





# केन्द्रीय लोक निर्माण विभाग CENTRAL PUBLIC WORKS DEPARTMENT



# PLINTH AREA RATES 2019



DIRECTOR GENERAL, CPWD, NIRMAN BHAWAN, NEW DELHI



भारत सरकार Government of India

# PLINTH AREA RATES 2019

June 2019 Director General, CPWD, Nirman Bhawan, New Delhi



PRABHAKAR SINGH Director General



भारत सरकार Government of India



केन्द्रीय लोक निर्माण विभाग

निर्माण भवन, नई दिल्ली-110011

Central Public Works Department Nirman Bhawan, New Delhi-110011 Tel: 23062556/1317, Fax: 23061884

E-mail : cpwd\_dgw@nic.in

## **Foreword**

Plinth Area Rates being published by CPWD from time to time is a comprehensive and useful Technical Document to arrive at preliminary cost of a Project. Apart from CPWD Engineers, this publication is used by most of Engineering Organizations and Builders in the country.

Last Plinth Area Rates were brought out in the year 2012, as such a need was felt to revise them incorporating revised GPRA norms approved by the Ministry of Housing & Urban Affairs in the year 2018.

I wish to place on record the commendable work done by Dr. K.M. Soni, ADG(Tech) Shri M.K. Malik, Chief Engineer (CSQ) (Civil) and team of CSQ (Civil and Electrical) in bringing out the Plinth Area Rates 2019 in a short time.

(Prabhakar Singh)
Director General



DR, K, M, SONI

# ADDITIONAL DIRECTOR GENERAL (TD) Central Public Works Department Nirman Bhawan, New Delhi



## **PREFACE**

Plinth Area Rates are being published by Central Public Works Department from time to time and last were published in 2012. This is a comprehensive and useful technical document being used by CPWD, PWDs, Other Govt. Departments, Public Sector undertakings, Builders, Engineers and Valuation officers for preparation of Preliminary Estimates, Rough Cost Estimates etc. with respect to all kinds of buildings like Offices/Colleges/Schools/Hostels/Hospitals and Residential Buildings. CPWD has been publishing Plinth area rates for long but during post-independence era the first PAR was issued in 1955 with subsequent revisions in 1970, 1976, 1992, 2007, 2010 (2007-reprint) and the last in 2012. From last few years references from various stakeholders were received for revision of these Plinth Area Rates and possible simplifications.

Also in 2013, MoHUA revised the Plinth area norms for General Pool Residential Accommodation (GPRA) vide office Memorandum No. DG/Arch./6 dated 07.08.2013 and thus there has been a need to incorporate them in new Plinth Area Rates.

Considering the above issues, it was decided to issue New Plinth Area Rates – 2019 incorporating new norms of GPRA.

For arriving at some concisely acceptable rates in PAR-2019, data of various recently completed projects from various field units were called. Out of the data received in CSQ unit from various field units for few Non-Residential Buildings and two Residential Buildings, projects were analysed for working out the New Plinth Area Rates. For doing so the completed project costs were segregated and per sqm cost so derived was suitably enhanced by adding relevant cost index between the completion date and the prevailing cost index.

Accordingly, the new plinth area rates are prepared as Plinth Area Rates- 2019, with 01.04.2019 rates being considered as of base 100. Additionally, these are made concise with the following considerations;

I) Use of new technological items do not have much of cost bearing as such nothing extra is added for adoption of new and emerging technologies.

- ii) Rates for office buildings, school buildings and colleges/institutions are merged into Non-Residential buildings. The rates for hostels are merged into residential buildings.
- iii) Plinth area rates for load bearing structures are now not given in separate sub head but at SI. No. 1.2 (1.2.1 & 1.2.3) in sub head I exceptt SI. No. 1.3.5 and 1.3.6, other extras for load bearing structures shall remain same as that of RCC framed structures.
- iv) In Annexure-IV(Proforma for calculation of cost index) weightages of items have been slightly modified considering current building technology, specifications and materials being adopted.

The Plinth Area Rates-2019 (with base 01.04.2019 as 100) comprises of following Annexures.

**Annexure-I:** New Plinth Area Rates with base 100 as on 01.04.2019 (for Non-Residential/Residential Buildings in R.C.C. framed & Load bearing structures along with services and development of site components.

**Annexure-II:** Specifications for Residential Buildings, Scale of Amenities, Scale of Sanitary & Water Supply fittings and Elect. Installations in GPRA and Specifications for Non-Residential Buildings.

**Annexure-III:** Guidelines for working out Plinth Area from Plans (for the purpose of calculating plinth area as per IS Code-3861 & as per Memo No. 29/2/58 (WI). Dated Oct. 1983.

**Annexure-IV:** Proforma for calculating cost index for future Cost indices with base 100 as on 01.04.2019 indicating revised weightages.

**Annexure-V:** PAR provisions for specialized E & M Works as on 01.04.2019.

All efforts have been made to compile these Plinth Area Rates-2019 user friendly by incorporating the views and feedback from various stakeholders and the field units and making necessary simplifications.

I would like to acknowledge the lead taken by Sh. M.K. Mallick, Chief Engineer, CSQ(Civil), Sh. C.K. Varma, Chief Engineer (E) (CSQ) and dedicated efforts of Sh. Divakar Agrawal, SE(TAS), Sh. D.K. Tulani, SE (E) TAS, Sh. Ashish Kumar Singh, Director (Finance), Shri M.L. Prasad, EE(TAS-II), Sh. V.K. Khetan, EE(E) TAS, Sh. Naresh Kumar, EE, (P&WA), Sh. D.S. Adhikari, AE(QA), CSQ, Sh. Sanjay Singh, AE(TAS), Shri Patta Madhu Kumar, AE(TAS), Sh. Kommalapati Madhu, AE(E), TAS, Ms. Shahana Shamim, Asstt, Architect O/o CA(NDR), Sh. Mukesh Varma, Chief Estimator (C), DCC-6, Sh. Prabhat Singh, Sr. D/Man, (TAS), other staff of CSQ and field units officers who have provided valuable inputs/data in finalisation of Plinth Area Rates-2019.

Place: New Delhi Date: June 2019

(DR. K. M. Soni)

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# PLINTH AREA RATES AS ON 01.04.2019

## ANNEXURE – 1

Sl. No.	Description	Non-Residen	tial Buildings	Residential Buildings
		Office/School /College	Hospital	Hostels/Quarters (Type- I to Type-VI Qtrs.) & Bunglows (Type-VII & VIII)
			(Rates in	n Rupees Per Sqm.)
1.0	BUILDING COST (Specifications as per Annexure-II)			
1.1	RCC FRAMED STRUCTURE (Upto Six Storeys)			
1.1.1	Floor ht. 3.60 m.	25500	26800	-
1.1.2	Floor ht. 2.90 m.	-	-	19500
1.2	LOAD BEARING STRUCTURE (Upto Four Storeys)			
1.2.1	Floor ht. 3.60 m.	21700	22800	
1.2.2	Floor ht. 2.90 m.	-	-	16600
1.3	EXTRA FOR			
1.3.1	Extra for every additional storey over six storeys upto twelve storeys (For RCC Framed Structure only)		58	80
1.3.2	Every 0.3 m. additional/lesser height of floor above normal floor height of 3.60 m./2.90 m.		3	35
1.3.3	Every 0.3 m. higher plinth over normal plinth height of 0.45 m. (on G.F. area only )		3:	35
1.3.4	Every 0.30 m. deeper foundations over normal depth of 1.20 m. (on G.F. area only)		10	60
1.3.5	Making stronger foundations to take load of one additional floor at a later date (on area of additional floor only)	1470 (For RCC f structures	ramed	550 (For load bearing structures only)
1.3.6	Resisting Earthquake forces	1200		800
		(For RCC structure		(For load bearing structures only)
1.3.7	R.C.C. Raft foundations (Ground floor only)		51	50
1.3.8	Pile foundation (On ground floor area only)		16	600
1.3.9	Stronger structural members to take heavy load above 500 Kgs./sqm. upto 1000 Kgs./Sqm.		16	560
1.4	BASEMENT FLOOR			
1.4.1	Floor ht. upto 3.35 m. with Kota Stones/HDPE membrance i/c integral crystalline water proofing.	30000		
1.4.2	Add or deduct for every 0.30 m. height against normal height of 3.35 m.		9	00
1.5	FIRE FIGHTING			
1.5.1	With wet riser system		8	00
1.5.2	With wet riser and sprinkler system		12	200

Sl. No. Description Non-Residential Buildings Residential Buildings
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		Office/School /College	Hospital (Rates in Ru	Hostels/Quarters (Type- I to Type-VI Qtrs.) & Bunglows (Type-VII & VIII) pees Per Sqm.)
1.6	FIRE ALARM SYSTEM			
1.6.1	Manual Fire Alarm System		2	50
1.6.2	Automatic Fire Alarm System		6	00
1.7	Pressurized mechanical ventilation system in the		10	050
	basements with Supply duct of exhaust blowers (on basement area only)	(I	For RCC frame	e structures only)
1.8	STILT PORTION			
1.8.1	Stilt Portion of Multistorey RCC framed structure (up to ht. of 3.60m) Applicable area only		800	00
1.8.2	Every 0.30 m. additional height (above 3.60 m.)		200	

Note:- 1) The rates for items are applicable on entire plinth area except items no. 1.3.3, 1.3.4, 1.3.5, 1.3.7, 1.3.8, 1.5.1, 1.5.2, 1.6.1, 1.6.2, 1.7, 1.8.1, 1.8.2.

