 2. Scope

These bye-laws are applicable to public buildings and exclude domestic buildings.

Building which shall provide access to ambulant disable and Non-Ambulant disabled are listed below. Distinction is made for buildings to be designed for the use of large wheel chairs and small wheel chair.

#### 3. Building to be designed for Ambulant Disabled People

Higher Secondary School, Conference Hall, Dance Halls, Youth Centres, Youth Clubs, Sport Centres, Sport Pavilions, Boat Club Houses, Ice Rinks, Bowling Centres, Swimming Pools, Police Stations, Law Courts, Courts Houses, Sport Stadiums, Theaters, Concert Halls, Cinemas, Auditorias, Small Offices (the maximum plinth area 1400 sq.mt) Snack Bars, Cafes and banqueting rooms (for capacity above 50 dinners).

Note:

- i) In sport stadiums provisions shall be made for non-ambulant spectators (small wheel chair)
- *ii)* @ 1:1000 up to 10,000 spectators and @ 1:2000 for spectators above 10,000.
- iii) In Theaters, Concert Halls, Cinemas and Auditoria provisions shall be made for non-ambulant spectators (Small Wheel Chairs) @ 1/250 up to 1000 spectators and 1/500 for spectators above 1000.

# 4. Building to be designed for Non-Ambulant Disabled People:

Schools for physically handicapped, cremation, buildings as mentioned in 3, Botanical Gardens, Religious Buildings, Old People Clubs, Village Halls, Day Centers, Junior Training Centres, Post Offices, Banks, Dispensaries, Railway Stations, Shops, Super Markets, and Departmental Stores.

Notes: Large wheel chair criteria shall be applicable on ground floors of the following building, post offices, banks, dispensaries, railway station, shops, supermarkets, and departmental stores.

5. Building to be designed for Non-Ambulant People (using small wheel chairs) Public lavatories in Tourist Sports, Clubs Motels, Professional and Scientific Institution, Museum, Art Galleries, Public Libraries, Laborites, Universities, Collage for further Education, Teachers Training Colleges, Technical College, Exhibition Halls Dentist Surgeries, Administrative Department of the Hospitals, Service Stations, Car Parking, Buildings Airports Terminals, Bus Terminals, Factories Employing Handicapped for Sedentary Works, Large Offices, (with plinth area abode 1400 sq.mt.), Tax Offices, Passport Offices, Pension Offices, and Labour Offices, Cafes, Banqueting Rooms and Snack Bars (For capacity above 100 dinners).

# **6.** Buildings Requirements:

**6.1** The following building requirements are to be provided for building mentioned above.

# **6.2** Site Planning

Access path form plot entry and surface parking to building entrance shall be minimum of 1800 mm wide having regular surface without any steps.

The parking of vehicles of disabled people two equivalent car spaces (ECS) shall be provided near entrance of 30 m from building entrance.

# 7. Approach to Plinth Level

Ramp shall be provided to enter the building, minimum width of ramp shall be 1800 mm with maximum gradient 1:12, length of ramp shall not exceed 9.0 m having 900 mm high hand rail on both sides extending 300 m on both sides of ramps. Minimum gap from the adjacent wall to the handrail shall be 50 mm.

Entrance landing shall be provided adjacent to ramp with the minimum dimension 1800 X 2000 mm.

Minimum Clear opening for the entrance door shall be 1000 mm.

Threshold shall not be raised more than 12 mm.

For stepped approach size of tread shall not be less than 275 mm and maximum riser shall be 150 mm.

# 8 Stairways

Height of the riser shall not be more than 150 mm and width of the tread not less than 275 mm, nosing if provided shall not extend beyond 25 mm. Maximum number of risers on a flight shall be limited to 12.

#### 9. Lifts

Whenever lift is required as per bye-laws, provision of at-least one lift shall be made for Non-Ambulant disabled (using small wheel chairs with the following minimum dimensions of lift).

Clear internal depth 1090 mm
Clear internal width 1750 mm
Entrance door width 910 mm

A handrail not less 600 mm long at 1000 mm above floor level shall be fixed adjacent to the control panel.

#### 10. Toilets

**10.1** One special W.C. in a set of toilet shall be provided for the use of disabled. No additional provision of W.C. is to be made for disabled.

