

Message from B. Kanaga sabapathy

24.07.2021

Sharing - Let knowledge spread - Part 222

CPWD PLINTH AREA RATES FROM 1976 to 2021 (230 pages)

Dear fellow valuers,

Sound knowledge about plinth area rates for different periods prescribed by CPWD is quite essential for a registered valuer of CBDT who is interested to do valuation for taxation. For the sake of such fellow valuers, we have compiled plinth area rates from 1976 to 2021 and given in the attachment. You may download and refer then and there. Wish you all the best.

Let knowledge spread.

R. Jayaraman

B. Kanaga sabapathy

24.07.2021



भारत सरकार

केंद्रीय लोक निर्माण विभाग

तकनीकी अनुप्रयोग एवं मानक एकाई

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## OFFICE MEMORANDUM

Plinth Area Rates 2021 has been released by the Hon'ble Minister of Housing and Urban Affairs on 167<sup>th</sup> CPWD Annual Day on 12.07.2021. It has come into force with effect from 12.07.2021. The soft copy in PDF format is uploaded on CPWD website.

This PAR 2021 includes improvement over PAR 2020 with synchronization of GPRA norms (approved by MoHUA in Aug. 2013) and housing up-gradation norms (approved by MoHUA in March, 2018). The guidelines for plinth area calculation have also been aligned with provisions of IS 3861:2002.

This issues with the approval of Director General, CPWD.

Encl: Plinth Area Rate 2021 (in PDF)

**Divakar Agrawal**

Superintending Engineer (TAS)

F. No. 62/SE(TAS)/PAR/2021/ 215780

Dated: 20/07/2021

To (through CPWD website):

1. All the SDGs and ADGs
2. All the CEs and SEs
3. All the EEs and other officers in CPWD

Superintending Engineer (TAS)



सत्यमेव जयते

भारत सरकार  
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केन्द्रीय लोक निर्माण विभाग  
CENTRAL PUBLIC WORKS DEPARTMENT

# कुर्सी क्षेत्र दरें PLINTH AREA RATES 2021

DIRECTOR GENERAL, CPWD, NIRMAN BHAWAN, NEW DELHI





सत्यमेव जयते

भारत सरकार

Government of India

कुर्सी क्षेत्र दरें

# PLINTH AREA RATES 2021

July 2021

Published under the Authority of Director General, CPWD, New Delhi





Vinit Kumar Jayaswal  
Director General



सत्यमेव जयते

भारत सरकार  
Government of India



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## FOREWORD

Plinth Area Rates published by CPWD is a useful technical document for preparation of preliminary cost estimate of projects and development works by engineers in construction industry. This publication is not only being used by CPWD but also by other organizations, PSUs, builders, architects and valuation experts.

Plinth Area Rates was last published in 2020. It has become necessary to revise it to align the GPRA specifications with the latest housing up-gradation norms of MoHUA, to synchronize plinth area calculation method with provisions of IS 3861:2002 and also to incorporate useful suggestions by field units and other stakeholders. Hence, this updated version of Plinth Area Rates is published as Plinth Area Rates 2021.

I wish to place on record the commendable work done by Shri Dharmesh Chandra Goel, Addl. Director General (Technical), Shri Vinayak Rai, Chief Engineer (CSQ), Shri Divakar Agrawal, Superintending Engineer (TAS), Shri S N Jaiswal, Executive Engineer (CSQ), Shri Mukesh Varma, Chief Estimator (CSQ) and CSQ team in bringing out the Plinth Area Rates 2021 in short time.

  
01.07.2021  
(Vinit Kumar Jayaswal)







**Dharmesh Chandra Goel**  
Additional Director General (Technical)



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## PREFACE

1. Plinth Area Rates published by Central Public Works Department is one of the most comprehensive and useful technical document used by CPWD, PWDs, Other Govt. Departments, PSUs, Builders, Engineers and Valuation officers for preparation of Preliminary Estimates and Rough Cost Estimates for Offices / Colleges / Schools / Hostels / Hospitals and Residential Buildings. This latest updated version of Plinth Area Rates 2021 is 10<sup>th</sup> edition since 1955.
2. CPWD field units and others in the construction sector have accustomed themselves with the changed format of PAR 2020. This edition is updated as per plinth area norms approved by MoHUA in August 2013 synchronized with up-gradation norms approved by MoHUA in March 2018. Plinth Area calculation guidelines have been synchronized with IS:3861-2002 for uniformity and clarity.
3. The per unit area rates for all categories of building have been revised as per prevailing cost index of 105 as on 01.04.2021 over PAR 2020 with base 100 as on 01.04.2020. The rates of various extras and development charges have been revised as per Delhi Schedule of Rates 2021.
4. Plinth Area Rates 2021 mandates that concerned Architectural unit shall work out the floor wise plinth area and compile the same to obtain building wise abstract of plinth area. The guidelines are explained in Annexure-II and proforma are provided in Annexure-III(a), III(b), III(c) which are self-explanatory so as to minimize discrepancies.
5. The Plinth Area Rates-2021 (with base 01.04.2021 as 100) comprises of following Annexure:  
Annexure-I: Specifications for Residential Buildings, Scale of Amenities, Scale of Sanitary & Water Supply fittings and Electrical installations in GPRA and Specifications for Non- Residential Buildings.  
Annexure-II: Guidelines for calculating Plinth Area.  
Annexure-III: Proforma for Plinth Area calculation by Architectural unit  
Annexure-IV: Proforma for calculating cost index for future Cost indices with base 100 as on 01.04.2021.
6. All efforts have been made to update Plinth Area Rates-2021 to make it user friendly by incorporating the views and feedback from various stakeholders and the field units and making necessary simplifications.
7. I would like to acknowledge the lead taken by Sh. Vinayak Rai, Chief Engineer, CSQ(Civil), Sh. MV Chalapathi Rao, Chief Engineer CSQ (Elect.) and dedicated efforts of Sh. Divakar Agrawal, SE(TAS), Sh. S.N. Jaiswal, EE(TAS), Sh. D.S. Adhikari, AE(TAS), Sh. Patta Madhu kumar, AE(TAS), Sh. Mukesh Varma, Chief Estimator (Civil), Ms. Anshu Shukla AE (TAS), Sh. Akhileshwar Sah, Chief Estimator, Sh. Naveenkumar P, JE (Civil) and Sh. Chalapaka Ramaraju, JE(Civil) of CSQ who have provided valuable inputs/data in finalization of Plinth Area Rates-2021.

Dharmesh Chandra Goel  
ADG (Technical) CPWD



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**PLINTH AREA RATES**  
as on 01.04.2021

S. No.	Description	Non-Residential Buildings			Rate in ₹ per sqm
		Offices/ Colleges	Hospitals	Schools	Residential Buildings Hostels/Quarters
1.0	BUILDING COST (Specifications as per Annexure-I)				
1.1	RCC FRAMED STRUCTURE (Upto six storeys)				
1.1.1	Floor height 3.60 meter	27,090	28,455	21,735	-
1.1.2	Floor height 3.00 meter	-	-	-	20,685
1.2	COMPOSITE (PARTIALLY LOAD BEARING AND PARTIALLY RCC FRAMED) STRUCTURE (Upto six storeys)				
1.2.1	Floor height 3.60 meter	22,995	24,150	18,690	
1.2.2	Floor height 3.00 meter	-	-		17,640
1.3	EXTRA FOR				
1.3.1	Set of six additional storeys (i.e. from 7 <sup>th</sup> to 12 <sup>th</sup> storey)	105			
	Similarly, extra for next set of six storeys may be increased by Rs. 105/- per sqm (viz Rs. 210/- per sqm for 13 <sup>th</sup> to 18 <sup>th</sup> storey, Rs. 315/- per sqm for 19 <sup>th</sup> to 24 <sup>th</sup> storey, Rs 420/- per sqm for 25 <sup>th</sup> to 30 <sup>th</sup> storey and so on). The applicable plinth area shall be the sum of plinth area of all the storeys within the set of six storeys. If the next set of storeys is having fewer than six storeys, the same procedure shall be followed. For example, if building is having 15 storeys, the additional rate applicable shall be (i) Rs 105/- per sqm for sum of plinth area between 7 <sup>th</sup> to 12 <sup>th</sup> storey and (ii) Rs. 210/- per sqm for sum of plinth area of 13 <sup>th</sup> to 15 <sup>th</sup> floor.				
1.3.2	Every 0.3 meter or part thereof, additional / less height of floor above normal floor height of 3.60 meter / 3.00 meter (on areas having additional / less height).	370			
1.3.3	Every 0.3 meter or part thereof, higher plinth height over normal plinth height of 0.60 meter (on ground floor area only).	370			
1.3.4	Every 0.30 meter or part thereof, deeper foundations over normal depth of 1.20 meter (on ground floor area only).	200			
1.3.5	Making stronger foundations to take load of one additional floor at a later date (on ground floor area only).	For RCC framed structures		Composite structure	
		1,600		620	
1.3.6	RCC raft foundation (on ground floor area only).	10,700			
1.3.7	Pile foundation (on ground floor area only).	17,100			
1.3.8	Stronger structural members to take heavy load above 500 kg per sqm upto 1000 kg per sqm.	1,800			
1.4	BASEMENT FLOOR				
1.4.1	Floor height upto 3.35 meter including water proofing (excluding raft base).	20,750			
1.4.2	Add or deduct for every 0.30 meter, or part thereof, height against normal height of 3.35 meter.	1,000			
1.5	FIRE FIGHTING				
1.5.1	Downcomer System.	400			
1.5.2	With wet riser system.	800			
1.5.3	With wet riser and sprinkler system.	1,200			
1.6	FIRE ALARM SYSTEM				
1.6.1	Manual fire alarm system.	250			
1.6.2	Automatic fire alarm system.	600			

S.No.	Description	Non-Residential Buildings			Residential Buildings	
		Offices & Colleges	Hospitals	Schools	Hostels	Quarters
1.7	Pressurized mechanical ventilation system in the basements with supply duct of exhaust blowers (on areas where mechanical ventilation is required).	1,050				
1.8	STILT PORTION					
1.8.1	Stilt portion of multi-storey buildings upto floor height of 3.60 meter (on stilt area only)	8,400				
1.8.2	Every 0.30 meter additional height above 3.60 meter.	200				

2.0	SERVICES(Percentage below refers to the percentage of building cost as per 1.0 above)					
2.1	Internal water supply & sanitary installations.	4%	10%	5%	12% with attached toilets, 8% with common toilets.	9%
2.2	External service connections and local body approval charges shall be as hereunder or as per estimates given by the local body whichever is higher.					
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%
2.2.3	Local body approvals including tree cutting etc.	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%
2.4	EXTRA FOR					
2.4.1	Power wiring and plugs.	4%	4%	4%	4%	4%
2.4.2	Lightning conductors.	0.25%	0.25%	0.25%	0.25%	-
2.4.3	Telephone conduits.	0.25%	0.25%	0.25%	0.25%	-
2.4.4	Third Party Quality Assurance.	1%	1%	1%	1%	1%

S.No.	Capacity/ Persons	Speed in m/sec	Travel height	Price (₹in lacs)	Extra for each additional floor (in ₹)
3.0	LIFTS with power operated centre opening doors and AC variable voltage & variable frequency controls				
3.1	Passenger lifts				
3.1.1	8	1.0	G+4	16	90,000
3.1.2	8	1.5	G+5	18	90,000
3.1.3	13	1.0	G+4	18	90,000
3.1.4	13	1.5	G+5	20	90,000
3.1.5	16	1.0	G+4	24	1,10,000
3.1.6	16	1.5	G+5	26	1,10,000
3.1.7	16	2.5	G+12	70	1,10,000
3.2	Bed Lifts				
3.2.1	20	0.75	G+4	24	1,10,000
3.2.2	20	1.5	G+5	27	1,10,000

S.No.	Capacity/ Persons	Speed in m/sec	Travel height	Price (₹in lacs)	Extra for each additional floor (in ₹)
3.2.3	20	2.5	G+12	75	1,10,000
3.3	Goods lifts				
3.2.1	1 Ton	0.5	G+4	26	85,000
3.2.2	2 Ton	0.5	G+4	33	85,000
3.2.3	3 Ton	0.25	G+4	41	1,00,000
S.No.	Description				Rates in ₹
4.0	RCC WATER TANK				
4.1	Overhead tank without independent staging				20 per litre
4.2	Overhead tank with staging height upto 20 metres				30 per litre
4.3	Overhead tank with staging height above 20 metres upto 30 metres				35 per litre
4.4	Overhead tank with staging height above 30 metres upto 40 metres				40 per litre
4.5	Underground sump				20 per litre
5.0	DEVELOPMENT OF SITE				
5.1	Levelling				300 per sqm
5.2	Internal roads & paths				
5.2.1	Internal road with WBM and bituminous top				1,700 per sqm
5.2.2	Internal road with WMM and bituminous top				1,850 per sqm
5.2.3	Cement concrete pavement with vacuum dewatered concrete				2,040 per sqm
5.2.4	Footpath with PCC base, 60 mm thick paver blocks and kerb stone edging				2,600 per sqm
5.3	External sewerage				3,350 per metre
5.4	Filtered water supply				
5.4.1	Distribution lines upto 100 mm dia				1,700 per metre
5.4.2	Peripheral grid 150 mm to 300 mm dia pipes				3,600 per metre
5.4.3	Unfiltered water supply distribution lines				1,330 per metre
5.5	Storm water drains				8,920 per metre
5.6	Rain water harvesting (RWH)				3,350 per metre
5.7	Trenches for services				6,400 per metre
5.8	Boundary wall with 1500 mm high wall and 600 mm high MS grill including 2100 mm high steel gates at every 100 metres				
5.8.1	With brickwork structure and RCC band at ground level and coping				9,550 per metre
5.8.2	Precast RCC wall in M40 grade concrete comprising of T shaped 250 x 230 mm RCC posts fixed in ground and 70 mm thick RCC wall panel inserts				8,050 per metre
5.9	Horticulture Works				
5.9.1	Horticulture operations including 300mm earth filling, grassing, tree plantations/shrubs and potted plants etc.				275 per sqm
5.9.2	Vertical plantations				45 per sqm
6.0	SPECIALISED E&M WORKS				
6.1	33 kV RECEIVING SUBSTATION AND 33 kV/11 kV HT CABLING				
6.1.1	Supplying, installation, testing and commissioning of 33 kV substation comprising 33 kV HT panel, transformers 33kV/11 kV, 11 kV HT panel, inter connections, 11 kV HT underground cabling to the distribution substations on ring main system, substation earthing, substation safety equipment.				3,500 per kVA

S.No.	Description	Rates in ₹
6.2	<b>SUB-STATION EQUIPMENT</b>	
6.2.1	Supplying, installation, testing and commissioning of 33 kV/0.433 kV or 11 kV/0.433 kV substation equipment comprising HT panel, dry type/Oil type transformers, HT cable, bus trunking from transformer to LT panel, LT panels, 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 substation to the buildings fed by the substation.	9,000 per kVA
	Note: For assessment of kVA estimation of a building, para 4.4, 13 and other relevant paras of “Guidelines for Substation & Power Distribution Systems of Buildings-2019” which is available on CPWD website may be referred to.	
6.3	<b>GENERATING SETS</b>	
6.3.1	Supplying, installation, testing and commissioning of DG sets, AMF panel, bus ducting/ cables from DG sets to essential panel, 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.	10,000 per kVA
6.3.2	Extra for synchronizing panels wherever required	1,000 per kVA
6.4	<b>UNINTERRUPTED POWER SUPPLY</b>	
6.4.1	Supplying, installation, testing and commissioning of online 3 phase UPS system with 30 minutes back up including batteries, interconnecting cables, battery racks etc.	20,000 per kVA
6.4.2	Add for every additional 30 minutes backup	9,000 per kVA
6.5	<b>CENTRAL AC PLANT</b>	
6.5.1	Supplying, installation, testing and commissioning of energy efficient central AC plant including low side works	85,000 per TR
6.5.2	Extra for stand-by chilling units high side	38,000 per TR
6.6	<b>VRV/ VRF AC System</b>	
6.6.1	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.	55,000 per HP
6.7	<b>PRECISION AIRCONDITIONING SYSTEM</b>	
6.7.1	Supplying, installation, testing and commissioning of precision air conditioning system including piping, electrical cabling, controller etc. required for the system	1,10,000 per TR
6.8	<b>SOLAR PHOTO VOLTAIC POWER GENERATION SYSTEM</b>	
6.8.1	Supplying, installation, testing and commissioning of grid interactive roof top solar photo voltaic power generation system including space frame	55,000 per kWp
6.9	<b>SOLAR WATER HEATING SYSTEM</b>	
6.9.1	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 litres capacity	22500 per 100 litre
6.9.2	For higher capacity in multiples of 100 litres.	22,500 per 100 litre
6.10	<b>CCTV SYSTEM</b>	
6.10.1	Supplying, installation, testing and commissioning of IP based CCTV system for building security comprising of PTZ / fixed camera, cabling, digital recording , HD display system with minimum display of 5” x 8” per camera and hard ware software support – for indoors only {Rate applicable on total plinth area but CCTV coverage shall be limited to 15% of the total plinth area as per requirement}	200 per sqm
6.10.2	For external surveillance (Rate applicable on total plot area minus plinth area at ground floor)	200 per sqm



S.No.	Description	Rates in ₹
6.11.1	<b>ACCESS CONTROL SYSTEM</b>	
	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 (Rate applicable only on plinth area of high security area in the building)	200 per sqm
6.12	<b>IBMS: INTEGRATED BUILDING MANAGEMENT SYSTEM</b>	
6.12.1	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 sqm) (Rate applicable on total plinth area)	400 per sqm
6.12.2	Add extra for built up area above 10,000 sqm (Rate applicable on total plinth area)	125 per sqm
6.13	<b>HYDROPNEUMATIC WATER SUPPLY SYSTEM</b>	
6.13.1	Supplying, installation, testing and commissioning of hydro pneumatic water supply system consisting of pumps, pneumatic tank, microprocessor based control panel, VFD, inter connecting pipes, valves, cabling, switchgear etc. as required	1,500 per LPM
6.14	<b>LIGHTING AUTOMATION INCLUDING OCCUPANCY SENSORS</b>	
6.14.1	Supplying, installation, testing and commissioning of lighting automation including occupancy sensors (Rate applicable on area to be specified by client)	200 per sqm
6.15	<b>BASIC HOME SECURITY FOR RESIDENTIAL COLONY</b>	
6.15	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 IP based 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 under ground cabling, digital recording system and monitor/ monitors with minimum display of 5" x 8" per camera in the control room:	
6.15.1	Intercom system (Rate applicable on plinth area excluding service/common areas).	300 per sqm
6.15.2	CCTV system (Rate applicable on plinth area excluding service/common areas).	300 per sqm
6.16	<b>LAN SYSTEM</b>	
6.16.1	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. (Rate applicable on plinth area excluding service/common areas).	500 per sqm
6.17	<b>IP BASED EPABX SYSTEM</b>	
6.17.1	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, cloud-based, enterprise-grade UC solution, MID/ENTRY level IP/SIP phone with, dual 1 gig ports, racks, CAT 6A cable, patch panels, OFC etc. (Rate applicable on plinth area excluding service/common areas).	500 per sqm
	NOTE: It will be economical to use common infrastructure of switches, OFC, CAT 6A cable for both voice and networking.	
6.18	Conference hall: supplying, installation, testing and commissioning of audio visual/conference system (Rate applicable on carpet area of Hall only)	10,000 per sqm
6.19	<b>STREET LIGHTING WITH LED</b>	
6.19.1	Supplying, installation, testing and commissioning of LED street/ compound/ high mast/ pathway/ landscape lighting for the entire campus (Rate applicable on total plot area).	150 per sqm
	Note: This is applicable for plot sizes more than 1 acre. For smaller plot sizes actual requirements may be worked out	

S.No.	Description	Rates in ₹
	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.	
6.20	STP/ETP PLANT	
	Supplying, installation, testing and commissioning of STP/ETP of appropriate technology including civil works (except plant room), tertiary treatment etc. for the building/ campus	
6.20.1	Plant size upto 50KLD	75,000 per KLD
6.20.2	Add extra for every KLD for plant size above 50 KLD and upto 100 KLD	60,000 per KLD
6.20.3	Add extra for every KLD for plant size above 100 KLD	50,000 per KLD
6.21	DRIVER FACE AND AUTOMATIC NUMBER PLATE RECORDING SYSTEM/RECOGNITION SYSTEM	
6.21.1	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	7,25,000 per set
6.22	BAGGAGE SCANNERS	
6.22.1	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 etc. as required.	21,25,000 per unit
6.22.2	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 etc. as required.	35,00,000 per unit
6.23	DOOR FRAME METAL DETECTOR	
6.23.1	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	3,50,000 per set
6.24	MEDICAL GAS PIPELINE SYSTEM	
6.24.1	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.	60,000 per bed
6.25	MODULAR OPERATION THEATER	
6.25	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.	
6.25.1	With stainless steel technology	85,00,000 per OT
6.25.2	With SMS technology	1,25,00,000 per OT
	Note: The above rates are based on minimum OT size of 50 sqm	
6.26	BOOM BARRIER	
6.26.1	Electromechanical boom barrier with all accessories upto 6 meter length.	1,25,000 each
6.27	CAR PARKING SYSTEM	
6.27.1	Sensor based car parking system with controller, display etc. as required. (cost based on minimum car capacity of 250)	10,000 per car
6.28	EMERGENCY LIGHT & ILLUMINATED SIGNAGES	
6.28.1	Illuminated signages (Rate applicable on total plinth area)	20 per sqm

S.No.	Description	Rates in ₹
6.29	Motorized steel gates upto 6.00 metre width	5,00,000 per gate

## Notes:

- 1) The rates are inclusive of CP & OH, GST and Labour Welfare Cess (any other cess / levy imposed by local Government shall be added separately).
- 2) If it is not feasible to compute the area or length of development components from item no. 5.1 to 5.7, the cost of these components may be worked out as below on the basis of percentage of building cost as per serial number 1.0.

2.1	Compact site, comprising of a single huge area building with a few ancillary buildings around or few blocks of high rise (higher than 12 storeys) building blocks in close cluster.	= 4.5% of building cost
2.2	Semi compact/semi scattered site comprising of few blocks of mid rise (between 6 to 12 storeys) buildings in a gated compound.	= 6.0% of building cost
2.3	Large site comprising of various scattered low rise (upto 4 storey) buildings with exception of a block or two upto 6 storeys.	= 7.5% of building cost

- 3) Cost of the following development works are not included in these rates.
  - 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 outfall sewer upto point of disposal etc.
- 4) Provision for Specialized E&M services if required may be made as per 6.0 above.
- 5) Concealed wiring shall be used in all electrical works
- 6) The rates for the following green measures are already included for civil & electrical works -
  - a) Over deck insulation and application of high SRI reflective paint on thereof.
  - b) Masonry work in super structure with autoclave aerated concrete (AAC) blocks/ fly ash bricks.
  - c) Window with reflective glass coating / high performance coatings / double glazed unit.
  - d) Paints with low VOC options.
  - e) Provision of pillar cock having infrared sensor and foam flow technology along with provisions of online water filter for sediment free water from terrace tank outlet or the distribution line.
  - f) Dual plumbing system.
  - g) LED light fixtures.
  - h) BEE certified 5 star rated fixtures.

## GENERAL SPECIFICATIONS FOR RESIDENTIAL BUILDINGS

S.No	Description	Latest Applicable Specifications				Remarks
		Type-II & III	Type-IV, IV (Special)	Type-V & VI	Type-VII & VIII /Bungalows	
1	FOUNDATION					
	Foundation & structure	As per structural requirements	Same as Type II & III	Same as Type-II & III	Same as Type-II & III	The design shall vary as per soil conditions
2	SUPERSTRUCTURE					
	For multi-storey RCC framed structure	RCC frame & filler walls of autoclaved aerated cement concrete (ACC) blocks / brunt clay FPS / fly ash bricks.	Same as Type-II & III	Same as Type-II & III	Same as Type-II & III	Any other energy efficient suitable locally available material in consultation with architect and structural engineer.
	For composite structure (partially load bearing & partially RCC framed structure)	Autoclaved aerated cement concrete (ACC) blocks / brunt clay FPS / fly ash bricks	Same as Type-II & III	Same as Type-II & III	Same as Type-II & III	Any other energy efficient suitable locally available material in consultation with architect and structural engineer.
	Internal Partition	Half brick thick masonry in autoclaved aerated cement concrete (ACC) blocks / brunt clay FPS / fly ash bricks.	Same as Type-II & III	Same as Type-II & III	Same as Type-II & III	Any other energy efficient suitable local material in consultation with architect and structural engineer.
	Sunken floor for toilets with four course water proofing treatment	Sunk recess in RCC floor of required size and depth for floor trap and W.C. traps	Same as Type-II & III	Same as Type-II & III	Same as Type-II & III	
3	DOORS AND WINDOWS					
	a) Frames(except of toilet/bath& WC)					
	i) Door	Chemically Treated Hard wood / seamless mild steel tubular frame(with Hot Dip GI Coating) with minimum wall thickness of 2.0 mm. The external entrance door frame will have double rebate or sub frame for double doors i.e. main door and safety grill door with SS 304 wire(Powder Coated) mesh. For internal doors single rebate frames.	Same as type-II & III	Same as type-II & III	2 <sup>nd</sup> class teak wood frame work for external entrance having double rebate for double doors i.e. main door and safety grill stainless steel door with stainless steel wire mesh. For internal doors 2 <sup>nd</sup> class teak wood / uPVC extruded frame sections with minimum wall thickness of 2 mm in single rebate.	
	ii) Window	Chemically Treated Hard wood / uPVC extruded frame sections with minimum wall	Same as type-II & III	Same as type-II & III	2 <sup>nd</sup> class teak wood / uPVC extruded frame sections of minimum wall	

S.No	Description	Latest Applicable Specifications				Remarks
		Type-II & III	Type-IV, IV (Special)	Type-V & VI	Type-VII & VIII /Bungalows	
		thickness of 2.0 mm / powder coated or colour anodized aluminum extruded tubular sections/ engineered wood sections along with the provision of sub frame of suitable material.			thickness of 2 mm / powder coated or colour anodized aluminum extruded tubular section having double rebate / three tracks sliding system for glazed shutters and wire mesh shutters	
	iii) Doors & windows of toilet/bath / WC	Chemically Treated Hard wood / uPVC extruded frame sections with wall thickness minimum 2.0 mm / FRP / PVC, compatible to doors shutters	Same as Type-II & III	Same as Type-II & III	2 <sup>nd</sup> class teak wood/uPVC / extruded frame sections with wall thickness minimum 2.0 mm / WPC of density 750 to 1000 kg per cum, compatible to doors shutters	
	iv) Door /window frames in domestic help's area	Not admissible to Type-II, II and III	For domestic help's quarters same as Type-II to III	For domestic help's quarters same as Type-II to III	For domestic help's quarters same as Type-II to III	
<b>b) Shutters</b>						
	i) Main door/ external door shutters	Double shutters, one mild steel (Hot Dip Galvanized) grill door with mosquito proof stainless steel wire mesh of SS-304 grade (Powder Coated), painted and other 35 mm thick factory made flush door shutter both side commercial veneered and painted. (including necessary lipping)	Same as Type-II to III except the flush door having decorative veneering on both side with melamine polish.	Double shutters one safety grill single / double leaf door in SS-304 L grade frame with mosquito proof stainless steel wire-mesh of stainless steel -304 grade (Powder Coated) and stainless steel fittings and other with 35mm thick factory made exterior grade both side decorative veneered type flush door shutter with melamine polish. (including necessary lipping)	Same as Type-V & VI	
	ii) Domestic help's area	Not admissible to Type-II and III	For domestic help's quarters same as Type-II to III.	For domestic help's quarters same as Type-II to III.	For s domestic help's quarters same as Type-II to III.	
	Bath, WC & toilet door	25 to 30 mm thick, FRP / PVC panelled doors	Same as Type-II & III	25 to 30 mm thick WPC of density 650 kg per cum paneled / 30 to 35 mm thick flush doors.	Some as Type-V & VI	
	Other doors	35 mm thick, Chemically Treated Hard wood styles and rails with 12 mm thick commercial ply/ wood	Same as Type II & III	35 mm thick, Chemically Treated Hard wood styles & rails with paneling of 12 mm thick teak ply / teak wood / 5 mm thick	Same as Type-V & VI	

S.No	Description	Latest Applicable Specifications				Remarks
		Type-II & III	Type-IV, IV (Special)	Type-V & VI	Type-VII & VIII /Bungalows	
		paneling or factory made flush door shutters both side commercial ply veneering and finished with wooden Putty and painted.		toughened glass glazing or 35 mm thick factory made exterior grade both side decorative veneered type flush door shutter with melamine polish.		
	c) Window shutters All windows shutters	Double shutter one glazed shutters with frames of / powder coated or colour anodized aluminum extruded tubular sections/ uPVC extruded profiles of minimum wall thickness of 2 mm/ 30 mm thick Chemically Treated Hard wood with glazing of float / toughened glass and with / without reflective coating / high performance coatings or double glazed unit as per design & requirement and other shutter with stainless steel SS-304 grade wire-mesh in place of glazing.	Same as Type II & III	Double shutter one glazed shutters with frames of / powder coated or colour anodized aluminum extruded tubular sections/ uPVC extruded profiles of minimum wall thickness of 2 mm/ 30 mm thick 2 <sup>nd</sup> class teak wood with glazing of float / toughened glass and with / without reflective coating / high performance coatings or double glazed unit as per design & requirement and other with stainless steel SS-304 grade wire-mesh in place of glazing.	Same as Type-V & VI	
	Domestic help's area (doors & windows)	Not admissible to Type-II and III	For domestic help's quarters same as Type II to III	For domestic help's quarters same as Type II to III	For domestic help's quarters same as Type II to III	Shutters in all respective rooms shall be as per the finishes of Type-1 to III in those rooms
	d)Hardware &Fittings Main units	Powder coated or colour anodized aluminum stainless steel fittings SS-304 grade.	Same as Type II & III	Same as Type-II & III	Stainless steel fittings SS-304 grade or chromium / nickel/ chromium & nickel plated brass fittings.	Rubberized door flashing at the bottom rails of all external doors shall be provided for protection from insects and rainwater etc.
<b>FLOORING, SKIRTING &amp; DADO</b>						
	a)Flooring Living/drawing room, dining & family lounge	Vitrified / ceramic tile flooring of size not less than 400 x 400 mm	Vitrified tile flooring of size not less than 600 x 600 mm	18 mm thick pre-polished granite stone of approved shade/ vitrified tile (in all designs and shades) flooring of size not less than 600 x 600 mm; living / drawing room can also have scratch resistant engineered wood or laminated wooden flooring.	Same as Type V & VI	

S.No	Description	Latest Applicable Specifications				Remarks
		Type-II & III	Type-IV, IV (Special)	Type-V & VI	Type-VII & VIII /Bungalows	
	Office area	Not admissible	Not admissible	Not admissible	Scratch resistant engineered wood or laminated wooden flooring	
	Bedrooms	Scratch resistant ceramic tiles / vitrified tiles of size not less than 400 x 400 mm with joints finished with matching grout.	Scratch resistant ceramic / vitrified tiles of size not less than 600 x 600 mm with joints finished with matching grout.	Vitrified tiles in all designs and shades (with water absorption less than 0.08%) of size not less than 600 x 600 mm/ scratch 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 not less than 300 x 300 mm with water absorption less than 0.08% laid with joints finished with matching grout	Same as Type-II & III	Anti-skid vitrified tiles of size not less than 400 x 400 mm with water absorption less than 0.08% with joints finished with matching grout.	Anti-skid vitrified tiles of size not less than 600 x 600 mm with water absorption less than 0.08% with joints finished with matching grout.	
	Kitchen counter	18mm thick pre-polished granite with nosing as per design				
	Common circulation area	18 mm thick pre-polished granite / vitrified tiles in all designs and shades (with water absorption less than 0.08%) of size not less than 600 x 600 mm.				
	Domestic help's area (flooring)	Not admissible to Type-II and III	For domestic help's quarters flooring shall be as per flooring of Type II & III			Finishes in all rooms shall be as per the finishes of Type-1 to III in respective rooms
	Common circulation area in domestic help's quarters	Not admissible to Type-II and III	18 mm thick granite stone / locally available stone			Use of locally available stone shall be as per approval of higher of Senior Architect / Chief Architect provided in the Region.
	Main Staircase Fire escape staircase	18 mm thick honed / flamed finish granite in single length of treads & risers				Nosing design in treads shall be as per architectural design
	Toilets / bathroom/ WC	Glazed ceramic anti-skid of size not less than 300 x 300 mm. including grouting the joints.	Same as Type-II & III	Rectified ceramic anti-skid tiles of size not less than 300 x 300 mm	Anti-skid vitrified/ ceramic tiles (with water absorption less than 0.08% not less than 300 x 300 mm or 18 mm thick gang-saw cut pre-polished granite stone.	
	Skirting in rooms and other areas	100 to 150 mm high skirting matching the floor material.				

S.No	Description	Latest Applicable Specifications				Remarks
		Type-II & III	Type-IV, IV (Special)	Type-V & VI	Type-VII & VIII /Bungalows	
	Kitchen dado	Ceramic glazed / vitrified tiles of size not less than 200 x 300 mm as per design from floor upto full height.	Same as Type-II & III	Ceramic glazed / vitrified tiles of size not less than 300 x 450 mm as per design from floor to full height	Ceramic glazed / vitrified tiles of size not less than 300 x 450 mm as per design from floor to full ht.	Must be read with scale of amenities in the respective categories
	Toilets/ bathrooms / WC dado	Ceramic glazed / vitrified tiles of size not less than 200 x 300 mm upto full height with decorative bands at certain intervals.	Same as Type-II & III	Ceramic glazed / vitrified tiles of size not less than 300 x 450 mm upto full height with decorative bands at certain intervals	Ceramic glazed / vitrified tiles of size not less than 300 x 450 mm upto full height with decorative bands at certain intervals.	
5.	RAILINGS / PARAPETS IN BALCONIES / TERRACE					
	(a) Railings in balconies	Clear 1.00 m high MS railing made out of MS flats and square bars with 40 mm dia MS pipe hand rail on top (as per approved design)	Clear 1.00 m high stainless steel railing made out of tubular balustrades with horizontal tubular SS tubes as rails and hand rail on top (as per approved design); all stainless steel tubular members to be on SS-316 L grade.			
	Note: Hand rail of the balcony railings in multi storey flats may be so designed that clothes drying lines in sufficient numbers are provided along with					
	(b) Parapet on terrace	200 / 230 mm thick masonry in autoclaved aerated cement concrete (ACC) blocks / RCC / burnt clay FPS bricks duly plastered on both sides and top upto 1.0 meter clear height				
6.	FINISHES					
	(a) 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	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 walls & ceiling to be treated with 6 mm thick POP punning (one time only) and painted with low VOC plastic emulsion paint. Synthetic enamel paint on all wood works and steel works	Premium acrylic emulsion paint with low VOC of approved shade in roller finish over 6 mm thick POP wall punning Synthetic enamel paint on all wood works and steel works	
	(b) External finishes	Quartz reinforced texture acrylic paint finish/Premium acrylic smooth water proof exterior finish over cement-based putty / washed mosaic plaster in premium cement. Synthetic enamel paint on all wood work & steel work	Same as Type-II & III.	Quartz reinforced texture acrylic paint finish of approved shade /premium acrylic smooth water proof exterior finish / washed mosaic plaster in premium cement-based putty /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

Note: For hostels, same specifications as for Type-IV & Type-IV (Special) quarters shall be followed.



## ANNEXURE-I (b)

## SCALE OF AMENITIES (CIVIL) FOR GENERAL POOL RESIDENTIAL ACCOMODATION (GPRA)

Item No.	Item	Type-II & III	Type-IV & IV (Special)	Type-V & VI	Type-VII & VIII	Domestic help's Qtrs.
1	Kitchen cabinets					
i)	Cooking platform	Yes	Yes			Yes
ii)	Stainless steel AISI 304(18/8) kitchen sink as per IS 13983 with drain board	Yes	Yes			Yes
iii)	Built in cupboard made up of box and shelves with both side balancing laminated and shutters with one side decorative and other side balancing laminated 18 mm thick high moisture resistant HDF board or Same shelves with box and shutter of 18 mm thick EPC boards, with stainless steel hardware, as per architectural design and specifications.	Yes, (with shelves)	Yes, (drawers with telescopic channels)			
iv)	25 mm thick and not more than 400 mm wide both side balancing laminated high moisture resistant HDF board shelves, in tiers upto 2100 mm height in niche and covered with 18 mm thick one side decorative and other side balancing laminated high density high moisture resistant HDF board, with stainless steel hardware as per architectural design and specifications.	Yes	Yes			Yes
v)	Factory made modular kitchen having sink with double bowl & double drain-board, cooking platform and electric chimney of reputed company.			Yes	Yes	
2	Wardrobes					
	Built in cupboard of minimum depth 650 mm made up of 18 mm thick one side decorative and other side balancing laminated high moisture resistant HDF board in box, sides, top and bottom and 18 mm thick both side balancing laminated high moisture resistant HDF board in shelves, with stainless steel hardware as per architectural design and specifications.	One in each bed room upto ceiling height	One in each bed room upto ceiling height (steel shutters with frame not to be used)			One upto ceiling height
	Factory made wardrobe carcass, shelves, drawers etc. manufactured in 19 mm thick block board / ply wood painted with synthetic enamel paint or primer on all the inner surfaces, and sides top and shutter faces finished with post formed lamination / natural veneer with melamine polish and using stainless steel hardware as per the approved sample.			One in each bed room upto ceiling height	One in each bed room upto ceiling height	
3	Magic eye in front entry door.	One	One	One	One	One
4	Curtain rod with required accessories.	On all windows and doors in all rooms except kitchen, toilets/baths/WC's	Drapery rods on all windows and doors in all rooms except kitchen, toilets/baths/WC's	Same as Type IV & IV (Special)	Same as Type IV & IV (Special)	Same as Type -II & III
5	Set of pegs.	In all toilets / baths /WC's	In all toilets/baths/WC's and wardrobes	In all toilets/baths/WC's and wardrobes	In all toilets/baths/WC's & wardrobes	
6	18 mm thick projected window sill lining, window jambs.	Granite stone	Granite stone	Granite stone	Granite stone	Granite stone

**SCALE OF AMENITIES FOR SANITARY AND WATER SUPPLY FITTING FOR GENERAL POOL RESIDENTIAL ACCOMMODATION (GPRA)**

S.No.	Item	Type-II&III	Type-IV& IV (Special)	Type-V &VI	Type-VII & VIII	Domestic help's Qtrs.	
1	EWC / IWC with trap (EWC with seat rim and cover) and low level dual flushing cistern.	One in each toilet					
2	Water jet and / or health faucet with WC.	Water jet and Health faucet with each EWC					Not applicable
3	Wash basin with CP brass basinmixture for hot & cold water, single lever quarter turns type with ceramic cartridges.	One in each toilet & one in dining area as per design.					One in each toilet
4	Tap (In kitchen, toilet, bath & WC) CP brass bib cock provided quarter turn type with ceramic cartridges.	Three in kitchen, one in each toilet for WC.					
5	Shower with CP brass diverter /mixture single liver type for hot & cold water with ceramic cartridges	One in each toilet/bath					-
6	CP brass towel rail and towel ring	One towel ring with each wash basin and towel rail in each bath					
7	Mirror with frame and glass shelf having stainless steel frame/guard bar/brackets.	600 x 450 mm with each wash basin	As per design with each wash basin			600 x 450 mm with each wash basin	
8	CP brass/ceramic toilet paper holder.	With each EWC					
9	Soap rack / niche as per architectural design and specification.	One with each wash basin and in each bath					
10	Plumbing for water purifier and geyser.	Yes for both in kitchen and for geyser in each bath					
11	Storage tank of capacity as per NBC 2016 provision of separate tank for WC & drinking water.	Separate tanks for kitchen and toilets for dual flushing system as per requirements with provision of online filter.					
13	Water meter of appropriate bore size, as per approval of the local municipal body.	Yes, inside the flat at direct supply point to dwelling unit or at first inlet point if supply is through bulk storage at terrace; separately for each piping system.					