2) The rates mentioned above are inclusive of all taxes, but excluding statutory provisions.

		Non-Res	idential Build	Residential Buildings		
Sl. No.	Description	Office & College	Hospitals	Schools	Hostels	(Type- I to Type- VIII Qtrs.)
2.0	SERVICES				-	
2.1	Internal Water Supply & Sanitary Installations	40/	100/	50/	12% with attached toilets, 8% with common	00/
2.2	External Service connections	4%	10%	5%	toilets.	9%
2.2.1	Electrical External Service Connections	3.75%	3.75%	3.75%	3.75%	3.75%
2.2.2	Civil External Service Connections	1.25%	1.25%	1.25%	1.25%	1.25%
2.3	Internal electric installations	12.5%	12.5%	12.5%	12.5%	12.5%
2.6	EXTRA FOR					
2.6.1	Power wiring and plugs	4%	4%	4%	4%	4%
2.6.2	Central Call bell system	0.5%	0.5%	0.5%	0.5%	-
2.6.3	Lightning conductors	0.25%	0.25%	0.25%	0.25%	-
2.6.4	Telephone conduits	0.25%	0.25%	0.25%	0.25%	-
2.6.5	Centralized Intercom system	-	-	-	-	1%
2.6.6	Third Party Quality Assurance	1%	1%	1%	1%	1%

#### Note:-

- 1. Third Party Quality Assurance charge of 1% shall be taken in estimate only when client department request for TPI.
- 2. For modular furniture to be provided in offices etc. extra provision for raceways, conducting and LAN shall be made as per requirement.
- 3. LED fitting/fixtures are inclusive in Internal Electrical Installation rates. No separate provision shall be made.
- 4. Percentage mentioned above means the percentage of building cost as per item 1.1/1.2.

Type of lift	Capacity/ Persons	Weight	Speed in M/Sec.	Travel	Doors	Control	Price (Rs. In lacs)	Addl. Price for each additional floor (Rs. )
2	3	4	5	6	7	8	9	10
LIFTS								
Passenger lifts								
Passenger lift	8	544 Kg.	1.0	G+4	Power operated	ACV VVF	16	90,000
Passenger lift	8	544 Kg.	1.5	G+5	Power operated	ACV VVF	18	90,000
Passenger lift	13	884 Kg.	1.0	G+4	Power operated	ACV VVF	18	90,000
Passenger lift	13	884 Kg.	1.5	G+5	Power operated	ACV VVF	20	90,000
Passenger lift	16	1088 Kg.	1.0	G+4	Power operated	ACV VVF	24	1,10,000
Passenger lift	16	1088 Kg.	1.5	G+5	Power operated	ACV VVF	26	1,10,000
Passenger lift	16	1088 Kg.	2.5	G+12	Power operated	ACV VVF	70	1,10,000
Passenger lift (Bed lift)	20	1360 Kg.	0.75	G+4	Power operated	ACV VVF	24	1,10,000
Passenger lift	20	1360 Kg.	1.5	G+5	Power operated	ACV VVF	27	1,10,000
Passenger lift	20	1360 Kg.	2.5	G+12	Power operated	ACV VVF	75	1,10,000
Goods lifts (2 speed )								
	1 Ton	-	0.5	G+4			26	85,000
	2 Ton	-	0.5	G+4			33	85,000
	3 Ton	-	0.25	G+4			41	1,00,000
	2 LIFTS Passenger lifts Passenger lift Goods lifts	Persons  2 3  LIFTS  Passenger lifts  Passenger lift 8  Passenger lift 13  Passenger lift 13  Passenger lift 16  Passenger lift 16  Passenger lift 20  Passenger lift 20  Passenger lift 20  Goods lifts (2 speed)  1 Ton 2 Ton	Persons           2         3         4           LIFTS	Persons       M/Sec.         2       3       4       5         LIFTS	Persons         M/Sec.           2         3         4         5         6           LIFTS         5         6         1.0	Persons         M/Sec.           2         3         4         5         6         7           LIFTS         Passenger lifts         Passenger lift         8         544 Kg.         1.0         G+4         Power operated           Passenger lift         13         884 Kg.         1.0         G+4         Power operated           Passenger lift         16         1088 Kg.         1.5         G+5         Power operated           Passenger lift         16         1088 Kg.         1.5         G+5         Power operated           Passenger lift         16         1088 Kg.         2.5         G+12         Power operated           Passenger lift         20         1360 Kg.         0.75         G+4         Power operated           Passenger lift         20         1360 Kg.         1.5         G+5         Power operated           Passenger lift         20         1360 Kg.         2.5         G+12         Power operated           Passenger lift         20         1360 Kg.         2.5         G+12         Power operated           Passenger lift         20         1360 Kg.         2.5         G+12         Power operated	Persons   M/Sec.	Persons   M/Sec.     (Rs. In lacs)

Note:- 1. ACV VVF=AC variable voltage variable frequency.

<sup>2.</sup> Provision for lift may also be taken for the buildings having floor less than G+4.

Sl. No.	Description	Rates in Rupees
4	WATER TANK (RCC ONLY )	
4.1	Overhead tank without independent staging	18 / Litre.
4.2	Overhead tank upto staging height 20 metres	30/ Litre.
4.3	Overhead tank with staging height between 20 metres and upto 30 metres	35/ Litre.
4.4	Overhead tank with staging height between 30 metres and 40 metres	40/ Litre.
4.5	Underground sump	18 / Litre

Sl. No.	Description	Rates in Rupees
5	DEVELOPMENT OF SITE	
5.1	Levellling	160/ sqm.
5.2	Internal roads & paths	
5.2.1	Internal road with WBM and Bituminous top	175/sqm
5.2.2	Internal road with WMM and Bituminous top	190/sqm
5.2.3	Cement Concrete pavement with vaccum dewatered concrete	85/sqm
5.2.4	Footpath with kerb stone	85/sqm
5.3	Sewer	165/sqm
5.4	Filter Water Supply	
5.4.1	Distribution lines100 mm dia and below	100/sqm
5.4.2	Peripheral grid 150 mm to 300 mm dia pipes	100/sqm
5.4.3	Unfiltered water supply distribution lines	65/sqm
5.5	Storm water drains	130/ sqm.
5.6	Rain Water Harvesting (RWH)	90/sqm
5.7	Trenchs for services	585/meter
5.8	Boundary wall with 1.5 metre. normal height from GL & 0.60 meter high MS grill, and required no. of steel gates/wicket gates etc.	
5.8.1	With load bearing brick wall and plastering on either side and with/without intermediate columns and plinth beams.	9000/metre
5.8.2	With precast RCC columns & 1.80/2.40 metre long, 200/250mm wide and 80 to 100mm thick precast RCC horizontal panels having required foundation footings.	7500/metre
5.9	Horticulture Works	
5.9.1	Horticulture Operations including 30 cm earth filling , grassing, tree plantations/shrubs and potted plants etc.	250/sqm.
5.9.2	Vertical plantations	40/sqm

#### Note :-

- 1. The rates are per sqm. and are to be applied on the entire area of the plinth/plot to be developed.
- 2. These rates will apply to normal conditions and normal layout plans. If any extras are required due to nature of layout involving filling, cutting or bringing services, from large distances, then additional provision should be made.
- 3. Cost of bulk services water supply, sewage disposal e.g.
- (a) Tube wells, pumps, open wells, treatment plant, extension of lines from source of local bodies, head works at water source etc.
- (b) Sewage pumps, sewage treatment plants, septic tanks, extension of cut-fall sewer up to point of disposal etc. are not included in these rates. Extra provision depending upon site conditions may be made for these.
- 4. None of the specialize E&M services are included in the above rates and necessary provisions as may be required as per design requirements must be considered and rates as per items provided in Annexure-V of this PAR may be referred.
- 5. The green measures considered for Civil & Electrical works.
- (a) Over deck insulation and Application of high SRI reflective paint on the roof.
- (b) Masonry work in super structure with Autoclave Aerated Concrete (AAC) blocks/ fly ash bricks.
- (c) Window with reflective glass coating / High performance double glazed unit.
- (d) Paints with low VOC options.
- (e) Rain water harvesting.
- (f) Replacement of conventional pillar cock with pillar cock having infrared sensor and foam flow technology (in offices and Hospitals).
- (g) AC plant with VVVF drives and ECBC compliant chillers, high efficiency motors, plant optimizers etc. (cost of plant not included.)
- (h) Automated lighting controls with day light sensors and PIRs etc.
- (i) Dual plumbing system.