Size of the W.C. shall depend on the category of disabled for whom it is has been provided.

All doors in W.Cs shall open outside.

The type of W.C. shall be European with seat height as 500 mm.

Handrails, where provided shall have min 25 mm dia.

#### 10.2 Provision of W.Cs in buildings without lift:

Provision of special W.C. shall be made on all floors for buildings designed for ambulant disabled persons.

For buildings designed for non-ambulant disabled special W.C. shall be provided at Ground Floor. Size of W.C. shall depend on the type of wheel chair used by the disabled.

#### 10.3 Provisions of W.Cs in buildings with lift:

Provision of Special W.C. shall be made on all floors. Size will depend on the category of disabled for whom it has been provided.

#### **10.4** Toilet Details

### **10.4.1** For Toilets Designed for Ambulant Disabled

The minimum size of W.C. shall be 1075 x 1650 mm with a minimum depth of 1450 mm from entry door 900 mm. Long handrail on the side closer to W.C. with a clear width between the handrails shall be 900 mm and height of handrails shall be 800 mm from floor level.

Minimum size of the clear door opening shall be 780 mm.

# 10.4.2 For Toilets Designed for Non-Ambulant Disabled Small Wheel Chair

The minimum size of W.C. shall be 1350 x 1500 mm with a minimum depth of 1500 mm from entry door. 900 mm long handrail on the side closer to W.C. shall be provided. To provide movement space for wheel chair, W.C. seat shall be fixed towards one side to the opposite adjacent wall. The centerline of W.C. from the adjacent wall shall be 400 mm and minimum 950 mm from the other wall.

Minimum size of the clear door opening shall be 780 mm.

#### 10.4.3 For Toilets Designed for Non-Ambulant Disabled Using Large Wheel Chair

The minimum size of W.C. shall be 1500 X 1750 with a minimum depth of 1750 mm for entry door. 900 mm long handrail on the side wall closer to W.C. shall be provided. To provided movement space for wheel chair, W.C. seat shall be fixed towards one side of the opposite wall. The centerline of the W.C. from the adjacent wall shall be 400 mm and a minimum of 1100 mm from the other wall. Min. size of clear door opening shall be 860 mm.

#### Appendix - 'H'

(Bye laws: 6.9)

# Regulations for Resettlement and Jhuggi Jhonpri (JJ) Institu Upgradation

# i) Density

The net density shall be up to 250 tenements per hectare.

# ii) Minimum Plot Size

The Minimum Plot Size shall be 25 sq.mt. However, it can be 18 sq.mt. with 100% coverage provided 7 sq.mt. per tenement is clubbed for cluster space.

# iii) External walls

115 mm thick external brick wall with or without plaster shall be permitted.

#### iv) Staircase

Single flight staircase without landing between the two floors shall be permitted.

#### v) Pathways

The width of path ways shall be as follows:

2 mt. width for pathways up to 30 m in length.

3 mt. width for pathways up to 50 m in length.

## vi) Flushing System:

In water closets flushing system shall not be essential and toilets without this provision may be permitted.

## vii) Water closets pan size:

The water closets seat shall be of minimum 46 m (18 inches) in length.

# viii) Septic tank and leaching pit (soak pit)

A septic tank shall be provided with capacity 141.6 m liters (five cubic feet) per capita, where the municipal services are likely to be available within four or five years or so, pour flush water seal latrines (NEERI type) shall be permitted, where the municipal sewage system is not available and the water table in the area is not high.

Appendix - "I"

(Bye laws: 6.10)

# Regulations for Low Income Housing on the lines of ISS-8888 formulated by the BIS (Bureau of Indian Standards)

- ISS 8888 deals with the requirements of low income housing, keeping in view of fire safety, health safety and structural safety in accordance to National Building Code and relaxation in the planning and general building requirements, which have bearing on cost of construction which needs to be reduced. The code is applicable for:
  - a) Layout plan for low income hosing colonies to be developed either by public or by private agencies.
  - b) Design for construction of building for such income group people either by public or by private agencies.
- 2. Keeping in view ISS-8888, the following provisions are incorporated in the Building byelaws