**SCALE OF AMENITIES FOR ELECTRICAL INSTALLATION IN GENERAL POOL RESIDENTIAL  
ACCOMMODATION**

S.No.	Description	Type-II	Type-III	Type-IV & IV (Special)	Type-V	Type-VI	Type-VII& VIII	Domestic help's Qtrs.
1	Power plug points (16 A 6 pins)	2 in each room 1 in kitchen 1 in utility area	2 in each room 1 in kitchen 1 in utility area	2 in each room 1 in kitchen 1 in utility area	3 in drawing room 3 in Dining Room 2 in each Bedroom 2 in Kitchen 1 in Utility Area	3 in drawing room 3 in dining room 2 in each bedroom 2 in kitchen 1 in utility area	2 in office 4 in drawing room 3 in dining room 2 in family lounge 2 in each bedroom 2 in kitchen 1 in utility area	Total 2
		Total 8	Total 8	Total 12	Total 15	Total 17	Total 22	
2	Light plug points (6 A)	2 in each room 1 in kitchen 1 in balcony area	2 in each room 1 in kitchen 1 in balcony area	2 in each room 1 in kitchen 1 in balcony area	2 in each room 1 in kitchen 1 in store 1 in main balcony	2 in each room 1 in kitchen 1 in store 1 in each balcony	1 in office 2 in each room 1 in kitchen 1 in store 1 in each balcony	Total 2
		Total 8	Total 8	Total 12	Total 13	Total 15	Total 20	
3	Bracket lights (with normal fittings excluding lamp/bulb)	1 in each room 1 in kitchen 1 in each toilet 1 in utility	1 in each room 1 in kitchen 1 in each toilet 1 in utility	1 in each room 1 in kitchen 1 in each toilet 1 in utility	1 in store 1 in each toilet 1 in utility	1 in store 1 in each toilet 1 in utility	1 in store 1 in each toilet 1 in utility	Total 3
		Total 4	Total 4	Total 11	Total 10	Total 12	Total 12	
4	Ceiling fans	1 in living room 1 in each bedroom	2 in living room 1 in each bedroom	2 in living room 1 in dining room 1 in each bedroom	2 in drawing room 1 in dining room 1 in each bedroom 1 in each balcony	2 in drawing room 1 in dining room 1 in family lounge 1 in each bedroom 1 in each balcony	2 in drawing room 1 in dining room 1 in family lounge 1 in each bedroom 1 in each balcony	Total 1
		Total 3	Total 4	Total 6	Total 6	Total 12	Total 14	
5	Call bell points	1	1	2	3	3 (One with image display system)	4 (One with image display system)	
6	Exhaust fans	1 each in kitchen, bath & WC	1 each in kitchen, bath & WC	1 each in kitchen, bath & WC	1 each in kitchen & toilets	1 each in kitchen & toilets	1 each in kitchen & toilets	Total 2
7	AC points (with MCB connected socket outlet with wiring)	1 in each room except kitchen & toilet	1 in each room except kitchen & toilets	1 in each room except kitchen & toilets	1 in each room except kitchen & toilets	1 in each room except kitchen & toilets	1 in each room except kitchen & toilets	
8	Geyser point (with MCB connected socket outlet with wiring)	1 in bathroom	1 in bathroom / toilet	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
10.	EDB/MCB (3 phase)			1	1	1	1	
11	Cable TV point	1 in living room 1 in each bedroom	1 in living room 1 in each bedroom	1 in drawing room 1 in each bedroom	1 in drawing room 1 in each bedroom	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

S.No.	Description	Type-II	Type-III	Type-IV & IV (Special)	Type-V	Type-VI	Type-VII& VIII	Domestic help's Qtrs.
12	Telephone point As per the approval of competent authority	1 in living room 1 in each bedroom	1 in living room 1 in each bedroom	1 in drawing room 1 in each bedroom	1 in drawing room 1 in each bedroom	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				3 in drawing room 3 in dining room	3 in drawing room 3 in dining room 2 in each bedroom	3 in office 3 in drawing room 3 in dining room	
	for LED bulbs (without bulbs)				2 in each bedroom 1 in kitchen	2 in kitchen	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 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 4	Total 4	Total 6	Total 6	Total 7	Total 9	
15	Modular switches	---	---	---	Yes	Yes	Yes	---

Note: All the common areas e.g. lifts & staircases, lobbies, connecting corridors etc. shall have lighting arrangement along with LED light fixtures as per actual design.

## GENERAL SPECIFICATIONS FOR NON – RESIDENTIAL BUILDINGS

Item No.	Description	Specifications
1.0	FOUNDATION	
1.1	For RCC framed structure	As per structural design based on soil investigation. (Primarily with RCC footings, columns, raft etc.).
1.2	For composite (partially load bearing and partially RCC framed structure)	As per structural design based on soil investigation. (brick/stone work spread footings on cement concrete base upto 1500 mm depth below ground level with or without RCC isolated combined footings with plinth beams/bands).
2.0	SUPER STRUCTURE	
2.1	For RCC framed structure	R.C.C. framed construction having filler walls with fly ash bricks / burnt clay FPS bricks / aerated cement concrete (ACC) blocks / autoclaved aerated cement (AAC) blocks.
2.2	For composite (partially load bearing and partially RCC framed structure)	Load bearing construction in burnt clay FPS bricks masonry / stone masonry / aerated cement concrete (ACC) blocks / fly ash bricks / autoclaved aerated cement (AAC) blocks with intermediate columns and RCC bands at lintel/ceiling level as per design.
2.3	Internal partitions:- Office /college/hospital	Aerated cement concrete (ACC) blocks./ Light weight autoclaved aerated concrete (AAC) blocks/ Gypsum blocks/ Non asbestos double skin cement boards/ Fly ash bricks/
	Schools	Light weight autoclaved aerated concrete (AAC) blocks / burnt clay FPS brick masonry work / aerated cement concrete (ACC) blocks / fly ash bricks.
2.4	Sunken Floor in Lavatory Blocks for Floor Traps / W.C. with four course waterproofing treatment	Sunk recess in RCC floor of required size and depth may be provided for floor traps, W.C. traps.
3.0	DOORS & WINDOWS	
3.1	Frames	
3.1.1	Door frames:- Office/college/hospital	Door frames of 2 <sup>nd</sup> class Indian teakwood or equivalent in officer's room. anodized / powder coated/ polyester powder coated aluminum extruded tubular sections/extruded hollow mild steel pipes (minimum 2 mm thickness)/uPVC extruded frame sections / WPC of density between 750 to 1000 kg per cum.
	Schools	Locally available chemically treated hard wood/ seamless mild steel tubular frame (with Hot Dip GI coating) of minimum 2 mm thickness.
3.1.2	Window frame:- Office/college/hospital	uPVC extruded sections of window frame / Aluminum extruded tubular sections / WPC of density between 750 to 1000 kg per cum.
	Schools	uPVC extruded sections of window frame / standard mild steel Z-section steel frame members.
3.2	Door & window shutters	
3.2.1	Door Shutter:- Office/college/hospital	Paneled type in 2 <sup>nd</sup> class Teak wood or flush door with teak veneered ply/ commercial ply or anodized/powder coated/ polyester powder coated aluminum shutters with toughened glass glazing/paneling wherever required as per CPWD specifications/as per design & drawing.
	Schools	Flush door shutters with Teak ply veneering/commercial ply veneering (including necessary lipping).
3.2.3	Frame and shutters in wet area	PVC/FRP/WPC door frames & shutters in wet areas.
3.3	Window shutters:- Office/college/hospital	Factory made colour anodized/ powder coated/ polyester powder coated Z-section aluminum shutters/ standard uPVC/WPC section for windows glazed with glazing of float / toughened glass and with / without reflective coating / high performance coatings or double glazed unit as per design & requirement.
	Schools	Standard powder coated aluminum tubular profiles windows / mild steel Z-section steel windows with glazing of float / toughened glass and with / without reflective coating / high performance coatings or double glazed unit as per design & requirement.
3.4	Fittings	Anodized aluminum / stainless steel SS-304 grade.
3.5	Fire check door	As per fire safety specifications.
4.0	FLOORING	
4.1	Main entrance hall:- Office/college/hospital	18mm thick Pre polished granite flooring.
	Schools	18mm thick Pre polished granite flooring in entrance lobby.
4.2	Corridors:- Office/college/hospital	Matt finished vitrified tiles/granite flooring
	Schools	Kota stone flooring and corresponding skirting.

Item No.	Description	Specifications
4.3	Rooms:- Office/college/hospital	Granite tiles/vitrified tiles/engineered wood flooring (in officers chambers)
	Schools	Kota stone flooring and corresponding skirting. In principal room and office area vitrified tiles of size 600 x 600 mm and matching skirting/dado.
4.4	Lavatory Blocks:- Office/college/hospital	18 mm thick Granite flooring.
	Schools	Rectified antiskid tiles (of size not less than 400 x 400 mm).
4.5	Laboratories in schools	Rectified antiskid tiles (of size not less than 400 x 400 mm) and chemical resistance tiles in floor/counters/shelves of chemistry labs.
4.6	Flooring in basement	Vacuum dewatered concrete.
4.7	Rest of the area	Vitrified ceramic floor tiles
5.0	STAIRCASE	
5.1	Internal staircases:- Office/college/hospital	18 mm thick single piece granite stone in flooring in treads & risers with dado of matching permanent finish specifications.
	Schools	20 mm thick single piece kota stone flooring in treads & risers with 1200 mm high dado of ceramic glazed tiles of size 300 x 450 mm.
5.2	Fire escape staircase	18 mm thick flamed granite in single piece in treads & risers with dado of matching permanent finish specifications.
6.0	RAILING:- Office/college/hospital	Stainless steel balustrades with 12mm thick toughened glass railing or stainless steel tubular horizontal guard rails /hand rails in SS-304 grade.
	Schools	1200 mm high parapets minimum 100 mm thick or mild steel railing with GI pipe hand rail.
7.0	TOILETS:- Office/college/hospital	Granite flooring / glazed tiles of size not less than 300 x 450 mm / 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.
	Schools	Rectified anti skid tiles of size not less than 400 x 400 mm and dado upto door height with ceramic glazed wall tiles of size not less 300 x 450 mm.
8.0	ROOFING	
8.1	Roof treatment	Coba treatment/over deck insulation with puff slab.
8.2	False ceiling:- Office/college/hospital	False ceiling in office area & toilets to cover the services as per design requirements.
	Schools	False ceiling in office area, principal room and in toilets (If needed to hide sanitary pipes)
9.	FINISHING	
9.1	External:- Office/college/hospital	Dry stone cladding/washed stone grit plaster/water proof weather coat paints/ structural glazing/ ACP cladding conforming to Energy Conservation Building Code.
	Schools	Dry stone cladding/washed stone grit plaster upto certain specified heights rest cement plastered surface with white cement based putty and acrylic smooth exterior paints.
9.2	Internal:- Office / college / hospital	Cement plaster in wet areas / Dry acrylic paint / distemper in service area & basement / Acrylic emulsion paint/ textured paint (low V.O.C) over POP / Wall paneling as per approved architectural design upto sill level / 1200 mm height or ceiling height
	Schools	Cement plastered wall surfaces with POP (one time) and acrylic smooth interior paints in classrooms, corridors and labs etc. In principal room and office texture paint over POP surface.
9.3	Painting:- Office/College/Hospital	Doors & windows – painting/polishing on wood work as per design requirement.
	Schools	Doors and windows to be painted with synthetic enamel paint and in corridors upto 1500 mm height on the exterior of classroom walls and upto parapet height on the other side to be painted with synthetic enamel paint.
10.0	Provision for barrier free building	Ramps, toilets for physically challenged, chequered tiles, use of Braille signage & lifts etc. GRC (glass reinforced concrete) tiles in ramp area.

## GUIDELINES FOR WORKING OUT PLINTH AREA

(As per IS:3861-2002 with upto date amendments as may be issued from time to time)

In order to ensure the adoption of a uniform method of working out Plinth Area from plans, the following guidelines are laid down. These guidelines are general in nature. These 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 plans.

### 1. Terminology

#### 1.1 Plinth Area :

The plinth area shall mean the built-up covered measured at the floor level of basement or of any storey.

#### 1.2 Balcony :

A horizontal projection with a hand-rail, balustrade or a parapet.

#### 1.3 Mezzanine Floor:

An intermediate floor in between two main floor having minimum height of 2.2 m from the floor and having a proper and permanent access to it.

Note: Where rules of the local bodies permit intermediate floor of minimum 1.8 m clear height, may also be considered as mezzanine floor for the purpose of measurement.

#### 1.4 Mumty (Stair Cover) :

It is a structure with a roof over a staircase and its landing, built to enclose only the stairs for the purpose of providing protection from weather and not used of human habitation .

#### 1.5 Loft

A structure providing, intermediate storage space in between two main floors without having a permanent access and at a height not less than 2.0 m from the floor below.

#### 1.6 Porch

It is a covered structure supported on pillars or otherwise for the purpose of pedestrian or vehicular approach to a building.

### 2. General

2.1 Linear measurement shall be measured to nearest 0.01 m, and areas shall be worked out to the nearest 0.01m<sup>2</sup>

2.2 The areas of each of the following categories shall be measured separately and shall not be clubbed together so as to enable the cost computation at different rates per unit area as worked out for varied heights or categories.

- a) Basement
- b) Floor without cladding (stilted floor)
- c) Floors including top floor which may be partly covered;
- d) Mezzanine floor including additional floor for seating in assembly building/theatre, auditorium etc
- e) Garage
- f) Accommodation for service staff
- g) Mumty (Stair cover)
- h) Machine room
- i) Porch
- j) Towers, turrets, domes projecting above the terrace level at terrace.

### 3. Method of measurement of Plinth Area

The total Plinth area shall be the sum total of built up covered areas measured at each floor level of the buildings for the categories mentioned under 3.1 below and exclude the areas given in 3.2

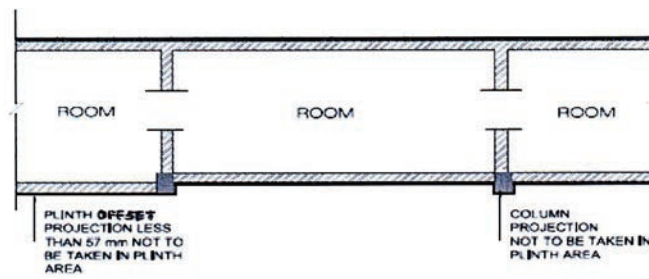
3.1 For the purpose of plinth area, following shall be included:

- a) Area of the wall at the floor level excluding plinth offsets, if any; when the building consists of columns projecting beyond cladding, the plinth area shall be taken upto the external face of cladding (in case of corrugated sheet cladding outer edge of corrugation shall be considered) (Refer sketch-1)  
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) Shafts for sanitary, water supply installations, garbage chute, telecommunication, electrical, fire fighting, air-conditioning and lifts.
- c) Stair case: Main stair case, open spiral/service stair case/fire escape stair case etc.
  - (i) 100 percent of the plan area of main / service / fire escape stair ( enclosed in defined stair hall and mummy at top)
  - (ii) 50 percent of the plan areas of service /fire escape/ openstairs (without any enclosure around and mummy at top).Note:- Any type of steps, ladder/cat-ladder, spiral/flat, with or without side guard rails created for the purpose of approaching inaccessible terrace or from terrace to top of bulk water storage tanks or otherwise for maintenance purposes shall not account for plinth area.
- d) In case of open verandah with parapets (Refer sketch-2):
  - (i) 100 percent areas for the portion protected by the projections above, and
  - (ii) 50 percent area for the portion unprotected from above.
- e) In case of balcony projections with railing / parapets (Refer sketch-3):
  - (i) 100 percent area of the balcony covered by projection above
  - (ii) 50 percent area of the uncovered balcony
- f) In case of alcove made by cantilevering a slab beyond external wall:
  - (i) 25 percent of the area for the alcove of height upto 1 m.
  - (ii) 50 percent of the area for the alcove of height more than 1 m and upto 2 m, and
  - (iii) 100 percent of the area for the alcove of height more than 2 m.
- g) Area of mummy and machine rooms (Refer sketch-4)
- h) Mezzanine floors shall be measured as different floor levels with deduction for lesser floor heights than the standard heights

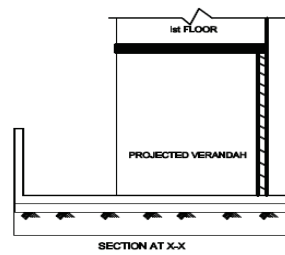
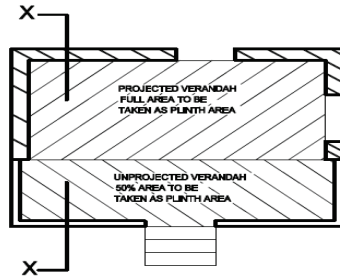
3.2 The following shall not be included in the plinth area

- 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. (Refer sketch-5)
- d) Terrace
- e) Open platform on ground
- f) Towers, turrets, domes projecting above terrace level.

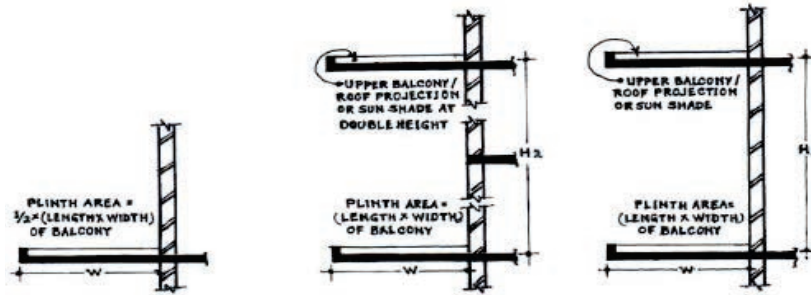




Sketch -1



Sketch -2

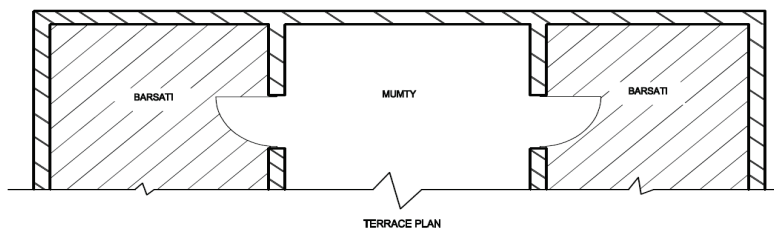


Uncovered balcony

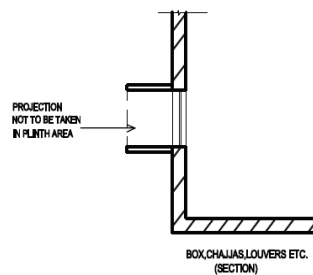
Covered balcony

H-1 refers to floor height & H-2 refers to double the floor height in case of staggered balconies.

Sketch -3



Sketch -4



Sketch- 5

## Proforma for Plinth Area calculation (Floor wise) by Architectural unit

Name of Project:

Reference to building/location:

Floor :

S.No.	Room Designation	Area of Room			Area deductions			Net Area (in sqm) A-A <sub>1</sub>
		Length, L (in meter)	Breadth, B (in meter)	Area, A =L*B (in sqm)	Length, L <sub>1</sub> (in meter)	Breadth, B <sub>1</sub> (in meter)	Area, A <sub>1</sub> = L <sub>1</sub> *B <sub>1</sub> (in sqm)	
1	Area of the wall at the floor level excluding plinth offsets							
(i)	Basement							
(ii)	Stilted floor							
(iii)	Entrance foyer / Lobby							
(iv)	Room-1/Hall-1							
(v)	Room-2/Hall-2							
(vi)	Room-3							
(vii)								
(viii)								
(ix)	Domestic help's room							
(x)	Corridors							
(xi)	Kitchen							
(xii)	Toilet							
(xiii)	Stores							
2	Shafts							
(i)	Sanitary and water supply							
(ii)	Garbage chute							
(iii)	Telecommunication							
(iv)	Electrical							
(v)	Fire Fighting							
3	Stairs							
(i)	Main/Service stairs (enclosed)							
(ii)	Service/Fire escape / Open							
4	Verandha							
(i)	Protected verandha							
(ii)	Un protected verandha							
5	Balconies							
(i)	Covered balconies							
(ii)	Uncovered balconies							
6.	Alcove (Cup-boards / Box storage)							
(i)	Upto 1.00 m							
(ii)	1.00 m to 2.00 m							
(iii)	Above 2.00 m							
7	Covered area at Terrace							
(i)	Machine Room							
(ii)	Mumty							
8	Mezzanine floor							
9	Poarch							

Note:- In above statement more no. of rooms/designated spaces may be added in serial and more than one toilets, balconies, corridors and other ancillary spaces may be incorporated accordingly. All care should be taken that no space on any floor is left out for calculation of plinth area. The proforma is for cuboidal plans only, architectural unit may modify it for other shapes in such a manner that calculation of plinth area is comprehensible.

Architect

Sr. Architect / Chief Architect

## Abstract of Plinth Area building wise

Name of Project:

Reference to building/location:

S. No.	Floor Designation	Floor No.	Plinth Area with;					
			Standard floor height		More than standard floor height		Less than standard floor height	
			Height (in m)	Area (in sqm)	Height (in m)	Area (in sqm)	Height (in m)	Area (in sqm)
1	Basement	(-x)						
2	(i) Ground Floor	0						
	(ii) Stilted floor	0						
	(iii) Porch (at ground floor)							
3	First floor	1						
4	Second floor	2						
5	Typical floor	3						
6								
7								
8								
9	Terrace floor							
	(i) Mumty							
	(ii) Machine rooms							
10	Mezzanine floor (at any floor)							
11	Domestic help's / service staff accommodation (at any floor)							
	Total Plinth Area (in building)							

Architect

Sr. Architect / Chief Architect

## Abstract of Plinth Area of the project

Name of Project:

Reference to building/location:

S.No.	Building Designation (Name/block of building)	No. of blocks	Plinth Area (each block)	Total plinth area in sqm (as per building area details)	Reference to building abstract sheet
1	Residential				
	(i) Type- II				
	(ii) Type- III				
	(iii) Type- IV				
	(iv) Type- V				
	(v) Type- VI				
	(vi) Hostel- 1				
	(vii) Hostel- 2				
2	Office/Admn. Blocks				
	(i) Block- 1				
	(ii) Block- 2				
	(iii) Block- 3				
3	Class room/ Lecture hall Blocks				
	(i) Halls				
	(ii) Blocks				
4	Auditorium/ assembly hall/ workshops				

Architect

Sr. Architect / Chief Architect

S. No. 3.1(a to h) refers to areas to be included for plinth area, 3.2 (a to f) refers to areas not to be included and 2.2 (a to j) refers to areas to be calculated separately on Annexure-II. Plinth area calculation sheets as per proforma (Annexure-III (a), (b) & (c)) above, shall be provided by the Architectural unit.

The concerned Architectural unit would provide building wise Plinth area calculation abstract and a consolidated plinth area abstract for the entire campus based on the parameters explained in Annexure-II, duly approved and signed by stated Architects with the conceptual drawings so as to enable the Project Managers work out Preliminary Estimate based on these Plinth Area Rates.

## PROFORMA FOR CALCULATION OF BUILDING COST INDEX

S.No	Description	Unit	%age	Rates as on 01.04.2021 (in ₹)	Proportionate value (in ₹)	Weightage rates (in ₹)	Weightage of Component	Rates at the time of revision of Cost Index	Cost Index
1	Bricks (Fly Ash)	1000 nos.	100%	4500.00	4500	4500.00	8.00	-	-
2	Cement (OPC)	qtl.	100%	500.00	500.00	500.00	14.50	-	-
3	TMT Steel Reinforcement bar								
a.	8 & 10 mm dia	qtl.	50%	4900.00	2450.00	4900.00	19.50	-	-
b.	12 & 16 mm dia		50%	4900.00	2450.00			-	-
4	Aggregates 20 mm	cum	75%	1400.00	1050.00	1289.25	6.50	-	-
	a) Natural sources		25%	957.00	239.25			-	-
	b) Aggregates 20 mm (RCA)								
5	Sand (coarse sand)	cum	75%	1500.00	1125.00	1310.25	3.00	-	-
(a)	Natural sources		25%	741.00	185.25			-	-
(b)	Sand (coarse sand) RA								
6	Flooring Items								
a.	Vitrified tiles	sqm	50%	560.00	280.00	732.00	5.00	-	-
b.	Ceramic tiles		20%	300.00	60.00			-	-
c.	Kota stone		10%	320.00	32.00			-	-
d.	Granite stone		20%	1800.00	360.00			-	-
7	Paints								
a.	Synthetic enamel paint	litre	33.33%	175.00	58.33	138.32	3.00	-	-
b.	Acrylic washable distemper		33.33%	40.00	13.33			-	-
c.	Premium acrylic paint		33.33%	200.00	66.66			-	-
8	Door / windows-wooden / uPVC / aluminum / steel								
a.	35 mm thick flush door shutters both side commercial veneering	sqm	30.00%	1000.00	300.00	2085.00	7.00	-	-
b.	Factory made, standard Z-section steel windows		15.00%	1750.00	262.50			-	-
c.	uPVC windows		20.00%	3500.00	700			-	-
d.	Aluminum window		35.00%	2350.00	822.50			-	-
9	Pipes								
a.	15 mm GI pipes	metre	10.00%	95.00	9.50	307.50	2.50		
b.	100 mm CI pipes		40.00%	650.00	260.00				
c.	20 mm clack conduits		20.00%	70.00	14.00				
d.	20 mm CPVC pipes		30.00%	80.00	24.00				

S.No	Description	Unit	%age	Rates as on 01.04.2021 (in ₹)	Proportionate value (in ₹)	Weightage rates (in ₹)	Weightage of Component	Rates at the time of revision of Cost Index	Cost Index
10	Lamps & Fans								
a.	Ceiling fans 1200 mm(Five Star)	each	50%	1590.00	795.00	1060.00	4.50		
b.	1200 mm LED tube lights with fittings		40%	640.00	256.00				
c.	LED bulbs9/11 W		10%	90.00	9.00				
11	Electrical machinery, Motor 7.5 HP (pump set) 1500 RPM	each	100%	23010.00	23010.00	23010.00	2.50		
12	Wires & cables								
a.	Copper wire 1.5 sqmm	100 metre	70%	1335.00	934.50	1888.50	4.00		
b.	Copper wire 4.0 sqmm		30%	3180.00	954.00				
13	Labour								
a.	Skilled	each	50%	784.00	392.00	714.50	20.00		
b.	Unskilled		50%	645.00	322.50				
						Total	100.00		

## Note:-

- In the above proforma at S. No. 4 & S. No. 5, Aggregates – 20 mm and Sand (coarse sand) are considered in two parts (a) & (b) respectively where (a) represents 75% from natural source and (b) represents 25% RCA/RA. In areas where components of RCA/RA are not available (because of non setting up of C&D waste conversion units), the components of aggregate 20 mm at 25% RCA and coarse sand at 25% RA can be avoided and 100% of these materials from natural sources only be considered.
- In the above proforma the rates for building materials adopted in column 5 and corresponding computed rates in column 6 & column 7 are bare rates excluding GST or any other levy. Therefore, for working out local cost index prevailing bare rates only at the respective station shall be considered.

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

Year	Effective Date	Cost Index	Base 100 of PAR	Year	Effective Date	Cost Index	Base 100 of PAR
1962	18.09.1962	131	1955	2006	01.04.2006	236	1992
1966	19.07.1966	148	1955	2007	01.04.2007	254	1992
1969	15.01.1969	157	1955	2007	01.10.2007	260	1992
1969	17.06.1969	168	1955	2007	01.10.2007	100	2007
1969	15.10.1969	181	1955	2008	01.04.2008	114	2007
1970	01.01.1970	100	1970	2008	01.10.2008	119	2007
1971	05.04.1971	120	1970	2009	01.04.2009	113	2007
1972	03.05.1972	134	1970	2009	01.10.2009	126	2007
1973	24.12.1973	166	1970	2010	01.04.2010	136	2007
1975	26.06.1975	180	1970	2010	01.10.2010	139	2007
1976	01.10.1976	180	1970	2011	01.04.2011	149	2007
1976	01.10.1976	100	1976	2011	01.10.2011	151	2007
1977	30.12.1977	113	1976	2012	01.04.2012	161	2007
1978	31.03.1978	116	1976	2012	01.10.2012	170	2007
1979	31.03.1979	130	1976	2012	01.10.2012	100	2012
1980	10.04.1980	176	1976	2013	01.04.2013	100	2012
1981	23.04.1981	200	1976	2014	01.04.2014	105	2012
1982	29.01.1982	217	1976	2014	01.10.2014	107	2012
1982	30.03.1982	221	1976	2015	01.04.2015	104	2012
1983	16.03.1983	245	1976	2015	01.10.2015	103	2012
1984	13.03.1984	274	1976	2016	01.04.2016	102	2012
1985	27.06.1985	312	1976	2016	01.10.2016	101	2012
1986	09.07.1986	340	1976	2017	01.04.2017	111	2012
1987	16.06.1987	370	1976	2017	01.10.2017	115	2012
1988	31.03.1988	397	1976	2018	01.04.2018	116	2012
1988	01.11.1988	421	1976	2018	01.10.2018	118	2012
1989	31.10.1989	494	1976	2019	01.04.2019	118	2012
1990	31.03.1990	521	1976	2019	01.04.2019	100	2019
1991	11.02.1991	564	1976	2019	01.10.2019	98	2019
1991	31.03.1991	595	1976	2020	01.04.2020	101	2019
1992	31.12.1991	664	1976	2020	01.04.2020	100	2020
1992	01.01.1992	100	1992	2020	01.10.2020	97	2020
1994	01.01.1994	117	1992	2021	01.04.2021	105	2020
1995	01.06.1995	132	1992	2021	01.04.2021	100	2021
1997	01.06.1997	145	1992	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. 8. PAR 2020 base 100 is effective from 01.04.2020. 9. PAR 2021 base 100 is effective from 01.04.2021			
1998	01.06.1998	148	1992				
1999	01.09.1999	158	1992				
2000	01.07.2000	162	1992				
2001	01.04.2001	166	1992				
2002	01.04.2002	176	1992				
2003	01.04.2003	197	1992				
2004	01.04.2004	209	1992				
2005	01.04.2005	223	1992				

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सत्यमेव जयते

Government of India  
Ministry of Housing and Urban Affairs

**CENTRAL PUBLIC WORKS DEPARTMENT**



सत्यमेव जयते

भारत सरकार  
Government of India

कुर्सी क्षेत्र दरें

PLINTH AREA RATES

2020



DIRECTOR GENERAL, CPWD, NIRMAN BHAWAN, NEW DELHI





सत्यमेव जयते

भारत सरकार

Government of India

कुर्सी क्षेत्र दरें

# PLINTH AREA RATES 2020

July 2020

Published under the Authority of Director General, CPWD, New Delhi



**CPWD**

**VINIT KUMAR JAYASWAL**  
Director General



**Central Public Works Department**  
Nirman Bhawan, New Delhi



## **Foreword**

The preliminary cost estimation is often the first step towards execution of a work. Therefore, it is very important that the design brief, preliminary drawings and specifications of work are finalized carefully, and that the preliminary cost is based on reliable unit rate. The plinth area rates being published by CPWD are derived from a large data base of various types of buildings completed in different parts of the country. These rates are used for preparation of preliminary cost estimates of works by not only CPWD engineers but also by construction professionals, architects and practicing engineers in construction industry and other government organizations.

Plinth Area Rates was last published in 2019 after taking into account the use of new materials, new construction technologies and revised General Pool Residential Accommodation (GPRA) norms approved by the Ministry of Housing and Urban Affairs.

This edition of Plinth Area Rates is based on latest unit rate of building and development works. The feedback and suggestions received from field units have also been incorporated.

I acknowledge the sincere work by Shri Anant Kumar, ADG (Tech), Shri M.K. Mallick, Chief Engineer (CSQ) (Civil), and the entire team of CSQ (Civil) in bringing out the Plinth Area Rates 2020 in a short time.

  
(Vinit Kumar Jayaswal)



**CPWD**



**ANANT KUMAR**  
Additional Director General  
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**Central Public Works Department**  
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## **Preface**

Plinth Area Rates published by Central Public Works Department is one of the most comprehensive and useful technical document being used by CPWD, PWDs, other government departments, public sector undertakings, builders, engineers and valuation officers for preparation of preliminary estimates for various categories of buildings viz. offices/colleges/schools/hospitals and hostels/residential buildings. This latest updated version of Plinth Area Rates 2020 is the 9<sup>th</sup> in the series of its publications since 1955 in the post independent India era.

Plinth Area Rates 2019 was released after a gap of 7 years. Most of the present day construction requirements of new technologies and revised General Pool Residential Accommodation (GPRA) norms of MoHUA (notified vide office memorandum no. DG/Arch./6 dated 07.08.2013) were incorporated in the 2019 edition. Some simplifications too were carried out by merging categories of buildings like offices, colleges & schools in non-residential buildings and hostels and various types of housing in one single category of residential buildings. Also, the separate group of load bearing structures in each category of buildings was removed and only a sub head of composite (partially RCC framed and partially load bearing) structures was added. In the proforma for calculation of Cost Index weightages of materials and labour components too were revised.

During past one year amendments/suggestions like inclusion of schools as separate category of rates & specifications, clarifying ambiguity in calculation of plinth areas and modifications for more realistic system of computing cost of services were offered by field units, other stakeholders and clients. Some suggestions are found useful & in line with present day needs, and felt apt for incorporation in plinth area rates. Therefore, having incorporated the useful suggested amendments and revising the rates of all categories of buildings by simply adding the Cost Index factor based on labour and materials rates as on 01.04.2020, extras, services and development components too having been revised on rates of labour & material prevailing as on 01.04.2020, this updated version of PAR is being brought out as Plinth Area Rates 2020.

The Plinth Area Rates 2020 (with base 01.04.2020 as 100) comprises of followings:

Latest Plinth Area Rates with base 100 as on 01.04.2020 (for non-residential/residential Buildings in RCC framed/composite structures along with services and development of site components.

And

Plinth Area Rates for specialized E & M works as on 01.04.2020.

Annexure-I (a) to (e): General 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-II: Guidelines for calculating plinth area.

Annexure-III: Proforma for calculating cost index for future cost indices with base 100 as on 01.04.2020.

Annexure -IV: Statement of cost indices of Delhi/NCR since 1955 till date

All efforts have been made to update Plinth Area Rates 2020 making it user friendly by incorporating the views and feedback from various stakeholders and the field units and making necessary simplifications.

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**(Anant Kumar)**  
**ADG (Tech)**

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**CPWD**

**PLINTH AREA RATES**  
as on 01.04.2020

Sl. No.	Description	Rate in ₹ per sqm			
		Non-Residential Buildings			Residential Buildings
		Offices/ Colleges	Hospitals	Schools	Hostels/Quarters
1.0	<b>BUILDING COST (Specifications as per Annexure-I)</b>				
1.1	<b>RCC FRAMED STRUCTURE (Upto six storeys)</b>				
1.1.1	Floor height 3.60 metre	25800	27100	20700	-
1.1.2	Floor height 3.00 metre	-	-	-	19700
1.2	<b>COMPOSITE (PARTIALLY LOAD BEARING AND PARTIALLY RCC FRAMED) STRUCTURE (Upto six storeys)</b>				
1.2.1	Floor height 3.60 metre	21900	23000	17800	
1.2.2	Floor height 3.00 metre	-	-		16800
1.3	<b>EXTRA FOR</b>				
1.3.1.1	For seven to twelve storey For every additional storey.			100	
1.3.1.2	For thirteen to eighteen storey For every additional storey.			200	
1.3.1.3	For nineteen to twenty four storey For every additional storey.			300	
1.3.1.4	For twenty five to thirty storey For every additional storey.			400	
1.3.1.5	For thirty one to thirty six storey For every additional storey.			500	
1.3.1.6	For thirty seven to forty two storey For every additional storey.			600	
	Similarly extra rate per storey may be increased by Rs. 100 per sqm for the next set of six stories				
1.3.2	Every 0.3 metre or part thereof, additional/lesser height of floor above normal floor height of 3.60 metre / 3.00 metre			350	
1.3.3	Every 0.3 metre or part thereof, higher plinth height over normal plinth height of 0.45 metre (on ground floor area only).			350	
1.3.4	Every 0.30 metre or part thereof, deeper foundations over normal depth of 1.20 metre (on ground floor area only).			200	
1.3.5	Making stronger foundations to take load of one additional floor at a later date (on ground floor area only).	For RCC framed structures		Composite structure	
		1500		600	
1.3.6	RCC raft foundation (on ground floor area only)			10000	
1.3.7	Pile foundation (on ground floor area only)			16000	
1.3.8	Stronger structural members to take heavy load above 500 kg per sqm upto 1000 kg per sqm.			1700	

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1.4	<b>BASEMENT FLOOR</b>	
1.4.1	Floor height upto 3.35 metre including water proofing.	31000
1.4.2	Add or deduct for every 0.30 metre, or part thereof, height against normal height of 3.35 metre.	1000
1.5	<b>FIRE FIGHTING</b>	
1.5.1	With wet riser system	800
1.5.2	With wet riser and sprinkler system	1200
1.6	<b>FIRE ALARM SYSTEM</b>	
1.6.1	Manual fire alarm system	250
1.6.2	Automatic fire alarm system	600
1.7	Pressurized mechanical ventilation system in the basements with supply duct of exhaust blowers (on basement area only)	1050
1.8	<b>STILT PORTION</b>	
1.8.1	Stilt portion of multi-storey up to floor height of 3.60 metre (on stilt area only)	8000
1.8.2	Every 0.30 metre additional height above 3.60 metre	200

**Notes for building cost:**

- 1) The rates for item no. 1.1 and 1.2 are inclusive of provisions for earthquake forces and other design loads/forces.
- 2) The rates for items are applicable on entire plinth area except for items no. 1.3.3, 1.3.4, 1.3.5, 1.3.6, 1.3.7, 1.7, 1.8.1, 1.8.2.
- 3) The rates mentioned above are inclusive of GST.
- 4) In case of basement, rate is inclusive of raft foundation; therefore rate as per item 1.3.6 shall not be taken separately.
- 5) In case of more than one basement, the lower most basement shall be considered as basement whereas the upper basements shall be treated as floors.

Sl. No.	Description	Non-Residential Buildings			Residential Buildings	
		Offices & Colleges	Hospitals	Schools	Hostels	Quarters
<b>2.0</b>	<b>SERVICES</b>					
2.1	Internal water supply & sanitary installations	4%	10%	5%	12% with attached toilets, 8% with common toilets.	9%
2.2	External service connections and local body approval charges					
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%
2.2.3	Local body approvals including tree cutting etc.	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%
2.4	<b>EXTRA FOR</b>					
2.4.1	Power wiring and plugs	4%	4%	4%	4%	4%
2.4.2	Lightning conductors	0.25%	0.25%	0.25%	0.25%	-
2.4.3	Telephone conduits	0.25%	0.25%	0.25%	0.25%	-
2.4.4	Third Party Quality Assurance	1%	1%	1%	1%	1%

**Notes for building cost:**

1. Third Party Quality Assurance (TPQA) charge of 1% shall be taken in estimate preferably on the request of client department.
2. In case of modular furniture, extra provisions for raceways, conduiting and LAN etc. shall be made on the basis of actual requirement.
3. LED fittings and 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 + 1.3.2.

Sl. No.	Capacity/ Persons	Speed in m/sec	Travel height	Price (₹ in lacs)	Extra for each additional floor (in ₹)
1	2	3	4	5	6
<b>3</b>	<b>LIFTS with power operated doors and AC variable voltage &amp; variable frequency controls</b>				
<b>3.1</b>	<b>Passenger lift</b>				
3.1.1	8	1.0	G+4	16	90,000
3.1.2	8	1.5	G+5	18	90,000
3.1.3	13	1.0	G+4	18	90,000
3.1.4	13	1.5	G+5	20	90,000
3.1.5	16	1.0	G+4	24	1,10,000
3.1.6	16	1.5	G+5	26	1,10,000
3.1.7	16	2.5	G+12	70	1,10,000
3.1.8	20 <b>(Bed lift)</b>	0.75	G+4	24	1,10,000
3.1.9	20	1.5	G+5	27	1,10,000
3.1.10	20	2.5	G+12	75	1,10,000
<b>3.2</b>	<b>Goods lift (2 speed)</b>				
3.2.1	1 Ton	0.5	G+4	26	85,000
3.2.2	2 Ton	0.5	G+4	33	85,000
3.2.3	3 Ton	0.25	G+4	41	1,00,000

Sl. No.	Description	Rates
4	WATER TANK (RCC )	₹ per litre
4.1	Overhead tank without independent staging	20
4.2	Overhead tank with staging height upto 20 metres	30
4.3	Overhead tank with staging height above 20 metres upto 30 metres	35
4.4	Overhead tank with staging height above 30 metres upto 40 metres	40
4.5	Underground sump	20
5	DEVELOPMENT OF SITE	₹ per sqm
5.1	Levelling	300
5.2	Internal roads & paths	
5.2.1	Internal road with WBM and bituminous top	1600
5.2.2	Internal road with WMM and bituminous top	1700
5.2.3	Cement concrete pavement with vacuum dewatered concrete	2200

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5.2.4	Footpath with PCC base, 60 mm thick paver blocks and kerb stone edging on one side.	2600
		₹ per metre
5.3	External sewerage	3300
5.4	Filtered water supply	
5.4.1	Distribution lines upto 100 mm dia	1300
5.4.2	Peripheral grid 150 mm to 300 mm dia pipes	3600
5.4.3	Unfiltered water supply distribution lines	1700
5.5	Storm water drains	8600
5.6	Rain water harvesting (RWH)	3300
5.7	Trenches for services	6200
5.8	Boundary wall with 1500 mm height from ground level & 600 mm high MS grill including steel gates/wicket gates etc.	
5.8.1	Composite structure	8600
5.8.2	Precast RCC wall	7500
5.9	Horticulture Works	₹ per sqm
5.9.1	Horticulture operations including 300mm earth filling, grassing, tree plantations/shrubs and potted plants etc.	250
5.9.2	Vertical plantations	40

### Notes for developmental works :

1. The rates mentioned as per sqm or per meter refers to the area or the running meter length of respective service as calculated from the layout plan.
2. For development of site, it would be desirable to design all the components under head 5 and cost estimate may be done as individual item with complete rates as per area/length of such components.