Plinth Area Rate - 2019

# SPECIFICATIONS FOR RESIDENTIAL BUILDINGS

Annexure-II

Sl.	Description		Latest applica	ble specifications		Remarks
No.		Type-I, II & III	Type-IV, IV (Spl.)	Type-V & VI	Type-VII & VIII	
1	FOUNDATIO	ON				
	Foundation & Structure	As per structural requirements	Same as Type-1, II & III	Same as Type-1, II & III	Same as Type-1, II & III	The design shall vary as per soil conditions
2	SUPERSTRU	ICTURE				
	For multi- storey framed structure	RCC framed & Filler walls of Aerated Cement Concrete (ACC) / Cellular Concrete Block (CLC) / Brick work / Fly-ash brick	Same as Type-1, II & III	Same as Type-1, II & Type-111	Same as Type-1, II &III	Any other energy efficient suitable local material in consultation with Architect and Structural Engineer.
	For Load bearing Construction	Brick-work/stone wall / ACC /CLC as per requirement /Fly-ash brick	Same as Type-1, II & III	Same as Type-1, II & III	Same as Type-1, II &III	Any other energy efficient suitable local material in consultation with Architect and Structural Engineer.
	Internal Partition	Half brick thick masonry in ACC/CLC/Fly-ash Bricks	Same as Type-1, II&III	Same as Type-1, II &III	Same as Type-1, II & III	Any other energy efficient suitable local material in consultation with Architect and Structural Engineer
3	DOORS AND	WINDOWS				6
	a) Frames(ex	cept of toilet/bath& WC	)			
	i) Door	2nd class teak wood/UPVC extruded frame sections with wall thickness minimum 2.0mm / powder coated or anodized aluminum extruded/tubular section/Engineered wood section	Same as type-1, II & III	Same as type-1, II & III	All frames external doors windows must have double rebates for Fixing of mosquito proof wire-mesh shutters on external side.	
	ii)Window	2nd class teak wood / UPVC extruded frame sections with wall thickness minimum 2.0mm/ powder coated or anodized aluminum extruded tubular section / Engineered wood section along with the provision of sub frame of suitable material.	Same as type-1, II & III	Same as type-1, II & III	Any other locally available material, with the approval of concerned Chief Architect.	

iii) Doors &	2nd class teak	Same as Type-1,	Same as Type-!. II &	Piinth A	Area Rate - 2019
Windows of toilet/bath/ WC	wood/UPVC extruded frame sections with wall thickness minimum 2.0mm / powder coated or anodized aluminum extruded tubular section/ Engineered wood section	II& III	III		
iv) Door /Window frames in servant area	N.A.	For servant quarters same as Type-I to III	For servant quarters same as Type-I to III		
b) Shutters					
i)Main Door/ External Door Shutters	Double shutters one with painted iron grill with stainless steel Grade-304mosquito proof wire mesh and other 35 mm thick factory made hardwood framed paneled shutter with melamine polish Or 35mm Thick MS tubular box section styles and rails frame with hard wood panels Or Factory made flush door	Same as Type-1 to III except that pre-laminated particle board paneling will be decorative on both sides. Or 35 mm thick factory made exterior grade both side decorative type flush door shutter with natural veneer and melamine polish.	S.S. wire-mesh and SS	Same as Type-V &VI	
ii) Servant's	N.A.	For Servant		For Servant	
Area		quarters same as Type-1 to III.		quarters same as Type-1 to III.	
Kitchen door	35mm thick shutter having 12mm thick pre-laminated (one side decorative and other side balancing) particle board panel at the bottom part and stainless steel wire mesh at upper part.	Same as Type-1, II & III	35mm thick shutter having 12mm thick both side decorative pre-laminated / veneered particle board panel/2 <sup>nd</sup> class teak wood with melamine polish at the bottom part and stainless ;steel wire mesh at upper part.	Same as Type-V &VI	

					Plinth A	Area Rate - 2019
	Bath , WC & Toilet Door	35 mm thick, pre- laminated flush door (one side decorative other side balancing) « 35mm thick hardwood styles and Rails with paneling with both sides' decorative pre- laminated particle board and finish in melamine polish / Factory made flush	Same as Type-1 to III  Same as Type 1, II & III	35 mm thick, prelaminated flush door (one side decorative other side balancing) 35 mm, thick,2 <sup>nd</sup> class teakwood Styles & Rails paneled of 12mm thick both side natural wood veneer finish paneled/ Glazed paneled shutter with 5.5 mm thick float	Some as Type- Same as Type- V&VI	riea Rate - 2019
	c) Window Shutters Ali windows shutters	Double shutter one with M.S. tubular box section / hardwood framed glazed panel and other with wiremesh shutter M	Same as Type 1, II & III	glass panes and finished in melamine polish.  Double shutter one with 2 <sup>nd</sup> class teakwood framed glazed pane! and other with wire-mesh shutter Or UPVC extruded section of wall thickness minimum 2.0mm framed glazed / paneled shutters	Same as Type-V & VI	
	Servant's Area (Door & Windows) d) Hardware	N.A.  Powder coated/	For servant quarters same as Type Ito III  Powder coated/	For servant quarters same as Type Ito III	For servant quarters same as Type Ito II!  Stainless Steel /	Shutters in all respective rooms shall be as per the finishes of Type-1 to III in those rooms  Rubberized Door
	& Fitting Main Units Servant's Area	anodized Aluminum S.S. fittings N.A.	anodized Aluminum S.S. fittings Powder coated M.S fittings.	Same as type-IV & IV special Powder coated M.S fittings.	Chromium plated brass/ Nickeled Chromium Brass. Powder coated M.S fittings.	flashing at the bottom rails of all externals doors shall be provided for protection from insects and rainwater etc.
4	FLOORING,	SKIRTING & DADO				
	Flooring living/Drawi ng Room, Dining & Family Lounge	Vitrified / Ceramic tile flooring of size not less than 400mm x 400mm	Vitrified tile flooring of size not less than 600mm x 600mm	18mm thick gang-saw cut pre-polished granite / marble/ stone of approved shade/ double charged vitrified tile flooring of size not less than 600x600mm Scratch resistant Engineered wood or laminated wooden flooring only in Living /drawing room. Granite, Marble, Stone & Tiles.	Same as Type V & VI	

Office area	N.A.	N.A.	N.A.	Scratch resistant	Area Rate - 2019
				Engineered wood or laminated wooden flooring	
Bedrooms	Scratch resistant Ceramic tiles / Vitrified tiles of size not less than 400mm x 400 mm with joints finished with matching grout	Scratch resistant Ceramic / verified tiles of size not less than 600mm x 600 mm with joints finished with matching grout	Vitrified/double charged vitrified tiles (with water absorption less than 0.08%) of size not less than 600mm X 600mmScratch resistant Ceramic tiles with joints finished with matching grout. Engineered wood or laminated wooden flooring in one bedroom.	Same as Type-V &VI	
Kitchen	Anti skid vitrified tiles of size no less than 300x300 mm with water absorption less than 0.08% lair with joints finished with matching grout	Same as Type- 1II & III	Anti skid vitrified tiles of size not less than 400x400mm with water absorption less than 0.08% laid seamless with joints finished with matching grout.	Anti-skid vitrified tiles of size not less than 600x600mm with water absorption less than 0.08% laid seamless with joints finished with matching grout	
Kitchen Counter	Udaipur green marble/granite stone with nosing	Udaipur green marble /granite stone with nosing	18mm thick gang-saw cut pre-polished granite with nosing as per design	Same as Type-V &VI	
Common circulation area	Mirror-polished Kota stone / locally available stone as approved by architect and matching skirting as per architectural drawing.	Same as Type-1, II &Type -III	18mm thick prepolished granite / Vitrified tiles (with water absorption less than 0.08%) flooring not less than 600mm x600mm	18mm thick gangsaw cut prepolished granite / marble stone of approved shade/ vitrified tiles (with water absorption less than 0.08%) size not less than 600x600 mm	
Servant's Area (Flooring)	N.A.	For Servant quarters Same as Type 1 to III	For Servant quarters Same as Type 1 to III \	For Servant quarters Same as Type 1 to III	Finishes in rooms shall per the finish Type-1 to I respective rooms
Common circulation area in servant quarters	N.A.	Mirror-polished Kota stone / locally available stone	Same as Type-IV & Type-IV(Special)	Same as Type-IV & Type- IV(Special)	Use of lostone shall be per approva Chief Archite
Staircase - Main	Pre-polished Kota stone in single length of treads & risers	Same as Type-1, II &III	18mm thick Prepolished / honed / flamed finish Granite in single length of Treads & Risers	Same as Type-V & VI	Nosing designate treads shall be a Architected design