## Building bye-laws for low income housing based on ISS-8888 (1978).

## Provision relating to layout planning

- i) The type of development may be plotted development income housing/flatted development as low housing/block development as a group housing.
- ii) Density: Residential density is indicated in terms of dwelling units per hectare as below:

Maximum Density for Low Income Housing

Sl. No.	Density in dwelling units / ha for plinth area of unit of 33 sq.mt.	· ·	No. of storeys
1	2	3	4
I	130	85	1
ii	250	170	2
iii	300	225	3
iv	250	260	4

#### Note:

- 1. These densities are applicable to a cluster of dwellings up to 400, with a family of 5 members.
- 2. Vertical incremental housing shall be permitted in single ownership plot.
- 3. These densities includes provision for open spaces, convenience shopping, nursery and all internal roads and pathways, but do not include peripheral road around the cluster.
- 4. The minimum density shall be 75 per cent of the value given under column 2 and 3.
  - \* The development up to 3 storeys is generally recommended. The number of storeys shall be restricted to four only.
- iii) Size of the plot / plinth area

Minimum plot size shall be as follows with coverage not exceeding 75% with the details as below:

### **Minimum Plot Size**

# **Type of Development**

30 sq.mt.	Incremental housing with one room, cooking space and			
	combined bath and W.C. on ground floor and future			
	extension of one room and a bath on the first			
	floor/ground floor.			
40 sq.mt.	Two roomed house on each floor for Group Housing /			
	Individual Ownership house.			

#### Note:

- The minimum size of plots takes into account the need of incremental housing. In the case of cities (other than Metropolitan Cities) with population, less than 0.5 million, the size of the plots may be increased by 33.5 per cent
- 2. In exceptional cases in metropolitan cities with population more than one million the size of the plots may be brought down to 25 sq.mt. in case of low income housing colonies located in congested area or in areas as decided by the Authority.

## iv) Other Requirements

a)	Open spaces	0.3 ha/1000 persons
b)	Road area	10% to 20% of the site
c)	Nursery School	0.1 ha (one site) for 1500 population
d)	Shopping Centre	@ 4 shops per 1000 population is to be provided.

3. General Building Requirements for Low Income Housing As per I.S.8888-1978.

Sl.	Component of Building	Requirements
No.	F	1
3.1	Habitable Room	
	(i) In case of one roomed house	Area 2.5 sq.mt
	including space for cooking	Width 2.4 mt.
		Height 2.6 mt.
	(ii) Two roomed house	Area 6.5 sq.mt
		Width 2.1 mt.
		Height 2.6 mt.
	(iii) Height in case of sloping roofs	Avg. height 2.6 mt.
		Min. height 2.0 mt.
		(at eaves)
3.2	Kitchen	
	(i) Cooking alcove serving as	Area 2.4 sq.mt.
	cooking space	Width 1.2 mt.
		Height 2.4 mt.
	(ii) Two roomed house	Area 3.3 sq.mt
		Width 1.5 mt.
		Height 2.4 mt.
3.3	Bathroom	Area 1.2 sq.mt
		Width 1.0 mt.
		Height 2.2 mt.
3.4	W.C.	Area 0.9 sq.mt
		Width 0.9 mt.
		Height 2.2 mt.
3.5	Combined bath and W.C	Area 1.8 sq.mt
		Width 1.0 mt.
		Height 2.2 mt.
3.6	Balcony	Min. width 0.9 m
3.7	Staircase	
	(i) 2 storeyed – Straight Flight	Width 0.60 mt. (min)
	Winding	Width 0.75 mt. (min)
		Min. tread 22.5 cm.
	(ii) 3 storeyed or more Strait Flight	Max riser 20.0 cm.
	Winding	Width 0.75 mt. (min)
		Width 0.90 mt. (min)
		Min. Tread 25.0 cm.
		Max riser 20.0 cm.
Notes A	A) the minimum clear head room shall be 2.	1 mt.
3.8	Plinth	Min. height 30 cm from the
		surrounding ground level
3.9	Lighting and Ventilation	(a) one – tenth of the room floor area
		for dry hot climate
		(b) one sixth of the room floor area
		for wet-hot climate