OR

Alternately, if it is not feasible to compute the exact area or length of development components from item no. 5.1 to 5.7, then the same may be considered for the entire plot area on proportionate building cost percentage basis as described below.

- |   |                           |
|---|---------------------------|
| 2.1 Compact building(s) site comprising of a single or close clustered multi storey high rise building(s) | = 4.5% of building cost * |
| 2.2 Semi compact / scattered building(s) site comprising of a few multi-storey buildings<br>floor nos.    | = 6.0% of building cost * |
| 2.3 Scattered building(s) site comprising of low rise buildings   | = 7.5% of building cost * |

\* Building cost = The cost of building/building(s) for entire plinth area calculated at rates as per 1.1 / 1.2 + 1.3.2

### General Notes :

1. Provisions for extra ordinary requirements over and above those provided in this PAR may be additionally accounted for.
2. Cost of bulk services like water supply, sewage disposal as mentioned in (a) & (b) below are not included in these rates and extra provisions as per requirement may be made.
  - (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 outfall sewer up to point of disposal etc.
3. None of the specialized E&M services are included in the above rates and necessary provisions are to be considered.



4. The rates for the following green measures are already included 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) Provision of pillar cock having infrared sensor and foam flow technology (in offices, colleges and hospitals).
  - (g) Dual plumbing system.

## PLINTH AREA RATES FOR SPECIALISED E&amp;M WORKS

Rate in ₹

Sl. No.	Description of Item	Unit	Rate
1	SUB-STATION EQUIPMENT		
1.1	Supplying, installation, testing and commissioning of 33 kV/0.433 kV or 11 kV/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.	per kVA	9000
2	DIESEL GENERATING SETS		
2.1	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.	per kVA	11000
3	33 kV RECEIVING SUBSTATION AND 33 kV/11 kV HT CABLING		
3.1	Supplying, installation, testing and commissioning of 33 kV substation comprising 33 kV HT panel, transformers 33kV/11 kV, 11 kV HT panel, inter connections, 11 kV HT under ground cabling to the distribution substations on ring main system, substation earthing, substation safety equipments.	per kVA	6000
3.2	Supplying, installation, testing and commissioning of 33 kV switch room comprising of 33 kV HT panel, inter connections, 33 kV HT under ground cabling to the distribution substations on ring main system, earthing, safety equipment.	per kVA	6000
4	UNINTERRUPTED POWER SUPPLY		
4.1	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
4.2	Add for every additional 30 minutes backup	per kVA	9000
	<b>Note:</b> For assessment of kVA estimation of a building, para 4.4,13 and other relevant paras of "Guidelines for Substation & Power Distribution Systems of Buildings-2019" which is available on CPWD website may be referred to.		
5	CENTRAL AC PLANT		
5.1	Supplying, installation, testing and commissioning of energy efficient central AC plant including low side works	per TR	85000
5.2	Extra for stand-by chilling units high side	per TR	38000
6	VRV/ VRF AC SYSTEM		
6.1	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
7	PRECISION AIRCONDITIONING SYSTEM		
7.1	Supplying, installation, testing and commissioning of precision air conditioning system including piping, electrical cabling, controller etc. required for the system	per TR	110000
8	SOLAR PHOTO VOLTAIC POWER GENERATION SYSTEM		
8.1	Supplying, installation, testing and commissioning of grid interactive roof top solar photo voltaic power generation system including space frame	per kWp	65000

Sl. No.	Description of Item	Unit	Rate
9	SOLAR WATER HEATING SYSTEM		
9.1	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 litres capacity	Each	22500
9.2	For higher capacity in multiples of 100 litres.	per 100 litres	22500
10	CCTV SYSTEM		
10.1	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 – for indoors only {Rate applicable on total plinth area}	per sqm	200
10.2	For external surveillance (Rate applicable on total plot area minus plinth area at ground floor)	per sqm	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.		
11	ACCESS CONTROL SYSTEM		
11.1	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 (Rate applicable only on plinth area of high security area in the building)	per sqm	200
12	IBMS: INTEGRATED BUILDING MANAGEMENT SYSTEM		
12.1	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) (Rate applicable on total plinth area)	per sqm	400
12.2	Add extra for built up area above 10,000 sq mtr. (Rate applicable on total plinth area)	per sqm	125
13	HYDROPNEUMATIC WATER SUPPLY SYSTEM		
13.1	Supplying, installation, testing and commissioning of hydro pneumatic 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
14	LIGHTING AUTOMATION INCLUDING OCCUPANCY SENSORS		
14.1	Supplying, installation, testing and commissioning of lighting automation including occupancy sensors (Rate applicable on area to be specified by client)	per sqm	200
15	BASIC HOME SECURITY FOR RESIDENTIAL COLONY		
15.1	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 under ground cabling, recording system and monitor/ monitors in the control room: Intercom system. (Rate applicable on plinth area excluding service/common areas).	per sqm	300
15.2	CCTV system (Rate applicable on plinth area excluding service/common areas).	per sqm	300
16	LAN SYSTEM		
16.1	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. (Rate applicable on plinth area excluding service/common areas).	per sqm	500

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Sl. No.	Description of Item	Unit	Rate
17	IP BASED EPABX SYSTEM		
17.1	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, cloud-based, enterprise-grade UC solution, MID/ENTRY level IP/SIP phone with, dual 1 gig ports, racks, CAT 6A cable, patch panels, OFC etc. (Rate applicable on plinth area excluding service/common areas).	per sqm	500
	NOTE: It will be economical to use common infrastructure of switches, OFC, CAT 6A cable for both voice and networking.		
18	Conference hall: supplying, installation, testing and commissioning of audio visual/conference system (Rate applicable on carpet area of Hall only)	per sqm	10000
19	STREET LIGHTING WITH LED		
19.1	Supplying, installation, testing and commissioning of LED street/ compound/ high mast/ pathway/ landscape lighting for the entire campus (Rate applicable on total plot area).	per sqm	150
	Note: This is applicable for plot sizes more than 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.		
20	STP/ETP PLANT		
	Supplying, installation, testing and commissioning of STP/ETP of appropriate technology including civil works (except plant room), tertiary treatment etc. for the building/ campus		
20.1	Plant size upto 50,000 LPD	per thousand litres	75000
20.2	Plant size above 50,000 upto 1,00,000 LPD	per thousand litres	60000
20.3	Plant size above 1,00,000 LPD	per thousand litres	50000
21	DRIVER FACE AND AUTOMATIC NUMBER PLATE RECORDING SYSTEM/RECOGNITION SYSTEM		
21.1	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
22	BAGGAGE SCANNERS		
22.1	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
22.2	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	per unit	3500000
23	DOOR FRAME METAL DETECTOR		
23.1	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

Sl. No.	Description of Item	Unit	Rate
24	MEDICAL GAS PIPELINE SYSTEM		
24.1	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		
25	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.		
25.1	With stainless steel technology	per OT	8500000
25.2	With SMS technology	per OT	12500000
	Note: The above rates are based on minimum OT size of 50 sqm		
26	BOOM BARRIER		
26.1	Electromechanical boom barrier with all accessories upto 6 meter length.	each	125000
27	CAR PARKING SYSTEM		
27.1	Sensor based car parking system with controller, display etc. as required. (cost based on minimum car capacity of 250)	per car	10000
28	EMERGENCY LIGHT & ILLUMINATED SIGNAGES		
28.1	Illuminated signages (Rate applicable on total plinth area)	per sqm	20
29	Motorized steel gates upto 6.00 metre. width	per gate	500000

## GENERAL SPECIFICATIONS FOR RESIDENTIAL BUILDINGS

Sl. No.	Description	Applicable Specifications				Remarks
		Type-I, II & III	Type-IV, IV (Special)	Type-V & VI	Type-VII & VIII / Bungalows	
<b>1</b>	<b>FOUNDATION</b>					
	Foundation & structure	As per structural requirements	Same as Type-I, II & III	Same as Type-I, II & III	Same as Type-I, II & III	The design shall vary as per soil conditions
<b>2</b>	<b>SUPERSTRUCTURE</b>					
	For multi-storey RCC framed structure	RCC frame & filler walls of autoclaved aerated cement concrete (ACC) blocks / brunt clay FPS / fly ash bricks.	Same as Type-I, II & III	Same as Type-I, II & III	Same as Type-I, II & III	Any other energy efficient suitable locally available material in consultation with architect and structural engineer.
	For composite structure (partially load bearing & partially RCC framed structure)	Autoclaved aerated cement concrete (ACC) blocks / brunt clay FPS / fly ash bricks	Same as Type-I, II & III	Same as Type-I, II & III	Same as Type-I, II & III	Any other energy efficient suitable locally available material in consultation with architect and structural engineer.
	Internal Partition	Half brick thick masonry in autoclaved aerated cement concrete (ACC) blocks / brunt clay FPS / fly ash bricks.	Same as Type-I, II & III	Same as Type-I, II & III	Same as Type-I, II & III	Any other energy efficient suitable local material in consultation with architect and structural engineer
<b>3</b>	<b>DOORS AND WINDOWS</b>					
	<b>a) Frames(except of toilet/bath&amp; WC)</b>					
	i) Door	Hard wood / seamless mild steel tubular frame with minimum wall thickness of 2.0 mm. The external entrance door frame will have double rebate or sub frame for double doors i.e. main door and safety grill door with stainless steel wire mesh. For internal doors single rebate frames.	Same as type-I, II & III	Same as type-I, II & III	2 <sup>nd</sup> class teak wood frame work for external entrance having double rebate for double doors i.e. main door and safety grill stainless steel door with stainless steel wire mesh. For internal doors 2 <sup>nd</sup> class teak wood / uPVC extruded frame sections with minimum wall thickness of 2 mm in single rebate.	

Sl. No.	Description	Applicable Specifications				Remarks
		Type-I, II & III	Type-IV, IV (Special)	Type-V & VI	Type-VII & VIII / Bungalows	
	ii) Window	Hard wood / uPVC extruded frame sections with minimum wall thickness of 2.0 mm / powder coated or colour anodized aluminum extruded tubular sections/ engineered wood sections along with the provision of sub frame of suitable material.	Same as type-I, II & III	Same as type-I, II & III	2 <sup>nd</sup> class teak wood / uPVC extruded frame sections of minimum wall thickness of 2 mm / powder coated or colour anodized aluminum extruded tubular section having double rebate / three tracks sliding system for glazed shutters and wire mesh shutters	
	iii) Doors & windows of toilet/bath / WC	Hard wood / uPVC extruded frame sections with wall thickness minimum 2.0 mm / FRP / PVC, compatible to doors shutters	Same as Type-I, II & III	Same as Type-I, II & III	2 <sup>nd</sup> class teak wood/uPVC / extruded frame sections with wall thickness minimum 2.0 mm / WPC of density 750 to 1000 kg per cum, compatible to doors shutters	
	iv) Door /window frames in servant area	Not admissible to Type-I, II and III	For domestic help's quarters same as Type-I to III	For domestic help's quarters same as Type-I to III	For domestic help's quarters same as Type-I to III	
<b>b) Shutters</b>						
	i) Main door/ external door shutters	Double shutters, one mild steel grill door with mosquito proof stainless steel wire mesh of SS-304 grade, painted and other 35 mm thick factory made flush door shutter both side commercial veneered and painted.	Same as Type-I to III except the flush door having decorative veneering on both side with melamine polish.	Double shutters one safety grill single / double leaf door in stainless steel frame with mosquito proof stainless steel wire-mesh of stainless steel -304 grade and stainless steel fittings and other with 35 mm thick factory made exterior grade both side decorative veneered type flush door shutter with melamine polish.	Same as Type-V & VI	
	ii) Domestic help's area	Not admissible to Type-I, II and III	For domestic help's quarters same as Type-I to III.	For domestic help's quarters same as Type-I to III.	For s domestic help's quarters same as Type-I to III.	

**Plinth Area Rates 2020**

Sl. No.	Description	Applicable Specifications				Remarks
		Type-I, II & III	Type-IV, IV (Special)	Type-V & VI	Type-VII & VIII / Bungalows	
	Kitchen door (Preferably to be avoided)	35 mm thick hard wood shutter having 12 mm thick both side commercial veneered ply or	Same as Type-I, II & III	35 mm thick hard wood shutter having 12 mm thick both side decorative veneered ply or	Same as Type-V & VI	
		same wood panel at the bottom part and stainless steel wire mesh at upper part.		same wood panel at the bottom part and stainless steel wire mesh at upper part.		
	Bath, WC & toilet door	25 to 30 mm thick, FRP / PVC panelled doors	Same as Type-I, II & III	25 to 30 mm thick WPC of density 650 kg per cum paneled / 30 to 35 mm thick flush doors.	Some as Type-V & VI	
	Other doors	35 mm thick hard wood styles and rails with 12 mm thick commercial ply/ wood paneling or factory made flush door shutters both side commercial ply veneering and painted.	Same as Type I, II & III	35 mm thick, 2 <sup>nd</sup> class teak wood styles & rails with paneling of 12 mm thick teak ply / teak wood / 5.5 mm thick float glass glazing or 35 mm thick factory made exterior grade both side decorative veneered type flush door shutter with melamine polish.	Same as Type-V & VI	
	<b>c) Window shutters</b> All windows shutters	Double shutter one glazed shutters with frames of / powder coated or colour anodized aluminum extruded tubular sections/ uPVC extruded profiles of minimum wall thickness of 2 mm/ 30 mm thick hard wood with glazing of 4 mm float glass and other with stainless steel SS-304 grade wire-mesh in place of glazing.	Same as Type I, II & III	Double shutter one glazed shutters with frames of / powder coated or colour anodized aluminum extruded tubular sections/ uPVC extruded profiles of minimum wall thickness of 2 mm/ 30 mm thick 2 <sup>nd</sup> class teak wood with glazing of 4 mm float glass and other with stainless steel SS-304 grade wire-mesh in place of glazing.	Same as Type-V & VI	



Sl. No.	Description	Applicable Specifications				Remarks
		Type-I, II & III	Type-IV, IV (Special)	Type-V & VI	Type-VII & VIII / Bungalows	
	Domestic help's area (doors & windows)	Not admissible to Type-I, II and III	For domestic help's quarters same as Type I to III	For domestic help's quarters same as Type I to III	For domestic help's quarters same as Type I to III	Shutters in all respective rooms shall be as per the finishes of Type-1 to III in those rooms
	<b>d)Hardware &amp; Fittings</b> Main units	Powder coated or colour anodized aluminum/ stainless steel fittings (SS-304)	Same as Type I, II & III	Same as Type I, II & III	Stainless steel (SS-304) or chromium / nickel/ chromium & nickel plated brass fittings	Rubberized door flashing at the bottom rails of all external doors shall be provided for protection from insects and rainwater etc.
<b>4</b>	<b>FLOORING, SKIRTING &amp; DADO</b>					
	<b>a) Flooring</b> Living drawing room, dining & family lounge	Vitrified / ceramic tile flooring of size not less than 400 x 400 mm	Vitrified tile flooring of size not less than 600 x 600 mm	18 mm thick gang-saw cut pre-polished granite / marble/ stone of approved shade/ double charged vitrified tile flooring of size not less than 600 x 600 mm / scratch resistant engineered wood or laminated wooden flooring only in living /drawing room. granite, marble, stone & tiles.	Same as Type V & VI	
	Office area	Not admissible	Not admissible	Not admissible	Scratch resistant engineered wood or laminated wooden flooring	
	Bedrooms	Scratch resistant ceramic tiles / vitrified tiles of size not less than 400 x 400 mm with joints finished with matching grout.	Scratch resistant ceramic / vitrified tiles of size not less than 600 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 600 x 600 mm/ scratch resistant ceramic tiles with joints finished with matching grout. engineered wood or laminated wooden flooring in one bedroom.	Same as Type-V & VI	

**Plinth Area Rates 2020**

Sl. No.	Description	Applicable Specifications				Remarks
		Type-I, II & III	Type-IV, IV (Special)	Type-V & VI	Type-VII & VIII / Bungalows	
	Kitchen	Anti-skid vitrified tiles of size not less than 300 x 300 mm with water absorption less than 0.08% laid with joints finished with matching grout	Same as Type-I,II & III	Anti-skid vitrified tiles of size not less than 400 x 400 mm with water absorption less than 0.08% laid seamless with joints finished with matching grout.	Anti-skid vitrified tiles of size not less than 600 x 600 mm with water absorption less than 0.08% laid seamless with joints finished with matching grout.	
	Kitchen counter	Granite stone 18 mm thick with nosing	Granite stone 18 mm thick 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 & III	18 mm thick pre-polished granite / vitrified tiles (with water absorption less than 0.08%) of size not less than 600 x 600 mm.	18 mm thick gang-saw cut pre-polished granite / marble stone of approved shade/ vitrified tiles (with water absorption less than 0.08%) of size not less than 600 x 600 mm.	
	Domestic help's area (flooring)	Not admissible to Type-I, II and III	For domestic help's quarters same as Type 1, II & III	For domestic help's quarters same as Type 1, II & III	For domestic help's quarters same as Type 1, II & III	Finishes in all rooms shall be as per the finishes of Type-1 to III in respective rooms
	Common circulation area in servant quarters	Not admissible to Type-I, II and III	Mirror-polished kota stone / locally available stone	Same as Type-IV & Type-IV(special)	Same as Type-IV & Type-IV (special)	Use of locally available stone shall be as per approval of Chief architect
	Main Staircase	Pre-polished kota stone in single length of treads & risers	Same as Type-1, II & III	18 mm thick Pre-polished / honed / flamed finish granite in single length of treads & risers	Same as Type-V & VI	Nosing design in treads shall be as per architectural design
	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 300 x 300 mm. including grouting the joints.	Same as Type-1, II & III	Rectified ceramic anti-skid tiles of size not less than 300 x 300 mm	Anti-skid vitrified/ ceramic tiles (with water absorption less than 0.08% not less than 300 x 300 mm Or 18 mm thick gang-saw cut pre-polished granite stone.	

Sl. No.	Description	Applicable Specifications				Remarks
		Type-I, II & III	Type-IV, IV (Special)	Type-V & VI	Type-VII & VIII / Bungalows	
	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 150 mm high skirting matching the floor material.	
	<b>b) Dado</b> Kitchen dado	Ceramic / vitrified tiles of size not less than 200 x 300 mm as per design from floor up to full height.	Same as Type-I, II & III	Ceramic / vitrified tiles of size not less than 300 x 450 mm as per design from floor to full height	Ceramic / vitrified tiles of size not less than 300 x 450 mm as per design from floor to full ht.	Must be read with scale of amenities in the respective categories
	Toilets/ bathrooms / WC dado	Glazed ceramic / vitrified tiles of size not less than 200 x 300 mm up to full height with decorative bands at certain intervals.	Same as Type-I, II & III	Glazed ceramic / vitrified tiles of size not less than 300 x 450 mm up to full height with decorative bands at certain intervals	Glazed ceramic / vitrified tiles of size not less than 300 x 450 mm up to full height with decorative bands at certain intervals.	
<b>5</b>	<b>FINISHES</b>					
	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	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 walls & ceiling to be treated with 6 mm thick POP punning (one time only) and painted with low VOC plastic emulsion paint.  Synthetic enamel paint on all wood works and steel works	Premium acrylic emulsion paint with low VOC of approved shade in roller finish over 6 mm thick POP wall punning  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 over cement-based putty / washed mosaic plaster in premium cement. Synthetic enamel paint on all wood work & steel work	Same as Type-I, II & III.	Quartz reinforced texture acrylic paint finish of approved shade /premium acrylic smooth water proof exterior finish / washed mosaic plaster in premium cement-based putty /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

**Note: For hostels same specifications as for Type-IV & Type-IV (Special) quarters shall be followed.**

## SCALE OF AMENITIES (CIVIL) FOR GENERAL POOL RESIDENTIAL ACCOMODATION (GPRA)

Item No.	Item	Type-I, II & III	Type-IV & IV Special	Type-V & VI	Type-VII & VIII	Domestic help's Qtrs.
<b>1</b>	<b>Kitchen cabinets</b>					
i)	Cooking platform	Yes	Yes			Yes
ii)	Stainless steel AISI 304(18/8) kitchen sink as per IS 13983 with drain board	Yes	Yes			Yes
iii)	Built in cupboard made up of box and shelves with both side balancing laminated and shutters with one side decorative and other side balancing laminated 18 mm thick high moisture resistant HDF board or Same shelves with box and shutter of 18 mm thick EPC boards, with stainless steel hardwares, as per architectural design and specifications.	Yes, (with shelves)	Yes, (with drawers)			
iv)	25 mm thick and not more than 400 mm wide both side balancing laminated high moisture resistant HDF board shelves, in tiers upto 2100 mm height in niche and covered with 18 mm thick one side decorative and other side balancing laminated high density high moisture resistant HDF board, with stainless steel hardwares as per architectural design and specifications.	Yes	Yes			Yes
v)	Factory made modular kitchen having sink with double bowl & double drain-board, cooking platform and electric chimney of reputed company.			Yes	Yes	
<b>2</b>	<b>Wardrobes</b>					
	Built in cupboard of minimum depth 650 mm made up of 18 mm thick one side decorative and other side balancing laminated high moisture resistant HDF board in box, sides, top and bottom and 18 mm thick both side balancing laminated high moisture resistant HDF board in shelves, with stainless steel hardwares as per architectural design and specifications.	One in each bed room upto ceiling height	One in each bed room upto ceiling height (steel shutters with frame not to be used)			One upto 2100 mm height
	Factory made wardrobe carcasses, shelves, drawers etc. manufactured in 19 mm thick block board / ply wood painted with synthetic enamel paint or primer on all the inner surfaces, and sides top and shutter faces finished with post formed lamination / natural veneer with melamine polish and using stainless steel hardwares as per the approved sample.			One in each bed room upto ceiling height	One in each bed room upto ceiling height	

Item No.	Item	Type-I, II & III	Type-IV & IV Special	Type-V & VI	Type-VII & VIII	Domestic help's Qtrs.
	hardwares as per the approved sample.					
3	Magic eye in front entry door.	One	One	One	One	One
4	Curtain rod with required accessories.	On all windows and doors in all rooms except kitchen, toilets/baths/WC's	Drapery rods on all windows and doors in all rooms except kitchen, toilets/baths/WC's	Same as Type IV & IV (Special)	Same as Type IV & IV (Special)	Same as Type I,II & III
5	Set of pegs.	In all toilets / baths /WC's	In all toilets/baths/WC's and wardrobes	In all toilets/ baths/ WC's and wardrobes	In all toilets/ baths/WC's & wardrobes	
6	18 mm thick projected window sill lining, window jambs.	Kota stone /green marble	Kota stone/granite	Marble/ granite	Marble/ granite	Kota stone

**SCALE OF AMENITIES FOR SANITARY AND WATER SUPPLY FITTING FOR GENERAL POOL  
RESIDENTIAL ACCOMODATION (GPRA)**

Sl. No.	Item	Type-I,II&III	Type-IV& IV Special	Type-V &VI	Type-VII & VIII	Domestic help's 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 level dual flushing PVC cistern.	Yes (In Type-II, and III)	Yes	Yes	Yes	-
3	Water jet/health faucet with European WC.	Health faucet with each European WC	Health faucet with each European WC	Health faucet with each European WC	Health faucet with each European 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 bib cock provided with quarter turns ceramic cartridges.	Two in kitchen, one in each toilet, bath & WC. PTMT in Type-I & II and CP brass in Type-III	Two in kitchen, one in each toilet, bath & WC-CP Brass	Two in kitchen, one in each toilet, bath & WC-CP brass	Two in kitchen, one in each toilet, bath & WC-CP Brass	Two in kitchen, one 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.	One in each toilet/bath	One in each toilet/bath	One in each toilet/bath	One 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 in toilet / bath
8	Mirror with PTMT glass shelf.	600 x 450 mm with each wash basin	600 x 450 mm with each wash basin	As per design with each wash basin	As per design with each wash basin	600 x 450 mm 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 2016 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 requirement for dual flushing system.	Separate water tanks to be provided for servants, in each type of flats.

## ANNEXURE-I (d)

## SCALE OF AMENITIES FOR ELECTRICAL INSTALLATION IN GENERAL POOL RESIDENTIAL ACCOMODATION

Sl. No.	Description	Type-I	Type-II	Type-III	Type-IV & IV (Special)	Type-V	Type-VI	Type-VII & VIII	Domestic help's Qtrs.
1	<b>Power points</b> (15 amp 6 pins)	2 in each room 1 in kitchen 1 in utility area	2 in each room 1 in kitchen 1 in utility area	2 in each room 1 in kitchen 1 in utility area	2 in each room 1 in kitchen 1 in utility area	3 in drawing room 3 in Dining Room 2 in each Bedroom 2 in Kitchen 1 in Utility Area	3 in drawing room 3 in dining room 2 in each bedroom 2 in kitchen 1 in utility area	2 in office 4 in drawing room 3 in dining room 2 in family lounge 2 in each bedroom 2 in kitchen 1 in utility area	Total 2
		<b>Total 6</b>	<b>Total 8</b>	<b>Total 8</b>	<b>Total 12</b>	<b>Total 15</b>	<b>Total 17</b>	<b>Total 22</b>	
2	<b>Plug points</b> (5 amp)	1 in each room 1 in kitchen 1 in balcony area	1 in each room 1 in kitchen 1 in balcony area	1 in each room 1 in kitchen 1 in balcony area	1 in each room 1 in kitchen 1 in balcony area	1 in each room 1 in kitchen 1 in store 1 in main balcony	1 in each room 1 in kitchen 1 in store 1 in each balcony	1 in office 1 in each room 1 in kitchen 1 in store 1 in each balcony	Total 2
3	<b>Bracket lights</b> (with normal fittings excluding lamp/bulb)	<b>Total 4</b> 1 in each room 1 in kitchen 1 in each toilet 1 in utility	<b>Total 5</b> 1 in each room 1 in kitchen 1 in each toilet 1 in utility	<b>Total 5</b> 1 in each room 1 in kitchen 1 in each toilet 1 in utility	<b>Total 7</b> 1 in each room 1 in kitchen 1 in each toilet 1 in utility	<b>Total 8</b> 1 in store 1 in each toilet 1 in utility	<b>Total 9</b> 1 in store 1 in each toilet 1 in utility	<b>Total 12</b> 1 in store 1 in each toilet 1 in utility	Total 3
4	<b>Ceiling fans</b>	<b>Total 3</b> 1 in living room 1 in each bedroom	<b>Total 4</b> 1 in living room 1 in each bedroom	<b>Total 4</b> 2 in living room 1 in each bedroom	<b>Total 11</b> 2 in living room 1 in dining room 1 in each bedroom	<b>Total 10</b> 2 in drawing room 1 in dining room 1 in each bedroom 1 in each balcony	<b>Total 12</b> 2 in drawing room 1 in dining room 1 in family lounge 1 in each bedroom 1 in each balcony	<b>Total 12</b> 2 in drawing room 1 in dining room 1 in family lounge 1 in each bedroom 1 in each balcony	Total 1
5	<b>Call bell points</b>	<b>Total 3</b> 1	<b>Total 3</b> 1	<b>Total 4</b> 1	<b>Total 6</b> 2	<b>Total 6</b> 3	<b>Total 12</b> 3 (One with image display system)	<b>Total 14</b> 4 (One with image display system)	
6	<b>Exhaust fans</b>	1 each in kitchen, bath & WC	1 each in kitchen, bath & WC	1 each in kitchen, bath & WC	1 each in kitchen, bath & WC	1 each in kitchen & toilets	1 each in kitchen & toilets	1 each in kitchen & toilets	Total 2
7	<b>AC points</b> (with MCB connected socket outlet with wiring)	1 in each room except kitchen & toilet	1 in each room except kitchen & toilet	1 in each room except kitchen & toilets	1 in each room except kitchen & toilets	1 in each room except kitchen & toilets	1 in each room except kitchen & toilets	1 in each room except kitchen & toilets	

Sl. No.	Description	Type-I	Type-II	Type-III	Type-IV & IV (Special)	Type-V	Type-VI	Type-VII & VIII	Domestic help's Qtrs.
8	Geyser point (with MCB connected socket outlet with wiring)	1 in bathroom	1 in bathroom	1 in bathroom / toilet	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 room 1 in each bedroom	1 in living room 1 in each bedroom	1 in living room 1 in each bedroom	1 in drawing room 1 in each bedroom	1 in drawing 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 in office 1 in drawing room 1 in dining room 1 in family lounge 1 in each bedroom	1
12	Telephone point As per the approval 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 family lounge 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 2 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	
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	
15	Modular switches	Total 3	Total 4	Total 4	Total 6	Total 6	Total 7	Total 9	---

**Note:- All the common areas 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 light fixtures shall only be used as per directives of competent authority.**



## GENERAL SPECIFICATIONS FOR NON – RESIDENTIAL BUILDINGS

Item No.	Description	Specifications
<b>1.0</b>	<b>FOUNDATION</b>	
1.1	For RCC framed structure	As per structural design based on soil investigation. (primarily with RCC footings, columns, raft etc.).
1.2	For composite (partially load bearing and partially RCC framed structure)	As per structural design based on soil investigation. (brick/stone work spread footings on cement concrete base upto 1500 mm depth below ground level with or without RCC isolated combined footings with plinth beams/bands).
<b>2.0</b>	<b>SUPER STRUCTURE</b>	
2.1	For RCC framed structure	R.C.C. framed construction having filler walls with fly ash bricks / burnt clay FPS bricks / aerated cement concrete (ACC) blocks / autoclaved aerated cement (AAC) blocks.
2.2	For composite (partially load bearing and partially RCC framed structure)	Load bearing construction in burnt clay FPS bricks masonry / stone masonry / aerated cement concrete (ACC) blocks / fly ash bricks / autoclaved aerated cement (AAC) blocks with intermediate columns and RCC bands at lintel/ceiling level as per design.
2.3	Internal partitions:-	Aerated cement concrete (ACC) blocks.
2.3.1	Office / college / hospital	Light weight autoclaved aerated concrete (AAC) blocks.
2.3.2		Gypsum blocks.
2.3.3		Non asbestos double skin cement boards.
2.3.4		Fly ash bricks.
	Schools	Light weight autoclaved aerated concrete(AAC) blocks / burnt clay FPS brick masonry work / aerated cement concrete (ACC) blocks / fly ash bricks.
<b>3.0</b>	<b>DOORS &amp; WINDOWS</b>	
3.1	Frames	
3.1.1	Door frames:- Office / college / hospital	Door frames of 2 <sup>nd</sup> class Indian teakwood or equivalent in officer's room. anodized / powder coated/ polyester powder coated aluminium extruded tubular sections/extruded hollow mild steel pipes (minimum 2 mm thickness)/uPVC extruded frame sections / WPC of density between 750 to 1000 kg per cum.
	Schools	Locally available hardwood/extruded hollow mild steel pipes (minimum 2 mm thickness).
3.1.2	Window frame:- Office /college / hospital	uPVC extruded sections of window frame / Aluminium extruded tubular sections / WPC of density between 750 to 1000 kg per cum.
	Schools	uPVC extruded sections of window frame / standard mild steel Z-section steel frame members.
3.2	Door & window shutters	
3.2.1	Door Shutter:- Office / college / hospital	Panelled type in 2 <sup>nd</sup> class Teak wood or flush door with teak veneered ply/commercial ply or anodized/powder coated/ polyester powder coated aluminium shutters with toughened glass glazing/paneling wherever required as per CPWD specifications/as per design & drawing.
	Schools	Flush door shutters with Teak ply veneering/commercial ply veneering.
3.2.3	Frame and shutters in wet area	PVC/FRP/WPC door frames & shutters in wet areas.
3.3	Window shutters:- Office / college / hospital	Factory made colour anodized/ powder coated/ polyester powder coated Z-section aluminium shutters/ standard uPVC/WPC section for windows with toughened glass glazing.
	Schools	Standard uPVC window sash shutters with double layered glazing/ mild steel Z-section steel shutter members.
3.4	Fittings	Anodized aluminium / stainless steel (SS-304) or equivalent.
3.5	Fire check door	As per fire safety specifications.

**Plinth Area Rates 2020**

<b>Item No.</b>	<b>Description</b>	<b>Specifications</b>
<b>4.0</b>	<b>FLOORING</b>	
4.1	Main entrance hall:- Office / college / hospital	Pre polished granite flooring.
	Schools	Pre polished granite flooring in entrance lobby.
4.2	Corridors:- Office / college / hospital	Matt finished vitrified tiles/granite flooring/combination of marble and granite
	Schools	Kota stone flooring and corresponding skirting.
4.3	Rooms:- Office / college / hospital	Granite tiles/vitrified tiles/engineered wood flooring (in officers chambers)
	Schools	Kota stone flooring and corresponding skirting. In principal room and office area vitrified tiles of size 600 x 600 mm and matching skirting/dado.
4.4	Lavatory Blocks:- Office / college / hospital	Granite flooring.
	Schools	Rectified antiskid tiles (of size not less than 400 x 400 mm).
4.5	Laboratories in schools	Rectified antiskid tiles (of size not less than 400 x 400 mm) and chemical resistance tiles in floor/counters/shelves of chemistry labs.
4.6	Flooring in basement	Vacuum dewatered concrete.
4.7	Rest of the area	Kota stone flooring.
<b>5.0</b>	<b>STAIRCASE</b>	
5.1	Internal staircases:- Office / college / hospital	Single piece granite or marble flooring in treads & risers with dado of matching permanent finish specifications.
	Schools	Single piece kota stone flooring in treads & risers with 1200 mm high dado of ceramic glazed tiles of size 300 x 450 mm.
5.2	Fire escape staircase	Single piece kota stone flooring in treads & risers with dado of matching permanent finish specifications.
<b>6.0</b>	<b>RAILING:-</b> Office / college / hospital	Stainless steel (SS-304) railings.
	Schools	1200 mm high parapets minimum 100 mm thick or mild steel railing with GI pipe hand rail.
<b>7.0</b>	<b>TOILETS:-</b> Office / college / hospital	Granite flooring / glazed tiles of size not less than 300 x 450 mm / 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.
	Schools	Rectified anti skid tiles of size not less than 400 x 400 mm and dado upto door height with ceramic glazed wall tiles of size not less 300 x 450 mm.
<b>8.0</b>	<b>ROOFING</b>	
8.1	Roof treatment	Coba treatment/over deck insulation with puff slab.
8.2	False ceiling:- Office / college / hospital	False ceiling in office area & toilets to cover the services as per design requirements.
	Schools	False ceiling in office area, principal room and in toilets (If needed to hide sanitary pipes)
<b>9.</b>	<b>FINISHING</b>	
9.1	<b>External:-</b> Office / college / hospital	Dry stone cladding/washed stone grit plaster/water proof weather coat paints/ structural glazing/ ACP cladding conforming to Energy Conservation Building Code.
	Schools	Dry stone cladding/washed stone grit plaster upto certain specified heights rest cement plastered surface with white cement based putty and acrylic smooth exterior paints.
9.2	<b>Internal:-</b> Office / college / hospital	

Item No.	Description	Specifications
9.2.1		Cement plaster in wet areas
9.2.2		Dry acrylic paint / distemper in service area & basement.
9.2.3		Acrylic emulsion paint/ textured paint (low V.O.C) over POP
9.2.4		Wall paneling as per approved architectural design upto sill level / 1200 mm height or ceiling height
	Schools	Cement plastered wall surfaces with POP (one time) and acrylic smooth interior paints in classrooms, corridors and labs etc. In principal room and office texture paint over POP surface.
9.3	Painting:- Office / College / Hospital	Doors & windows – painting/polishing on wood work as per design requirement.
	Schools	Doors and windows to be painted with synthetic enamel paint and in corridors upto 1500 mm height on the exterior of classroom walls and upto parapet height on the other side to be painted with synthetic enamel paint.
<b>10.0</b>	<b>PROVISION FOR BARRIER FREE BUILDING</b>	Ramps, toilets for physically challenged, chequered tiles, use of braille signages & lifts etc.GRC (glass reinforced concrete) tiles in ramp area.

## GUIDELINES FOR WORKING OUT PLINTH AREA

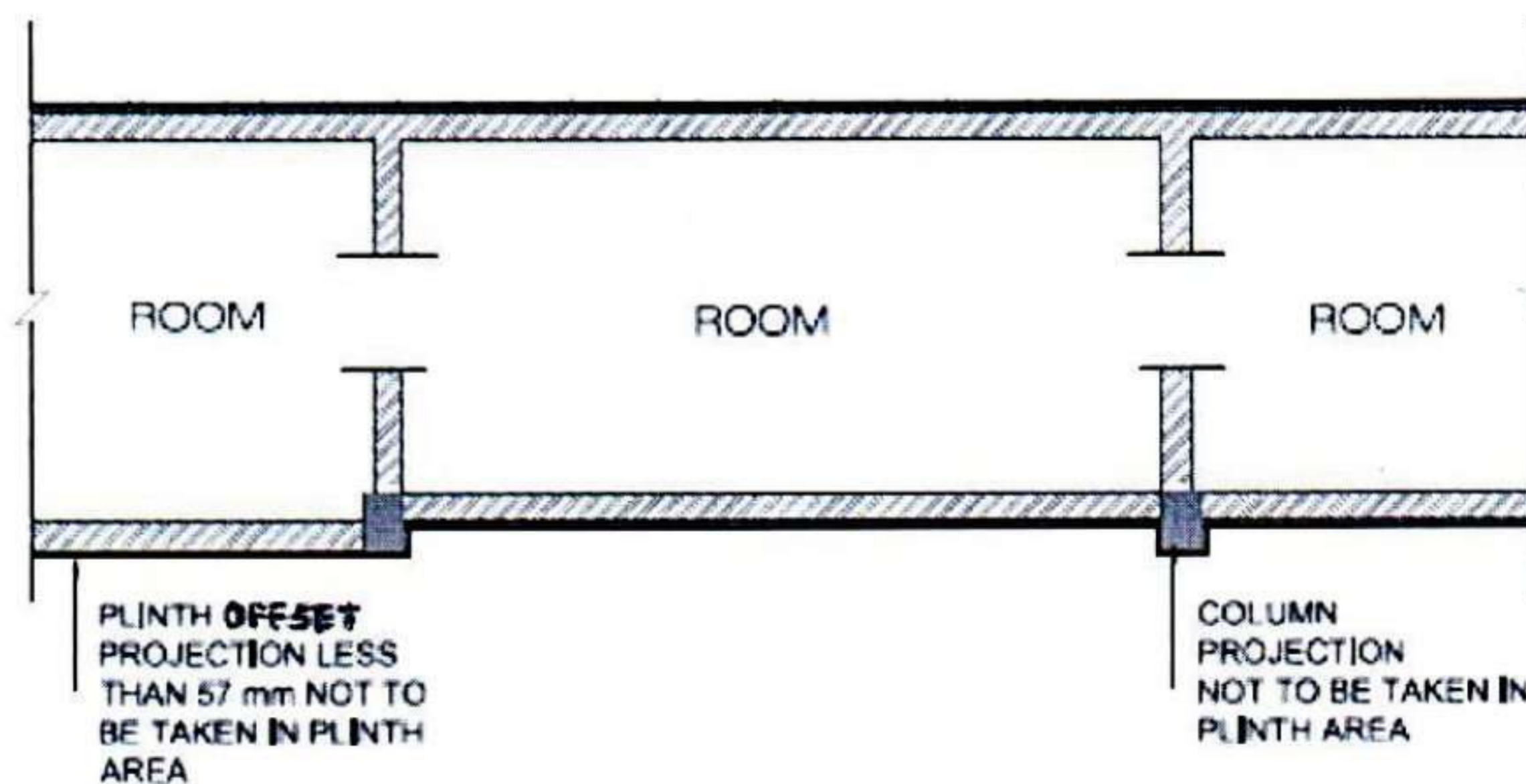
**(For purpose of calculating plinth area as per IS code: 3861-2002)**

In order to ensure the adoption of a uniform method of working out Plinth Area from plans, the following guidelines are laid down. These guidelines are general in nature. These 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 plans.