- 6	Plint	h Δr	ea R	ate -	201	19

Fire escape Staircase	Pre-polished Kota stone in single length of tread & risers	Same as Type-1, II &III	Single length pre- polished Kota stone in Tread & Risers	Same as Type V & VI	- Do -
Toilets / Bathroom/ WC	Glazed ceramic anti- skid of size not less than 300X300 mm. including grouting the joints.	Same as Type-1, II & III	Rectified Ceramic antiskid tiles of size not less than 300X300	Anti-skid vitrified/ Ceramic tiles (with water absorption less than 0.08% not less than 300x300mm Or 18mm thick gang- saw cut pre- polished granite stone	
Skirting in rooms and other areas	100 to 150 mm high skirting matching the floor material.	100 to 150 mm high skirting matching the floor material.	100 to 150 mm high skirting matching with the floor material.	100 to ISO mm high skirting matching the floor material.	
b) Dado Kitchen Dado	Ceramic tiles of size not less than 200 x 300 as per design from floor up to full height.	Same as Type-1, II & III	Ceramic tiles of size not less than 300 x 450mmas per design from floor to full height	Ceramic tiles of size not less than 300 x 450mmas per design from floor to full ht.	Must be read with Scale of Amenities in the respective categories
Toilets/ bathrooms / WC Dado	Glazed ceramic tiles of size not less than 200 x 300 up to full height with decorative bands at certain intervals.	Same as Type-1, II &III	Glazed ceramic tiles of size not less than 300x450 up to full height with bands at certain intervals	Glazed ceramic tiles *of size not less than 300x450nim up to full height with a decorative bands at certain intervals.	1
FINISHES					
Internal Finishes  External	All walls & ceiling to be treated with 2 mm thick POP (one time only) and painted with low VOC Acrylic washable distemper/ Synthetic enamel paint on all wood works and steel works	All walls & ceiling to be treated with 2 mm thick POP (one time only) & painted with low VOC Acrylic washable distemper/ Synthetic enamel paint on all wood works & steel works	All wails & ceiling to be treated with 6 mm thick POP punning (one time only) and painted with low VOC Premium acrylic Emulsion paints. Synthetic enamel paint on POP and on ail wood works and steel works	Premium acrylic emulsion paint with low VOC of approved shade in roller finish over6 mm thick POP wall punning	In case of large
External Finishes	Quartz reinforced Texture Acrylic paint finish/Premium Acrylic smooth water proof exterior finish / washed mosaic plaster in premium cement. Synthetic enamel paint on all wood work & steel work	Same as Type-1, II & III.	texture Acrylic paint finish of approved shade /premium Acrylic smooth water proof exterior finish / washed mosaic plaster in premium cement /exposed brick / stone work/GRC / Designer cement concrete tile cladding/ACP cladding in combination with structural glazing	Same as Type-V & VI	In case of large campus etc., the External finishes of the residences shall match the overall colour & texture finishes within the campus
	Toilets / Bathroom/ WC  Skirting in rooms and other areas  b) Dado Kitchen Dado  Toilets/ bathrooms / WC Dado  FINISHES  Internal Finishes	Staircase stone in single length of tread & risers  Toilets / Bathroom/ WC Glazed ceramic antiskid of size not less than 300X300 mm. including grouting the joints.  Skirting in rooms and other areas floor material.  b) Dado Kitchen Dado Ceramic tiles of size not less than 200 x 300 as per design from floor up to full height.  Toilets/ bathrooms / WC Dado Size not less than 200 x 300 up to full height with decorative bands at certain intervals.  FINISHES  Internal Finishes All walls & ceiling to be treated with 2 mm thick POP (one time only) and painted with low VOC Acrylic washable distemper/ Synthetic enamel paint on all wood works and steel works  External Finishes Quartz reinforced Texture Acrylic paint finish/Premium Acrylic smooth water proof exterior finish / washed mosaic plaster in premium cement. Synthetic enamel paint on all wood work &	Staircase   Stone in single length of tread & risers    Toilets   Glazed ceramic antishund of size not less than 300X300 mm. including grouting the joints.    Skirting in rooms and other areas   100 to 150 mm high skirting matching the floor material.    b) Dado   Ceramic tiles of size not less than 200 x 300 as per design from floor up to full height.    Toilets/ bathrooms / WC Dado   Glazed ceramic tiles of size not less than 200 x 300 was per design from floor up to full height.    Toilets/ bathrooms / size not less than 200 x 300 up to full height with decorative bands at certain intervals.    FINISHES   All walls & ceiling to be treated with 2 mm thick POP (one time only) and painted with low VOC Acrylic washable distemper/ Synthetic enamel paint on all wood works and steel works   Quartz reinforced Texture Acrylic paint finish/Premium Acrylic smooth water proof exterior finish / washed mosaic plaster in premium cement. Synthetic enamel paint on all wood works & Same as Type-1, II & III.    External Finishes   Quartz reinforced Texture Acrylic paint finish/Premium Acrylic smooth water proof exterior finish / washed mosaic plaster in premium cement. Synthetic enamel paint on all wood works & Same as Type-1, II & III.    External Finishes   Quartz reinforced Texture Acrylic paint finish/Premium cement. Synthetic enamel paint on all wood works & Same as Type-1, II & III.    External Finishes   Quartz reinforced Texture Acrylic paint finish/Premium cement. Synthetic enamel paint on all wood works & Same as Type-1, II & III.    External Finishes   Quartz reinforced Texture Acrylic paint finish/Premium cement. Synthetic enamel paint on all wood work & Same as Type-1, II & III.    External Finishes   Quartz reinforced Texture Acrylic paint finish/Premium cement. Synthetic enamel paint on all wood work & Same as Type-1, II & III.    External Finishes   Quartz reinforced Texture Acrylic paint finish/Premium cement. Synthetic enamel paint on all wood work & Same as Type-1, II & III.    External Finishes   Potentine	Staircase   Stone in single length of tread & risers	Staircase   Pre-polished Kota stone in single length of tread & risers   Toilets / Bathroom/ WC   Skirting in rooms and other areas   Same and skirting matching the joints.   Same and skirting matching the joints.   Same and skirting matching the joints.   Skirting in rooms and other areas   Same and skirting matching the joints.   Skirting in rooms and other areas   Same and skirting matching the joints.   Skirting in rooms and other areas   Same and skirting matching the floor material.   Same and skirting matching the floor material.   Same and Type-1, like in the floor material.   Same and the floor to full height with and the floor material.   Same and the floor to full height with and the floor to full height with and the floor material.   Same and the floor to full height with and theight with bands at certain intervals.   Same and the floor the f

Plinth Area Rate - 2019

# SCALE OF AMENITIES FOR GENERAL POOL RESIDENTIAL ACCOMODATION

ITEM	ITEM	TYPE-I/II	TYPE-IV/IV	TYPE-	TYPE-VII/	SERVANT
NO. 1	Kitchen Cabinets	/III	SPECIAL	V/VI	VIII	QTRS.
i)		Yes	Vac			Yes
ii)	Cooking Platform	Yes	Yes Yes			
11)	Stainless steel AISI 304(18/) Kitchen	res	res			Yes
:::>	sink as per IS 13983 with drain board	Yes	V			
iii)	Built in cupboard without any shelves	Y es	Yes, with			
	but with shutters of 18mm thick pre- laminated decorative particle board		drawers			
	below cooking platform as per architectural design and specifications.					
iv)	25mm thick and not more than	Yes	Yes			Yes
10)		ies	res			res
	400mm wide pre-laminated non					
	decorative particle board/plywood shelves in tiers upto 2.10 meter height					
	covered with pre-laminated decorative					
	particle board shutters along one wall					
	as per architectural design and					
	specifications.					
v)	Factory made modular kitchen having			Yes	Yes	
V)	sink with double bowl & double drain-			1 68	168	
	board, cooking platform and electric					
	chimeny of reputed company.					
2	Wardrobes					
	Built in cupboard 650mm wide with	One in each	One in each bed			One upto 7-
	1800 thick pre-laminated non	bed room	room upto			0" height
	decorative particle board as shelves	upto ceiling	ceiling height			0 licigiit
	and 18mm thick pre-laminated	height	cennig neight			
	decorative particle board as	neight				
	shutters/steel almirahas.					
	Factory made wardrobe carcases,			One in	One in each	
	shelves, drawers etc. manufactured in			each bed	bed room	
	19mm thick particle/block board &			room upto	upto ceiling	
	finished in emulsion paint and			ceiling	height	
	wardrobe shutter in 19mm thick			height	noight	
	particle/block board/plywood finished					
	with exterior grade post formed					
	lamination/natural veneer with					
	melamine polish as per the approved					
	sample.					
3	Magic eye in front entry door.	One	One	One	One	One
4	Curtain road with required	In all	Drapery roads	Same as	Same as	Same as
	accessories.	windows	on all windows	Type IV &	Type IV &	Type I,II &
		doors in all	and doors in all	IV	IV (Special)	III
		rooms except	rooms except	(Special)		
		kitchen	kitchen,			
		except	toilets/bath/WC			
		kitchen,				
		toilets/bath/				
		WC				
5	Set of pegs.	In all	In all	In all	In all	
		toilets/bath/wc	toilets/bath/WC	toilets/bath/	toilets/bath/	
			and wardrobes	WC and	WC and	
				wardrobes	wardrobes	
6	18mm thick projected window sill	Kota	Kota	Marble/	Marble/	Kota stone
	lining, window jhambs.	stone/green	stone/granite	Granite	Granite	
		marble				
	18mm thick projected window sill	kitchen except kitchen, toilets/bath/ WC In all toilets/bath/wc  Kota stone/green	kitchen, toilets/bath/WC  In all toilets/bath/WC and wardrobes  Kota	In all toilets/bath/ WC and wardrobes Marble/	toilets/bath/ WC and wardrobes Marble/	