### General:

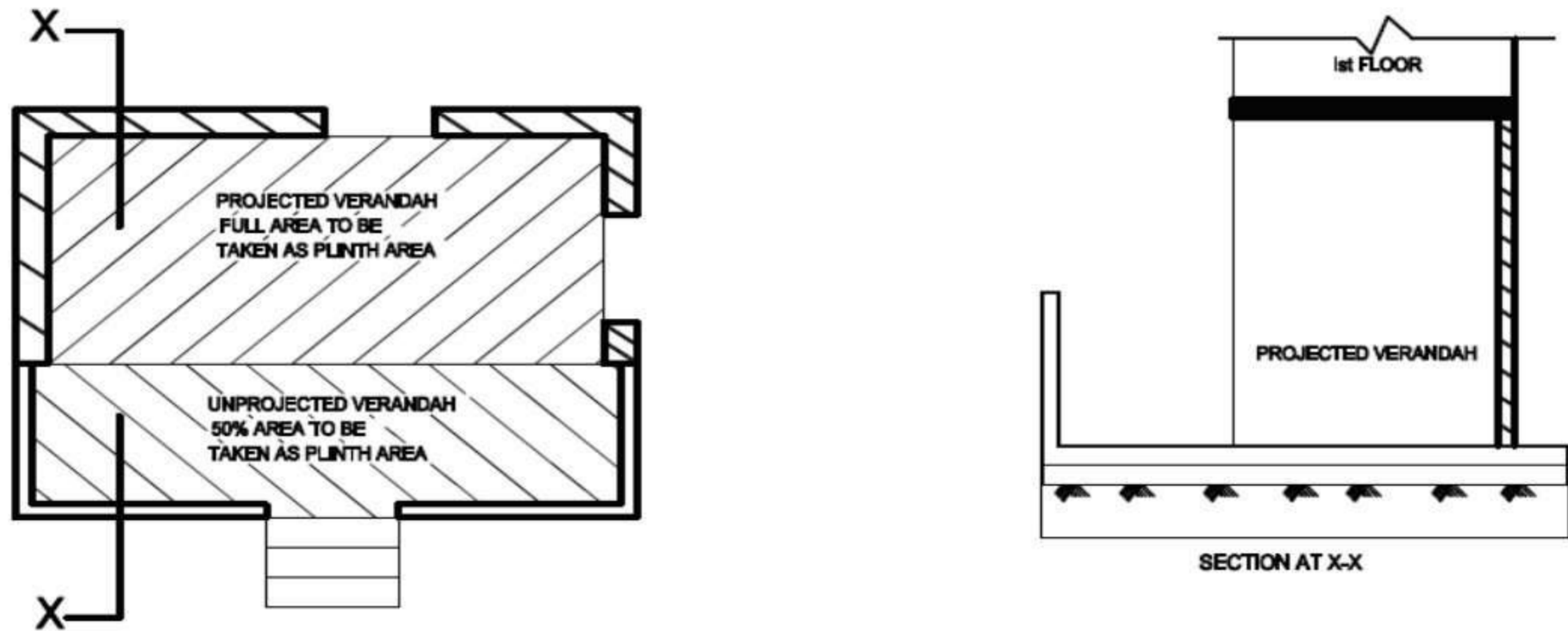
1. The total plinth area of a building shall be the sum total of plinth area at every floor level and plinth area of the following :
  - (i) Basement.
  - (ii) Floor without cladding (Stilted floor).
  - (iii) Floor of varied floor heights including top floor which may be partially covered.
  - (iv) Garages.
2. The plinth area of S.No. (i) to (iv) as mentioned above, shall be measured separately and shall not be clubbed together, so as to enable the cost computation at different rates per sqm as worked out for varied heights or categories.
3. If there is more than one basement, the lower most basement shall be termed as basement and upper basement shall be treated as floors.
- A. For the purpose of calculating the plinth area, the following shall be included :-
  - a. Areas of walls at floor levels excluding plinth offsets (if any). When buildings consists of columns and columns are projecting beyond cladding, the area shall be taken only up to external face of cladding {Refer sketch-1} (in case of corrugated sheet cladding, outer edge of corrugation shall be considered).

**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.



Sketch -1

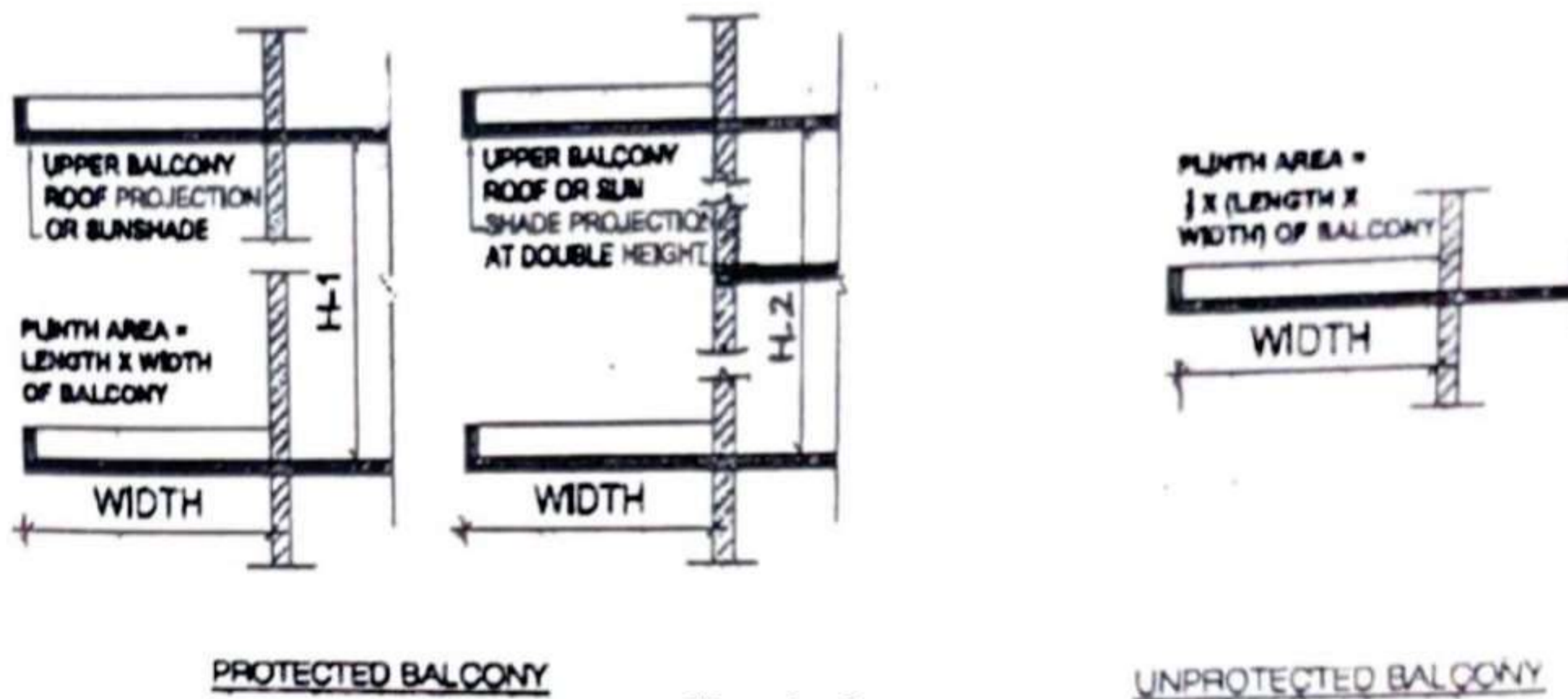
- b. Shafts & ducts
- c. Stair Cases
- d. In case of open verandah with parapets at ground floor; {Refer Sketch-2}
  - (I) 100 percent of area for the portion protected by projections above and,
  - (ii) 50 percent of area for the portion unprotected from above.



Sketch -2

- e. In case of balconies {Refer sketch-3}
  - (I) 100 percent of area, protected by projection above
  - (ii) 50 percent of area, unprotected balcony from above

**Note:** If balconies are proposed in staggered manner, that is covering slab of balcony is at double floor height then also it shall be treated as protected balcony and shall be measured as per (i) above.

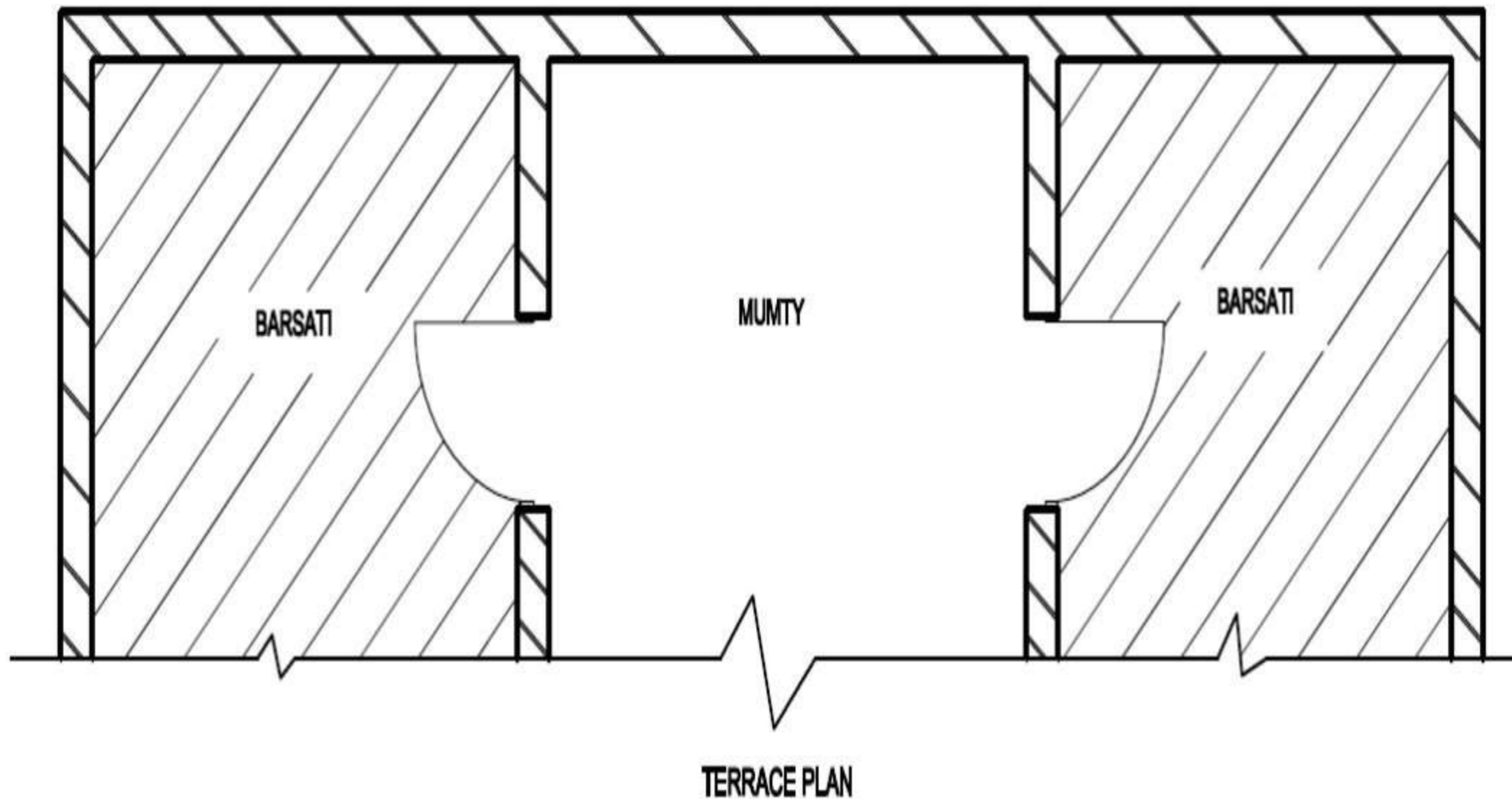


Sketch -3

H-1 refers to floor height & H-2 refers to double the floor height in case of staggered balconies.

## Plinth Area Rates 2020

- f. In case of alcove by cantilevering a slab beyond external walls;
  - (i) 25 percent of the area for the alcove of height up to 1.00 metre.
  - (ii) 50 percent of the area for the alcove of height more than 1.00 metre & up to 2.00 meter and
  - (iii) 100 percent of the area for the alcove of height more than 2.00 metre
- g. Barsati (covered enclosure at terrace level) including mumty (**Refer sketch – 4**)



**Sketch -4**

- h. Area of galleries i.e. upper floor seating area in an assembly hall, auditorium or theater to be included.
- i. Area of an independent floor of shorter height of minimum 2.2 metre or 1.80 metres (if allowed by bye-laws) between two main floors with access stairs leading to it, is termed as mezzanines floor and shall be included in the Plinth Area, though may be measured separately (as costing may be different)
- j. Open stair cases/ spiral stair cases for the purpose of fire escape or service with no enclosing / covering structure from sides, are to be considered for 50 percent plan area of stair at each floor level.
- k. Mumty, machine room, turrets, domes etc. (only if the height of walls/structure/enclosure exceeds 2.25 m clear of terrace.)

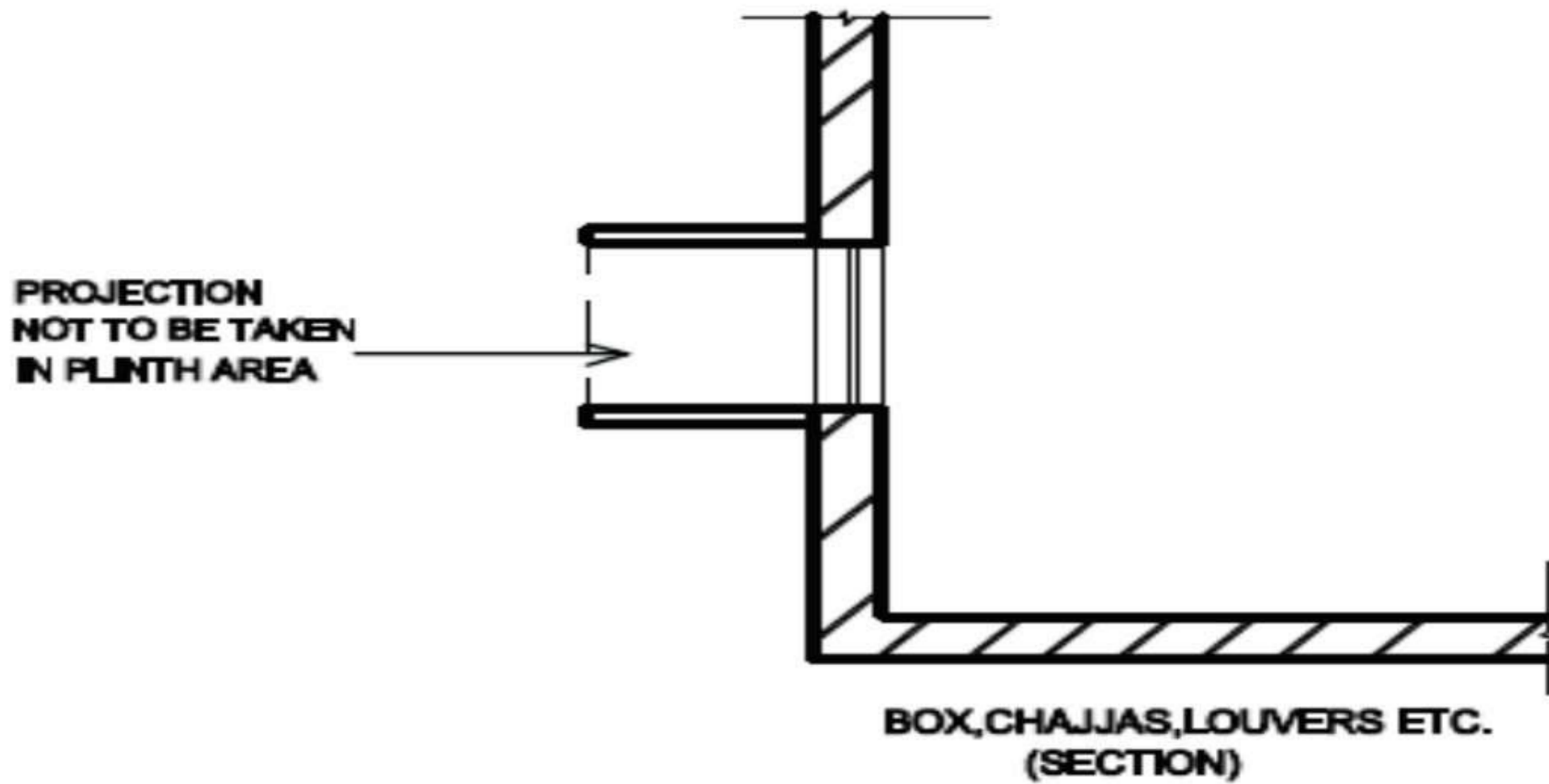
### **Note:**

As per IS code 3861-2002, Note under (e) and para (j) & (k) are not to be included in plinth area. However, as shown above these are included in plinth area for the purpose of cost computation. NIT approving authority may decide, whether to include or not to include the areas of these three categories for payments when the tenders are called on EPC mode.

### **B. The following shall not be included in the plinth area**

- a. Area of loft (i.e. an intermediate partial slab between two floors, having no direct access stair)

- b. Area of Architectural bands, cornices etc. projecting from external face of walls.
- c. Area of vertical sun-breakers or box louvers projecting out and other architectural features, for example slab projection for flower pots etc. {Refer Sketch-5}
- d. Open platform
- e. Terrace



Sketch- 5

## PROFORMA FOR CALCULATION OF BUILDING COST INDEX

Sl. No	Description	Unit	%age	Rates as on 01.04.2020 (in ₹)	Proportionate value (in ₹)	Weightage rates (in ₹)	Weightage of Component	Rates at the time of revision of Cost Index	Cost Index
1	Bricks (Fly Ash)	1000 nos.	100%	4300.00	4300.00	4300.00	8.00	-	-
2	Cement (OPC)	qtl.	100%	484.00	484.00	484.00	14.50	-	-
3	<b>TMT Steel Reinforcement bar</b>								
a.	8 & 10 mm dia	qtl.	50%	4250.00	2125.00	4250.00	19.50	-	-
b.	12 & 16 mm dia		50%	4250.00	2125.00			-	-
4	Aggregates 20 mm	cum	75%	1380.00	1035.00	1297.50	6.50	-	-
	a) Natural sources		25%	1050.00	262.50			-	-
	b) Aggregates 20 mm (RCA)								
5 (a)	Sand (coarse sand) Natural sources	cum	75%	1400.00	1050.00	1192.50	3.00	-	-
(b)	Sand (coarse sand) RA		25%	570.00	142.50			-	-
6	<b>Flooring Items</b>								
a.	Vitrified tiles	sqm	50%	515.00	257.50	707.50	5.00	-	-
b.	Ceramic tiles		20%	290.00	58.00			-	-
c.	Kota stone		10%	320.00	32.00			-	-
d.	Granite stone		20%	1800.00	360.00			-	-
7	<b>Paints</b>								
a.	Synthetic enamel paint	litre	33.33%	170.00	56.66	136.65	3.00	-	-
b.	Acrylic washable distemper		33.33%	40.00	13.33			-	-
c.	Premium acrylic paint		33.33%	200.00	66.66			-	-
8	<b>Door/windows-wooden/ uPVC/aluminium/steel</b>								
a.	35 mm thick flush door shutters both side commercial veneering	sqm	30.00%	1000.00	300.00	2057.50	7.00	-	-
b.	Factory made, standard Z-section steel windows		15.00%	1750.00	262.50			-	-
c.	uPVC windows		20.00%	3450.00	690.00			-	-
d.	Aluminium window		35.00%	2300.00	805.00			-	-
9	<b>Pipes</b>								
a.	15 mm GI pipes	metre	10.00%	90.00	9.00	312.60	2.50		
b.	100 mm CI pipes		40.00%	665.00	266.00				
c.	20 mm clack conduits		20.00%	68.00	13.60				
d.	20 mm CPVC pipes		30.00%	80.00	24.00				
11	<b>Lamps &amp; Fans</b>								
a.	Ceiling fans 1200 mm	each	50%	1550.00	775.00	1033.50	4.50		
b.	1200 mm LED tube lights with fittings		40%	625.00	250.00				
c.	LED bulbs		10%	85.00	8.50				



Sl. No	Description	Unit	%age	Rates as on 01.04.2020 (in ₹)	Proportionate value (in ₹)	Weightage rates (in ₹)	Weightage of Component	Rates at the time of revision of Cost Index	Cost Index
12	Electrical machinery, Motor 7.5 HP (pump set) 1500 RPM (Kirloskar)	each	100%	22500.00	22500.00	22500.00	2.50		
13	<b>Wires &amp; cables</b>								
a.	Copper wire 1.5 sqmm	100 metre	70%	1300.00	910.00	1843.00	4.00		
b.	Copper wire 4.0 sqmm		30%	3110.00	933.00				
14	<b>Labour</b>								
a.	Skilled	each	50%	764.00	382.00	696.50	20.00		
b.	Unskilled		50%	629.00	314.50				
<b>Total</b>							<b>100.00</b>		

**Note:**

In the above proforma at Sl. No. 4 & Sl No. 5, Aggregates – 20 mm and Sand (coarse sand) are considered in two parts (a) & (b) respectively. (a) representing 75% from Natural source and (b) representing 25% RCA/RA. In areas where components of RCA/RA are not available (because of non setting up of C&D waste conversion units), the components of aggregate 20 mm at 25% RCA and coarse sand at 25% RA can be avoided and 100% of these materials from Natural sources can be considered.

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

Year	Effective Date	Cost Index	Base 100 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	1955
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	Effective Date	Cost Index	Base 100 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	118	2012
2019	01.04.2019	100	2019
2019	01.10.2019	98	2019
2020	01.04.2020	101	2019
2020	01.04.2020	100	2020

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.
8. PAR 2020 base 100 is effective from 01.04.2020.



**CPWD**

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सत्यमेव जयते

Government of India  
Ministry of Housing and Urban Affairs  
**CENTRAL PUBLIC WORKS DEPARTMENT**





सत्यमेव जयते  
भारत सरकार  
Government of India



# केन्द्रीय लोक निर्माण विभाग CENTRAL PUBLIC WORKS DEPARTMENT



# PLINTH AREA RATES 2019



DIRECTOR GENERAL, CPWD, NIRMAN BHAWAN, NEW DELHI







सत्यमेव जयते

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



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## 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;

l) 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 Sl. No. 1.2 (1.2.1 & 1.2.3) in sub head I exceptt Sl. 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.



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## PLINTH AREA RATES AS ON 01.04.2019

## ANNEXURE - 1

Sl. No.	Description	Non-Residential Buildings		Residential Buildings
		Office/School /College	Hospital	Hostels/Quarters (Type- I to Type-VI Qtrs.) & Bunglows (Type-VII & VIII)
		(Rates in Rupees Per Sqm.)		
1.0	<b>BUILDING COST (Specifications as per Annexure-II)</b>			
1.1	<b>RCC FRAMED STRUCTURE (Upto Six Storeys)</b>			
1.1.1	Floor ht. 3.60 m.	25500	26800	-
1.1.2	Floor ht. 2.90 m.	-	-	19500
1.2	<b>LOAD BEARING STRUCTURE (Upto Four Storeys)</b>			
1.2.1	Floor ht. 3.60 m.	21700	22800	
1.2.2	Floor ht. 2.90 m.	-	-	16600
1.3	<b>EXTRA FOR</b>			
1.3.1	Extra for every additional storey over six storeys upto twelve storeys (For RCC Framed Structure only)	580		
1.3.2	Every 0.3 m. additional/lesser height of floor above normal floor height of 3.60 m./2.90 m.	335		
1.3.3	Every 0.3 m. higher plinth over normal plinth height of 0.45 m. (on G.F. area only )	335		
1.3.4	Every 0.30 m. deeper foundations over normal depth of 1.20 m. (on G.F. area only)	160		
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 framed structures only)	550 (For load bearing structures only)	
1.3.6	Resisting Earthquake forces	1200 (For RCC framed structures only)	800 (For load bearing structures only)	
1.3.7	R.C.C. Raft foundations (Ground floor only)	5150		
1.3.8	Pile foundation (On ground floor area only)	16600		
1.3.9	Stronger structural members to take heavy load above 500 Kgs./sqm. upto 1000 Kgs./Sqm.	1660		
1.4	<b>BASEMENT FLOOR</b>			
1.4.1	Floor ht. upto 3.35 m. with Kota Stones/HDPE membrane 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.	900		
1.5	<b>FIRE FIGHTING</b>			
1.5.1	With wet riser system	800		
1.5.2	With wet riser and sprinkler system	1200		

Sl. No.	Description	Non-Residential Buildings	Residential Buildings
---------	-------------	---------------------------	-----------------------

		Office/School /College	Hospital	Hostels/Quarters (Type- I to Type-VI Qtrs.) & Bunglows (Type-VII & VIII)
		(Rates in Rupees Per Sqm.)		
1.6	<b>FIRE ALARM SYSTEM</b>			
1.6.1	Manual Fire Alarm System		250	
1.6.2	Automatic Fire Alarm System		600	
1.7	Pressurized mechanical ventilation system in the basements with Supply duct of exhaust blowers (on basement area only)		1050 (For RCC frame structures only)	
1.8	<b>STILT PORTION</b>			
1.8.1	Stilt Portion of Multistorey RCC framed structure (up to ht. of 3.60m) Applicable area only		8000	
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.

Sl. No.	Description	Non-Residential Buildings			Residential Buildings	
		Office & College	Hospitals	Schools	Hostels	(Type- I to Type-VIII Qtrs.)
<b>2.0</b>	<b>SERVICES</b>					
2.1	Internal Water Supply & Sanitary Installations	4%	10%	5%	12% with attached toilets, 8% with common toilets.	9%
2.2	External Service connections					
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	<b>EXTRA FOR</b>					
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.

Sl. No.	Type of lift	Capacity/ Persons	Weight	Speed in M/Sec.	Travel	Doors	Control	Price (Rs. In lacs)	Addl. Price for each additional floor (Rs. )
1	2	3	4	5	6	7	8	9	10
<b>3.0</b>	<b>LIFTS</b>								
3.1	<b>Passenger lifts</b>								
3.1.1	Passenger lift	8	544 Kg.	1.0	G+4	Power operated	ACV VVF	16	90,000
3.1.2	Passenger lift	8	544 Kg.	1.5	G+5	Power operated	ACV VVF	18	90,000
3.1.3	Passenger lift	13	884 Kg.	1.0	G+4	Power operated	ACV VVF	18	90,000
3.1.4	Passenger lift	13	884 Kg.	1.5	G+5	Power operated	ACV VVF	20	90,000
3.1.5	Passenger lift	16	1088 Kg.	1.0	G+4	Power operated	ACV VVF	24	1,10,000
3.1.6	Passenger lift	16	1088 Kg.	1.5	G+5	Power operated	ACV VVF	26	1,10,000
3.1.7	Passenger lift	16	1088 Kg.	2.5	G+12	Power operated	ACV VVF	70	1,10,000
3.1.8	Passenger lift (Bed lift)	20	1360 Kg.	0.75	G+4	Power operated	ACV VVF	24	1,10,000
3.1.9	Passenger lift	20	1360 Kg.	1.5	G+5	Power operated	ACV VVF	27	1,10,000
3.1.10	Passenger lift	20	1360 Kg.	2.5	G+12	Power operated	ACV VVF	75	1,10,000
3.2	Goods lifts (2 speed )								
3.2.1		1 Ton	-	0.5	G+4			26	85,000
3.2.2		2 Ton	-	0.5	G+4			33	85,000
3.2.3		3 Ton	-	0.25	G+4			41	1,00,000

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

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

Sl. No.	Description	Rates in Rupees
<b>4</b>	<b>WATER TANK (RCC ONLY )</b>	
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	<b>DEVELOPMENT OF SITE</b>	
5.1	Levelling	160/ sqm.
5.2	<b>Internal roads &amp; paths</b>	
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 vacuum 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 lines 100 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	Trenches 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	<b>Horticulture Works</b>	
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.

## SPECIFICATIONS FOR RESIDENTIAL BUILDINGS

Annexure-II

Sl. No.	Description	Latest applicable specifications				Remarks
		Type-I, II & III	Type-IV, IV (Spl.)	Type-V & VI	Type-VII & VIII	
1	<b>FOUNDATION</b>					
	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	<b>SUPERSTRUCTURE</b>					
	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	<b>DOORS AND WINDOWS</b>					
	<b>a) Frames(except of toilet/bath&amp; WC)</b>					
	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 & Windows of toilet/bath/ WC	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		
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>b) Shutters</b>					
i) Main Door/ External Door Shutters	Double shutters one with painted iron grill with stainless steel Grade-304 mosquito 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.	Double shutters one Safety door in Stainless steel frame with mosquito proof S.S. wire-mesh and SS fittings and other with 35mm thick 2nd class teak wood framed paneled with decorative veneer on both sides /35 mm thick factory made exterior grade both side decorative veneered type flush door shutter with melamine polish. Or UPVC extruded section of wall thickness minimum 2.0mm framed glazed/paneled shutters For Servant quarters same as Type-1 to III.	Same as Type-V &VI	
ii) Servant's Area	N.A.	For Servant quarters same as Type-1 to III.		For Servant 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	

Bath , WC & Toilet Door	35 mm thick, pre-laminated flush door (one side decorative other side balancing) <	Same as Type-1 to III	35 mm thick, pre-laminated flush door (one side decorative other side balancing)	Some as Type-V&VI	
Other Door	35mm thick hardwood styles and Rails with paneling with both sides' decorative pre-laminated particle board and finish in melamine polish / Factory made flush door	Same as Type 1, II & III	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 glass panes and finished in melamine polish.	Same as Type-V&VI	
c) Window Shutters Ali windows shutters	Double shutter one with M.S. tubular box section / hardwood framed glazed panel and other with wire-mesh shutter <i>M</i>	Same as Type 1, II & III	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)	N.A.	For servant quarters same as Type Ito III	For servant quarters same as Type Ito III	For servant quarters same as Type Ito II!	Shutters in all respective rooms shall be as per the finishes of Type-1 to III in those rooms
d) Hardware & Fitting Main Units Servant's Area	Powder coated/ anodized Aluminum S.S. fittings N.A.	Powder coated/ anodized Aluminum S.S. fittings Powder coated M.S fittings.	Same as type-IV & IV special Powder coated M.S fittings.	Stainless Steel / Chromium plated brass/ Nickered Chromium Brass. Powder coated M.S fittings.	Rubberized Door flashing at the bottom rails of all externals doors shall be provided for protection from insects and rainwater etc.
<b>4</b>	<b>FLOORING, SKIRTING &amp; DADO</b>				
<b>Flooring</b> living/ Drawing 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 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 600mm Scratch 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% laid with joints finished with matching grout	Same as Type-III & 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 pre-polished granite / Vitrified tiles (with water absorption less than 0.08%) flooring not less than 600mm x600mm	18mm thick gang-saw cut pre-polished 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 all rooms shall be as per the finishes of Type-1 to III in 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 locally stone shall be as per approval of Chief Architect
Staircase - Main	Pre-polished Kota stone in single length of treads & risers	Same as Type-1, II &III	18mm thick Pre-polished / honed / flamed finish Granite in single length of Treads & Risers	Same as Type-V & VI	Nosing design in treads shall be as per Architectural design



	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 450mm as per design from floor to full height	Ceramic tiles of size not less than 300 x 450mm as 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 300x450mm up to full height with a decorative bands at certain intervals.	1
<b>5</b>	<b>FINISHES</b>					
	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	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 walls & 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 over 6 mm thick POP wall punning	
	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.	Quartz reinforced 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

**SCALE OF AMENITIES FOR GENERAL POOL RESIDENTIAL ACCOMODATION**

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

## 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 (Spl.)	Type-V	Type-Vi	Type-Vii & Viii	Servant Qtrs.
1	Power Points (15 amp 6 pins)	2 in each room 1 in kitchen 1 in utility area	2 in each room 1 in kitchen 1 in utility area	2 in each room 1 in kitchen 1 in utility area	2 in each room 1 in kitchen 1 in utility area	3 in drawing room 3 in dining room 2 in each bedroom 2 in kitchen 1 in utility area	3 in drawing room 3 in dining room 2 in each bedroom 2 in kitchen 1 in utility area	2 in office 4 in drawing room 3 in dining room 2 in family lounge 2 in each bedroom 2 in kitchen 1 in utility area	Total 2
		<b>Total 6</b>	<b>Total 8</b>	<b>Total 8</b>	<b>Total 12</b>	<b>Total 15</b>	<b>Total 17</b>	<b>Total 22</b>	
2	Plug Points (5 amp)	1 in each room 1 in kitchen 1 in balcony area	1 in each room 1 in kitchen 1 in balcony area	1 in each room 1 in kitchen 1 in balcony area	1 in each room 1 in kitchen 1 in balcony area	1 in each room 1 in kitchen 01 in store 1 in main balcony	1 in each room 1 in kitchen 1 in store 1 in each balcony	1 in office 1 in each room 1 in kitchen 1 in store 1 in each balcony	Total 2
		<b>Total 4</b>	<b>Total 5</b>	<b>Total 5</b>	<b>Total 7</b>	<b>Total 8</b>	<b>Total 9</b>	<b>Total 12</b>	
3	Bracket Lights (with normal fittings excluding lamp/bulb)	1 in each room 1 in kitchen 1 in each toilet 1 in utility	1 in each room 1 in kitchen 1 in each toilet 1 in utility	1 in each room 1 in kitchen 1 in each toilet 1 in utility	1 in each room 1 in kitchen 1 in each toilet 1 in utility	1 in store 1 in each toilet 1 in utility	1 in store 1 in each toilet 1 in utility	1 in store 1 in each toilet 1 in utility	Total 3
		<b>Total 3</b>	<b>Total 4</b>	<b>Total 4</b>	<b>Total 11</b>	<b>Total 10</b>	<b>Total 12</b>	<b>Total 12</b>	
4	Ceiling Fans	1 in living room 1 in each bedroom	1 in living room 1 in each bedroom	2 in living room 1 in each bedroom	2 in living room 1 in dining room 1 in each bedroom	2 in drawing room 1 in dining room 1 in each bedroom 1 in each balcony	2 in drawing room 1 in dining room 1 in family lounge 1 in each bedroom 1 in each balcony	2 in drawing room 1 in dining room 1 in family lounge 1 in each bedroom 1 in each balcony	Total 1
		<b>Total 3</b>	<b>Total 3</b>	<b>Total 4</b>	<b>Total 6</b>	<b>Total 6</b>	<b>Total 12</b>	<b>Total 14</b>	
5	Call Bell Points	1	1	1	2	3	3 (One with image display system)	4 (One with image display system)	
6	Exhaust Fans	1 each in kit & bath & WC	1 each in kit & bath & WC	1 each in kit & bath & WC	1 each in kit & bath & WC	1 each in kitchen & toilets	1 each in kitchen & toilets	1 each in kitchen & toilets	Total 2
7	AC Points (With MCB connected socket outlet with wiring)	1 in each room except kitchen & toilet	1 in each room except kitchen & toilet	1 in each room except kitchen & toilets	1 in each room except kitchen & toilets	1 in each room except kitchen & toilets	1 in each room except kitchen & toilets	1 in each room except kitchen & toilets	

Sl. No.	Description	Type-I	Type-Ii	Type-Iii	Type-Iv & Iv (Spl.)	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 room 1 in each bedroom	1 in living room 1 in each bedroom	1 in living room 1 in each bedroom	1 in drawing room 1 in each bedroom	1 in drawing room 1 in each bedroom	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
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	
						<b>Total 13</b>	<b>Total 16</b>	<b>Total 22</b>	
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	
		<b>Total 3</b>	<b>Total 4</b>	<b>Total 4</b>	<b>Total 6</b>	<b>Total 6</b>	<b>Total 7</b>	<b>Total 9</b>	
15	Modular Switches	---	---	---	---	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	---

**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
<b>1.0</b>	<b>FOUNDATION</b>	As per structural design based on soil investigation.
<b>2.0</b>	<b>SUPER STRUCTURE</b>	
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.
2.2.3		Non asbestos double skin cement boards.
2.2.4		Fly ash bricks.
<b>3.0</b>	<b>DOORS &amp; WINDOWS</b>	
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
<b>4.0</b>	<b>FLOORING</b>	
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.
<b>5.0</b>	<b>STAIRCASE</b>	
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.
<b>6.0</b>	<b>RAILING</b>	Stainless steel railings.
<b>7.0</b>	<b>TOILETS</b>	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.

<b>8.0</b>	<b>ROOFING</b>	
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.
<b>9.</b>	<b>FINISHING</b>	
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.
<b>10.0</b>	<b>PROVISION FOR BARRIER FREE BUILDING</b>	
		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.

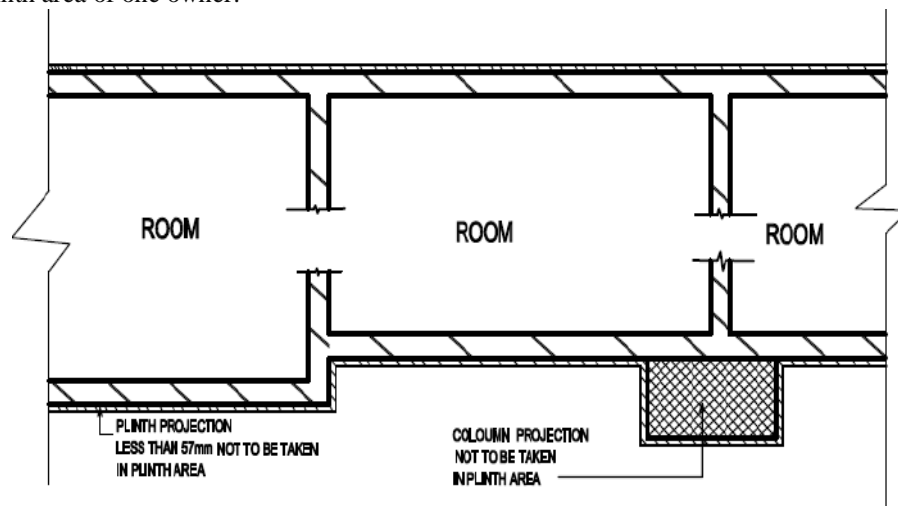
**1. GENERAL**

The total plinth area of a building shall be the sum total of the plinth area at every floor including the basement, if any.

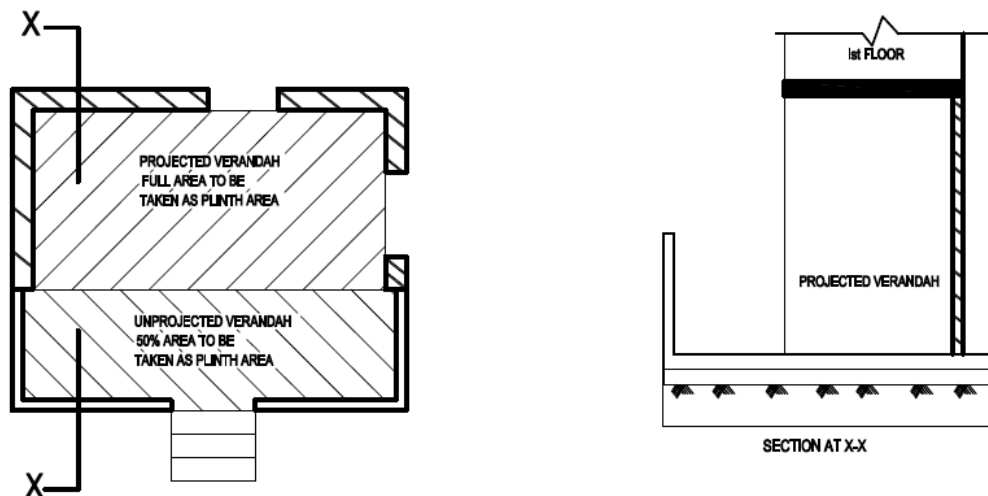
**PLINTH AREA OF GROUND FLOOR**

- (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.

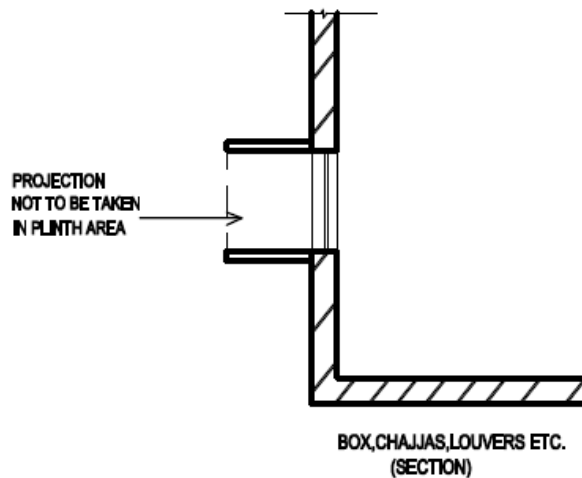


- (c) Shafts for sanitary, water supply installations, garbage chute, telecommunication, electrical, fire fighting, air-conditioning and lifts etc. less than 2.00 sqm. in area shall be included in plinth area whereas the said opening with more than 2.00 sqm. in area shall be excluded from the plinth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

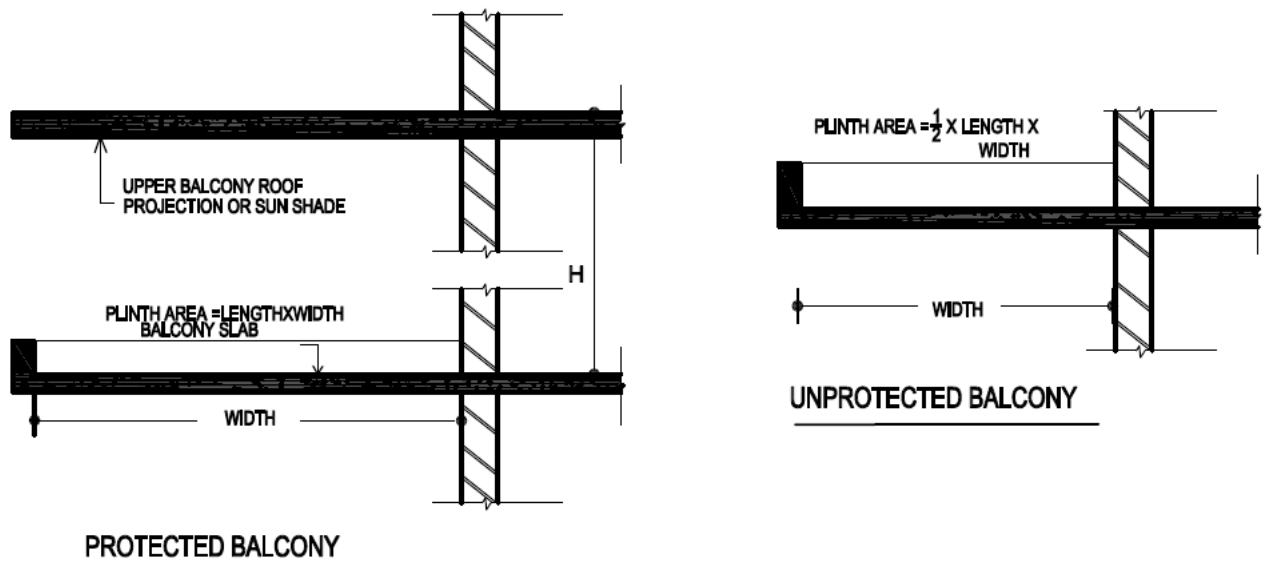


**PLINTH AREA AT FIRST AND HIGHER FLOORS**

- (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:



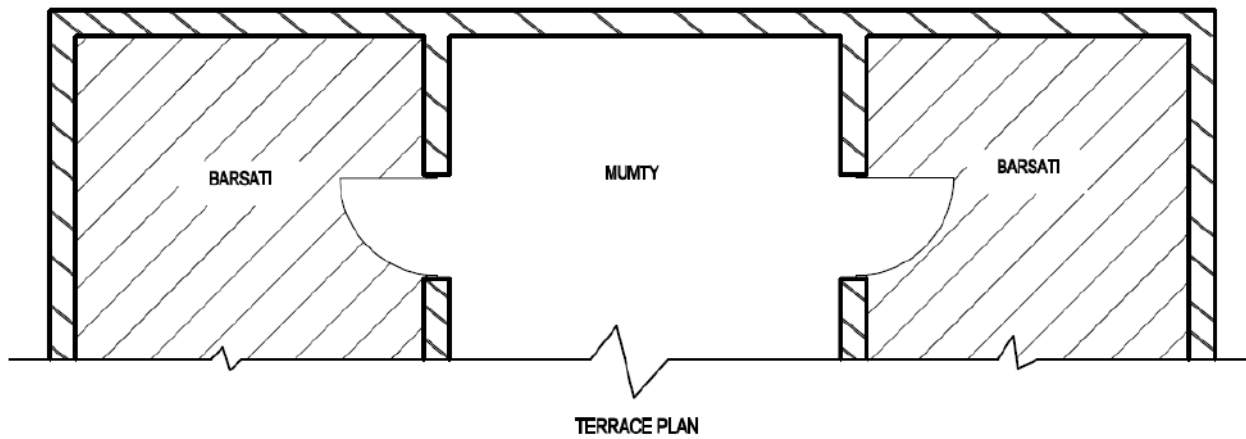
- (c) In case of alcove (box projection like storage below sill level and cupboards etc.) made by cantilevering a slab beyond external wall:
1. 25 percent of the area for the alcove of height up to 1 m,
  2. 50 percent of the area for the alcove of height more than 1m and upto 2 m, and
  3. 100 percent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

**GALLERIES, 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.



## PROFORMA FOR CALCULATION OF BUILDING COST INDEX

ANNEXURE –IV

SI. No	Description	Unit	%age	Rates as on 01.04.2019	Proportionate value	Weightage rates	Weightage of Component	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	<b>TMT Steel</b>								
a.	8 & 10 mm dia	Qtl.	50%	4300.00	2150.00	4300.00	19.50	-	-
b.	12 & 16 mm dia		50%	4300.00	2150.00			-	-
4	Aggregates 20 mm	Cum	75%	1400.00	1050.00	1312.50	6.50	-	-
	a) Natural sources b) Aggregates 20mm (RCA)		25%	1050.00	262.50			-	-
5	Sand (Coarse Sand)	Cum	75%	1400.00	1050.00	1225.00	3.00	-	-
(a)	Natural Sources		25%	700.00	175.00			-	-
(b)	Sand (Coarse Sand) RA								
6	<b>Flooring Items</b>								
a.	Vitrified tiles	Sqm	50%	660.00	330.00	770.00	5.00	-	-
b.	Ceramic Tiles		20%	260.00	52.00			-	-
c.	Kota Stone		10%	280.00	28.00			-	-
d.	Granite Stone		20%	1800.00	360.00			-	-
7	<b>Paints</b>								
a.	Synthetic Enamel Paint	Litre	33.33%	160.00	53.33	143.33	3.00	-	-
b.	Acrylic Washable distemper		33.33%	50.00	16.67			-	-
c.	Premium acrylic paint		33.33%	220.00	73.33			-	-
8	<b>Door/Windows-Wooden/ uPVC/Aluminium/Steel</b>								
a.	35mm thick flush door shutters both side commercial veneering	Sqm	30.00%	950.00	285.00	1978.60	7.00	-	-
b.	Factory made, standard Z-section steel windows		15.00%	1712.00	258.30			-	-
c.	uPVC windows		20.00%	3295.00	659.00			-	-
d.	Aluminium Window		35.00%	2218.00	776.30			-	-
9	<b>Pipes</b>								
a.	15 mm GI Pipe	Metre	10.00%	85.00	8.50	292.66	2.50		
b.	100 mm CI Pipes		40.00%	630.50	252.22				
c.	20 mm Black Conduits		20.00%	43.00	8.60				
d.	20mm CPVC pipes		30.00%	77.80	23.34				
11	<b>Lamps &amp; Fans</b>								
a.	Ceiling Fans 1200 mm	Each	50%	1500.00	750.00	1318.00	4.50		
b.	1200 mm LED tube lights with fittings		40%	1400.00	560.00				
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		

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

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

Year	Effective Date	Cost Index	Base 100 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	Effective Date	Cost Index	Base 100 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.

<b>PLINTH AREA RATES FOR SPECIALISED E&amp;M WORKS</b>			
<b>Sl. No.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Annexure-V</b>
			<b>Rate</b>
	<b>SUB-STATION EQUIPMENTS</b>		
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.	per KVA	9000
	<b>DIESEL GENERATING SETS</b>		
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.	per KVA	11000
	<b>33 KV RECEIVING SUBSTATION AND 33KV/11KV HT CABLING</b>		
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.	per KVA	6000
	<b>UNINTERRUPTED POWER SUPPLY</b>		
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.		
	<b>CENTRAL AC PLANT</b>		
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
	<b>VRV/ VRF AC System</b>		
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
	<b>PRECISION AIRCONDITIONING SYSTEM</b>		
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
	<b>SOLAR PHOTO VOLTAIC POWER GENERATION SYSTEM</b>		
8	Supplying, installation, testing and commissioning of Grid interactive roof top solar photo voltaic power generation system including space frame	per KWp	65000
	<b>SOLAR WATER HEATING SYSTEM</b>		
9	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		
	<b>CCTV SYSTEM</b>		
10	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)	200
		per sqm.(for 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.		
	<b>ACCESS CONTROL SYSTEM</b>		
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
	<b>IBMS: INTEGRATED BUILDING MANAGEMENT SYSTEM</b>		
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
	<b>HYDROPNEUMATIC WATER SUPPLY SYSTEM</b>		
13	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
	<b>LIGHTING AUTOMATION INCLUDING OCCUPANCY SENSORS</b>		
14	Supplying, installation, testing and commissioning of lighting automation including occupancy sensors	per sqm.	200
	<b>BASIC HOME SECURITY FOR RESIDENTIAL COLONY</b>		
15	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 Area	300
15.2	CCTV system	per sqm. of plot Area	300

Sl. No.	Description of Item	Unit	Rate
	<b>LAN SYSTEM</b>		
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
	<b>IP BASED EPABX SYSTEM</b>		
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, Cloud-based, enterprise-grade UC Solution, MID/ENTRY Level IP/SIP Phone with, Dual 1 Gig Ports, Racks, CAT 6A cable, Patch Panels, OFC etc.	per sqm. of covered area	900
	NOTE: It will be economical to use common infrastructure of switches, OFC, 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
	<b>STREET LIGHTING WITH LED</b>		
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.		
	<b>STP/ETP PLANT</b>		
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	<b>DRIVER FACE AND AUTOMATIC NUMBER PLATE RECORDING SYSTEM/RECOGNITION SYSTEM</b>		
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	<b>BAGGAGE SCANNERS</b>		
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	per unit	3500000

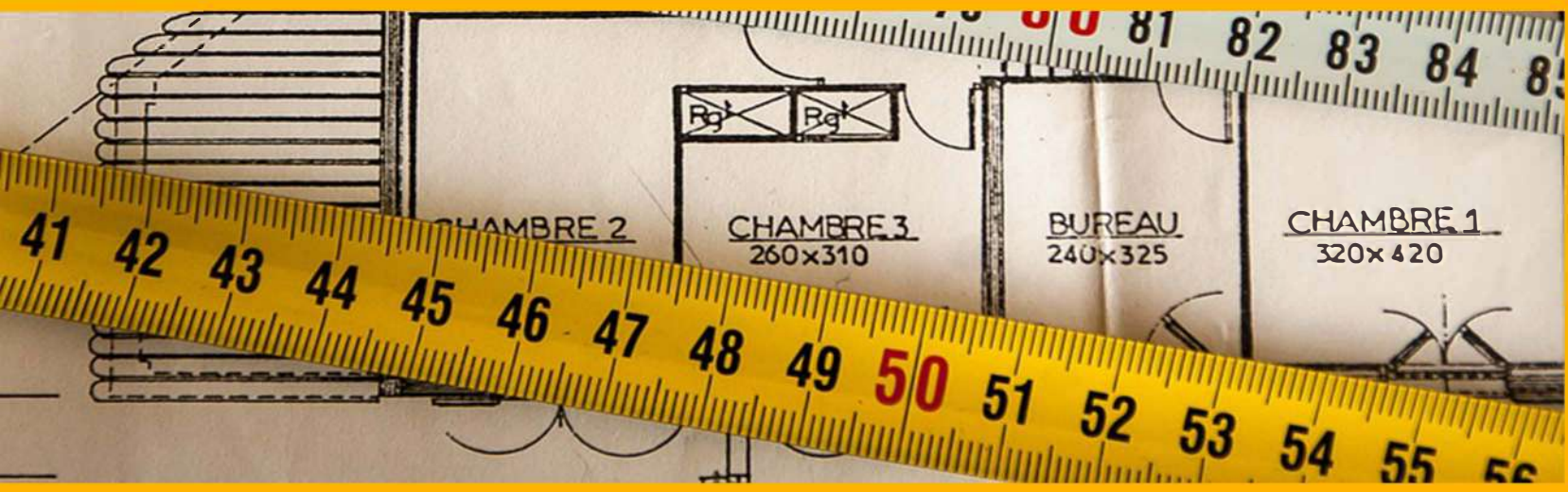


Sl. No.	Description of Item	Unit	Rate
24	DOOR FRAME METEL DETECTOR		
	20 zone or above Door frame Metal detector nominal Size: 760 mm (W) x 2050 mm (H) x 700 mm (D) loaded with necessary software	per set	350000
25	MEDICAL GAS PIPELINE SYSTEM		
	Medical Gas pipeline system (as per international standards) 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
26	MODULAR OPERATION THEATER		
	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)	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

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सत्यमेव जयते

Government of India  
Ministry of Housing and Urban Affairs

**CENTRAL PUBLIC WORKS DEPARTMENT**

## CENTRAL PWD - PLINTH AREA RATES (1.10.2012)

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Govt. of India  
Central Public Works Department  
(Technology Application and Standards Unit)  
Ninnan Bhawan, New Delhi

No: 621SE(TAS)/Plinth Area Rates/399

Dated: 24/12/2012

### MEMORANDUM

Plinth Area Rates as applicable on 1.10.2007(Reprint) were last circulated under Memo no. SE(S&S)/EE-III AE-1111 dated 19.7.2010 along with annexure I to IV. Relevant cost indices with reference to base 100 as 1.10.2007 shall continue to be applicable on these plinth area rates for works in progress etc.

However, the need for issuing fresh plinth area rates has been felt to account for rise in prices in the last 5 years as well as the latest development in construction practices such as fire safety measures for high rise buildings and also incorporating the green buildings concept for three star rating of GRIHA.

Accordingly, fresh plinth area rates with reference to base 100 as on 1.10.2012 has been prepared for circulation in the department, In future, Preliminary Estimates may be prepared on the basis of these plinth area rates.

All the rates are based on data of actual expenditure for structures completed recently, as received from various field formations. In case of any discrepancy in Hindi & English versions, English version will prevail.

The latest plinth area rates as on 1.10.2012 is hereby issued with following annexures :

Annexure - I : Fresh Plinth Area Rates with base 100, as on 1.10.2012 (for residential/non residential buildings, services and development) .

Annexure - II : Broad specifications and scale of amenities for sanitary/Electrical fittings for which plinth area rates are applicable.

Annexure - III : Memo no. 29/21/58/W1 of 10/83 indicating the rules for working out plinth area from plans, to be observed while adopting these plinth area rates given in Annexure-I.

Annexure - IV: Proforma for calculating cost index for future cost index with base 100 as on 1.10.2012 indicating revised weightages also. .

Annexure - V : Specifications for buildings - Non Residential & Residential Buildings.

Encl: Annexure I to V

## PLINTH AREA RATES AS ON 01.10.2012

### ANNEXURE-I

S.No.	Description	Office/College/ Hospital	Schools	Hostels	Residential
1	2	3	4	5	6
1.0 (A)	RCC FRAMED STRUCTURE ( Specifications as per Annexure -II)	Rates in Rs. per sq. metre			
1.1 (A)	RCC framed structure upto six storeys				
1.1.1 (A)	F1oo ht. 3.35 mtr.	23500	17000		
1.1.2 (A)	Floor ht. 2.90 mtr.			16500	16000
1.0 (B)	RCC FRAMED STRUCTURE (Normal Buildings) (Specifications as per Annexure -V)				
1.1 (B)	RCC framed structure upto six storeys				
1.1.1(B)	Floor ht. 3.35 mtr.	19000	15200		
1.1.2 (B)	Floor ht. 2.90 mtr.			15000	14500
12	EXTRAS FOR				
1.2.1	Every additional storey over six storeys upto nine storeys	560	560	560	560
1.2.2	Every additional storey over nine storeys upto twelve storeys	500	500	500	500
1.2.3	Every 0.3 mt. additional height of floor above normal floor height of 3.35 mt. / 2.90 mts.	270	270	270	270
1.2.4	Every 0.3 mt. higher plinth over normal plinth height of 0.6 mt. (on GF. area only)	270	270	270	270
1.2.5	Every 0.30 mt. deeper foundations over normal depth of 1.20 metre (on GF. area only)	270	270	270	270
1.2.6	Making stronger foundations to take load of one additional floor at a later date (on area of additional floor only)	2270	2270	2270	2270
1.2.7	Strip foundations in poor soil having bearing capacity less than 10 tonnes/ sqmt. (onGF. area only)	520	520	520	520
1.2.8	Resisting Earthquake forces	1140	1140	1140	1140
1.2.9	R.C.C. Raft foundations (ground floor only)	6450	6450	6450	6450

1.2.10	File Foundation upto a depth of 1.5 mts. ( on ground floor area only )	11750	11750	11750	11750
1.2.11	Stronger structural members to take heavy load above 500 kgs / sqm. upto 1000 kgs/sqm.	1500	1500	1500	1500
1.2.12	Larger modules over 35 sqm.	1500	1500	1500	1500
1.3	BASEMENT FLOOR				
1.3.1	Floor ht. 3.35 mtrs with normal water proofing	19000	--	--	--
1.3.2	EXTRA FOR BASEMENT WITH				
1.3.2.1	Every 0.3 mt. addl. Height (above 3.35 mt.)	2320	--	--	--
1.3.2.2.	Reduction for every 0.5m, less height of basement than normal height 3.35mt.	( - 1280 )	--	--	--
1.4	FIREFIGHTING				
1.4.1	With wet riser system	500	500	500	500
1.4.2	With sprinkler system	750	750	750	750*
1.5	FIRE ALARM SYSTEM				
1.5.1	Manual Fire Alarm System	--	--	--	300
1.5.2	Automatic Fire Alarm System	500	500	500	500*
1.6	Operation Theatre (OPD) (Extra provision)	2150	--	--	--
1.7	Pressurized mechanical ventilation system in the basements (with supply of Exhaust blowers )	650	650	650	650
1.8	STILT PORTION				
1.8.1	Stilt Portion of Multistorey RCC structure (upto ht of 3.35m) Applicable area only	9850	9850	9850	9850
1.8.2	Every 0.30 mt. additional height (above 3.35m)	450	450	450	450

Note : Rates marked as\* under items 14.2 & 15.2 for residential building are NBC 2005 applicable for apartment houses more than 34m height





S.No.	Description	Non -Residential			Residential		
		Office/ College/ Hospital	Schools	Hostel	Type-I, II, III & servant Qtrs.	Type-IV Qtrs.	Type - V, VI and above
1	2	3	4	5	6	7	8
2.6.2	Buildings of two storeyes or more in Zone III & IV	520	520	520	520	520	520
2.6.3	Resisting earthquake forces in Zone II and single storey buildings in Zone III & IV						
2.7	Stronger structural members to take heavy loads above 500 Kg Isqm. Up to 1000 Kg/sqmt.	1500	1500	1500	1500	1500	1500
2.8	Larger modules over 35 sqmt.	1800	1800	1800	1800	1800	1800
2.9	Fire-fighting						
2.9.1	With wet riser system	500	500	500	500	500	500
2.9.2	With sprinkler system	750	750	750	750	750	750
2.10	Fire Alarm System						
2.10.1	a) Manual Fire Alarm system		-	-	270	270	270
2.10.2	b) Automatic Fire Alarm system	500	500	500	-	-	-
2.11	O.P.D. Operation Theatre etc.	2150	-	-	-	-	-

Note: Rates for items are applicable on entire plinth area except for items 1.2.4. 1.2.5. 1.2.6. 1.2.7. 1.2.9.1.2.10.1.5. 1.6, 1.7, 1.8, 2.5.2, 2.5.3, 2.5.4, 2.5.5, 2.5.6, 2.5.7, 2.5.8, 2.8, 2.9, 2.10 and 2.11

S.No.	Description	Office & College	Hospitals	Schools	Hostels	Type of Quarters					V, VI & above
						I	II	III	IV		
1	2	3	4	5	6	7	8	9	10	11	
3.0	SERVICES										
3.1	Internal water supply & sanitary installations	4%	10%	5%	15% with attached toilets, 10% with common toilets	12%	12%	12%	12%	12%	
						% age means % age of building cost of normal Building (1.0B)					
3.2	External service connections	5%	5%	5%	5%	5%	5%	5%	5%	5%	
3.3	Internal electric installations	12½%	12½%	12½%	12½%	12½%	12½%	12½%	12½%	12½%	
						Note: The above does not include service connection charges & electrification					
3.4	Internal electric installations for laboratories of schools	-	-	15% of building cost of normal building (1.0B)	-	-	-	-	-	-	
3.5	Internal electric installations for terminal building and other allied structures in airports	15% of building cost	-	-	-	-	-	-	-	-	
3.6	Extra for:										
3.6.1	Power wiring and plugs	4%	4%	-	-	-	-	-	-	-	
3.6.2	Central Call bell system	1%	-	-	-	-	-	-	-	-	
3.6.3	Lightening conductors										
3.6.3.1	Upto 4 storeyed building	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	
3.6.3.2	5 to 8 storeys buildings	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	
3.6.3.3	Beyond 8 storeyed buildings	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	
3.6.4	Telephone conduits	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	
3.6.5	Centralized Intercom system		-	-		1%	1%	1%	1%	1%	
3.6.6	Computer conduiting	0.5%	0.5%	0.5%	0.5%						
3.6.7	Quality assurance	1%	1%	1%	1%	1%	1%	1%	1%	1%	

Note: - Quality control charge of 1 % should be taken in estimate only when client department request for TPI.

Sl.No.	Type of lift	Capacity/ Persons	Weight	Speed in M/Sec.	Travel	Doors	Control	Price (Rs. in lakhs)	Addl. price for each additional floor (Rs.)
1	2	3	4	5	6	7	8	9	10
4.0	LIFTS								
4.1	Passenger lifts								
4.1.1	Passenger lift	8	544 Kg.	1.0	G+4	Power operated	ACV VVF	18.00	1,25,000.00
4.1.2	Passenger lift	8	544 Kg.	1.5	G+5	Power operated	ACV VVF	24.00	1,25,000.00
4.1.3	Passenger lift	13	884 Kg.	1.0	G+4	Power operated	ACV VVF	22.00	1,25,000.00
4.1.4	Passenger lift	13	884 Kg.	15	G+5	Power operated	ACV VVF	28.00	1,25,000.00
4.1.5	Passenger lift	16	1088 Kg.	1.0	G+4	Power operated	ACV VVF	28.00	1,50,000.00
4.1.6	Passenger lift	16	1088 Kg.	15	0+5	Power operated	ACV VVF	34.00	1,50,000.00
4.1.7	Passenger lift	16	1088 Kg.	25	G+12	Power operated	ACV VVF	70.00	1,50,000.00
4.1.8	Passenger lift (Bed lift)	:!)	1360 Kg.	0.75	G+4	Power operated	ACV VVF	24.00	1,50,000.00
4.1.9	Passenger lift	:!)	1360 Kg.	1.5	G+5	Power operated	ACV VVF	32.00	1,50,000.00
4.1.10	Passenger lift	:!)	1360 Kg.	25	G+12	Power operated	ACV VVF	75.00	1,50,000.00
4.2	Goods lifts (2 speed )								
4.2.1		1 Ton	-	05	G+4			26.00	85,000.00
4.2.2		2 Ton	-	05	G+4			33.00	85,000.00
4.2.3		3 Ton	-	0.25	G+4			41.00	1,00,000.00

- Note : 1. ACVVVF= AC variable voltage variable frequency.  
2. Provision for lift may also be taken for the buildings having floor less than G+ 4.

Sl.No.	Description	Rates in Rupees
5	WATERTANK(RCC ONLY)	
5.1	Overhead tank without independent staging	IS/Litre.
5.2	Overhead tank upto staging height 20 metres	25/Litre.
5.3	Overhead tank with staging height between 20 metres and upto 30 metres	30/Litre.
5.4	Overhead tank with staging height between 30 metres and 40 metres	35/Litre.
5.5	Underground sump	IS/Litre

Sl.No.	Description	Rates in Rupees
6	DEVELOPMENT OF SITE	
6.1	Levellling	951 sqm,
6.2	Internal roads & paths	1451 sqm
6.3	Sewer	110/ sqm.
6.4	Filter Water Supply	
6.4.1	Distribution lines 100 mm dia and below	80/ sqm.
6.4.2	Peripheral grid 150 mm to 300 mm dia pipes	60/ sqm.
6.4.3	Unfiltered water supply distribution lines	45/ sqm.
6.5	Storm water drains	85/ sqm,
6.6	Horticulture Operations	801 sqm.
6.7	Street lighting	
6.7.1	With fluorescent lamps	951 sqm,
6.7.2	With HPMV Lames	130/ sqm.
6.7.3	With HPSV Lamps	165/ sqm.
6.7.4	Exit sign board i/c electric signage.	85/ sqm.

Note :-

- (1) The rates are per sqm.. and are to be applied on the entire areas 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) Cost of HT sub - station equipments, LT distribution system, DG sets, pumps, air-conditioning and other specialized works like aesthetic external lighting with metal halide lamp & facade lighting, addressable fire alarm system, rising mains. UPS. aviation obstruction tights, external service connections. storage water cooler, IBMS, CCTV, access control system for security. solar water heating system, solar lighting etc. are not included in above rates and the same are to be taken as per actual based on functional/ utility of the proposed building.
- (5) 1.0 (A) shall be adopted for GPO and GPRA.  
1.0 (B) may be adopted for other buildings.
- (6) 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 complaint chillers. high efficiency motors, plant optimizers etc. (cost of plant not included.)
  - (h) Automated lighting controls with day light sensors and PIRs etc.

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## SPECIFICATIONS FOR RESIDENTIAL BUILDINGS

### SUPERIOR CATEGORY

### ANNEXURE II

Item no.	Item	Type I, II, III & Servant Qtrs.	Type-IV	Type - V / VI	Hostel
1.1 1.2 1.3 2.1 2.2	Foundation   Super structure	Bearing capacity 10 tonnes per sq. metre. Type-spread foundation in RCC isolated / combined, continuous wall footing with lean concrete. Depth upto 1.2 metres below ground level RCC framed construction with filler walls in brick work or load bearing construction if brick/stone masonry with intermediate columns where found necessary . Internal partition- half brick masonry in cement mortar 1:4	Applicable to all.		

S. No.	Item	Type I, II, III & Servant Qtrs.	Type-IV	Type - V / VI
3.1 3.1.1	<b>Frames</b> Window	Pressed steel frames made out of corrosion resistant coated sheet of 1.6 mm thick with double rebate	Pressed steel frames made out of corrosion resistant coated sheet of 1.6 mm thick with double rebate/scratch proof aluminium sheets/poly- propylene windows	Same as Type IV
3.1.2	Door	T-Iron /Pressed steel/Pre-cast R.C.C. frames.	Pressed steel frames made out of corrosion resistant coated sheet of 1.6 mm thick with single rebate/factory manufactured precast RCC frames.	Same as Type IV
3.2 3.2.1	<b>Shutters</b> Window	M.S. tubular box section corrosion resistant coated shutters. Wire mesh shutters may also be provided at the discretion of Zonal Chief Engineer.	M.S. tubular box section corrosion resistant coated shutters. Wire mesh shutters may also be provided at the discretion of Zonal Chief Engineer /Scratch proof aluminium window. Shutters to match with frame.	Same as Type IV
3.2.2	Main Door	Double door. one with iron grill with wire mesh mosquito proof and other 35 mm thick panelled shutter with hard wood style and rail with panelling of pre-laminated particle board. one side decorative other side balancing.	Same as Type I to III.	Same as Type I to III except that panelling will be of both side decorative, pre-laminated particle board.
3.2.3	W.C/Bath room	Solid PVC shutters 28 mm thick	Same as Type I to III	Same as Type I to III
3.2.4	Kitchen door	Partly panelled and partly wire mesh with stainless steel wire mesh. The panelling with pre-laminated particle board. one side decorative-35 mm thick panelled shutter with hard wood style and rails.	Same as Type I to III	Partly panelled and partly wire mesh with stainless steel wire mesh. The panelling with pre-laminated particle board. both sides decorative- 35 mm thick panelled shutter with hard wood Style and rails.

S. No.	Item	Type I, II, III & Servant Qtrs.	Type-IV	Type - V / VI
3.2.5	Other doors	35 mm thick panelled shutters with hard wood style and rail with panelling of pre-laminated board, one side decorative.	Same as Type I to III	35 mm thick panelled shutters with hard wood style and rail with panelling of pre laminated board, both sides decorative.
3.3	Fittings	Powder coated M.S. fittings/stainless steel fittings	Powder coated aluminium /stainless steel fittings	Same as type IV
3.4	Peep hole and security chain for external door only.	Yes	Yes	Yes

- Note:
1. In item no. 3 of Wood work, if any other option of local material is available, the same can also be used by the respective Chief Engineers.
  2. External sliding door bolt and handles will be in powder coated M.S. or stainless steel.
  3. Koba treatment on roofing in all type of quarters.

S. No.	Item	Type I, II, III & Servant Qtrs.	Type-IV	Type - V / VI
4	Flooring			
4.1	Bed rooms/ living rooms	Grey/Beige color ceramic floor tiles (size 12" x 12" Matt finish) of approved design	Same as Type I to III	Grey/Beige color rectified ceramic floor tiles (size 16" x 16" Matt finish) of approved design,
4.2	Kitchen, internal circulation area	Ceramic floor tiles (size 12" x 12" Matt finish) of approved design.	Same as Type I to III	Rectified ceramic floor tiles (size 16" x 16" Matt finish) of approved design.
4.3	Common circulation area. staircase	(i) Kota stone flooring and matching skirting. In staircase, single. piece pre-polished kota stone slab with pre-finished nosing be used. (ii) Dado of ceramic tile light grey/dull green shade 12" x 12" size upto 120 cm ht. above skirting i/c green marble nosing.	Same as type I to III	Same as type IV
4.4	Kitchen work top	Green marble pre-polished with pre-moulded nosing	Same as type I to III	Granite with pre-polished and pre-moulded nosing
4.5	Toilets	Ceramic floor tiles (Size 12" x 12") Matt finish/anti skid of approved design.	Same as type I to III	Rectified ceramic floor tiles (size 16" x 16")Matt finish/ anti skid of approved design
4.6	Skirting/ Dado in toilets	Ceramic white glazed tiles (min. size 8" x 12") upto door lintel level.	Same as type I to III	Ceramic white glazed tiles (min. size 8"x 12") upto ceiling ht. with decorative band of tiles.
5.0	Finishing			
5.1	External	Acrylic smooth exterior finish or washed stone grit plaster or exposed brick work	Premium Acrylic smooth exterior finish with additive of silicone or washed mosaic plaster in ordinary cement or exposed brick work	Premium Acrylic smooth exterior finish with additives of silicone or washed mosaic plaster in ordinary cement or exposed brick work.
5.2	Internal	All walls and ceilings to be treated with the 2mm thick POP followed with a coat of acrylic/ oil bound distemper except ceiling which will be done with white wash. Synthetic enamel paint on all wood work and steel work.	Same as type I to III	All walls and ceilings to be treated with the 2 mm thick POP followed by plastic emulsion paint except ceiling which will be done with white wash. Synthetic enamel paint on all wood work and steel work.

## SCALE OF AMENITIES FOR GENERAL POOL ACCOMMODATION SUPERIOR CATEGORY

Item No.	Item	Type I	Type II	Type III	Type IV	Type V/VI
1	<b>Kitchen</b>					
(I)	Shelves in tiers not more than 400mm wide along one wall 1" thick	Yes	Yes	Yes	Covered cup boards above sill level with pre-laminated decorative board	Same as Type IV
(II)	<b>Kitchen sink</b>	Stainless steel sink without drain board	Same as type -I	Same as type - I	Stainless steel sink with drain board	Same as type -IV/ vitreous china sink with draining board
(III)	Dado Ceramic glazed tiles (size 8" x 12") for 60cm. above and along work top and around and below kitchen sink	Yes	Yes	Yes	Yes	Ceramic glazed tiles (size 8" x 12") 60cm high dado from skirting level upto 60cm/ht. above kitchen platform above and along the work top and around and below kitchen sink excluding areas where built in cupboards are fixed.
(iv)	Built in cupboard with open shelves below cooking platform shutters of pre-laminated particle board 18mm thick below window sill level of cooking platform along one wall	Yes	Yes	Yes	Yes with 2 drawers	Yes with 2 drawers
(v)	Cooking platform standing	Yes	Yes	Yes	Yes	Yes
2(1)	<b>Wardrobes</b> Built in cupboard with R.C.C/ pre-laminated particle board /Kota stone shelves and shutter upto ceiling height	(One in each BedRoom) 7' - 00" height	One in each Bed Room, 1'-00"height	(One in each Bed Room) 1'-00"height	(One in each Bed Room) upto ceiling height	One in each Bed Room upto ceiling height
(ii)	Magic eye in front door	One	One	One	One	One
(iii)	Window sill lining 18mm thick projected with Kota stone/marble	Kota Stone	Kota Stone	Kota Stone	Kota Stone	Marble
(iv)	Curtain rods with brackets	Kota Stone	Kota Stone	Kota Stone	Kota Stone	Marble
(v)	Set of Pegs	In bath and bed rooms	In bath and bed rooms	In bath. bed and wardrobes	In bath. bed and wardrobes	In bath, bed and wardrobes

## SCALES OF SANITARY FITTINGS FOR GENERAL POOL RESIDENTIAL QUARTERS - SUPERIOR CATEGORY

Item No.	Item	Type I	Type II	Type III	Type IV	Type V / VI
1.	Indian W.C. Pan with dual flushing cistern	One WC Pan O r i s s a pattern	One Same as Type I	One Same as Type I	One Same as Type I	One + One for servant quarter
2.	European type W.C. with low level dual flushing cistern	--	--	--	One with low level dual PVC flushing cistern	One (syphonic type) with matching low level cistern
2(a)	Water Jet with low level European W.C.	--	--	--	One	One
3.	Wash basin with one pillar tap each	One	One	One	Two CP Brass mixer type for hot and cold water with single lever	Three CP Brass mixer type for hot and cold water with single lever
4.	Tap (kitchen bath & W.C.) C.P. Brass/ PTMT bib cock	4PTMT	4PTMT	4 C.P. brass	5 C.P. brass	12 (1 PTMT + 11 CP brass)
5.	Shower C.P. Brass / PTMT	One PTMT	One PTMT	One PTMT	Two C.P.brass	Three C.P. brass
6.	Towel rail C.P. Brass/ PTMT	One PTMT	One PTMT	One PTMT	Two C.P.brass	Two C.P.brass
7.	Mirror / Bevelled edge / P.V.C. frame with PTMT glass shelf	One	One	One	Two	Three
8.	Soap rack (Nitch in W.C./ Bath)	One	One	One	Two	Three
9.	Liquid soap container	--	--	--	Two	Three
10.	Storage tank	500 ltr.	500 ltr.	500 ltr.	750 litre	1000 litre + 500 litre for servant quarters
11.	Nitch with Kota stonesill in bath room	500 ltr.	500 ltr.	500 ltr.	750 litre	1000 litre + 500 litre for servant quarters
12.	Plumbing for water purifier and Geyser	Yes	Yes	Yes	Yes	Yes

Note: Waste coupling in wash basins and grating over the floor trap shall be only of PTMT.



## SPECIFICATIONS FOR ELECTRICAL INSTALLATION IN RESIDENTIAL QUARTERS - SUPERIOR CATEGORY

Item No.	Description	Type I	Type II	Type III	Type IV	Type V (excluding servant quarter & Garage )	Type VI (excluding servant quarter & garage )	Servant Qtrs & Garage	
1.	Power Points (15 amperes, 6 pins	2	3	4	5	6	7	1	
2.	MCB connected socket outlet for A. C. unit / Geyser complete with wiring	1	1	1	2	4	5	-	
3.	Ceiling Fans	2	3	4	5	6	7	1	
4.	Exhaust Fans	1	1	2	2	3	3	-	
5.	Call bells	1	1	1	1	2	3	-	
6.	Light / Fans/Call bell /5A Plug Points	17	20	23	7J	38	44	5	
7.	F.I. Fittings excluding Tube and Starter	2	3	4	5	7	8	1	
	Type of Wiring	Recessed Conduit wiring				Concealed conduit wiring			
8.	EDB MCB Type A. Single Phase	1	1	1	-	-	-	1	
	B. 3 Phase	-			1	1	1	-	
9.	Cable TV Point	1	1	1	1	2	2	-	
10.	Telephone Point	-			1	2	2	-	

## SPECIFICATION FOR NON - RESIDENTIAL BUILDING

### SUPERIOR CATEGORY

Item No.	Description	Specification
1.0	<b>FOUNDATION</b>	As per structural design based on soil investigation.
2.0	<b>SUPER STRUCTURE</b>	
2.1	Structure	R.C.C. framed construction with filler walls with fly ash bricks lbrick work or load bearing construction in fly ash brick/brick/ stone masonry with intermediate columns as per design.
2.2	Internal partitions.	Light weight auto claved aerated concrete blocks.
2.2.1		Gypsum Blocks.
2.2.2		Non asbestos double skin cement boards.
2.2.3		Fly ash bricks.
2.2.4		
3.0	<b>DOORS &amp; WINDOWS</b>	
3.1	Frames:	
3.1.1		Door frames of 2nd class Indian teakwood or equivalent in officer's room.
3.1.2		Anodized / Powder coated! Polyester powder coated Aluminium windows/ doors.
3.1.3		Glazing with reflective glass or double glass using float glass.
3.2	Door Shutters:	
3.2.1		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 float glass panelling where required.
3.2.3		PVC/FRP door frames & shutters in wet areas.
3.3	Window shutters	Factory made Anodised / powder coated/ Polyester powder coated 'Z' section aluminium frames & shutters for windows.
3.4	Fittings	Anodized aluminium / stainless steel or equivalent.
3.5	Fire check door	As per fire safety specifications
4.0	<b>FLOORING</b>	
4.1	Main entrance hall	Pre polished granite flooring.
4.2	Corridors	Matt finished vitrified tiles/Granite flooring.
4.3	Rooms	Granite tiles / Vitrified tiles/Ceramic tile flooring.
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	<b>STAIRCASE</b>	
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	<b>RAILING</b>	Stainless steel railings.
7.0	<b>TOILETS</b>	Granite flooring. Glazed tiles of size not less than 300 x 450 mm in dado. Granite counters. Stainless steel sinks. Mirrors with moulded PVC frame. FRP/ PVC doors with frames.

8.0	<b>ROOFING</b>	
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.
9.0	<b>FINISHING</b>	
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 distemper in service area & basement.
9.2.4		Oil bound distemper/Acrylic emulsion paint/Textured paint (low V.O.C)
9.3	Painting	Doors & windows - Painting/polishing on wood work as per design requirement.
10.0	<b>PROVISION FOR BARRIER FREE BUILDING</b>	
		Ramps. toilets for physically challenged. chequered tiles use of Braille signages & lifts etc.GRC (Glass reinforced concrete) tiles in Ramp area.
11.0	<b>LANDSCAPING</b>	
		10% of the building cost will be kept in Preliminary Estimate for murals and! Landscape related construction ilc pavement/ paving.