# SCALE OF SANITARY AND WATER SUPPLY FITTING FOR GENERAL POOL RESIDENTIAL ACCOMODATION

S. NO.	ITEM	TYPE-I/II/III	TYPE-IV/IV SPECIAL	TYPE-V/VI	TYPE- VII/VIII	SERVANT QTRS.
1	Orissa WC pan (European style) with low level dual flushing PVC cistern	One	One	One	One	One
2	European type floor mounted/wall-hung WC with seat, lid and low dual flushing PVC cistern.	Yes	Yes	Yes	Yes	
3	Water jet/health faucet with European WC.	Health faucet with each WC	Health faucet with each WC	Health faucet with each WC	Health faucet with each WC	
4	Wash basin with CP brass mixture type for hot & cold water with single lever with quarter turns ceramic cartridges.	One	One in each toilet & one for dining area as per design.	One in each toilet & one for dining area as per design.	One in each toilet & one for dining area as per design.	One
5	Tap (kitchen, toilet, bath & WC) CP brass/PTMT bic cock provided with quarter turns ceramic cartridges.	2 in kitchen 1 in each toilet, bath & WC PTMT in Type-I & II/CP brass in Type- III	2 in kitchen 1 in each toilet, bath & WC-CP brass	2 in kitchen 1 in each toilet, bath & WC-CP brass	2 in kitchen 1 in each toilet, bath & WC-CP brass	2 in kitchen 1 in each toilet, bath & WC- PTMT
6	Shower with CP brass mixture type tap for hot & cold water with single lever, ceramic cartridges quarter turn.	1 in each toilet/bath	1 in each toilet/bath	1 in each toilet/bath	1 in each toilet/bath	
7	Towel rail CP brass/PTMT.	One PTMT in each toilet/bath	One CP brass in each toilet	One CP brass in each toilet	One CP brass in each toilet	One PTMT toilet/bath
8	Mirror with PTMT glass shelf.	600x450mm with each wash basin	600x450mm with each wash basin	As per design with each wash basin.	As per design with each wash basin.	600x450mm with each wash basin
9	CP brass/ceramic toilet paper holder with European WC.	Yes in Type-III only	Yes	Yes	Yes	
10	Soap rack/niche as per architectural design and specification.	One in each bath/toilet	One in each toilet	One in each toilet	One in each toilet	
11	Plumbing for water purifier and geyser.	Yes	Yes	Yes	Yes	Yes
12	Storage tank of capacity as per NBC 2005 provision of separate tank for WC & drinking water.	Separate tanks for kitchen and toilets as per requirements for dual flushing system.	Separate tanks for kitchen and toilets as per requirements for dual flushing system.	Separate tanks for kitchen and toilets as per requirements for dual flushing system.	Separate tanks for kitchen and toilets as per requirements for dual flushing system.	Separate water tanks to be provided for servants in each category.

## SCALE FOR ELECTRICAL INSTALLATION IN GENERAL POOL RESIDENTIAL ACCOMODATION

Sl. No.	Description	Type-I	Type-Ii	Type-Iii	Type-Iv & Iv (Spcl.)	Type-V	Type-Vi	Type-Vii & Viii	Servant Qtrs.
1	Power Points	2 in each	2 in each	2 in each	2 in each	3 in drawing	3 in drawing	2 in office	Total 2
1	(15 amp 6 pins)	room 1 in	room 1 in	room 1 in	room 1 in	room 3 in dining	room 3 in	4 in drawing room	101412
	(r · F)	kitchen 1 in	kitchen 1 in	kitchen 1 in	kitchen 1 in	room 2 in each	dining room	3 in dining room	
		utility area	utility area	utility area	utility area	bedroom 2 in	2 in each	2 in family lounge	
				,		kitchen 1 in	bedroom 2 in	2 in each bedroom	
						utility area	kitchen 1 in	2 in kitchen 1 in	
						,	utility area	utility area	
		Total 6	Total 8	Total 8	Total 12	Total 15	Total 17	Total 22	
2	Plug Points	1 in each	1 in each	1 in each	1 in each	1 in each room 1	1 in each room	1 in office 1 in	Total 2
	(5 amp)	room 1 in	room 1 in	room 1 in	room 1 in	in kitchen 01 in	1 in kitchen 1	each room 1 in	
		kitchen 1 in	kitchen 1 in	kitchen 1 in	kitchen 1 in	store 1 in main	in store 1 in	kitchen 1 in store	
		balcony area	balcony area	balcony area	balcony area	balcony	each balcony	1 in each balcony	
		Total 4	Total 5	Total 5	Total 7	Total 8	Total 9	Total 12	
3	Bracket Lights	1 in each	1 in each	1 in each	1 in each	1 in store	1 in store	1 in store	Total 3
	(with normal	room 1 in	room 1 in	room 1 in	room 1 in	1 in each toilet	1 in each toilet	1 in each toilet	
	fittings excluding	kitchen 1 in	kitchen 1 in	kitchen 1 in	kitchen 1 in	1 in utility	1 in utility	1 in utility	
	lamp/bulb)	each toilet 1	each toilet 1	each toilet	each toilet 1				
		in utility	in utility	1 in utility	in utility				
		Total 3	Total 4	Total 4	Total 11	Total 10	Total 12	Total 12	
4	Ceiling Fans	1 in living	1 in living	2 in living	2 in living	2 in drawing	2 in drawing	2 in drawing room	
		room 1 in	room 1 in	room 1 in	room 1 in	room 1 in dining	room 1 in	1 in dining room	
		each bedroom	each	each bedroom	dining room	room 1 in each	dining room	1 in family lounge	
			bedroom		1 in each	bedroom 1 in	1 in family	1 in each bedroom	
					bedroom	each balcony	lounge 1 in	1 in each balcony	
							each bedroom		
							1 in each		m . 14
		T. 4.12	T . 1.2	TD 4 1 4	TD 4 1 6	TD 4 1 6	balcony	TD 4 144	Total1
	Call Bell Points	Total 3	Total 3	Total 4	Total 6	Total 6	Total 12	Total 14	
5	Call Bell Points	1	1	1	2	3	3 (One with	4 (One with image	
							image display	display system)	
6	Exhaust Fans	1 each in kit	1 each in kitchen	system) 1 each in	1 each in kitchen	Total 2			
0	Exilaust rails	& bath & WC	& bath &	& bath & WC	& bath & WC	& toilets	kitchen &	& toilets	10tal 2
		& Daill & WC	WC balli &	& ball & WC	& ball & WC	& tonets	toilets	& tollets	
7	AC Points	1 in each	1 in each	1 in each	1 in each	1 in each room	1 in each room	1 in each room	
_ ′	(With MCB	room except	room except	room except	room except	except kitchen &	except kitchen	except kitchen &	
	connected socket	kitchen &	kitchen &	kitchen &	kitchen &	toilets	& toilets	toilets	
	outlet with wiring)	toilet	toilet	toilets	toilets	toricts	& tonets	tonets	
	outer with withing)	tonet	101101	torious	1011013				

Sl. No.	Description	Type-I	Type-Ii	Type-Iii	Type-Iv & Iv (Spcl.)	Type-V	Type-Vi	Type-Vii & Viii	Servant Qtrs.
8	Geyser Point (With MCB connected socket outlet with wiring)	1 in bath	1 each in bath & toilet	1 each in toilets	1 in kitchen 1 in each toilet	1 in kitchen 1 in each toilet	1 in kitchen 1 in each toilet	1 in kitchen 1 in each toilet	1 in toilet
9	EDB/MCB Point (single phase)	1	1	1					1
10	EDB/MCB (3 phase)				1	1	1	1	
11	Cable TV point	1 in living room1 in each bedroom	1 in living room1 in each bedroom	1 in living room1 in each bedroom	1 in drawing room1 in each bedroom	1 in drawing room1 in each bedroom	1 in drawing room1 in each bedroom	1 in office1 in drawing room1 in dining room1 in family lounge1 in each bedroom	1
12	Telephone Point As per the app. of competent authority	1 in living room	1 in living room	1 in living room	1 in drawing room	1 in drawing room 1 in each bedroom	1 in office 1 in drawing room 1 in dining room 1 in each bedroom	1 in office 1 in drawing room 1 in dining room 1 in family lounge 1 in each bedroom	1
13	Decorative Light Fittings for LED bulbs (without bulbs)					3 in drawing room 3 in dining room 2 in each bedroom 1 in kitchen	3 in drawing room 3 in dining room 2 in each bedroom 2 in kitchen	3 in office 3 in drawing room 3 in dining room 3 in family lounge 2 in each bedroom 2 in kitchen	
						Total 13	Total 16	Total 22	
14	LED tube light fittings (excluding tubes)	1 in each room 1 in kitchen	1 in each room 1 in kitchen	1 in each room 1 in kitchen	1 in each room 1 in kitchen	1 in drawing room 1 in dining room 1 in each bedroom 1 in kitchen	1 in drawing room 1 in dining room 1 in each bedroom 1 in kitchen	1 in office 1 in drawing room 1 in dining room 1 in family lounge 1 in each bedroom	
		Total 3	Total 4	Total 4	Total 6	Total 6	Total 7	Total 9	
15	Modular Switches					Yes	Yes	Yes	

Note:- All the common area e.g. Lifts & Staircases Lobbies, Connecting Corridors etc. shall have lighting arrangement along with LED light fixtures as per actual design. As far as possible concealed wiring shall be used in all electrical works. LED shall only be used as per directives of competent authority.