### Central Public Works Department

Copy of the Memo no. 29/21/58/WI

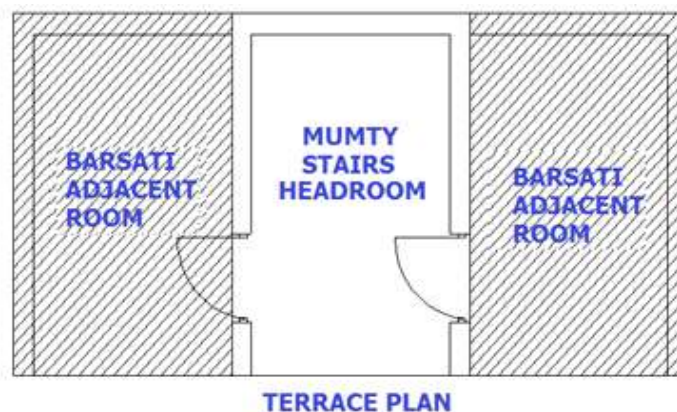
Dated: New Delhi, Oct. 1983

#### Subject: Rules for working out plinth area from plans

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

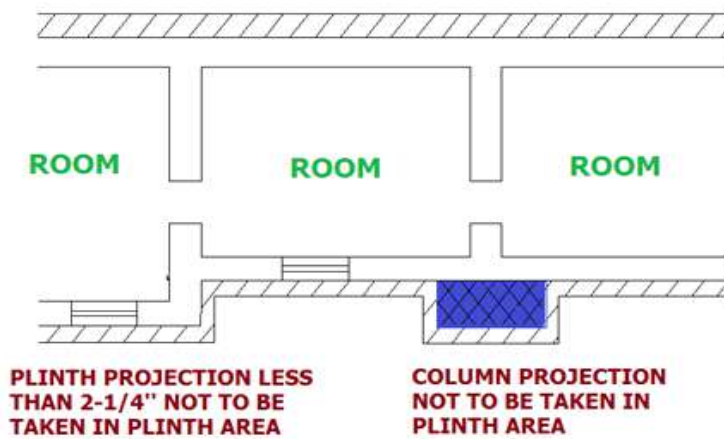
- (a) The total plinth area of a building shall be the sum total of the plinth area at every floor including the basement, if any.
- (b) Internal sanitary shafts shall not be included in the plinth area in the case of a residential building at any floor level.
- (c) In case of non-residential building internal shafts for sanitary installations, air-conditioning ducts, lifts etc. shall be included in the plinth area at all floor levels.
- (d) The area of the mumty at terrace level shall not be included in the plinth area. If a Barsati is provided jointly with mumty then the area of the Barsati excluding mumty at the terrace level shall be included in the plinth area as shown below in the hatched area.



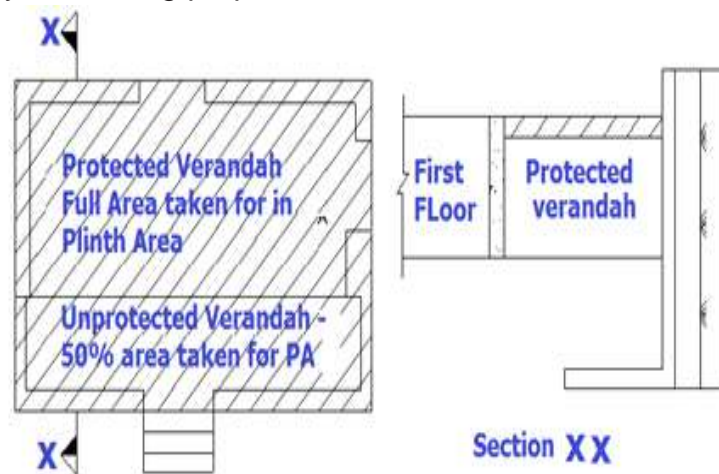
- (e) Towers, turrets domes projecting above the terrace shall not be included in the plinth area at terrace level, but shall be allowed for separately for costing purposes.

#### PLINTH AREA OF GROUND FLOOR

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 2 IA" . 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.

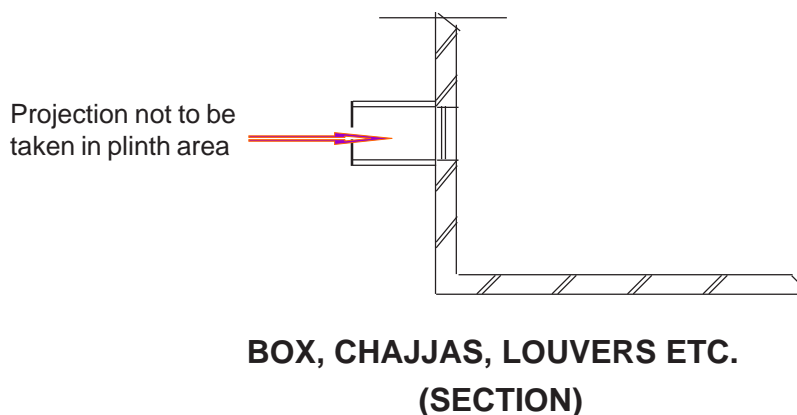


In case open verandah with parapets are protected at the ground floor projecting out of the building, the full area shall be taken up to the outer line of the external verandah lintel and only 50% of area shall be taken for the unprotected verandah. Open platform without parapets and terraces at ground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

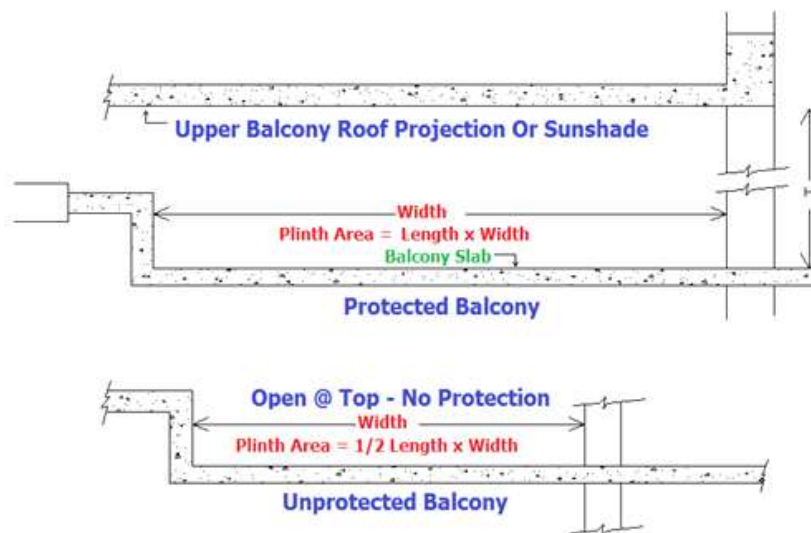


### PLINTH AREA AT FIRST AND HIGHER FLOORS

The plinth area of first and higher floors shall be calculated at the relevant floor levels. Architectural bonds, 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:



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:



#### IV) GALLERIES, MEZZANINE FLOORS, LOFTS

- Area of galleries i.e. upper floor of seats in an assembly hall, Auditorium, theatres, etc. shall be fully included in the plinth area. '
- 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.
- 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.

Sd/-  
Chief Engineer  
Central P.W.D.

(Er. RAM DIYA)  
ASSTT. ENGINEER-III  
S&S- II, CPWD  
NIRMAN BHAWAN, N.D.

(Er. K.L.LANGAR)  
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(S&S) II, CPWD  
NIRMAN BHAWAN, N.D.

(Er. M.K.KANCHAN)  
SUPTDG ENGINEER(S&S)  
CPWD, NIRMAN BHAWAN  
NEW DELHI

## PROFORMA FOR CALCULATION OF COST INDEX

ANNEXURE - IV

S.No.	Description		Unit	Rate as on 1.10.2012 in Rs.	Weightage	Rate at the time of revision of cost index	
1.	BRICKS		1000 Nos.	3867.00	8.00		
2	CEMENT (OPC)		QTL	587.00	14.50		
3.	STEEL a) 8 & 10 MM(TOR STEEL) b) 12& 16 MM (TOR STEEL)	50% 50%	QTL	4669.00	19.50		
4.	AGGREGATE 20 MM SIZE		CUM.	1350.00	6.50		
5.	SAND{COARSE SAND}		CUM.	1293.00	3.00		
6.	FLOORING ITEMS (a) MOSAIC TILES (b) CERAMIC TILES (c) KOTASTONE (d) GRANITE STONE	40% 40% 10% 10%	SQM.	467.00	3.00		
7.	PAINTS (a) SYNTHETIC ENAMEL PAINT (b) O.B.O. (c) PLASTIC EMULSION PAINT	33.33% 33.33% 33.33%	LITRE	151.00	3.00		
8.	PLY AND COMM. WOOD (I) 12 MM THICK PARTICLE BOARD (ii) STEEL WINDOW STANDARD Z SECTION (iii) ALUMINIUM WINDOW	33.33% 33.33% 33.33%	SQM.	1476.00	5.00		
9.	PIPES (I) 15MM G.I. PIPE (ii) 100MM SCI PIPES (iii) 20 MM Black Conduit	33.33% 33.33% 33.33%	MTR.	300.00	2.50		
10.	LAMPS & FANS (i) CEILING FANS 48" (ii) 120 M FLUORSCENT TUBE WITH FITTINGS	50% 50%	EACH	1024.00	3.50		
11.	ELECT MACHINERY FITTING MOTORS 7.5 HP (PUMP SET) 1500 RPM (KIRLOSKAR)		EACH	30380.00	2.50		
12	WIRES & CABLES COPPER WIRES (a) 1.5 SQMM (b) 4.0 SQMM	70% 30%	100 MTR.	1790.00	4.00		
13.	LABOUR (i) SKILLED (ii) UNSKILLED	50% 50%	EACH	30938	25.00		

**SPECIFICATIONS FOR BUILDINGS**  
**NON - RESIDENTIAL**  
**NORMAL CATEGORY**

ANNEXURE - V

S.No.	Description	Item No.	Office	Hospitals	Schools
1	2	3	4	5	6
1	FOUNDATIONS	1.1	Bearing capacity 10 tonnes / square metre.		
		1.2	Type - Spread foundations isolated / combined		
		1.3	Depth - Upto 1.2 metre below ground level		
2.	SUPER STRUCTURES	2.1	RCC framed construction with finer walls in brick work or load bearing construction in brick / stone masonry with intermediate columns where found necessary.		
		2.2	Internal partition in brick masonry		
		2.3	RCC chajjas, fins, jalis etc.		
3.	DOORS & WINDOWS	3.1	Frames of 2nd class Indian teak wood or equivalent or T-iron frame. pressed steel frame as per CPWD Specifications		
		3.2	Door shutters; Panelled type in 2nd class teak wood or flush door with commercial ply as per CPWD Specifications		
		3.3	Window shutters 2nd class Indian teak wood	Window shutters 2nd class Indian teak wood. Fly proof shutters for all doors & windows and iron grills for windows in ground floor shall be provided for which provision for extra rate will be made or steel windows.	Window shutters 2nd class Indian Teak wood or Steel windows.
		3.4	Fittings	Anodized aluminium or equivalent	
4	FLOORING	4.1	Main entrance hall terrazzo tiles. kota stone and the like. Lavatory blocks and corridors & some officers room.  Mosaic limited upto 25% of total area.	Main entrance hall terrazzo tiles, kota stone & the like. Lavatory block, corridors and other rooms except stores. weather-maker rooms etc. mosaic flooring with dado upto "0" height.  In corridors & upto sill level in other rooms, the flooring & dado to be limited to SO% in ordinary cement and 50% in white cement.	Main entrance hall, staircase. lavatory blocks in-situ mosaic
		4.2	Rest of the area ordinary cement concrete	Rest of the area ordinary cement concrete	Rest of the area ordinary cement concrete
5	ROOFING	5.1	Filling for drainage lime concrete	Filling for drainage lime concrete	Filling of drainage lime concrete finished with brick tiles
		5.2	Water-proofing treatment 4 course treatment finished with brick tiles	Water-proofing treatment 4 course treatment finished with brick tiles.	Water-proofing treatment 4 course treatment finished with brick tiles .
6	FINISHING	6.1	External water proofing cement paint	External water proofing cement paint	External water proofing cement paint
		6.2	Internal Officers rooms & important rooms such as Committee Rooms dry distemper to be limited upto 25% of the total area. Rest either colour or white wash. Main entrance hall plastic emulsion paint or the like. (Low V.O.C)	Internal dry distemper in doctors room operation theatre other important rooms. such as committee room, X-ray room etc. Limited upto 25% of total area. Rest either colour or white wash. Main entrance hall, OPD Plastic emulsion paint or the like. (Low V.O.C)	Internal - entrance hall principals room. Committee room etc. dry distemper. Rest of the area white or colour wash. (Low V.O.C)  Doors & windows painting
		6.3	Door & windows- painting	Doors & windows painting	



## SPECIFICATIONS FOR RESIDENTIAL BUILDINGS

### NORMAL CATEGORY

Item no.	Item	Type I, II, III & Servant Qtrs.	Type-IV	Type - V / VI	Hostel
1.1	Foundation	Bearing capacity 10 tonnes per sq. metre.	Applicable to all.		
1.2		Type-spread foundation in RCC isolated / combined, continuous wall footing with lean concrete.			
1.3		Depth upto 1.2 metres below ground level			
2.1	Super structure	RCC framed construction with filler walls in brick work or load bearing construction if brick/stone masonry with intermediate columns where found necessary .			
2.2		Internal partition- half brick masonry in cement mortar 1:4			

S. No.	Item	Type I, II, III & Servant Qtrs.	Type-IV	Type - V and VI
3.1	<b>Frames</b>			
3.1.1	Window	Pressed steel frames made out of corrosion resistant coated sheet of 1.6 mm thick with double rebate	Pressed steel frames made out of corrosion resistant coated sheet of 1.6 mm thick with double rebate/scratch proof aluminium sheets/poly- propylene windows	Same as Type IV
3.1.2	Door	T-Iron / Pressed steel / Pre-cast R.C.C. frames.	Pressed steel frames made out of corrosion resistant coated sheet of 1.6 mm thick with single rebate/factory manufactured precast RCC frames.	Same as Type IV
3.2	<b>Shutters</b>			
3.2.1	Window	M.S. tubular box section corrosion resistant coated shutters. Wire mesh shutters may also be provided at the discretion of Zonal Chief Engineer.	M.S. tubular box section corrosion resistant coated shutters. Wire mesh shutters may also be provided at the discretion of Zonal Chief Engineer /Scratch proof aluminium window. Shutters to match with frame.	Same as Type IV
3.2.2	Main Door	Double door. one with iron grill with wire mesh mosquito proof and other 35 mm thick panelled shutter with hard wood style and rail with panelling of pre-laminated particle board, one side decorative other side balancing.	Same as Type I to III.	Same as Type I to III except that panelling will be of both side decorative, pre-laminated particle board.
3.2.3	W.C/ Bath room	Solid PVC shutters 28 mm thick	Same as Type I to III	Same as Type I to III
3.2.4	Kitchen door	Partly panelled and partly wire mesh with stainless steel wire mesh. The panelling with pre-laminated particle board, one side decorative-35 mm thick panelled shutter with hard wood style and rails.	Same as Type I to III	Partly panelled and partly wire mesh with stainless steel wire mesh. The panelling with pre- laminated particle board, both sides decorative- 35 mm thick panelled shutter with hard wood Style and rails.

S. No.	Item	Type I, II, III & Servant Qtrs.	Type-IV	Type - V / VI
3.2.5	Other doors	35 mm thick panelled shutters with hard wood style and rail with panelling of pre-laminated board, one side decorative.	Same as Type I to III	35 mm thick panelled shutters with hard wood style and rail with panelling of pre laminated board, both sides decorative.
3.3	Fittings	Powder coated M.S. fittings / stainless steel fittings	Powder coated aluminium / stainless steel fittings	Same as type IV
3.4	Peep hole and security chain for external door only.	Yes	Yes	Yes

- Note:
1. In item no. 3 of Wood work, if any other option of local material is available, the same can also be used by the respective Chief Engineers.
  2. External sliding door bolt and handles will be in powder coated M.S. or stainless steel.
  3. **Over deck insulation with PUF Slab / Koba treatment on roofing in all type of quarters.**

S. No.	Item	Type I, II, III & Servant Qtrs.	Type-IV	Type - V and VI
4	Flooring			
4.1	In rooms, kitchen, internal circulation area	Mosaic flooring and skirting with ordinary cement except in common circulation area and staircase.	Same as Type I to III	Mosaic / Terrazzo tile flooring with white cement . In kitchen, ceramic tiles / marbles flooring.
4.2	Common circulation area, staircase	Kota stone flooring and matching skirting. In staircase, single piece kota stone shall be used.	Same as Type I to III	Same as type IV
4.3	Kitchen work top	Kota stone	Udaipur green marble / Granite stone	Granite stone
4.4	Toilets	Mosaic	Ceramic tiles	Ceramic tiles
4.5	Skirting/ Dado	Ceramic glazed tiles in Indian Type WC upto 90cm. height and bathroom upto door jamb height.	Same as type I to III	Ceramic glazed tiles upto ceiling height with a decorative band of tiles.
5.0	Finishing			
5.1	External	Acrylic smooth exterior finish or washed stone grit plaster or exposed brick work	Premium Acrylic smooth exterior finish with additive of silicone or washed mosaic plaster in ordinary cement or exposed brick work	Premium Acrylic smooth exterior finish with additives of silicone or washed mosaic plaster in ordinary cement or exposed brick work.
5.2	Internal	All walls and ceilings to be treated with the 2 mm thick POP followed with a coat of acrylic / oil bound distemper except kitchen , bath & WC and all ceiling, which will be done with white wash. Synthetic enamel paint on all wood work and steel work.	All walls and ceilings to be treated with the 2 mm thick POP followed with a coat of acrylic/ oil bound distemper except kitchen , bath & WC and all ceiling, which will be done with white wash. Synthetic enamel paint on all wood work and steel work.	All walls and ceilings to be treated with the 2 mm thick POP plaster and cornices followed with a coat of plastic emulsion paint except kitchen, bath and WC and all ceilings, which will be done with white wash. Synthetic enamel paint on all wood work and steel work.

## SCALE OF AMENITIES FOR GENERAL POOL ACCOMMODATION

### NORMAL CATEGORY

Item No.	Item	Type I	Type II	Type III	Type IV	Type V / VI
1	<b>Kitchen</b>					
(I)	Shelves in tiers not more than 400mm wide along one wall 1" thick	Yes	Yes	Yes	Covered cup boards above sill level with pre-laminated decorative board	Same as Type IV
(II)	<b>Kitchen sink</b>	Stainless steel sink without drain board size 610x510mm with bowl depth 200 mm	Same as type -I	Same as type - I	Stainless steel sink with drain board size 510 x 1040 mm with bowl depth 200 mm	Stainless steel sink of size 510 x 1040 mm with bowl depth of 250 mm with draining board / vitreous china sink with draining board of size 600 x 450 x 250 mm
(III)	<b>Dado Ceramic glazed tiles for 60 cm. above work top and around sunken floor</b>	Yes	Yes	Yes	Yes	Ceramic glazed tiles upto 60cm above cooking platform all around
(iv)	Built in cupboard with open shelves below cooking platform shutters of pre-laminated particle board 18 mm thick below window sill level of cooking platform along one wall	Yes	Yes	Yes	Yes with 2 drawers	Yes with 2 drawers
(v)	Cooking platform standing	Yes	Yes	Yes	Yes	Yes
2(i)	<b>Wardrobes</b> Built in cupboard with R.C.C / pre-laminated particle board / Kota stone shelves and shutter upto ceiling height	One in each BedRoom 7' - 00" height	One in each Bed Room, 7'-00"height	One in each Bed Room 7'-00"height	One in each Bed Room upto ceiling height	One in each Bed Room upto ceiling height
(ii)	Magic eye in front door	One	One	One	One	One
(iii)	Window sill lining 18mm thick projected with Kota stone / marble	Kota Stone	Kota Stone	Kota Stone	Kota Stone	Marble
(iv)	Curtain rods with brackets	All rooms	All rooms	All rooms	Drapery rods	Drapery rods
(v)	Set of Pegs	In bath and bed rooms	In bath and bed rooms	In bath, bed and wardrobes	In bath, bed and wardrobes	In bath, bed and wardrobes

## SCALES OF SANITARY FITTINGS FOR GENERAL POOL RESIDENTIAL QUARTERS - NORMAL CATEGORY

Item No.	Item	Type I	Type II	Type III	Type IV	Type V/VI
1.	Indian W.C. Pan with flushing cistern	One WC Pan Orissa pattern with low level PVC Flushing Cistern	One Same as Type I	One Same as Type I	One Same as Type I	One + One for servant quarter
2.	European type W.C. with low level flushing cistern	--	--	--	One with low level PVC flushing cistern	One (syphonic type) with matching low level cistern
2(a)	Water Jet with low level European W.C.	--	--	--	One	One
3.	Wash basin with one tap each	One	One	One	Two mixer type for hot and cold water	Three mixer type for hot and cold water
4.	Tap (kitchen bath & W.C.) C.P. Brass / PTMT bib cock	4 PTMT	4 PTMT	4 C.P. brass	5 C.P. brass	12 ( 1 PTMT + 11 CP brass)
5.	Shower C.P. Brass / PTMT	One PTMT	One PTMT	One PTMT	Two C.P. brass	Three C.P. brass
6.	Towel rail C.P. Brass / PTMT	One PTMT	One PTMT	One PTMT	Two C.P. brass	Two C.P. brass
7.	Mirror / Bevelled edge / P.V.C. frame with PTMT glass shelf	One	One	One	Two	Three
8.	Soap rack (Nitch in W.C./ Bath)	One	One	One	Two	Three
9.	Liquid soap container	--	--	--	Two	Three
10.	Storage tank	500 ltr.	500 ltr.	500 ltr.	750 litre	1000 litre + 500 litre for servant quarter
11.	Nitch with Kota stonesill in bath room	One	One	One	Two	3 + 1 for servant quarter

Note: Waste coupling in wash basins and grating over the floor trap shall be only of PTMT.

## SPECIFICATIONS FOR ELECTRICAL INSTALLATION IN RESIDENTIAL QUARTERS - NORMAL CATEGORY

Item No.	Description	Type I	Type II	Type III	Type IV	Type V (excluding servant quarter & Garage )	Type VI (excluding servant quarter & garage )	Servant Qtrs & Garage
1.	Power Points (15 amperes, 6 pins)	2	3	4	5	6	7	1
2.	MCB connected socket outlet for A. C. unit / Geyser complete with wiring	1	1	1	2	4	5	-
3.	Ceiling Fans	2	3	4	5	6	7	1
4.	Exhaust Fans	1	1	1	1	1	1	-
5.	Call bells	1	1	1	1	2	3	-
6.	Light / Fans/Call bell /5A Plug Points	17	20	23	27	38	44	5
7.	F.I. Fittings excluding Tube and Starter	2	3	4	5	7	8	1
	Type of Wiring	Recessed Conduit wiring			Concealed conduit wiring			
8.	EDB MCB Type							
	A. Single Phase	1	1	1	-	-	-	1
	B. 3 Phase	-			1	1	1	-
9.	Cable TV Point	1	1	1	1	2	2	-
10.	Telephone Point	-			1	2	2	-





भारत सरकार

GOVERNMENT OF INDIA

केन्द्रीय लोक निर्माण विभाग

Central Public Works Department



PLINTH AREA RATES

1.10.2007

REPRINT- 2010



भारत सरकार  
GOVERNMENT OF INDIA

केन्द्रीय लोक निर्माण विभाग  
**CENTRAL PWD**

कुरसी क्षेत्र दरें  
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**(1.10.2007)**  
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## FOREWORD TO REPRINT - 2010

Plinth Area Rates w.e.f. 1/10/2007 published by CPWD is a very useful document for preparation of preliminary estimates all over India in all Govt. residential buildings and non-residential buildings e.g. Offices/Colleges/ Hospitals, Schools, Hostels etc. which is in extensive use by all Central Government Departments, Public Sector Undertakings, Private Sector Builders and Engineers etc.

This edition is the Reprint of Plinth Area Rates 2007 after incorporating Correction Slips no. 1 to 3 i.e. issued upto March 2010 on the basis of various feed backs received from various field units from time to time thus making this edition more elloborative and accurate.

I am sure that this PAR- 2007 (Reprint - 2010) will be very useful to all concerned.



13/5/2010

**(Bhisma Kumar Chugh)**  
**Director General (Works)**

**New Delhi**  
**May, 2010**

**Govt. of India**  
**Central Public Works Department**  
**(Technology Application and Standards Unit )**  
**Nirman Bhawan, New Delhi**

No. 62/SE(TAS)/Plinth area rates/122

Dated : 12.12.2007

**MEMORANDUM**

Plinth Area Rates as applicable on 1.1.1992 were last circulated under Memo No. SE (S & S)/EE-II/AE-III/289 dated 29.6.1992 along with annexure I to IV. Relevant cost indices with reference to base 100 as 1.1.1992 shall continue to be applicable on these plinth area rates for works in progress etc.

However, the need for issuing fresh plinth area rates has been felt for quite some time to account for rise in prices in the last 15 years, and also to account for revised specifications for Type-I, to type - VI Qrs; approved by MOUD and issued subsequently by DG(W) vide circular No. 62/SE (S&S)/EE-I/AE-II/PAR/05-06/01 dated 2.1.2006.

Now it is proposed to bring out new Plinth area rates as on 1.10.2007 incorporating revised specifications for Type-I, to type - VI Qrs; as issued by DG(W) vide circular No. 62/SE (S&S)/EE-I/AE-II/PAR/05-06/01 dated 2.1.2006. The specification for Non – residential buildings have been updated and incorporated.

Accordingly, fresh plinth area rates with reference to base 100 as on 1.10.2007 has been prepared for circulation in the department. In future, the preliminary estimates may be prepared on the basis of these plinth area rates.

All the rates are based on data of actual expenditure for structures completed recently, as received from various field formations. In case of any discrepancy in Hindi & English versions, English version will prevail.

The latest plinth area rates as on 1.10.2007 is hereby issued with following annexures :

- Annexure – I :** Fresh Plinth Area Rates with base 100, as on 1.10.2007 (for residential /non residential buildings, services and development ).
- Annexure – II :** Broad specifications and scale of amenities for sanitary/Electrical fittings for which plinth area rates are applicable.
- Annexure – III :** Memo no. 29/21/58/WI of 10/83 indicating the rules for working out plinth area from plans, to be observed while adopting these plinth area rates given in Annexure – I.
- Annexure –IV :** Proforma for calculating cost index for future cost index with base 100 as 1.10.2007 indicating revised weightages also.

Encl: Annexure I to IV



Director General (Works)  
CPWD, Nirman Bhawan, New Delhi

## PLINTH AREA RATES AS ON 01.10.2007

## ANNEXURE – 1

S. No.	Description	Office/College/Hospital	Schools	Hostels	Residential
1	2	3	4	5	6
1.0(A)	<b>RCC FRAMED STRUCTURE</b> ( Specifications as per Annexure –II)	Rates in Rs. per sq. metre			
1.1(A)	RCC framed structure upto six storeys				
1.1.1(A)	Floor ht.3.35 mtr.	13200	9150		
1.1.2 (A)	Floor ht. 2.90 mtr.			9100	9000
1.0(B)	<b>RCC FRAMED STRUCTURE</b> (Normal Buildings) (Specifications as per Annexure –V)				
1.1 (B)	RCC framed structure upto six storeys				
1.1.1(B)	Floor ht. 3.35 mtr.	10900	8650		
1.1.2 (B)	Floor ht. 2.90 mtr.			8600	8500
1.2	<b>EXTRAS FOR</b>				
1.2.1	Every additional storey over six storeys upto nine storeys	310	310	310	310
1.2.2	Every additional storey over nine storeys upto twelve storeys	320	320	320	320
1.2.3	Every 0.3 mt. additional height of floor above normal floor height of 3.35 mt./ 2.90 mts.	150	150	150	150
1.2.4	Every 0.3 mt. higher plinth over normal plinth height of 0.6 mt. (on G.F. area only )	150	150	150	150
1.2.5	Every 0.30 mt. deeper foundations over normal depth of 1.20 metre (on G.F. area only )	150	150	150	150
1.2.6	Making stronger foundations to take load of one additional floor at a later date (on area of additional floor only )	1250	1250	1250	1250
1.2.7	Strip foundations in poor soil having bearing capacity less than 10 tonnes/ sqmt.	286	286	286	286
1.2.8	Resisting Earthquake forces	630	630	630	630
1.2.9	R.C.C. Raft foundations (ground floor only )	3560	3560	3560	3560

1.2.10	Pile foundation up to a depth of 15 mts (on ground floor area only.)	6470	6470	6470	6470
1.2.11	Stronger structural members to take heavy load above 500 Kgs./sqm. upto 1000 Kgs./Sqm.	850	850	850	850
1.2.12	Larger modules over 35 sqm.	990	990	990	990
1.3	<b>BASEMENT FLOOR</b>				
1.3.1	Floor ht. 3.35 mtrs with normal water proofing treatment with bituminous felt	10452	-	-	-
1.3.2	<b>EXTRA FOR BASEMENT WITH</b>				
1.3.2.1	Mastic Asphalt W.P.T.	1144	-	-	-
1.3.2.2	Every 0.3 mt. addl. Height (above 3.35 mt. )	1274	-	-	-
1.3.2.3	Reduction for every 0.5 m. less height of basement than normal height 3.35 mt.	(-) 728	-	-	-
1.4	<b>FIRE FIGHTING</b>				
1.4.1	With wet riser system	300	300	300	300
1.4.2	With sprinkler system	450	450	450	-
1.5	<b>FIRE ALARM SYSTEM</b>				
1.5.1	Manual Fire Alarm System	-	-	-	155
1.5.2	Automatic Fire Alarm System	300	300	300	-
1.6	<b>Operation Theatre (OPD) (Extra provision )</b>	1235	-	-	-
1.7	<b>Pressurized mechanical ventilation system in the basements (with supply of Exhaust blowers)</b>	50	50	50	-

Sl. No.	Description	Non -Residential			Residential		
		Office/College /Hospitals	Schools	Hostel	Type-I, II, III & servant Qtrs.	Type -IV Qtrs.	Type -V, VI and above
1	2	3	4	5	6	7	8
2.0	<b>LOADBEARING CONSTRUCTION</b>						
2.1	<b>Floor height 3.35 mt.</b>						
2.1.1	Single storeyed	8250	7505	-	-	-	-
2.1.2	Doubled storeyed	7900	6740	-	-	-	-
2.1.3	Three storeyed	8250	7505	-	-	-	-
2.1.4	Four storeyed	8715	7555	-	-	-	-
2.2	<b>Floor height 2.90 mt.</b>						
2.2.1	Single storeyed	-	-	7315	6390	7030	7555
2.2.2	Double storeyed	-	-	6425	6200	6820	7205
2.2.3	Three storeyed	-	-	7315	6390	7030	7355
2.2.4	Four storeyed	-	-	7665	6740	7410	7900
2.3	<b>Scooter &amp; Cycles sheds</b>	-	-	-	5805	5805	5805
2.4	<b>Garrages</b>	-	-	-	5455	5455	5455
2.5	<b>Extra for</b>						
2.5.1	Every 0.3 mt. additional height above normal height 3.35 mt./2.90 mt.	150	150	150	150	150	150
2.5.2	Every 0.3 mt. higher plinth over normal plinth height of 0.60 mt. (on ground floor area only )	150	150	150	150	150	150
2.5.3	Every 0.3 mt. deeper foundations over normal depth of 1.20 mt. (on G.F. area only)	150	150	150	150	150	150
2.5.4	Making stronger foundations to take load of one additional floor at a later date (on area of additional floor only )	430	430	430	430	430	430
2.5.5	Foundations on poor soils having bearing capacity less than 10 T/sqmt.	286	286	286	286	286	286
2.5.6	Foundation on poor soils requiring under reamed pile 6 mt. long	3085	3085	3085	3085	3085	3085
2.5.7	R.C.C. Raft foundation (G.F. area only)	3560	3560	3560	3560	3560	3560
2.5.8	Pile foundation up to a depth of 15 mtr. (G. F. area only)	6470	6470	6470	6470	6470	6470
2.6	<b>Extra for resisting Earth-quake Forces</b>						
2.6.1	In Zone V	588	588	588	588	588	588

Sl. No.	Description	Non -Residential			Residential		
		Office/College /Hospitals	Schools	Hostel	Type-I, II, III & servant Qtrs.	Type -IV Qtrs.	Type -V, VI and above
1	2	3	4	5	6	7	8
2.6.2	Buildings of two storeyes or more in Zone III & IV	286	286	286	286	286	286
2.6.3	Resisting earthquake forces in Zone II and single storey buildings in Zone III & IV	Nil	Nil	Nil	Nil	Nil	Nil
2.7	<b>Stronger structural members to take heavy loads above 500 Kg /sqm. Up to 1000 Kg/sqmt.</b>	850	850	850	850	850	850
2.8	<b>Larger modules over 35 sqmt.</b>	990	990	990	990	990	990
2.9	<b>Fire-fighting</b>						
2.9.1	With wet riser system	300	300	300	300	300	300
2.9.2	With sprinkler system	450	450	450	450	450	450
2.10	<b>Fire Alarm System</b>						
2.10.1	a) Manual Fire Alarm system	-	-	-	155	155	155
2.10.2	b) Automatic Fire Alarm System	300	300	300	-	-	-
2.11	<b>O.P.D. Operation Theatre etc.</b>	1235	-	-	-	-	-

Note : Rates for items are applicable on entire plinth area except for items 1.2.4, 1.2.5, 1.2.6,1.2.9,1.2.10,1.5,2.5.2, 2.5.3, 2.5.4, 2.5.7 and 2.5.8.





Sl. No.	Type of lift	Capacity/ Persons	Weight	Speed in M/Sec.	Travel	Doors	Control	Price (Rs. In lacs)	Addl. Price for each additional floor (Rs. )
1	2	3	4	5	6	7	8	9	10
<b>4.0</b>	<b>LIFTS</b>								
4.1	<b>Passenger lifts</b>								
4.1.1	Passenger lift	8	544 Kg.	1.0	G+4	Power operated	ACV VVF	13.50	90,000.00
4.1.2	Passenger lift	8	544 Kg.	1.5	G+4	Power operated	ACV VVF	18.00	90,000.00
4.1.3	Passenger lift	13	884 Kg.	1.0	G+4	Power operated	ACV VVF	18.00	90,000.00
4.1.4	Passenger lift	13	884 Kg.	1.5	G+4	Power operated	ACV VVF	19.00	90,000.00
4.1.5	Passenger lift	16	1088 Kg.	1.0	G+4	Power operated	ACV VVF	17.00	1,10,000.00
4.1.6	Passenger lift	16	1088 Kg.	1.5	G+4	Power operated	ACV VVF	19.50	1,10,000.00
4.1.7	Passenger lift	16	1088 Kg.	2.5	G+4	Power operated	ACV VVF	57.00	1,10,000.00
4.1.8	Passenger lift (Bed lift)	20	1360 Kg.	0.75	G+4	Power operated	ACV VVF	21.50	90,000.00
4.1.9	Passenger lift	20	1360 Kg.	1.5	G+4	Power operated	ACV VVF	27.00	1,10,000.00
4.1.10	Passenger lift	20	1360 Kg.	2.5	G+4	Power operated	ACV VVF	59.00	1,30,000.00
4.2	<b>Goods lifts (2 speed )</b>								
4.2.1		1 Ton	-	0.5	G+4			14.75	50,000.00
4.2.2		2 Ton	-	0.5	G+4			19.00	50,000.00
4.2.3		3 Ton	-	0.25	G+4			23.25	60,000.00

Note:- AC VVVF = AC variable voltage variable frequency.

Sl. No.	Description	Rates in Rupees
<b>5</b>	<b>WATER TANK (RCC ONLY )</b>	
5.1	Overhead tank without independent staging	9.00 /Litre.
5.2	Overhead tank upto staging height 20 metres	15.20/ Litre.
5.3	Overhead tank with staging height between 20 metres and upto 30 metres	17.30/ Litre.
5.4	Overhead tank with staging height between 30 metres and 40 metres	21.00/ Litre.
5.5	Underground sump	9.00 /Litre
<b>6</b>	<b>DEVELOPMENT OF SITE</b>	
6.1	<b>Levelling</b>	55.00/ sqm.
6.2	<b>Internal roads &amp; paths</b>	83.00/ sqm
6.3	<b>Sewer</b>	63.00/ sqm.
6.4	<b>Filter Water Supply</b>	
6.4.1	Distribution lines 100 mm dia and below	46.00/ sqm.
6.4.2	Peripheral grid 150 mm to 300 mm dia pipes	35.00/ sqm.
6.4.3	Unfiltered water supply distribution lines	27.00/ sqm.
6.5	<b>Storm water drains</b>	50.00/ sqm.
6.6	<b>Horticulture Operations</b>	47.00/ sqm.
6.7	<b>Street lighting</b>	
6.7.1	With fluorescent lamps	55.00/ sqm.
6.7.2	With HPMV Lamps	75.00/ sqm.
6.7.3	With HPSV Lamps	95.00/ sqm.
6.7.4	Exit sign board i/c electric signage.	50.00/ sqm.

- Note :
- The rates are per sqm. and are to be applied on the entire areas of the plot to be developed.
  - 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.
  - Cost of bulk services water supply, sewage disposal e.g.
    - 3.1 Tube wells, pumps, open wells, treatment plant, extension of lines from source of local bodies, head works at water source etc.
    - 3.2 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.
  - The cost of providing green building & Water harvesting are to be taken as per actual.
  - Cost of HT sub - station equipments, LT distribution system, DG sets, pumps, air-conditioning and other specialized works like aesthetic external lighting with metal halide lamp for façade lighting, addressable fire alarm system, rising mains, UPS, aviation obstruction lights, external service connections, storage water cooler, IBMS, CCTV, access control system for security, solar water heating system, solar lighting etc. are not included in above rates and the same are to be taken as per actual based on functional / utility of the proposed building.
  - 1.0 (A) shall be adopted for GPO and GPRA.  
1.0 (B) may be adopted for other buildings.



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## SPECIFICATIONS FOR RESIDENTIAL BUILDINGS

Item no.	Item	Type I, II, III & Servant Qtrs.	Type-IV	Type-V/VI	Hostel
1.1	Foundation	Bearing capacity 10 tonnes per sq. metre.	Applicable to all		
1.2		Type –spread foundation in RCC isolated /combined, continuous wall footing with lean concrete.			
1.3		Depth upto 1.2 metres below ground level			
2.1	Super structure	RCC framed construction with filler walls in brick work or load bearing construction if brick/stone masonry with intermediate columns where found necessary.			
2.2		Internal partition- half brick masonry in cement mortar 1:4			

S No.	Item	Type I, II, III & Servant Qtrs.	Type IV	Type V and VI
3.1	<b>Frames</b>			
3.1.1	Window	Pressed steel frames made out of corrosion resistant coated sheet of 1.6 mm thick with double rebate	Pressed steel frames made out of corrosion resistant coated sheet of 1.6 mm thick with double rebate/scratch proof aluminium sheets/poly-propylene windows	Same as Type IV
3.1.2	Door	T-Iron /Pressed steel/Pre-cast R.C.C. frames.	Pressed steel frames made out of corrosion resistant coated sheet of 1.6 mm thick with single rebate/factory manufactured precast RCC frames.	Same as Type IV
3.2	<b>Shutters</b>			
3.2.1	Window	M.S. tubular box section corrosion resistant coated shutters. Wire mesh shutters may also be provided at the discretion of Zonal Chief Engineer.	M.S. tubular box section corrosion resistant coated shutters. Wire mesh shutters may also be provided at the discretion of Zonal Chief Engineer /Scratch proof aluminium window. Shutters to match with frame.	Same as Type IV
3.2.2	Main Door	Double door, one with iron grill with wire mesh mosquito proof and other 35 mm thick panelled shutter with hard wood style and rail with panelling of pre-laminated particle board, one side decorative other side balancing.	Same as Type I to III.	Same as Type I to III except that panelling will be of both side decorative, pre-laminated particle board.
3.2.3	W.C / Bath room	Solid PVC shutters 28 mm thick	Same as Type I to III	Same as Type I to III
3.2.4	Kitchen door	Partly panelled and partly wire mesh with stainless steel wire mesh. The panelling with pre-laminated particle board, one side decorative-35 mm thick panelled shutter with hard wood style and rails.	Same as Type I to III	Partly panelled and partly wire mesh with stainless steel wire mesh. The panelling with pre-laminated particle board, both sides decorative-35 mm thick panelled shutter with hard wood style and rails.

S No.	Item	Type I, II, III & Servant Qrs.	Type IV	Type V and VI
3.2.5	Other doors	35 mm thick panelled shutters with hard wood style and rail with panelling of pre-laminated board, one side decorative.	Same as Type I to III	35 mm thick panelled shutters with hard wood style and rail with panelling of pre-laminated board, both sides decorative.
3.3	Fittings	Powder coated M.S. fittings/stainless steel fittings	Powder coated aluminium/stainless steel fittings	Same as type IV
3.4	Peep hole and security chain for external door only.	Yes	Yes	Yes

- Note :**
- In item no. 3 of Wood work, if any other option of local material is available, the same can also be used by the respective Chief Engineers.
  - External sliding door bolt and handles will be in powder coated M.S. or stainless steel.
  - Koba treatment on roofing in all type of quarters.