# SPECIFICATIONS FOR NON - RESIDENTIAL BUILDINGS

ITEM NO.	DESCRIPTION	SPECIFICATION
1.0	FOUNDATION	As per structural design based on soil investigation.
2.0	SUPER STRUCTURE	-
2.1	Structure	R.C.C. framed construction with filler walls with fly ash bricks /brick work/ ACC blocks or load bearing construction in /brick work/fly ash bricks/ stone masonry with intermediate columns as per design.
2.2	Internal partitions.	
2.2.1		Light weight auto claved aerated concrete blocks.
2.2.2		Gypsum Blocks.  Non asbestos double skin cement boards.
2.2.3		Fly ash bricks.
3.0	DOORS & WINDOWS	11y usii offeks.
3.1	Frames	
3.1.1	Door frames	Door frames of 2nd class Indian teakwood or equivalent in officer's room. Anodized/Powder coated/Polyester powder coated Aluminium sections/
3.1.2	Window frame	Standard sections of UPVC window frame members/Extruded Aluminium tubular sections
3.2	Door Window Shutters	
3.2.1	Door Shutter	Panelled type in 2nd class teak wood or flush door with teak veneered ply/commercial ply as per CPWD Specifications/as per design.
3.2.2		Anodized/powder coated/ Polyester powder coated Aluminium shutters with toughened glass glazing/paneling where required.
3.2.3	Frame and shutters in wet area	PVC/FRP door frames & shutters in wet areas.
3.3	Window shutters	Factory made Anodised/ powder coated/ Polyester powder coated 'Z' section aluminium shutters/ standard UPVC section for windows with toughened glass glazing
3.4	Fittings	Anodized aluminium /stainless steel or equivalent.
3.5	Fire check door	As per fire safety specifications
4.0	FLOORING	
4.1	Main entrance hall	Pre polished granite flooring.
4.2	Corridors	Matt finished vitrified tiles/Granite flooring/combination of marble and granite
4.3	Rooms	Granite tiles/Vitrified tiles/Engineered wood flooring (in officers chambers)
4.4	Lavatory Blocks	Granite flooring.
4.5	Flooring in basement	Vacuum dewatered concrete.
4.6	Rest of the area	Kota Stone flooring.
5.0	STAIRCASE	
5.1	Internal staircases	Single piece Granite or marble flooring in treads & risers with dado of matching permanent finish specifications.
5.2	Fire escape staircase	Single piece Kota stone flooring in treads & risers with dado of matching permanent finish specifications.
6.0	RAILING	Stainless steel railings.
7.0	TOILETS	Granite flooring. Glazed tiles of size not less than 300 x 450/400 x 600 mm in dado upto ceiling height. Granite counters. Rimless counter sunk basins/Stainless steel sinks. Mirrors with moulded PVC frame. FRP/PVC doors with frames.

8.0	ROOFING	
8.1	Roof treatment	Coba treatment/over deck insulation with Puf slab.
8.2	False ceiling	False ceiling in office area & toilets to cover the services as per design requirement.
9.	FINISHING	
9.1	External	Dry stone cladding/washed grit plaster/water proof weather coat paints/ Structural Glazing/ ACP cladding conforming to Energy Conservation Building Code.
9.2	Internal	
9.2.1		Gypsum plaster in dry areas.
9.2.2		Cement plaster in wet areas
9.2.3		Dry acrylic distemper in service area & basement.
9.2.4		Acrylic emulsion paint/ Textured paint (low V.O.C)
9.2.5		Wall panelling as per approved Architecture Design upto sill level/1.2 meter, height or ceiling height.
9.3	Painting	Doors & windows – Painting/polishing on wood work as per design requirement.
10.0	PROVISION FOR BARRIER FREE BUILDING	Ramps, toilets for physically challenged, chequered tiles use of Braille signages & lifts etc.GRC (Glass reinforced concrete) tiles in Ramp area.

# Rules for working out plinth area from plans (for the purpose of calculating plinth areas as per IS Code 3861 & as per Memo No. 29/21/58/WI) Dated: New Delhi,Oct.1983).

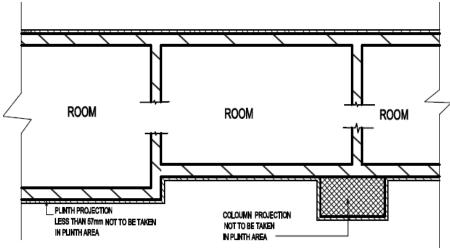
ANNEXURE -III

In order to ensure the adoption of a uniform method of working out plinth areas from plans, the following rules are laid down. These rules are general in nature and should be taken as a guide. They are based on the fundamental principle that the plinth area of a building should present a true picture of the covered floor area provided in the plan.

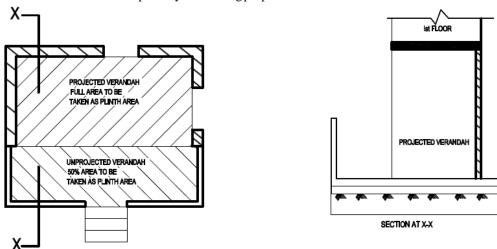
#### 1. GENERAL

The total plinth area of a building shall be the sum total of the plinth area at every floor including the basement, if any. **PLINTH AREA OF GROUND FLOOR** 

- (a) The plinth area of the ground floor shall be calculated at the plinth level excluding the plinth off-sets provided such plinth off-sets are not more than 58mm. In cases where the building consists of columns projecting beyond cladding, the plinth area shall be taken up to the external face of the cladding and shall not be included the projections of the columns.
  - Note In case. a common wall is owned jointly by two owners, only half the area of such walls shall be included in the plinth area of one owner.



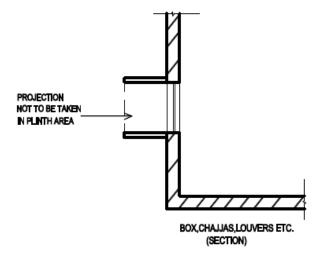
(b) In case open verandah with parapets are protected at the ground floor projecting out of the building, the full area shall be taken up to the outer line of the external verandah lintel and only 50% of area shall be taken for the unprotected verandah. Open platform without parapets and terraces at ground floor and porches, shall not be included in the plinth area but shall be allowed for separately for costing purposes.



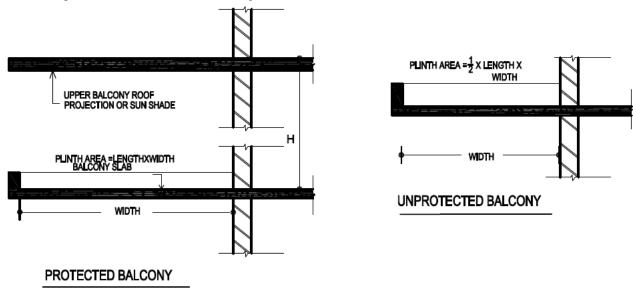
- (c) Shafts for sanitary, water supply installations, garbage chute, telecommunication, electrical, fire fighting, air-conditioning and lifts etc. less than 2.00 sqm. in area shall be included in plinth area whereas the said opening with more than 2.00 sqm. in area shall be excluded from the plinth area.
- (d) Stair case:

#### PLINTH AREA AT FIRST AND HIGHER FLOORS

(a) The plinth area of first and higher floors shall be calculated at the relevant floor levels. Architectural bands, cornice etc. shall not be included in the plinth area even though they may occur at the floor level, vertical sun breakers or box louvers projecting out also shall not be include in plinth area. See illustrative sketch below.



(b) In the case of projecting balconies protected to their full width by the shades full width roof projections or by upper in the case of unprotected balconies equivalent area to the extent of 50% of the area of the balconies shall be included in the plinth area. See illustrative sketch given below:



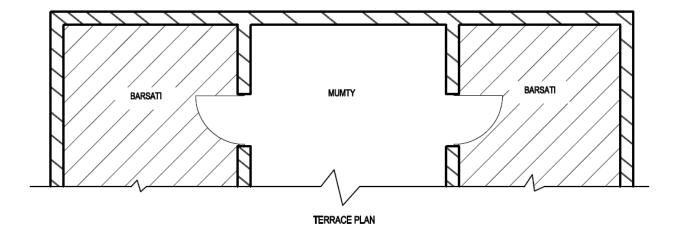
- (c) In case of alcove (box projection like storage below sill level and cupboards etc.) made by cantilevering a slab beyond external wall:
  - 1. 25 percent of the area for the alcove of height up to 1 m,
  - 2. 50 percent of the area for the alcove of height more than 1m and upto 2 m, and
  - 3. 100 percent of the area for the alcove of height more than 2 m.

#### GALLARIES, MEZZANINE FLOORS, LOFTS.

- (a) Area of galleries i.e. upper floor of seats in an assembly hall, Auditorium, theatres, etc. shall be fully included in the plinth area.
- (b) Area of mezzanine floor i.e. an intermediate floor introduced between two main floors, shall be included in the plinth area, if no separate provision is made for the same.
- (c) The area of a loft i.e. an intermediate slab just beneath the floor of roof without any direct staircase leading to it and used for storage purpose shall not be included in the plinth area.

## The following shall not be included in the plinth area:

- a) Area of loft;
- b) Area of architectural band, cornice, etc;
- c) Area of vertical sun breaker or box louver projecting out and other architectural features, for example slab projection for flower pot, etc;
- d) Open platform;
- e) Terrace;
- f) Open spiral/service stair cases; and
- g) Area of mumty, machine room, towers, turrets, domes projecting above terrace level.