S No.	Item	Type I, II, III & Servant Qrs.	Type IV	Type V and VI
4 4.1	Flooring Bedrooms/ living rooms	Grey/Beige color ceramic floor tiles (size 12" × 12" Matt finish) of approved design	Same as Type I to III	Grey/Beige color rectified ceramic floor tiles (size 16" × 16" Matt finish) of approved design.
4.2	Kitchen, internal circulation area	Ceramic floor tiles (size 12" × 12" Matt finish) of approved design.	Same as Type I to III	Rectified ceramic floor tiles (size 16" × 16" Matt finish) of approved design.
4.3	Common circulation area, staircase	(i) Kota stone flooring and matching skirting. In staircase, single piece pre-polished kota stone slab with pre-finished nosing be used. (ii) Dado of ceramic tile light grey/ dull green shade 12" × 12" size upto 120 cm ht. above skirting i/c green marble nosing.	Same as type I to III	Same as type IV
4.4	Kitchen work top	Green marble pre-polished with pre-moulded nosing	Same as type I to III	Granite with <b>pre-polished and premoulded nosing</b>
4.5	Toilets	Ceramic floor tiles (Size 12" × 12") Matt finish/anti skid of approved design.	Same as type I to III	Rectified ceramic floor tiles (size 16" × 16") Matt finish/ anti skid of approved design
4.6	Skirting/Dado in toilets	Ceramic white glazed tiles (min. size 8" × 12") upto door lintel level.	Same as type I to III	Ceramic white glazed tiles (min. size 8" × 12") upto ceiling ht. with decorative band of tiles.
5.0 5.1	Finishing External	Acrylic smooth exterior finish or washed stone grit plaster or exposed brick work	Premium Acrylic smooth exterior finish with additive of silicone or washed mosaic plaster in ordinary cement or exposed brick work	Premium Acrylic smooth exterior finish with additives of silicone or washed mosaic plaster in ordinary cement or exposed brick work.
5.2	Internal	All walls and ceilings to be treated with the 2 mm thick POP followed with a coat of acrylic/ oil bound distemper except ceiling which will be done with white wash. Synthetic enamel paint on all wood work and steel work.	Same as type I to III	All walls and ceilings to be treated with the 2 mm thick POP followed by plastic emulsion paint except ceiling which will be done with white wash. Synthetic enamel paint on all wood work and steel work.

## SCALE OF AMENITIES FOR GENERAL POOL ACCOMMODATION

Item No.	Item	Type I	Type II	Type III	Type IV	Type V/VI
<b>1</b>	<b>Kitchen</b>					
(i)	Shelves in tiers not more than 400mm wide along one wall 1 " thick	Yes	Yes	Yes	Covered cup boards above sill level with pre-laminated decorative board.	Same as Type IV
(ii)	<b>Kitchen sink</b>	Stainless steel sink without drain board	Same as type -I	Same as type - I	Stainless steel sink with drain board	Same as type -IV/vitreous china sink with draining board
(iii)	Dado Ceramic glazed tiles (size 8" × 12") for 60cm. above and along work top and around and below kitchen sink	Yes	Yes	Yes	Yes	Ceramic glazed tiles (size 8" × 12") 60cm high dado from skirting level upto 60cm/-ht. above kitchen platform above and along the work top and around and below kitchen sink excluding areas where built in cupboards are fixed.
(iv)	Built in cupboard with open shelves below cooking platform shutters of pre-laminated particle board 18mm thick below window sill level of cooking platform along one wall	Yes	Yes	Yes	Yes with 2 drawers	Yes with 2 drawers
(v)	Cooking platform standing	Yes	Yes	Yes	Yes	Yes
<b>2(i)</b>	<b>Wardrobes</b> Built in cupboard with R.C.C./pre-laminated particle board/Kota stone shelves and shutter upto ceiling height	(One in each Bed Room ) 7'- 00" height	One in each Bed Room, 7'-00" height	(One in each Bed Room) 7'-00" height	(One in each Bed Room) upto ceiling height	One in each Bed Room upto ceiling height
(ii)	Magic eye in front door	One	One	One	One	One
(iii)	Window sill lining 18mm thick projected with Kota stone/marble	Kota Stone	Kota Stone	Kota Stone	Kota Stone	Marble
(iv)	Curtain rods with brackets	All rooms	All rooms	All rooms	Drapery rods	Drapery rods
(v)	Set of Pegs	In bath and bed rooms	In bath and bed rooms	In bath bed and wardrobes	In bath, bed and wardrobes	In bath, bed and wardrobes

## SCALES OF SANITARY FITTINGS FOR GENERAL POOL RESIDENTIAL QUARTERS

Item No.	Item	Type I	Type II	Type III	Type IV	Type V/VI
1.	Indian W.C. Pan with flushing cistern	One WC Pan Orissa pattern with low level PVC Flushing Cistern	One Same as Type I	One same as Type I	One same as Type I	One + One for servant quarter
2.	European type W.C. with low level flushing cistern	-	-	-	One with low level PVC flushing cistern	One (syphonic type) with matching low level cistern
2(a)	Water Jet with low level European W.C.	-	-	-	One	One
3.	Wash basin with one pillar tap each	One	One	One	Two CP Brass mixer type for hot and cold water with single lever	Three CP Brass mixer type for hot and cold water with single lever
4.	Tap (kitchen bath & W.C.) C.P. Brass/ PTMT bib cock	4 PTMT	4 PTMT	4 C.P. brass	5 C.P. brass	12 (1 PTMT + 11 CP brass)
5	Shower C.P. Brass / PTMT	One PTMT	One PTMT	One PTMT	Two C.P.brass	Three C.P. brass
6.	Towel rail C.P. Brass/ PTMT	One PTMT	One PTMT	One PTMT	Two C.P. brass	Two C.P. brass
7.	Mirror / Bevelled edge /P.V.C. frame with PTMT glass shelf	One	One	One	Two	Three
8.	Soap rack (Nitch in W.C./ Bath)	One	One	One	Two	Three
9.	Liquid soap container	-	-	-	Two	Three
10.	Storage tank	500 ltr.	500 ltr.	500 ltr.	750 litre	1000 litre + 500 litre for servant quarters
11.	Nitch with Kota stone sill in bath room	One	One	One	Two	3 + 1 for servant quarter
12.	Plumbing for water purifier and Geyser	Yes	Yes	Yes	Yes	Yes

Note : Waste coupling in wash basins and grating over the floor trap shall be only of PTMT.

## SPECIFICATIONS FOR ELECTRICAL INSTALLATION IN RESIDENTIAL QUARTERS

Item No.	Description	Type I	Type II	Type III	Type IV	Type V (excluding servant quarter & Garage)	Type VI (excluding servant quarter & garage )	Servant Qtrs & Garage
1.	Power Points (15 amperes, 6 pins)	2	3	4	5	6	7	1
2.	MCB connected socket outlet for A.C. unit /Geyser complete with wiring	1	1	1	2	4	5	-
3.	Ceiling Fans	2	3	4	5	6	7	1
4.	Exhaust Fans	1	1	2	2	3	3	-
5.	Call bells	1	1	1	1	2	3	-
6.	Light/Fans/Call bell/5A Plug Points	17	20	23	27	38	44	5
7.	F.I. Fittings excluding Tube and Starter	2	3	4	5	7	8	1
	Type of Wiring	Recessed Conduit wiring			Concealed conduit wiring			
8.	EDB MCB Type							
	A. Single Phase	1	1	1	-	-	-	1
	B. 3 Phase	-			1	1	1	-
9.	Cable TV Point	1	1	1	1	2	2	-
10.	Telephone Point	-			1	2	2	-

## SPECIFICATION FOR NON - RESIDENTIAL BUILDING

ITEM NO.	DESCRIPTION	SPECIFICATION
<b>1.0</b>	<b>FOUNDATION</b>	As per structural design based on soil investigation.
<b>2.0</b>	<b>SUPER STRUCTURE</b>	
2.1	Structure	R.C.C. framed construction with filler walls with fly ash bricks /brick work or load bearing construction in fly ash brick/brick/ 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.
2.2.3		Non asbestos double skin cement boards.
2.2.4		Fly ash bricks.
<b>3.0</b>	<b>DOORS &amp; WINDOWS</b>	
3.1	Frames:	
3.1.1		Door frames of 2nd class Indian teakwood or equivalent in officer's room.
3.1.2		Anodized / Powder coated/ Polyester powder coated Aluminium windows/doors.
3.1.3		Glazing with reflective glass or double glass using float glass.
3.2	Door Shutters:	
3.2.1		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 float glass panelling where required.
3.2.3		PVC/FRP door frames & shutters in wet areas.
3.3	Window shutters	Factory made Anodised/ powder coated/ Polyester powder coated 'Z' section aluminium frames & shutters for windows.
3.4	Fittings	Anodized aluminium /stainless steel or equivalent.
3.5	Fire check door	As per fire safety specifications
<b>4.0</b>	<b>FLOORING</b>	
4.1	Main entrance hall	Pre polished granite flooring.
4.2	Corridors	Matt finished vitrified tiles/Granite flooring.
4.3	Rooms	Granite tiles/Vitrified tiles/Ceramic tile flooring.
4.4	Lavatory Blocks	Granite flooring.
4.5	Flooring in basement	Vacuum dewatered concrete.
4.6	Rest of the area	Kota Stone flooring.
<b>5.0</b>	<b>STAIRCASE</b>	
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.
<b>6.0</b>	<b>RAILING</b>	Stainless steel railings.
<b>7.0</b>	<b>TOILETS</b>	Granite flooring. Glazed tiles of size not less than 300 x 450 mm in dado. Granite counters. Stainless steel sinks. Mirrors with moulded PVC frame. FRP/ PVC doors with frames.



<b>8.0</b>	<b>ROOFING</b>	
8.1	Roof treatment	Coba treatment.
8.2	False ceiling	False ceiling in office area & toilets to cover the services as per design requirement.
<b>9.</b>	<b>FINISHING</b>	
9.1	External	Dry stone cladding, washed grit plaster, water proof weather coat paints, structural glazing, ACP cladding conforming to <b>Energy Conservation Building Code.</b>
9.2	Internal	
9.2.1		Gypsum plaster in dry areas.
9.2.2		Cement plaster in wet areas
9.2.3		Dry distemper in service area & basement.
9.2.4		Oil bound distemper/Acrylic emulsion paint/ Textured paint
9.3	Painting	Doors & windows – Painting/polishing on wood work as per design requirement.
<b>10.0</b>	<b>PROVISION FOR BARRIER FREE BUILDING</b>	Ramps, toilets for physically challenged, chequered tiles use of Braille signages & lifts etc.GRC (Glass reinforced concrete) tiles in Ramp area.
<b>11.0</b>	<b>LANDSCAPING</b>	10% of the building cost will be kept in Preliminary Estimate for murals and/ Landscape related construction i/c pavement/ paving.

### Central Public Works Department

Copy of the Memo no. 29/21/58/WI

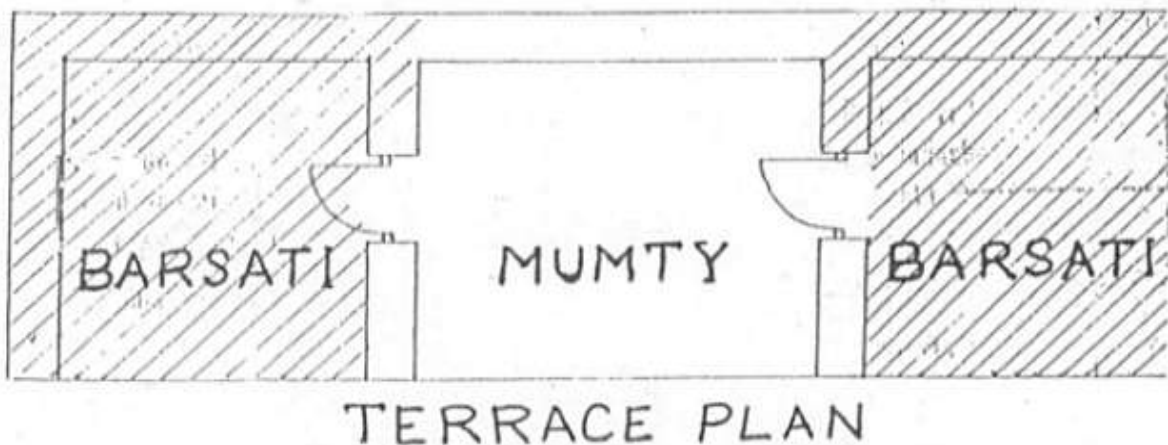
Dated: New Delhi, Oct. 1983

#### Subject: Rules for working out plinth area from plans

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

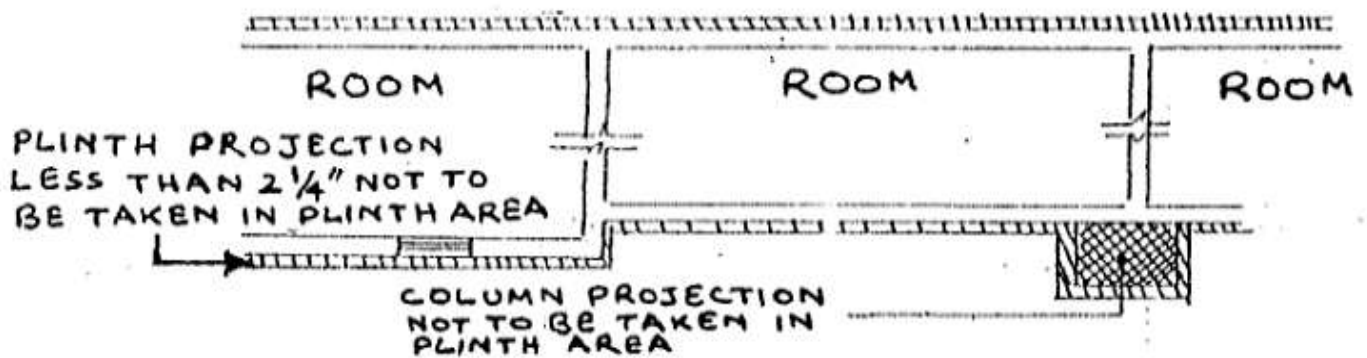
- The total plinth area of a building shall be the sum total of the plinth area at every floor including the basement, if any.
- Internal sanitary shafts shall not be included in the plinth area in the case of a residential building at any floor level.
- In case of non-residential building internal shafts for sanitary installations, air-conditioning ducts, lifts etc. shall be included in the plinth area at all floor levels.
- The area of the mumty at terrace level shall not be included in the plinth area. If a Barsati is provided jointly with mumty then the area of the Barsati excluding mumty at the terrace level shall be included in the plinth area as shown below in the hatched area.



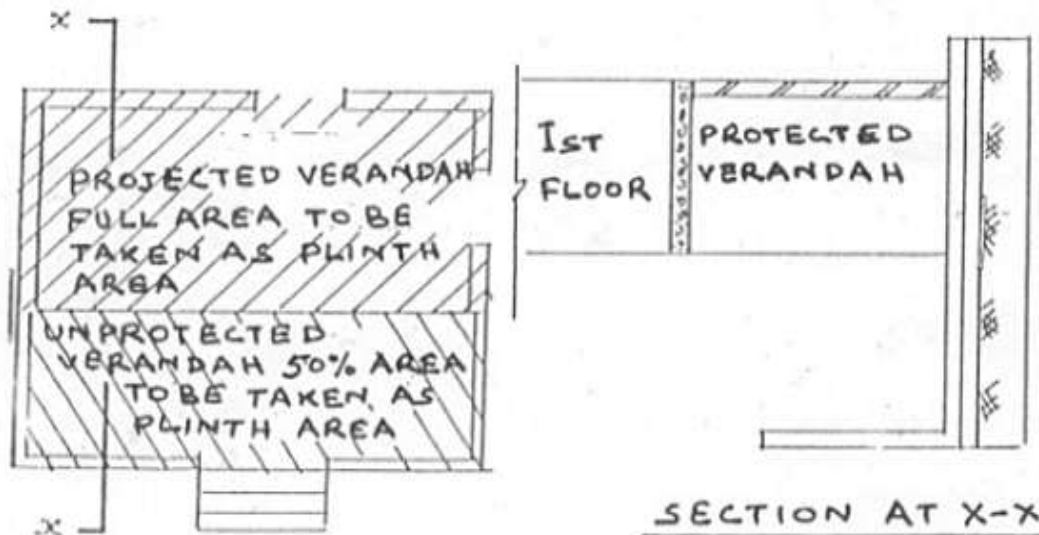
- Towers, turrets domes projecting above the terrace shall not be included in the plinth area at terrace level, but shall be allowed for separately for costing purposes.

#### PLINTH AREA OF GROUND FLOOR

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 2 1/4". 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.

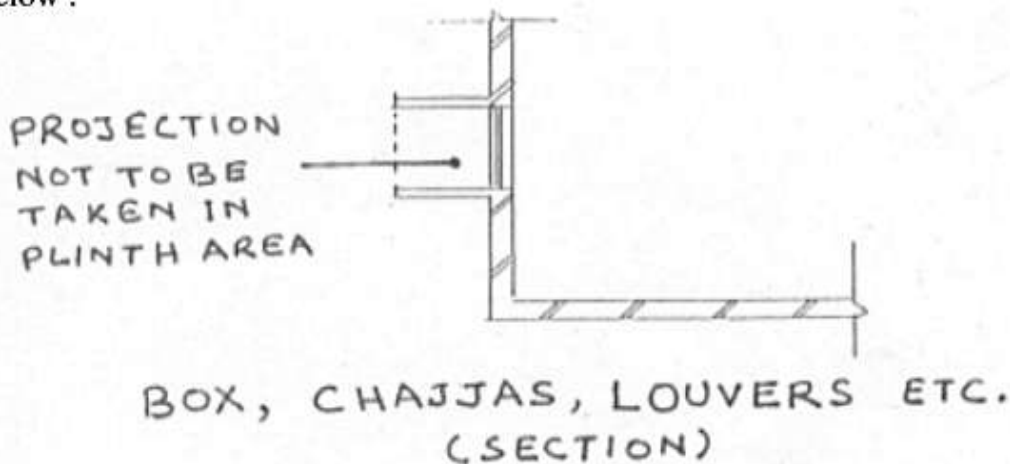


In case open verandah with parapets are protected at the ground floor projecting out of the building, the full area shall be taken up to the outer line of the external verandah lintel and only 50% of area shall be taken for the unprotected verandah. Open platform without parapets and terraces at ground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

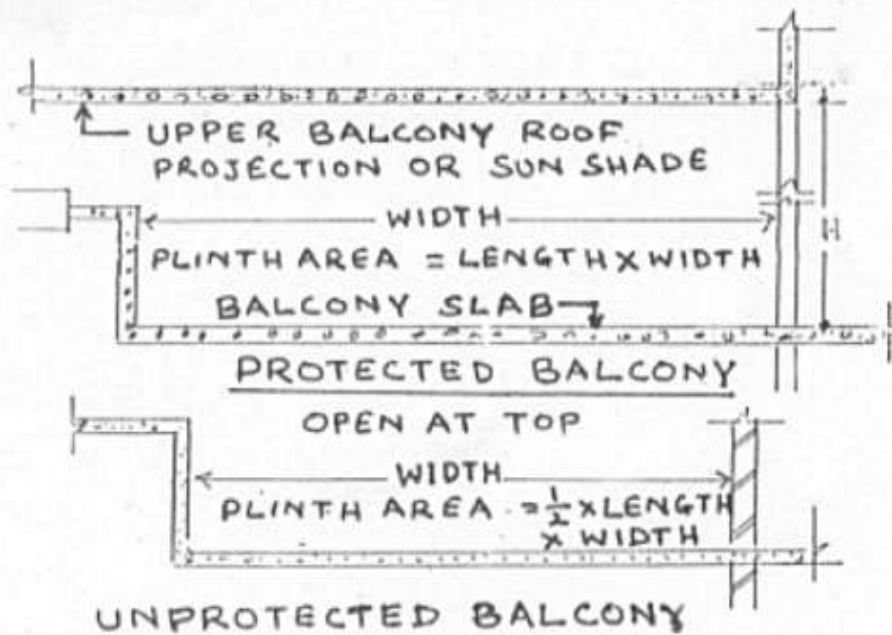


### PLINTH AREA AT FIRST AND HIGHER FLOORS

The plinth area of first and higher floors shall be calculated at the relevant floor levels. Architectural bonds, 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 :



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:



#### IV) GALLERIES, MEZZANINE FLOORS, LOFTS

- Area of galleries i.e. upper floor of seats in an assembly hall, Auditorium, theatres, etc. shall be fully included in the plinth area.
- 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.
- 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.

Sd/-  
Chief Engineer  
Central P.W.D.

(Er. RAM DIYA)  
ASSTT. ENGINEER-III  
S&S- II, CPWD  
NIRMAN BHAWAN, N.D.

(Er. K.L.LANGAR)  
EXECUTIVE ENGINEER  
(S&S) II, CPWD  
NIRMAN BHAWAN, N.D.

(Er. M.K.KANCHAN)  
SUPTDG. ENGINEER(S&S)  
CPWD, NIRMAN BHAWAN  
NEW DELHI

## PROFORMA FOR CALCULATION OF COST INDEX

S.No.	Description		Unit	Rate as on 1.10. 2007 in Rs.	Weightage	Rate at the time of revision of cost Index	Cost Index
1.	BRICKS		1000 Nos.	2000/-	8.00		
2.	CEMENT(OPC)		QTL.	457/-	14.50		
3.	STEEL a) 8 & 10 MM(TOR STEEL) b) 12 & 16 MM (TOR STEEL)	50% 50 %	QTL.	3280/-	19.50		
4.	AGGREGATE 20 MM SIZE		CUM.	700/-	6.50		
5.	SAND(COARSE SAND)		CUM.	650/-	3.00		
6.	FLOORING ITEMS (a) MOSAIC TILES (b) CERAMIC TILES (c) KOTA STONE (d) GRANITE STONE	40% 40% 10% 10%	SQM.	381.10	3.00		
7.	PAINTS (a) SYNTHETIC ENAMEL PAINT (b) O.B.D. (c) PLASTIC EMULSION PAINT	33.33% 33.33% 33.33%	LITRE	100/-	3.00		
8.	PLY AND COMM. WOOD (i) 12 MM THICK PARTICLE BOARD (ii) STEEL WINDOW STANDARD Z SECTION (iii) ALUMINIUM WINDOW	33.33% 33.33% 33.33%	SQM.	1281.33	5.00		
9.	PIPES (i) 15 MM G.I. PIPE (ii) 100MM SCI PIPES (iii) 20 MM Black Conduit	33.33% 33.33% 33.33%	MTR.	144.50	2.50		
10.	LAMPS & FANS (i) CEILING FANS 48" (ii) 1.20 M FLUORSCENT TUBE WITH FITTINGS	50 % 50 %	EACH	655/-	3.50		
11.	ELECT MACHINERY FITTING MOTORS 7.5 HP (PUMP SET) 1500 RPM (KIRLOSKAR)		EACH	35000/-	2.50		
12.	WIRES & CABLES COPPER WIRES (a) 1.5 SQMM (b) 4.0 SQMM	70% 30%	100 MTR.	825	4.00		
13.	LABOUR (i) SKILLED (ii) UNSKILLED	50 % 50 %	EACH	143.38	25.00		

## SPECIFICATIONS FOR BUILDINGS

### NON-RESIDENTIAL

S.No.	Description	Item no.	Office	Hospitals	Schools
1	2	3	4	5	6
1	FOUNDATIONS	1.1	Bearing capacity 10 tonnes/square metre.		
		1.2	Type – Spread foundations isolated/ combined		
		1.3	Depth.- Upto 1.2 metres below ground level		
2.	SUPER STRUCTURES	2.1	RCC framed construction with filler walls in brick work or load bearing construction in brick/stone masonry with intermediate columns where found necessary.		
		2.2	Internal partition in brick masonry		
		2.3	RCC chajjas, fins, jalis etc.		
3.	DOORS & WINDOWS	3.1	Frames of 2nd class Indian teakwood or equivalent or T-iron frame, pressed steel frame as per CPWD Specifications		
		3.2	Door shutters; Panelled type in 2nd class teak wood or flush door with commercial ply as per CPWD Specifications		
		3.3	Window shutters 2nd class Indian teak wood	Window shutters 2nd class Indian teak wood. Fly proof shutters for all doors & windows and iron grills for windows in ground floor shall be provided for which provision for extra rate will be made or steel windows,	Window shutters 2nd class Indian Teak wood or Steel windows.
		3.4	Fittings	Anodized aluminium or equivalent	
4.	FLOORING	4.1	Main entrance hall terrazzo tiles, kota stone and the like. Lavatory blocks and corridors & some officers room.  Mosaic limited upto 25% of total area.	Main entrance hall terrazzo tiles, kota stone & the like. Lavatory blocks corridors and other rooms except stores, weather-maker rooms etc. mosaic flooring with dado upto 7'0" height.  In corridors & upto sill level in other rooms, the flooring & dado to be limited to 50% in ordinary cement and 50% in white cement.	Main entrance hall, staircase, lavatory blocks in-situ mosaic
		4.2	Rest of the area ordinary cement concrete	Rest of the area ordinary cement concrete	Rest of the area ordinary cement concrete
5.	ROOFING	5.1	Filling for drainage lime concrete	Filling for drainage lime concrete	Filling of drainage lime concrete finished with brick tiles
		5.2	Water-proofing treatment 4 course treatment finished with brick tiles	Water-proofing treatment 4 course treatment finished with brick tiles.	Water-proofing treatment 4 course treatment finished with brick tiles.
6.	FINISHING	6.1	External water proofing cement paint	External water proofing cement paint	External water proofing cement paint
		6.2	Internal Officers rooms & important rooms such as Committee Rooms dry distemper to be limited upto 25% of the total area. Rest either colour or white wash. Main entrance hall plastic emulsion paint or the like.	Internal dry distemper in doctors room, operation theatre other important rooms, such as committee room, X-ray room etc. Limited upto 25% of total area. Rest either colour or white wash. Main entrance hall, OPD Plastic emulsion paint or the like.	Internal – entrance hall, principals room, Committee room etc. dry distemper. Rest of the area white or colour wash.
		6.3	Door & windows- painting	Doors & windows painting	Doors & windows painting

## SPECIFICATIONS FOR RESIDENTIAL BUILDINGS

Item no.	Item	Type I, II, III & Servant Qtrs.	Type-IV	Type-V/VI	Hostel
1.1	Foundation	Bearing capacity 10 tonnes per sq. metre.	Applicable to all		
1.2		Type –spread foundation in RCC isolated /combined, continuous wall footing with lean concrete.			
1.3		Depth upto 1.2 metres below ground level			
2.1	Super structure	RCC framed construction with filler walls in brick work or load bearing construction in brick/stone masonry with intermediate columns where found necessary.			
2.2		Internal partition- half brick masonry in cement mortar 1:4			

S No.	Item	Type I, II, III & Servant Qrs.	Type IV	Type V and VI
3.1	Frames Window	Pressed steel frames made out of corrosion resistant coated sheet of 1.6 mm thick with double rebate	Pressed steel frames made out of corrosion resistant coated sheet of 1.6 mm thick with double rebate/scratch proof aluminium sheets/poly-propylene windows	Same as Type IV
3.1.1				
3.1.2	Door	T-Iron /Pressed steel/Pre-cast R.C.C. frames.	Pressed steel frames made out of corrosion resistant coated sheet of 1.6 mm thick with single rebate/factory manufactured precast RCC frames.	Same as Type IV
3.2	Shutters Window	M.S. tubular box section corrosion resistant coated shutters. Wire mesh shutters may also be provided at the discretion of Zonal Chief Engineer.	M.S. tubular box section corrosion resistant coated shutters. Wire mesh shutters may also be provided at the discretion of Zonal Chief Engineer /Scratch proof aluminium window. Shutters to match with frame.	Same as Type IV
3.2.1				
3.2.2	Main Door	Double door, one with iron grill with wire mesh mosquito proof and other 35 mm thick panelled shutter with hard wood style and rail with panelling of pre-laminated particle board, one side decorative other side balancing.	Same as Type I to III.	Same as Type I to III except that panelling will be of both side decorative, pre-laminated particle board.
3.2.3	W.C / Bath room	Solid PVC shutters 28 mm thick	Same as Type I to III	Same as Type I to III
3.2.4	Kitchen door	Partly panelled and partly wire mesh with stainless steel wire mesh. The panelling with pre-laminated particle board, one side decorative-35 mm thick panelled shutter with hard wood style and rails.	Same as Type I to III	Partly panelled and partly wire mesh with stainless steel wire mesh. The panelling with pre-laminated particle board, both sides decorative-35 mm thick panelled shutter with hard wood style and rails.

S No.	Item	Type I, II, III & Servant Qrs.	Type IV	Type V and VI
3.2.5	Other doors	35 mm thick panelled shutters with hard wood style and rail with panelling of pre laminated board, one side decorative.	Same as Type I to III	35 mm thick panelled shutters with hard wood style and rail with panelling of pre laminated board, both sides decorative.
3.3	Fittings	Powder coated M.S. fittings/ stainless steel fittings	Power coated aluminium/ stainless steel fittings	Same as type IV
3.4	Peep hole and security chain for external door only.	Yes	Yes	Yes

- Note :**
1. In item no. 3 of Wood work, if any other option of local material is available, the same can also be used by the respective Chief Engineers.
  2. External sliding door bolt and handles will be in powder coated M.S. or stainless steel.
  3. Koba treatment on roofing in all type of quarters.

S No.	Item	Type I, II, III & Servant Qrs.	Type IV	Type V and VI
4	<b>Flooring</b>			
4.1	In rooms, kitchen, internal circulation area	Mosaic flooring and skirting with ordinary cement except in common circulation area and staircase	Same as Type I to III	Mosaic/ Terrazzo tile flooring with white cement. In kitchen, ceramic tiles/marbles flooring
4.2	Common circulation area, staircase	Kota stone flooring and matching skirting. In staircase, single piece Kota stone shall be used	Same as Type I to III	Same as Type IV
4.3	Kitchen work top	Kota stone	Udaipur green marble/Granite stone	Granite stone
4.4	Toilets	Mosaic	Ceramic Tiles	Ceramic Tiles
4.5	Skirting/Dado	Ceramic glazed tiles in Indian Type WC upto 90 cm. height and bath room upto door jamb height.	Same as Type I to III	Ceramic glazed tiles upto ceiling height with a decorative band of tiles.
5.0	<b>Finishing</b>			
5.1	<b>External</b>	Acrylic smooth exterior finish or washed stone grit plaster or exposed brick work	Premium Acrylic smooth exterior finish with additive of silicone or washed mosaic plaster in ordinary cement or exposed brick work	Premium Acrylic smooth exterior finish with additives of silicone or washed mosaic plaster in ordinary cement or exposed brick work.
5.2	<b>Internal</b>	All walls and ceilings to be treated with the 2 mm thick POP followed with a coat of acrylic/ oil bound distemper except kitchen, bath & WC and all ceiling, which will be done with white wash. Synthetic enamel paint on all wood work and steel work.	All walls & ceiling to be treated with 2 mm thick POP followed with a coat of acrylic / oil bound distemper except kitchen, bath & WC and all ceilings, which will be done with white wash. Synthetic enamel paint on all wood work and steel work.	All walls & ceiling to be treated with 2mm thick POP plaster and cornices followed with a coat of plastic emulsion paint except kitchen, bath and WC and all ceilings, which will be done with white wash. Synthetic enamel paint on all wood work and steel work.



## SCALE OF AMENITIES FOR GENERAL POOL ACCOMMODATION

Item No.	Item	Type I	Type II	Type III	Type IV	Type V/VI
1 (i)	<b>Kitchen</b> Shelves in tiers not more than 400mm wide along one wall 1 " thick	Yes	Yes	Yes	Covered cup boards above sill level with pre-laminated decorative board.	Same as Type IV
(ii)	<b>Kitchen sink</b>	Stainless steel sink without drain board size 610 X 510 mm with bowl depth 200 mm.	Same as Type -I	Same as Type - I	Stainless steel sink with drain board size 510 X 1040 mm with bowl depth 200mm	Stainless steel sink of size 510 x 1040 mm with bowl depth of 250 mm with draining board/ vitreous china sink with draining board of size 600 x 450 x 250 mm
(iii)	<b>Dado</b> Ceramic glazed tiles for 60cm. above work top and around sunken floor	Yes	Yes	Yes	Yes	Ceramic glazed tiles upto 60 cm above cooking platform all around
(iv)	Built in cupboard with open shelves below cooking platform shutters of pre-laminated particle board 18mm thick below window sill level of cooking platform along one wall	Yes	Yes	Yes	Yes with 2 drawers	Yes with 2 drawers
(v)	Cooking platform standing	Yes	Yes	Yes	Yes	Yes
2(i)	<b>Wardrobes</b> Built in cupboard with R.C.C./pre-laminated particle board/Kota stone shelves and shutter upto ceiling height	One in each Bed Room 7'-00" height	One in each Bed Room, 7'-00" height	One in each Bed Room 7'-00" height	One in each Bed Room upto ceiling height	One in each Bed Room upto ceiling height
(ii)	Magic eye in front door	One	One	One	One	One
(iii)	Window sill lining 18mm thick projected with Kota stone/marble	Kota Stone	Kota Stone	Kota Stone	Kota Stone	Marble
(iv)	Curtain rods with brackets	All rooms	All rooms	All rooms	Drapery rods	Drapery rods
(v)	Set of Pegs	In bath and bed rooms	In bath and bed rooms	In bath and bed and wardrobes	In bath, bed and wardrobes	In bath, bed and wardrobes

## SCALES OF SANITARY FITTINGS FOR GENERAL POOL RESIDENTIAL QUARTERS

Item No.	Item	Type I	Type II	Type III	Type IV	Type V/VI
1.	Indian W.C. Pan with flushing cistern	One WC Pan Orissa pattern with low level PVC Flushing Cistern	One Same as Type I	One same as Type I	One same as Type I	One + One for servant quarter
2.	European type W.C. with low level flushing cistern	-	-	-	One with low level PVC flushing cistern	One (syphonic type )with matching low level cistern
2(a)	Water Jet with low level European W.C.	-	-	-	One	One
3.	Wash basin with one tap each	One	One	One	Two mixer type for hot & cold water	Three mixer type for hot & cold water
4.	Tap (kitchen bath & W.C.) C.P. Brass/ PTMT bib cock	4 PTMT	4 PTMT	4 C.P. brass	5 C.P. brass	12 (1 PTMT + 11 CP brass )
5	Shower C.P. Brass / PTMT	One PTMT	One PTMT	One PTMT	Two C.P.brass	Three C.P. brass
6.	Towel rail C.P. Brass/ PTMT	One PTMT	One PTMT	One PTMT	Two C.P. brass	Two C.P. brass
7.	Mirror / Bevelled edge/ P.V.C. frame with PTMT glass shelf	One	One	One	Two	Three
8.	Soap rack (Nitch in W.C./ Bath)	One	One	One	Two	Three
9.	Liquid soap container	-	-	-	Two	Three
10.	Storage tank	500 ltr.	500 ltr.	500 ltr.	750 litre	1000 litre + 500 litre for servant quarter
11.	Nitch with Kota stone sill in bath room	One	One	One	Two	3 + 1 for servant quarter

**Note :** Waste coupling in wash basins and grating over the floor trap shall be only of PTMT.

## SPECIFICATIONS FOR ELECTRICAL INSTALLATION IN RESIDENTIAL QUARTERS

Item No.	Description	Type I	Type II	Type III	Type IV	Type V (excluding servant quarter & Garage)	Type VI (excluding servant quarter & garage )	Servant Qtrs & Garage
1.	Power Points (15 amperes, 6 pins)	2	3	4	5	6	7	1
2.	MCB connected socket outlet for A.C. unit /Geyser complete with wiring	1	1	1	2	4	5	-
3.	Ceiling Fans	2	3	4	5	6	7	1
4.	Exhaust Fans	1	1	1	1	1	1	-
5.	Call bells	1	1	1	1	2	3	-
6.	Light/Fans/Call bell/5A Plug Points	17	20	23	27	38	44	5
7.	F.I. Fittings excluding Tube and Starter	2	3	4	5	7	8	1
	Type of Wiring	Recessed Conduit wiring			Concealed conduit wiring			
8.	EDB MCB Type							
	A. Single Phase	1	1	1	-	-	-	1
	B. 3 Phase	-	-	-	1	1	1	-
9.	Cable TV Point	1	1	1	1	2	2	-
10.	Telephone Point	-	-	-	1	2	2	-

# PLINTH AREA RATES OF RCC STRUCTURES PRESCRIBED BY CPWD

Rates as on 01.10.2007 at Delhi Base 100

S no	Description	Rates in Rupees per Sqm			
		Offices/ colleges & Hospitals	Schools	Hostels	Residential
1	2	3	4	5	6
<b>1.0.0</b>	<b>RCC Framed Structures</b>	<b>Rates in per square metre</b>			
1.1.0	RCC Framed Structures upto six storeys				
1.1.1	Floor Height 3.35m (11'0")	13200	9150		
1.1.2	Floor Height 2.9m (9' 6")			9100	9000
1.2.0	<b>Extra for-</b>				
1.2.1	Every additional storey over six storeys upto nine storeys.	310	310	310	310
1.2.2	Every additional storey over nine storeys upto twelve storeys.	320	320	320	320
1.2.3	Every 0.30m,additional height of floor above normal floor height 3.35 m/2.9m.	150	150	150	150
1.2.4	Every 0.30m higher plinth over normal plinth height of 0.60m (2.'0") (on G.F.area only)	150	150	150	150
1.2.5	Every 0.30 m deeper foundations over normal depth of 1.20 m (4'0") (on G.F.area only)	150	150	150	150
1.2.6	Making stornger foundations to take load of one additional floor at a later date (on area of additional floor at a later date)	1250	1250	1250	1250
1.2.7	Destrip foundations in poor soil having a bearing capacity less than 10 T/Sqm.	286	286	286	286
1.2.8	Resisting earthquake forces.	630	630	630	630
1.2.9	R.C.C.raft foundations	3560	3560	3560	3560
1.2.10	Pile foundations upto a depth of 15 m (50'0")	6470	6470	6470	6470
1.2.11	Stronger structural members to make heavy loads above 500 K/Sqm.	850	850	850	850
1.2.12	Larger modules over 35 Sqm. (400 sft.)	990	990	990	990
1.2.13	Termite proof treatment (on ground floor area only)	196	196	196	196
1.3	<b>BASEMENT FLOOR:</b>				
1.3.1	Floor height 3.35 m (11'0") with normal provision of water proofing treatment with bituminous felt.	18035	-	-	-

1.3.2	<b>Extra for basements with ...</b>				
1.3.2.1	Mastic asphalt water proofing treatment.	1144	-	-	-
1.3.2.2	Every 0.30 m additional height above normal height of 3.35 m (11'0")	1274	-	-	-
1.3.2.3	Reduction for every 0.30 m less height of basement than normal height of 3.35 m (11'0")	(-)728	-	-	-
1.4	<b>FIRE FIGHTING</b>				
1.4.1	With wet riser system	300	300	300	300
1.4.2	With sprinkler system	450	450	450	450
1.5	<b>FIRE ALARM SYSTEM</b>				
1.5.1	Manual fire alarm system	-	-	-	155
1.5.2	Automatic fire alarm system	300	300	300	-
1.6	Operation Theatre (OPD)	1235	-	-	-
1.7	Pressurized mechanical ventilation system in the basements (with supply of exhaust blowers)	50	50	50	-

# PLINTH AREA RATES PRESCRIBED BY CPWD

Rates as on 01.10.2007 at Delhi Base 100

Rates in Rupees per Sqm

S no	Description	Non Residential			Residential		
		Offices/ colleges & Hospitals	Schools	Hostels	Residential Type I,II,III & Servant qrtr.	Residential Type IV qrtr.	Residential Type V and above
1	2	3	4	5	6	7	8
<b>2.0.0</b>	<b>LOAD BEARING CONSTRUCTION</b>						
2.1	<b>Floor Height 3.35m (11'0")</b>						
2.1.1	Single storeyed	8250	7505	-	-	-	-
2.1.2	Double storeyed	7900	6740	-	-	-	-
2.1.3	Three storeyed	8250	7505	-	-	-	-
2.1.4	Four storeyed	8715	7555	-	-	-	-
2.2	<b>Floor Height 2.9m (9'6")</b>						
2.2.1	Single storeyed	-	-	7313	6390	7030	7555
2.2.2	Double storeyed	-	-	6425	6200	6820	7205
2.2.3	Three storeyed	-	-	7315	6390	7030	7355
2.2.4	Four storeyed	-	-	7665	6740	7410	7900
2.3	Scooter and cycle sheds	-	-	-	5805	5805	5805
2.4	Garages	-	-	-	5455	5455	5455
2.5	<b>Extra for....</b>						
2.5.1	Every 0.30 additional height of floor above normal height 3.35/2.9m.	150	150	150	150	150	150

2.5.2	Every 0.30 m higher plinth over normal plinth height of 0.60 m. (2'0") on ground floor area only.	150	150	150	150	150	150
2.5.3	Every 0.30 m. deeper foundations over normal depth of 1.20 m.(4'0") on ground floor area only.	150	150	150	150	150	150
2.5.4	Making stronger foundations to take load of one additional floor at a later date (on area of additional floor at a later date)	430	430	430	430	430	430
2.5.5	<b>Foundation in poor soils.</b>						
	Foundations in poor soil having bearing capacity less than 10 T/Sqm.	286	286	286	286	286	286
2.5.6	Foundations requiring under reamed piles 6 m. long	3085	3085	3085	3085	3085	3085
2.5.7	RCC raft foundations	3560	3560	3560	3560	3560	3560
2.5.8	Pile foundations upto a depth of 15 m (50'0")	6470	6470	6470	6470	6470	-
<b>2.6 Extra for Resisting earthquake forces</b>							
2.6.1	In Zone V	588	588	588	588	588	588
2.6.2	More than 2 storeyed buildings in Zone III & IV.	286	286	286	286	286	286
2.6.3	Resisting earthquake force in Zone I & II and less than 2 storeyed buildings in Zones III & IV	-	-	-	-	-	-
2.7	Stronger structural members to take heavy loads above 500 Kg./Sqm. Upto 1000 Kg/Sqm.	850	850	850	850	850	850
2.8	Larger modules over 35 Sqm.	990	990	990	990	990	990
2.9	<b>Fire fighting</b>						
2.9.1	With wet riser system	300	300	300	300	300	300

2.9.2	With sprinkler system	450	450	450	450	450	450
2.10	<b>Fire alarm system</b>						
2.10.1	a) Manual fire alarm system	-	-	-	155	155	155
2.10.2	b) Automatic fire alarm system	300	300	300	-	-	-
2.11	OPD operation theatres etc.	1235	-	-	-	-	-
2.12	Termite proof treatment (on ground floor area only)	196	196	196	196	196	196

Note: Rates for items are applicable on entire plinth area except for items 1.2.4, 1.2.5, 1.2.6, 1.2.9, 1.5, 2.5.2,2.5.3, 2.5.4, 2.5.7







## PLINTH AREA RATES PRESCRIBED BY CPWD - WATER TANKS (RCC Only)

**Rates as on 01.10.2007**

S no	Description	Rates in Rupees
<b>5.0</b>	<b>WATER TANKS (RCC Only)</b>	
5.1	Overhead tank without independent staging	9.00 per litre
5.2	Overhead tank upto staging height 20 metres	15.20 per litre
5.3	Overhead tank with staging height between 20 metres & upto 30 metres	17.30 per litre
5.4	Overhead tank with staging height between 30 metres & 40 metres	21.00 per litre
5.5	Underground sump:	9.00 per litre
6.0	<b>DEVELOPMENT OF SITE:</b>	<b>RATES:</b>
6.1	Levelling	55.00 per Sqm.
6.2	Internal roads and paths	83.00 per Sqm.
6.3	Sewer	63.00 per Sqm.
6.4	<b>Filter water supply</b>	
6.4.1	Distribution lines 100 mm. Dia. And below	46.00 per Sqm.
6.4.2	Peripheral grid 150mm to 300 mm. Dia. Pipes	35.00 per Sqm.
6.4.3	Unfiltered water supply distribution lines	27.00 per Sqm.
6.5	Storm water drains	50.00 per Sqm.
6.6	Horticulture operations	47.00 per Sqm.
6.7	<b>Street Lighting</b>	
6.7.1	With flourescent lamps	55.00 per Sqm.
6.7.2	With HPMV Lamps	75.00 per Sqm.
6.7.3	With HPSV Lamps	95.00 per Sqm.
6.7.4	Exit Sign board i/c electric signage	50.00 per Sqm.
	Note: Cost of HT distribution is not included in above rates	

**NOTE:**

1. The rates are per Sqm. And are to be applied on the entire areas of the plot to be developed
2. These rates will supply 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 or bulk services (water supply, sewage disposal e.g.)
  - i) Tubewells, pumps, open wells, treatment plants, extension of lines from source to local bodies, head works at water source etc.
  - ii) Sewage pumps, sewage treatment plants, septic tanks, extension of cut-fall sewer upto point of disposal etc. are not included in these rates. Extra provision depending upon site conditions may be made for these.
4. The cost of providing green building & water harvesting are to be taken as per actual.
5. Cost of HT sub-station equipments, LT distribution system, DG sets, pumps, air-conditioning & other specialized works like aesthetic external lighting with metal halide lamp for façade lighting, addressable fire alarm system, rising mains, UPS, aviation obstruction lights, external service connections, storage water cooler, IBMS, CCTV, access control system for security, solar water heating system, solar lighting etc. are not included in above rates and the same are to be taken as per actual based on functions/utility of the proposed building.