Plinth Area Rate - 2019

# PROFORMA FOR CALCULATION OF BUILDING COST INDEX

ANNEXURE -IV

SI. No	Description	Unit	%age	Rates as on 01.04.2019	Proportio- nate value	Weightage rates	Weight- age of Compo- nent	Rates at the time of revision of cost index	Cost Index
1	Bricks (Fly Ash)	1000 Nos.	100%	4400.00	4400.00	4400.00	8.00	-	-
2	Cement (OPC)	Qtl.	100%	600.00	530.00	530.00	14.50	_	_
3	TMT Steel	<b>C</b>							
a.	8 & 10 mm dia	0.1	50%	4300.00	2150.00	1200.00	10.70	-	-
b.	12 & 16 mm dia	Qtl.	50%	4300.00	2150.00	4300.00	19.50	-	-
4	Aggregates 20 mm a) Natural sources	Cum	75%	1400.00	1050.00	1312.50	6.50	-	-
	b) Aggregates 20mm (RCA)	Cum	25%	1050.00	262.50	1312.30	0.50	-	-
5	Sand (Coarse Sand)		75%	1400.00	1050.00			-	-
(a)	Natural Sources	Cum	250/	700.00	177.00	1225.00	3.00		
(b)	Sand (Coarse Sand) RA		25%	700.00	175.00			-	_
6	Flooring Items	Г	1	1		I			
a.	Vitrified tiles		50%	660.00	330.00			-	-
b.	Ceramic Tiles	Sqm	20%	260.00	52.00	770.00	5.00	-	-
c.	Kota Stone	Sqiii	10%	280.00	28.00	770.00	5.00	-	-
d.	Granite Stone		20%	1800.00	360.00			-	-
7	Paints					1			
a.	Synthetic Enamel Paint		33.33%	160.00	53.33			-	-
b.	Acrylic Washable distemper	Litre	33.33%	50.00	16.67	143.33	3.00	-	-
c.	Premium acrylic paint		33.33%	220.00	73.33			-	-
8	Door/Windows-Wooden/	uPVC/A	Aluminiun	n/Steel					
	05 4:1 (1 1 1	1	20.000/	0.50.00	207.00	T		T	
a.	35mm thick flush door shutters both side commercial veneering		30.00%	950.00	285.00			-	-
b.	Factory made, standard Z-section steel windows	Sqm	15.00%	1712.00	258.30	1978.60	7.00		
c.	uPVC windows		20.00%	3295.00	659.00			-	-
d.	Aluminium Window		35.00%	2218.00	776.30			-	-
9	Pipes								
a.	15 mm GI Pipe		10.00%	85.00	8.50				
b.	100 mm CI Pipes	Metre	40.00%	630.50	252.22	292.66	2.50		
c.	20 mm Black Conduits	1,10110	20.00%	43.00	8.60	272.00			
d.	20mm CPVC pipes		30.00%	77.80	23.34				
11	Lamps & Fans	ı	ı	T		1			
a.	Ceiling Fans 1200 mm		50%	1500.00	750.00	]			
b.	1200 mm LED tube lights with fittings	Each	40%	1400.00	560.00	1318.00	4.50		
c.	LED bulbs		10%	80.00	8.00				
12	Electrical Machinery, Motor 7.5 HP (Pump set) 1500 RPM (Kirloskar)	Each	100%	27500.00	27500.00	27500.00	2.50		

## Plinth Area Rate - 2019

13	Wires & Cables							
a.	Copper Wire 1.5 Sq.		70%	900.00	630.00			
	mm	100				1290.00	4.00	
b.	Copper Wire 4.0 Sq.	Metre	30%	2200.00	660.00	1290.00		
	mm							
14	Labour							
a.	Skilled	E a ala	50%	710.00	355.00	647.00	20.00	
b.	Unskilled	Each	50%	584.00	292.00	647.00	20.00	
	Total 100.00							

## STATEMENT OF COST INDICES OF DELHI/NCR SINCE 1955

Year	Effective	Cost	Base 100
	Date	Index	of PAR
1955	17.05.1955	100	1955
1962	12.01.1962	118	1955
1962	18.09.1962	131	1955
1966	19.07.1966	148	1955
1969	15.01.1969	157	1955
1969	17.06.1969	168	1955
1969	15.10.1969	181	1970
1970	01.01.1970	100	1970
1971	05.04.1971	120	1970
1972	03.05.1972	134	1970
1973	24.12.1973	166	1970
1975	26.06.1975	180	1970
1976	01.10.1976	180	1970
1976	01.10.1976	100	1976
1977	30.12.1977	113	1976
1978	31.03.1978	116	1976
1979	31.03.1979	130	1976
1980	10.04.1980	176	1976
1981	23.04.1981	200	1976
1982	29.01.1982	217	1976
1982	30.03.1982	221	1976
1983	16.03.1983	245	1976
1984	13.03.1984	274	1976
1985	27.06.1985	312	1976
1986	09.07.1986	340	1976
1987	16.06.1987	370	1976
1988	31.03.1988	397	1976
1988	01.11.1988	421	1976
1989	31.10.1989	494	1976
1990	31.03.1990	521	1976
1991	11.02.1991	564	1976
1991	31.03.1991	595	1976
1992	31.12.1991	664	1976
1992	01.01.1992	100	1992
1992	31.03.1992	104	1992
1994	01.01.1994	117	1992
1995	01.06.1995	132	1992
1996	01.06.1996	142	1992
1997	01.06.1997	145	1992
1998	01.06.1998	148	1992
1999	01.09.1999	158	1992
2000	01.07.2000	162	1992
2001	01.04.2001	166	1992

Year	<b>Effective</b>	Cost	<b>Base 100</b>	
	Date	Index	of PAR	
2002	01.04.2002	176	1992	
2003	01.04.2003	197	1992	
2004	01.04.2004	209	1992	
2005	01.04.2005	223	1992	
2006	01.04.2006	236	1992	
2007	01.04.2007	254	1992	
2007	01.10.2007	260	1992	
2007	01.10.2007	100	2007	
2008	01.04.2008	114	2007	
2008	01.10.2008	119	2007	
2009	01.04.2009	113	2007	
2009	01.10.2009	126	2007	
2010	01.04.2010	136	2007	
2010	01.10.2010	139	2007	
2011	01.04.2011	149	2007	
2011	01.10.2011	151	2007	
2012	01.04.2012	161	2007	
2012	01.10.2012	170	2007	
2012	01.10.2012	100	2012	
2013	01.04.2013	100	2012	
2014	01.04.2014	105	2012	
2014	01.10.2014	107	2012	
2015	01.04.2015	104	2012	
2015	01.10.2015	103	2012	
2016	01.04.2016	102	2012	
2016	01.10.2016	101	2012	
2017	01.04.2017	111	2012	
2017	01.10.2017	115	2012	
2018	01.04.2018	116	2012	
2018	01.10.2018	118	2012	
2019	01.04.2019	120	2012	
2019	01.04.2019	100	2019	

- 1. PAR 1955 base 100 is effective from 17.05.1955
- 2. PAR 1970 base 100 is effective from 01.01.1970.
- 3. PAR 1976 base 100 is effective from 01.10.1976.
- 4. PAR 1992 base 100 is effective from 01.01.1992.
- 5. PAR 2007 base 100 is effective from 01.10.2007.
- 6. PAR 2012 base 100 is effective from 01.10.2012.
- 7. PAR 2019 base 100 is effective from 01.04.2019.

PLINTH AREA RATES FOR SPECIALISED E&M WORKS			Annexure-V
Sl. No.	Description of Item	Unit	Rate
	SUB-STATION EQUIPMENTS		
1	Supplying, installation, testing and commissioning of 33kV/0.433kV or 11kV/0.433 kV substation equipments comprising HT Panel, Dry type Transformers, HT cable, Bus trunking from Transformer to LT Panel, LT Panel, Automatic Power factor correction panel, Active Harmonic Filters, TVSS (Transient Voltage suppression system),SPD (Surge protection system), Essential panel, Earthing, required inter-connections, substation safety equipments including LT cabling from sub station to the buildings fed by the sub station.	non VVA	9000
	DIESEL GENERATING SETS	per KVA	9000
2	Supplying, installation, testing and commissioning of Silent Type DG Sets,AMF Panel, Bus Ducting/ Cables from DG Sets to Essential Panel, Synchronizing Panel where required, DG Set enclosure room sound insulation/ventilation/smoke exhaust as required, Earthing of DG Set system, control cabling, Fuel tank/piping, DG set Exhaust piping/ Exhaust Chimney as per CPCB norms, Civil works connected with DG Sets including Foundation as required.  33 KV RECEIVING SUBSTAION AND 33KV/11KV HT CABLING	per KVA	11000
3	(i) Supplying, installation, testing and commissioning of 33 kV Substation comprising 33 kV HT Panel, transformers 33kV/11 kV, 11 kV HT Panel, inter connections, 11kV HT UG cabling to the distribution substations on Ring main system, Substation earthing, substation safety equipments.	per KVA	6000
	(ii) Supplying, Installation, testing & Commissioning of 33 kV Switch room comprising of 33 kV HT panel, inter connections, 33 kV HT UG cabling to the distribution substations, on ring main system, earthing, safety equipments.  UNINTERRUPTED POWER SUPPLY	per KVA	6000
4	Supplying, installation, testing and commissioning of online 3 phase UPS System with 30 minutes back up including batteries, interconnecting cables, battery racks		
	etc.	per KVA	20000
4.1	Add for every additional 30 minutes backup	per KVA	9000
	Note: For assessment of kVA estimation of a building, Para 4.4 and other relevant Paras of "Guidelines for Substation & Power Distribution Systems of Buildings-2019" which is available on CPWD Website may be referred.	pas social	
	CENTRAL AC PLANT		
5	Supplying, installation, testing and commissioning of energy efficient central AC Plant including low side works	per TR	85000
	Extra for stand by chilling units High side	per TR	38000
	VRV/ VRF AC System		
6	Supplying, installation, testing and commissioning of VRV/VRF System including indoor /outdoor units, piping, electrical power distribution/wiring, electrical panel, treated fresh air system etc.	per HP	55000
	PRECISION AIRCONDITIONING SYSTEM		
7	Supplying, installation, testing and commissioning of PRECISION Air Conditioning System including piping, electrical cabling, controller etc. required for the system	per TR	110000

Sl. No.	Description of Item	Unit	Rate
110.	SOLAR PHOTO VOLTAIC POWER GENERATION SYSTEM		
8	Supplying, installation, testing and commissioning of Grid interactive roof top solar photo voltaic power generation system including space frame	per KWp	65000
9	SOLAR WATER HEATING SYSTEM  Supplying, installation, testing and commissioning of solar water heating system with heat exchanger type including electrical heater backup, make up water tank but without piping	100 liters per day	22500
	Note: For higher capacity, multiply the rate		
10	CCTV SYSTEM  Supplying, installation, testing and commissioning of IP Based CCTV system for building security comprising of PTZ Fixed camera, cabling, recording, display system and hard ware software support	per sqm.(for Indoor) per sqm.(for	200
		external surveillance of plot area)	200
	Note: Rate includes peripheral IP Based PTZ camera besides indoor camera at reception, corridors, lift lobby etc., wiring upto CCTV room and setting up monitoring unit/ units, as required.		
	ACCESS CONTROL SYSTEM		
11	Supplying, installation, testing and commissioning of Access control system for building security comprising of controller, E&M Locks, Reader, Smart Cards, cabling, recording, display system, hardware and software support as required	per sqm.	200
	IBMS: INTEGRATED BUILDING MANAGEMENT SYSTEM	1 1	
12	Supplying, installation, testing and commissioning of Integrated Building Management System for Digital/electronic display and monitoring of all E&M systems like substation, DG sets, Ups, Solar power, Lifts, AC Plants, Ventilation systems, Fire protection systems, Pumps etc. to include cabling, monitors, recording, display system, hardware, software support(upto 10,000 sq.m)	upto 10,000 sqm.	400
12.1	Add extra for built up area above 10, 0000 sq mtr.	per sqm.	125
13	HYDROPNEUMATIC WATER SUPPLY SYSTEM  Supplying, installation, testing and commissioning of Hydropneumatic water supply system consisting of pumps, pneumatic tank, Microprocessor based control panel, VFD, inter connecting pipes, valves, cabling, switchgear etc. as required	per LPM	1500
	LIGHTING AUTOMATION INCLUDING OCCUPANCY SENSORS	per Er ivi	1300
14	Supplying, installation, testing and commissioning of lighting automation including occupancy sensors	per sqm.	200
15	BASIC HOME SECURITY FOR RESIDENTIAL COLONY Supplying, installation, testing and commissioning of basic security system in the residential colony to include control room at the gate and intercom connection to each dwelling unit, and basic CCTV system to be installed at the entry and exit points, Parking areas, entry point of each dwelling unit and other common areas as required including CCTV control room, required UG cabling, recording system and monitor/ monitors in the control room		
15.1	Intercom system	per sqm. of residential	200
15.2	CCTV system	Area per sqm. of plot Area	300

Sl. No.	Description of Item	Unit	Rate
	LAN SYSTEM		
16	Supplying, installation, testing and commissioning of LAN System comprising of Core switches & L2 switches with 10 G, 10 Giga SFP modules, WIFI Access points, WIFI controller, Network Management Software, Racks, CAT 6A cable, Patch Panels, OFC etc.	per sqm. of covered area	500
	IP BASED EPABX SYSTEM		
17	Supplying, installation, testing and commissioning of IP based EPABX System comprising of Core switches & L2 switches with 10 G, 10 Giga SFP modules, Industry Standard Appliance Server, Cloudbased, enterprise-grade UC Solution, MID/ENTRY Level IP/SIP Phone with, Dual 1 Gig Ports, Racks, CAT 6A cable, Patch Panels, OFC etc.  NOTE: It will be economical to use common infrastructure of switches, OFC,	per sqm. of covered area	900
10	CAT 6A cable for both voice and Networking		
18	Conference Hall: Supplying, installation, testing and commissioning of Audio Visual/Conference System	per sqm.	10000
19	Auditorium: Supplying, installation, testing and commissioning of Sound reinforcement, Stage Lighting, Stage curtains	per sqm.	12500
	STREET LIGHTING WITH LED		
20	Supplying, installation, testing and commissioning of LED Street/ Compound/ High mast/ Pathway/ Landscape Lighting for the entire Campus	per sqm. (Plot Area)	150
	Note: This is applicable for plot sizes more then 1 acre. For smaller plot sizes actual requirements may be worked out		
	Note: - Cost for General Façade lighting, if required, with IP 66/67 LED fixtures (RGB/Tunable/Mono) along with controls (hardware and software) and cabling may be assessed on case to case basis.		
	STP/ETP PLANT		
21	Supplying, installation, testing and commissioning of STP/ETP of appropriate technology including Civil Works (except plant room), Tertiary Treatment etc. for the Building/campus		
21.1	Per Day for Plant size upto 50,000 LPD	per thousand Ltr.	75000
21.2	Per Day for Plant size above 50,000 upto 1,00,000 LPD	per thousand Ltr.	60000
21.3	Per Day for Plant size above 1,00,000 LPD	per thousand Ltr.	50000
22	DRIVER FACE AND AUTOMATIC NUMBER PLATE RECORDING SYSTEM/RECOGNITION SYSTEM		
22.1	Supplying, installation, testing and commissioning of Driver face and automatic number plate recording system / recognition system Including High resolution camera and software set for the driver face capture and automatic number plate recording	per set	725000
23	BAGGAGE SCANNERS		
23.1	Baggage scanner small: computer based multi energy X-Ray Baggage Inspection System mounted on castor wheels capable of passing through bags of dimensions 540 mm (W) X 350 mm (H), belt height 750 mm to 850 mm, 22"/24 LCD Monitor, Input / Output rollers with frames	per unit	2125000
23.2	Baggage scanner Big: computer based multi energy X-Ray Baggage Inspection System capable of passing through bags/parcels of dimension 940mm (W) x 640mm (H) with Belt Height – 750mm –850mm with 22"/24" LCD Monitor, Input/Output rollers with frames		
	Input/ Output rollers with frames	per unit	3500000

Sl.	Description of Item	Unit	Rate
No.	DOOR FRAME METEL DETECTOR		
24	20 zone or above Door frame Metal detector nominal Size: 760 mm (W) x 2050 mm (H) x 700 mm (D) loaded with necessary software	per set	350000
	MEDICAL GAS PIPELINE SYSTEM	1	
25	Medical Gas pipeline system (as per international standards) comprising of oxygen, carbon dioxide, nitrous oxide, AGSS, Air-4, Air-7, Vacuum outlets, manifolds, pressure alarms, fully automatic gas control system, Bed head panels, copper piping, cylinder banks, plant equipment such as compressors, Vacuum pumps etc.	per bed	60000
	MODULAR OPERATION THEATER	Produc	
26	MOT comprising of walls & ceiling system for operating area, steel framework, static dissipative flooring, laminar flow, double dome OT light, touch screen surgeon's control panel, scrub station, X ray viewing screen, hatch box, automatic sliding doors, anesthesia pendent, surgeon pendent etc.		
26.1	With stainless steel technology	per OT	8500000
26.2	With SMS technology	per OT	12500000
	Note: The above rates are based on minimum OT size of 550 sq ft.	•	
27	NURSING CALL SYSTEM		
27.1	Nursing call system comprising of VDE 0834/UL approved Nursing call system, System Switch for de-centralized communications, Nurse Station Terminal, Patient Handset, Event Data base Software, Nurse Call Server along with its Integration with LAN and EPBAX, cabling etc.	per Bed	42000
27.2	Nursing call system (INDIAN) comprising of System Switch for de-centralized communications, Nurse Station Terminal, Patient Handset, Event Database Software, Nurse Call Server, Cabling etc.	per Bed	21500
28	BOOM BARRIER	•	
28.1	Boom Barrier for car: Electromechanical parking barrier with all accessories upto 6 meter length		125000
29	CAR PARKING SYSTEM		
29.1	Sensor based car parking system with controller, display etc. as required. (Cost based on minimum car quantity of 250 cars)		
20		per car	10000
30	EMERGENCY LIGHT & ILLUMINATED SIGNAGES		
30.1	Illuminated signages	per sqm. of covered Area	20
31	MOTORIZED STEEL GATES	per gate upto 5.00 m. Width	500000

## **UPDATED BY**

- 1) Dr. K M Soni, ADG (Tech.)
- 2) Sh. M K Mallick, CE CSQ
- 3) Sh. Divakar Agrawal, SE (TAS), CSQ
- 4) Sh. M L Prasad, EE (TAS), CSQ
- 5) Sh. N K Bansal, EE (P&WA), CSQ
- 6) Sh. Mukesh Varma, Chief Estimator, (DCC-6)
- 7) Sh. Patta Madhu Kumar, AE (TAS), CSQ
- 8) Book Cover Designed by: Ms. Sahana Shamim, Asst. Architect