## RATES PRESCRIBED BY CPWD - PASSENGER LIFTS

**Rates as on 01.10.2007 at Delhi Base 100**

### PASSENGER LIFTS

4

S no	Type Of Lifts	Capacity: Persons	Weight	Speed in M/Sec.	Travel	Doors	Control	Price (Rs. In lacs)	Addl Price for each add. floor Rs.
4.1	<b>Passenger lifts</b>								
4.1.1	Passenger lift	8	544 Kg.	1.00	G+4	Power operated	ACW	13.50	90,000
4.1.2	Passenger lift	8	544 Kg.	1.50	G+4	Power operated	ACW	18.00	90,000
4.1.3	Passenger lift	13	884 Kg.	1.00	G+4	Power operated	ACW	18.00	90,000
4.1.4	Passenger lift	13	884 Kg.	1.50	G+4	Power operated	ACW	19.00	90,000
4.1.5	Passenger lift	16	1088 Kg.	1.00	G+4	Power operated	ACW	17.00	1,10,000
4.1.6	Passenger lift	16	1088 Kg.	1.50	G+4	Power operated	ACW	19.50	1,10,000
4.1.7	Passenger lift	16	1088 Kg.	2.50	G+4	Power operated	ACW	57.00	1,10,000
4.1.8	Passenger (Bed Lift)	20	1360 Kg.	0.75	G+4	Power operated	ACW	21.50	90,000
4.1.9	Passenger lift	20	1360 Kg.	1.50	G+4	Power operated	ACW	27.00	1,10,000
4.1.10	Passenger lift	20	1360 Kg.	2.50	G+4	Power operated	ACW	59.00	1,30,000
4.2	<b>GOOD LIFTS (2 Speed)</b>								
4.2.1		1 TON	-	0.50	G+4			14.75	50,000
4.2.2		2 TON	-	0.50	G+4			19.00	50,000
4.2.3		3 TON	-	0.25	G+4			23.25	60,000

**SPECIFICATIONS FOR BUILDINGS - NON-RESIDENTIAL  
AS ON 01.10.2007 at Delhi Base 100**

S no	DESCRIPTION	SPECIFICATIONS
1.0	<b>Foundations</b>	As per structural design based on soil investigation
2.0	<b>Super structure</b>	
2.1	Structure	RCC framed construction with filler walls with fly ash bricks/brick work or load bearing construction in fly-ash brick/brick/stone masonry with intermediate columns as per design.
2.2	Internal Partitions	Light weight auto claved aerated concrete blocks. Gypsum blocks. Non asbestos double skin cement boards. Fly ash bricks.
3.0	<b>Doors &amp; Windows</b>	
3.1	Frames:	
3.1.1		Door frames of 2nd class Indian Teakwood or equivalent in officer's room.
3.1.2		Anodized/Powder coated/Polyester powder coated Aluminium windows/doors.
3.1.3		Glazing with reflective glass or double glass using float glass.
3.2	Door Shutters	
3.2.1		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 float glass panelling where required.
3.2.3		PVC/FRP door frames & shutters in wet areas.
3.3	Window Shutters	Factory made Anodized/Powder coated/Polyester powder coated 'Z' Section aluminium frames & shutters for windows.
3.4	Fittings	Anodized aluminium/ stainless steel or equivalent.
3.5	Fire check door	As per fire safety specifications
<b>4.0</b>	<b>FLOORINGS</b>	
4.1	Main entrance hall	Pre polished granite flooring.
4.2	Corridors	Matt finished vitrified tiles/Granite flooring.
4.3	Rooms	Granite tiles/Vitrified tiles/Ceramic tile flooring.
4.4	Lavatory blocks	Granite flooring.
4.5	Flooring in basement	Vacuum dewatered concrete.
4.6	Rest of the area	Kota stone flooring.
<b>5.0</b>	<b>STAIRCASE</b>	
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.
<b>6.0</b>	<b>RAILING</b>	Stainless steel railings.
<b>7.0</b>	<b>TOILETS</b>	Granite floorings. Glazed tiles of size not less than 300x450 mm in dado. Granite counters. Stainless steel sinks. Mirrors with moulded PVC frame. FRP/PVC doors with frames.
<b>8.0</b>	<b>ROOFING</b>	
8.1	Roof treatment	Coba treatment.
8.2	False ceiling	False ceiling in office area & toilets to cover the services as per design requirement.
<b>9.0</b>	<b>FINISHING</b>	
9.1	External	Dry stone cladding, washed grit plaster, water proof weather coat paints, structural glazing, ACP cladding conforming to <b>Energy Conservation Building Code</b> .
9.2	Internal	
9.2.1		Gypsum plaster in dry areas.
9.2.2		Cement plaster in wet areas.
9.2.3		Dry distemper in service area & basement.
9.2.4		Oil bound distemper/Acrylic emulsion paint/Textured paint.
9.3	Painting	Doors & windows- Painting/polishing on wood work as per design requirement.
<b>10.0</b>	<b>PROVISION FOR BARRIER FREE BUILDING</b>	Ramps, toilets for physically challenged, chequered tiles use of Braille signages & lifts etc. GRC (Glass reinforces concrete) tiles in ramp area.
<b>11.0</b>	<b>LANDSCAPING</b>	10% of the building cost will be kept in Preliminary Estimate for murals and/Landscape related construction i/c pavement/paving.

# SPECIFICATIONS FOR BUILDINGS - RESIDENTIAL

**AS ON 01.10.2007 at Delhi Base 100**

Item No.	Item	Type I, II, III & Servant Qtrs.	Type IV	Type V and VI	Hostel
1.1	<b>Foundation</b>	Bearing capacity 10 tonnes per Sq.m.	<b>Applicable to all</b>		
1.2		Type-spread foundation in RCC isolated/ combined,continuous wall footing with lean concrete.			
1.3		Depth upto 1.2 m.below ground level			
2.1	<b>Super Structure</b>	RCC framed construction with filler walls in brick work or load bearing construction in brick/stone masonry with intermediate columns where found necessary.			
2.2		Internal partition-half brick masonry in cement mortar 1:4			
3.1	<b>Frames</b>	Pressed steel frames made out of corrosion resistant coated sheet of 1.6mm thick with double rebate	Pressed steel frames made out of corrosion resistant coated sheet of 1.6mm thick with double rebate/scratch proof aluminium sheets/poly-propylene windows	Same as Type IV	
3.1.1					
3.1.2	Door	T-Iron/Pressed steel/Pre-cast RCC frames	Pressed steel frames made out of corrosion resistant coated sheet of 1.6mm thick with single rebate factory manufactured precast RCC frames	Same as Type IV	
3.2	<b>Shutters</b>	MS Tubular box section corrosion resistant coated shutters. Wire mesh shutters may also be provided at the discretion of Zonal Chief Engineer	MS Tubular box section corrosion resistant coated shutters. Wire mesh shutters may also be provided at the discretion of Zonal Chief Engineer. Scratch proof aluminium window. Shutters to match with frame	Same as Type IV	Same as for type V
3.2.1					

3.2.2	Main Door	Double door, one with iron grill with wire mesh mosquito proof and other 35mm thickpanelled shutter with hard wood style and rail with panelling of pre-laminated particle board, one side decorative other side balancing.	Same as Type I To III	Same as Type I To III except that panelling will be of both sides decorative, pre-laminated particle board
3.2.3	WC/Bath room	Solid PVC Shutters 20mm thick	Same as Type I To III	Same as Type I To III
3.2.4	Kitchen door	Partly panelled and partly wired mesh with stainless steel wire mesh. The panelling with pre-laminated particle board, one side decorative-35 mm thick panelled shutter with hard wood style and rails	Same as Type I To III	Partly panelled and partly wired mesh with stainless steel wire mesh. The panelling with pre-laminated particle board, both sides decorative-35 mm thick panelled shutter with hard wood style and rails
3.2.5	Other doors	35mm thick panelled shutters with hard wood style and rail with panelling of pre-laminated board, one side decorative.	Same as Type I To III	35mm thick panelled shutters with hard wood style and rail with panelling of pre-laminated board, both sides decorative.
3.3	<b>Fittings</b>	Powder coated MS fittings/stainless steel fittings	Powder coated aluminium/stainless steel fittings	Same as Type IV
3.4	Peep hole and security chain for external door only	Yes	Yes	Yes

Note: 1. In item No.3 of wood work, if any other option of local material is available, the same can also be used by the respective Chief Engineers.

2. External sliding door bolt and handles will be in powder coated MS or stainless steel.

3. Koba treatment on roofing in all type of quarters.

Item No.	Item	Type I, II, III & Servant Qtrs.	Type IV	Type V and VI
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4	<b>Flooring</b>			
4.1	In rooms,kitchen, internal circulation area	Mosaic flooring and skirting with ordinary cement except in common circulation area and staircase.	Same as Type I to III	Mosaic terrazo tile flooring with white cement. In kitchen, ceramic tiles/ marbles flooring.
4.2	Common circulation area, staircase	Kotah stone flooring and matching skirting. In staircase, sinlge piece Kotah stone shall be used.	Same as Type I to III	Same as Type IV
4.3	Kitchen work top	Kotah stone	Udaipur Green marble/Granite stone	Granite stone
4.4	Toilets	Mosaic	Ceramic tiles	Ceramic tiles
4.5	Skirting/Dado	Ceramic glazed tiles in Indian Type WC upto 90 cm. Height and bathroom upto door jamb height.	Same as Type I to III	Ceramic glazed tiles upto ceiling height with a decorative band of tiles.
5.0	<b>Finishing</b>			
5.1	External	Acrylic smooth exterior finish or washed stone grit plaster or exposed brick work.	Premium acrylic smooth exterior finish with additive of silicone or washed mosaic plaster in ordinary cement or exposed brick work.	Premium acrylic smooth exterior finish with additive of silicone or washed mosaic plaster in ordinary cement or exposed brick work.
5.2	Internal	All walls & ceilings to be treated with 2 mm thick POP followed with a coat of acrylic/oil bound distemper except kitchen, bath & WC and all ceiling, which will be done with white wash. Synthetic enamel paint on all wood work and steel work..	All walls & ceilings to be treated with 2 mm thick POP followed with a coat of acrylic/oil bound distemper except kitchen, bath & WC and all ceiling, which will be done with white wash. Synthetic enamel paint on all wood work and steel work..	All walls & ceilings to be treated with 2 mm thick POP plaster and cornices followed with a coat of acrylic/oil bound distemper except kitchen, bath & WC and all ceiling, which will be done with white wash. Synthetic enamel paint on all wood work and steel work..



REVISED SPECIFICATIONS OF AMENITIES FOR GENERAL  
 POOL RESIDENTIAL ACCOMODATION (TYPE I TO VI)  
 AS ON 02.01.2006 VIDE CPWD REF.NO.62/SE(S&S)/EE-II/AE-I/PAR/05-06/01

S.No	Item	Type I, II, III & Servant Qtrrs.		Type IV		Type V & VI	
		Existing	Revised	Existing	Revised	Existing	Revised
3.1 (a)	Frames Window	1st Class Kail Wood or 2nd class Deodar Wood or mild steel	Pressed steel frames made of corrosion resistant coated sheet of 1.6mm thick with double rebate	T-Iron frames	Pressed steel frames made of corrosion resistant coated sheet of 1.6mm thick with double rebate/scratch proof aluminium sheers/polypropylene windows	2nd class teak wood or 1st class Deodar Wood or mild steel	Same as Type IV
	Door	-Do-	T-Iron/Pressed steel/ Pre-cast RCC frames	-Do-	Pressed steel frames made of corrosion resistant coated sheet of 1.6mm thick with single rebate/ factory manufactured precast RCC frames	-Do-	Same as Type IV
3.2	<b>Shutters</b>						
	a) Window	1st Class Kail Wood or 2nd class Deodar Wood	MS Tubular box section corrosion resistant coated shutters. Wire mesh shutters may also be provided at the discretion of Zonal Chief Engineer	a) 35mm panelled shutters with 1st class deodar wood for all rooms	MS Tubular box section corrosion resistant coated shutters. Wire mesh shutters may also be provided at the discretion of Zonal Chief Engineer/ Scratch proof aluminium window shutters to match with frame	2nd class teak wood or 1st class deodar wood or mild steel	Same as Type IV

			b) 35mm panelled shutters with 2nd class deodar wood for bath/WC, kitchen, Scooter shed & balcony			
b) Main door	1st Class Kail Wood or 2nd class Deodar Wood	Double door, one with iron grill with wire mesh mosquito proof & other 35mm thick panelled shutter with hard wood style & rail with panelling of pre-laminated particle board, one side decorative other side balancing	35mm panelled shutters with 2nd class Deodar wood for all rooms	Same as for type I to III	2nd class Indian teak wood or commercial ply flush door	Same as type I to III except that panelling will be of both side decorative, pre-laminated particle board
c) WC & Bath	-Do-		35mm panelled shutters with 2nd class Deodar wood for bath, WC, kitchen, Scooter shed & balcony	Same as for type I to III	3rd class Indian teak wood or commercial ply flush door	Same as for type I to III
d) Kitchen door	-Do-	Partly panelled & partly wire mesh with stainless steel wire mesh. The panelling with pre-laminated particle board, one side decorative-35mm thick panelled shutter with hard wood style & rails	-Do-	Same as for type I to III	-Do-	Partly panelled & partly wire mesh with stainless steel wire mesh. The panelling with pre-laminated particle board, one side decorative-35mm thick panelled shutter with hard wood style & rails
e) Other doors	-Do-	35mm thick panelled shutters with hard wood style & rail with panelling of pre-laminated board, one side decorative	35mm panelled shutters with 1st class Deodar wood for all rooms	Same as for type I to III	-Do-	35mm thick panelled shutters with hard wood style & rail with panelling of pre-laminated board, one side decorative

3	<b>Fittings</b>	Oxidised iron	Powder coated MS fittings/stainless steel fittings	Aluminium fittings	Powder coated aluminium/stainless steel fittings	Anodized aluminium in external doors & internal doors oxidized	Same as type IV
4	Peep hole & security chain for external door only	Yes	Yes	Yes	Yes	Yes	Yes

1 In item no.3 of wood work, if any other option of local material is available,the same can also be used by the respective chief engineers.

2 External sliding door bolt & handles will be in powder coated MS or stainless steel

#### 4.1 Flooring

a) In rooms, kitchen, internal circulation area	Mosaic flooring & skirting in 50% area	Mosaic flooring & skirting with ordinary cement except in common circulation area & staircase	Marble chips flooring with ordinary cement in all rooms, kitchen, internal circulation area, store, WC & bath	Same as type I to III	Mosaic flooring in living room, dining, drawing, bath,WC.Rest cement concrete	Mosaic/Terrazo tile flooring with white cement.In kitchen ceramic tiles,marble flooring
b) Common circulation area	-Do-	Kota stone flooring & matching skirting.In staircase, single piece Kota stone shall be used.	Cement concrete flooring with matching skirting in common circulation area, staircase	Same as type I to III	Cement concrete	Same as type IV
c) Kitchen work top	Kota stone	Kota stone	Kota stone slab for kitchen platform	Udaipur green marble/granite stone	-	Granite stone
d) Toilets	Mosaic flooring	Mosaic flooring	Marble chips flooring with ordinary cement	Ceramic tiles	Mosaic flooring	Ceramic tiles
e) Skirting/ Dado	Mosaic & white glazed dado in WC & Bath (90/150 cm)	Ceramic glazed tiles in Indian type WC upto 90 cm. Height & bathroom upto door jamb height	White glazed tiles in WC/bath (90/150 cm) white glazed tiles dado for 60 cm above work top of kitchen platform	Same as type I to III	-	Ceramic glazed tiles upto ceiling height with a decorative band of tiles

6.2	<b>Finishing External</b>	Water proof cement paint or washed stone grit plaster or exposed brick work	Acrylic smooth exterior finish or washed stone grit plaster or exposed brick work	a) washed mosaic plaster in ordinary cement for external walls	Premium acrylic smooth exterior finish with additive of silicone or washed mosaic plaster in ordinary cement or exposed brick work	External colour wash	Premium acrylic smooth exterior finish with additive of silicone or washed mosaic plaster in ordinary cement or exposed brick work
				b) Water proof cement paint on roof parapets (inner sides) soffit & inner fins of chhajjas etc.			
6.3	<b>Finishing Internal</b>	Dry distemper in all rooms and synthetic enameled paint on wooden/steel work,white washing on ceiling	All walls & ceilings to be treated with 2mm thick POP followed with a coat of acrylic/oil bound distemper except kitchen, bath & WC & all ceiling which will be done with white wash.Synthetic enamel paint on all wood work & steel	Dry distemper in drawing & dining space.White wash/colour wash in other rooms l/c staircases.	All walls & ceilings to be treated with 2mm thick POP followed with a coat of acrylic/oil bound distemper except kitchen, bath & WC & all ceiling which will be done with white wash.Synthetic enamel paint on all wood work & steel work	Distemper in drawing & dining,bedrooms & study room & white washing in rest	All walls & ceilings to be treated with 2mm thick POP & cornices followed with a coat of plastic emulsion paint except kitchen, bath & WC & all ceiling which will be done with white wash.Synthetic enamel paint on all wood work & steel work
	I) Kitchen: Shelves in tiers not more than 400mm wide along one wall 1" thick		Yes	Yes	Covered cupboards above sill level with pre-laminated decorative board	Yes	Same as type IV
	ii) Kitchen Sink	Fibre glass with drain board	Stainless steel sink without drain board size 610 x 510mm with bowl depth 200 mm	White vitreous glazed kitchen sink with drain board	Stainless steel sink with drain board size 510x1040mm with bowl depth 200mm	Same as type IV	Stainless steel sink of size 510x 1040 mm with bowl depth of 250mm with draining board/vitreous sink with draining board of size 650x450x250mm

iii) Dado Ceramic glazed tiles for 60 cm. Above work top and around sunken floor	Yes	Yes	-	Yes	-	Ceramic glazed tiles upto 60 cm above cooking platform all around
iv) Built in cupboard with open shelves below cooking platform shutters of pre-laminated particle board 18mm thick below window sill level of cooking platform along one wall	-	Yes	One	Yes,with 2 drawers	One	Yes,with 2 drawers
v) Cooking platform standing	Yes	Yes	Yes	Yes	Yes	Yes
2(I) Wardrobes Built in cupboard with RCC/prelaminated particle board/kota stone shelves and shutter upto ceiling height	-	One in each bedroom - Two in two bedrooms 7'0" height	One in each bedroom upto ceiling height	Three in three bedrooms	One in each bedroom upto ceiling height	
ii) Magic eye in front door	-	One	One	One	One	One
iii) Window sill lining 18mm thick projected with kota stone/marble	-	Kota stone	-	Kota stone	-	Marble
iv) Curtain rods with brackets	All rooms	All rooms	All rooms	Draperly rods	With pelmets	Draperly rods
v) Set of pegs	In bath & bedrooms	In bath & bedrooms	In bath & bedrooms	In bath & bedrooms	In bathroom	In bath,bed & wardrobes

1	Indian WC Pan with flushing cistern, tiles for 60 cm above worktop & around sunken floor	One	One WC Pan Orissa pattern with low level PVC flushing cistern	One	One Same as type I	1+One for servant qtr.	1+One for servant qtr.
2	European type WC with high level flushing cistern	-	Yes	One with high level flushing cistern	One with low level flushing cistern	One with high level flushing cistern	One with siphonic type WC with matching low level flushing cistern
2a)	Water jet with low level European WC	-	-	-	One	-	One
3	Wash basin with one tap each	One	One	One	Three mixer type for hot & cold water	Two	Three mixer type for hot & cold water
4	Tap (Kitchen Bath & WC) C.P. Brass/PTMT bib cock	3	4 PTMT for Type I & II and 4 C.P.Brass for type III	3+1 for sink	5 C.P.Brass	5+2 for servant qtr.	12 (1 PTMT - 11 C.P.Brass)
5	Shower C.P. Brass/PTMT	-	One PTMT	One	Two C.P.Brass	Two	3 C.P.Brass
6	Towel rail C.P.Brass/PTMT	One	One PTMT	One	Two C.P.Brass	One towel rail outside near the wash basin	Two C.P.Brass
Note: Waste coupling in wash basins & grating over the floor trap shall be only of PTMT.							
7	Mirror/ Bevelled edge/ PVC frame with PTMT glass shelf	One	One	One	Two	One	Three
8	Soap rack/Niche in WC/ Bath)	One	One	One	Two	One	Three
9	Liquid soap container	-	-	-	Two	-	Three
10	Storage tank	One 270 litre	500 litre	One 270 litre	750 litre	One 270 litre	1000 litre- 500 litres for servant quarter
11	Niche with kota sill in bathroom	One	One	One	Two	-	3 - 1 for servant quarter

## SCALES OF AMENITIES FOR RESIDENTIAL QUARTERS

REVISED ON 01.10.2007 at Delhi Base 100

S. NO.	Description	Type I	Type II	Type III	Type IV	Type V/VI
1	<b>KITCHEN:</b>					
(i)	I) Open shelves in tiers not more than 400mm wide along one wall 1" thick	Yes	Yes	Yes	Covered cup boards above sill level with pre-laminated decorative board.	Same as Type IV
(ii)	<b>b) kitchen sink</b>	Stainless steel sink without drainboard size 610x510 mm with bowl depth 200 mm.	Same as Type IV	Same as Type IV	Stainless steel sink with drainboard size 510x1040 mm with bowl depth 200mm.	Stainless steel sink with drainboard size 510x1040 mm with bowl depth 200mm.with drain board/vitreous china sink with draining board of size 600x 450x 250 mm.
(iii)	<b>Dado</b> Ceramic glazed tiles for 60 cm. Above work top and around sunken floor	Yes	Yes	Yes	Yes	Ceramic tile glazed upto 60 cm. Above cooking platform all around
(iv)	Built-in cupboard with open shelves below cooking platform shutters of pre-laminated particle board 18 mm thick below window sill level of cooking platform along one wall	Yes	Yes	Yes	Yes with 2 drawers	Yes with 2 drawers
(v)	Cooking platform standing.	Yes	Yes *	Yes *	Yes *	Yes *
2(i)	<b>Wardrobes</b> Built in cupboard with RCC/Pre-laminated particle board/Kota stoneshelves and shutter upto ceiling height	(One in each bed room) 7'00" height	(One in each bed room) 7'00" height	(One in each bed room) 7'00" height	(One in each bed room)upto ceiling height	(One in each bed room)upto ceiling height
(ii)	Magic eye in front door	One	One	One	One	One
(iii)	Window sill lining 18 mm thick projected with Kota stone/marble	Kota stone	Kota stone	Kota stone	Kota stone	Mrble
(iv)	Curtain rods with brackets	All rooms	All rooms	All rooms	Drapery rods	Drapery rods

(v)	Set of pegs	In bath and bedrooms	In bath and bedrooms	In bath,bed & wardrobes	In bath,bed & wardrobes	In bath,bed & wardrobes
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### SCALES OF SANITARY FITTINGS FOR GENERAL POOL RESIDENTIAL QUARTERS

S. NO.	Description	Type I	Type II	Type III	Type IV	Type V & VI
1	Indian WC Pan with flushing istern	One WC Pan Orissa pattern with low level PVC Flushing Cistern	One - Same as Type I	One - Same as Type I	One - Same as Type I	1+1 (for servant qtr.
2	European type WC with high level flushing cistern	-	-	-	One with low level PVC flushing cistern	One (Syphonic type) with matching low level cistern
2 (a)	Water jet with low level European WC	-	-	-	One	One
3	Wash basin with one tap each	One	One	One	Two mixer type for hot and cold water	Three mixer type for hot and cold water
4	Tap (kitchen, bathroom & WC) CP Brass/PTMT bib cock	4 PTMT	4 PTMT	4 CP Brass	5 CP Brass	12 (1PTMT +11 CP Brass)
5	Showers CP Brass/PTMT	One PTMT	One PTMT	One PTMT	2 CP Brass	3 CP Brass
6	Towel rail CP Brass /PTMT	One PTMT	One PTMT	One PTMT	2 CP Brass	2 CP Brass
7	Mirror/Bevelled edge/PVC frame with PTMT glass shelf	One	One	One	Two	Three
8	Soap rack niche (in WC/bath)	One	One	One	Two	Three
9	Liquid soap container	-	-	-	Two	Three
10	Storage tank	500 litres	500 litres	500 litres	750 litres	1000 litre + 500 litre for servant quarters
11	Niche with kotah stone sill in bath room	One Quarters	One	One	Two	3+1 for servant



## SPECIFICATIONS FOR ELECTRICAL INSTALLATIONS IN RESIDENTIAL QUARTERS

REVISED ON 01.10.2007 at Delhi Base 100

S. NO.	Description	Type I	Type II	Type III	Type IV	Type V	Type V I (excluding servant qtr & garage)	Servant Qtrr. & Garage
1	Power points (15 amperes, 6 pins)	2	3	4	5	6	7	1
2	MCB connected socket outlet for AC unit/Geyser complete with wiring	1	1	1	2	4	5	-
3	Ceiling fans	2	3	4	5	6	7	1
4	Exhaust fans	1	1	1	1	1	1	-
5	Call bells	1	1	1	1	2	3	-
6	Light/Fans/Call bell/5A Plug Points	17	20	23	27	38	44	-
7	F.I. Fittings excluding Tube and Starter	2	3	4	5	7	8	5
	Type of Wiring	Recessed conduit wiring			Concealed conduit wiring			
8	EDB MCB Type							
	A. Single Phase	1	1	1	-	-	-	1
	B. Three Phase	-			1	1	1	-
9	Cable TV Point	1	1	1	1	2	2	-
10	Telephone Point	-			1	2	2	-

**SCALES OF AMENITIES FOR GENERAL POOL  
RESIDENTIAL ACCOMODATION (TYPE I TO VI)**

AS ON 02.01.2006 VIDE CPWD REF.NO.62/SE(S&S)/EE-II/AE-I/PAR/05-06/01

The financial effects due to revised specifications & scale of amenities for each type of house of type I to VI over the plinth area rate 1.1.92 are as under:

S.No	Type of construction	Type of houses	Plinth area rate per Sq.M. as on 1.1.92 In Rs.	Extra cost involved per Sq.m. due to revised specifications & scale of amenitiess as on 1.1.92		
				Civil Works (In Rs.)	Electrical Works (In Rs.)	TOTAL (In Rs.)
1	RCC framed structure	Type I,II,III & servant qtrs.	2810	346	36	382
		Type IV	2810	400	72	472
		Type V & VI	2810	495	81	576
2	Load Bearing Structure	Type I,II,III & servant qtrs.	2120	346	36	382
		Type IV	2330	400	72	472
		Type V & VI	2485	495	81	576

To obtain the financial effects for the current period, the cost index for the particular place is to be added over the plinth area rates 1.1.92 as base 100.

REVISED ELECTRICAL SPECIFICATIONS OF AMENITIES FOR GENERAL  
POOL RESIDENTIAL ACCOMODATION (TYPE I TO VI)

AS ON 02.01.2006 VIDE CPWD REF.NO.62/SE(S&S)/EE-II/AE-I/PAR/05-06/01

No	Item	Type I		Type II		Type III		Type IV		Type V Excluding servant qrtr. & garage		Type VI Excluding servant qrtr. & garage		Servant qrtr. & garage	
		Existing	Revised	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
1	Power points 15 Amp.	3	2	3	3	3	4	3	5	4	6	-	7	-	1
2	MCB + socket for AC & geyser complete with wiring	-	1	-	1	-	1	-	2	-	4	-	5	-	-
3	Ceiling fans	2	2	3	3	4	4	5	5	5	6	-	7	1	1
4	Exhaust fans	-	1	-	1	-	1	1	1	-	1	-	1	-	-
5	Call bells	1	1	1	1	1	1	1	1	1	2	-	3	-	-
6	Light/fans/call bell/ 5A plug points F.I fittings	17	17	20	20	23	23	24	27	33	38	-	44	5	5
7	excluding tube and starter	2	2	2	3	3	4	4	5	-	7	-	8	1	1
	Type of wiring	Recessed conduit type													
8	RDB & MCB Type													1	
	A. Single Phase	1	1	1	1	1	1	1	-	1	-	-	-	1	1
	B. 3 phase	-	-	-	-	-	-	-	1	-	1	-	1	-	-
9	Cable TV point	-	1	-	1	-	1	-	1	-	2	-	2	-	-
10	Telephone point	-	-	-	-	-	-	-	1	-	2	-	2	-	-

**CPWD CONSTRUCTION COST INDEX CALCULATION EFFECTIVE FROM  
01.10.2007**

Memorandum no: 62/SE(TAS)/Plinth area rates/122 Dt 12/12/2007

**Cost Index of Delhi based on Plinth Area Rate as on 01.10.2007 Base 100**

Place	DELHI	New Date	01.10.07	New Index	0.00
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S.no.	Description	Unit	Rate as on 1.10.2007	Weightage	Rate as on New Date	Cost Index as on New Date	% Contribution
1	Bricks	1000	2000.00	8.00			
2	Cement	Qtl	457.00	14.50			
3	Reinforcement	Qtl	3280.00	19.50			
	50% 8-10mm						
	50% 12-16mm						
4	Aggregate	Cum	700.00	6.50			
5	Sand-coarse	Cum	650.00	3.00			
6	Flooring Items	Sqm	381.10	3.00			
	Mosaic tiles 40%	Sqm					
	Ceramic tiles 40%	Sqm					
	Kota stone 10%	Sqm					
	Granite stone 10%						
7	Paints	Lt-Kg	100.00	3.00			
	Syn Enamel Paint 33.33%	Lt					
	Dry Distemper 33.33%	Kg					
	OBD & Plastic emulsion paint 33.33%	Lt					
8	Ply-wood	Sqm	1281.33	5.00			
	12mm Particle board 33.33%						
	Steel Z-section Window 33.33%						
	Aluminium Windows 33.33%						
9	Pipes	M	144.50	2.50			
	15mm GI Pipe 33.33%	M					
	100mm HCl Pipe 33.33%	M					
	20mm Black conduit 33.33%	M					
10	Lamps & Fans	Each	655.00	3.50			
	Ceiling Fan 48" 50%	Each					
	1.2m single Tube light 50%	Each					
11	Electrical	Each	35000.00	2.50			
	7.5HP Motor Pump set 1500rpm						
12	Wires & Cables	M	825.00	4.00			
	1.5 Sq mm wire 70%	100M					
	4.0 Sq mm wire 30%	100M					
13	Labour	Each	143.38	25.00			
	Unskilled 50%	Each					
	Skilled 50%	Each					
				100.00			
					Say		

## APPENDIX 3

**Subject: Guidelines for preparing Building Cost Index as per Procedure w.e.f. June 1, 1995.**

1. Building Cost Index for Delhi by conventional method is 117 w.e.f. Jan. 1, 1994 (with base 100 as on Jan. 1, 1992) and was issued vide No. SE/S&S/EEII/CI/93/236-435 dated March 15, 1994. This was based on the weightages of 9 components (building materials and labour) of a normal building on the basis of an exercise carried out in 1991 for a cost index with base Jan. 1, 1992. It has been decided in consultation with the Ministry of Urban Affairs and Employment and the Ministry of Finance to have a broad based cost index including electrical components as well, identical to the one adopted for calculating workload norms. Accordingly a new proforma for Cost Index has been devised containing civil and electrical items as well as labour component (total 12 items), in which the weightages are identical with the C.I. for workload norms based on wholesale price index. On this basis, DG(W) has accorded approval for the cost index of 132 w.e.f. June 1, 1995 (with base 100 as on Jan. 1, 1992) for Delhi.

2. For working out the Cost Index as per new procedure, base rates as on Jan. 1, 1992 and the weightages of 12 items are indicated in Annexure I. Detailed guidelines for preparation of Cost Index are enclosed at Annexure II. The rates for electrical items at S. No. 8(c), 9, 10 and 11 will be furnished by the electrical side and rest by the civil side. As a sample, details for computing rates as on June 1, 1995 for the 12 items for the Cost Index of Delhi are given in Annexure III. Based on this, calculations for Cost Index of Delhi as on June 1, 1995 are given in Annexure IV.

3. The cost index for all the places shall be approved by the Zonal Chief Engineers with effect from 1st June of the relevant year based on this new procedure. A copy of cost indices approved for the places in your Zone may please be endorsed to SE(S&S), CPWD, Room No. 417A, Nirman Bhawan, New Delhi for compilation of All India Cost Indices periodically. Revised C.I. should be approved, wherever required by July 31, 1995.

**[No. SE/S&S/EEII/CI/AE II/391, Dated July 11, 1995]**

**PROFORMA FOR COST INDEX (EFFECTIVE FROM JUNE 1, 1995) WITH BASE JAN. 1, 1992**

S.No.	Description	Unit	Rate as on Jan. 1, 1992 (Rs.)	Weightage
1.	Bricks	1000 Nos.	800.00	10.50
2.	Cement (OPC)	QTL	213.28	14.50
3.	Steel	QTL	1342.50	19.50
	(i) 50% 8 & 10 mm (Tor steel)			
	(ii) 50% 12 & 16 mm (Tor steel)			
4.	Aggregate 20 mm size (coarse)	cu. m.	185.00	7.00
5.	Sand (coarse sand)	cu. m.	146.60	3.00
6.	Paints:		68.32	3.00
	(i) Synthetic enamel paint	litre		
	(ii) Dry distemper	kg.		
7.	Ply and commercial wood	sq. m.	224.00	5.00
	(i) 12 mm particle board			
	(ii) 12 mm medium density fibre board			
	(iii) Steel window standard Z-section			
8.	Pipes	metre	53.92	2.50
	(i) 15 mm G.I. (Galvanised Iron) Pipe			
	(ii) 100 mm H.C.I. (Heavy Cast Iron) Pipes			
	(iii) 20 mm black conduits*			
9.	Lamps & fans*	each	366.50	3.50
	(i) Ceiling fans 48"			
	(ii) 1.20 m flourescent fitting with single tube			
10.	Electrical machinery	each	24,800.00	2.50
	(i) Motors 7.5 hp [Pump set] 1500 rpm (Kirloskar)			
11.	Wires & Cables	100 metre	122.90	4.00
	(i) Wire (70% of 1.5 sq. mm. & 30% of 4.0 sq. mm.)			
	(ii) Cables (300 sq. mm.)			
12.	Labour	each	45.00	25.00
	(i) Unskilled			
	(ii) Skilled			
<b>Total</b>				<b>100.00</b>

\*Electrical items.

## APPENDIX 4

**Subject: Guidelines for preparing Building Cost Index as per New Procedure w.e.f. June 1, 1996.**

1. In partial modification of the guidelines for preparing Building Cost Index as per new procedure issued vide letter No. SE/SS/EEII/CI/AEII/391 dated July 11, 1995, it has been decided that while calculating the Cost Index as on June 1, 1996 and onwards, the item of 'Wire & Cables' at S. No. 11 of Cost Index Proforma, shall include the cost of copper wires and element of cable shall be deleted altogether, as the cost of wires constitutes the bulk towards the cost of the internal electrical installation work. Accordingly, the base rate for the item Wire and Cables as on January 1, 1992, which was taken as Rs. 122.90 per metre during June 95 has been modified to Rs. 447.70 per 100 metres taking into consideration the cost of copper wires 1.5 sq.m (70%) plus 4.0 sq.m (30%).
2. For working out the Cost Index w.e.f. June 1, 1996, taking into account the modification in the item of 'Wires and Cables', base rates as on January 1, 1992 and the weightages of 12 items are indicated in Annexure I. Detailed guidelines for preparation of Cost Index are given in Annexure II. On this basis, DG(W) has accorded approval for the Cost Index of 142 w.e.f. June 1, 1996 (with base 100 as on January 1, 1992) for Delhi. Details for computing rates as on June 1, 1996 for 12 items for the Cost Index of Delhi are given in Annexure III and calculations for Cost Index of Delhi as on June 1, 1996 are given in Annexure IV.
3. The Cost Index for all the places shall be approved by the Zonal Chief Engineers w.e.f. June 1 of the relevant year based on the revised guidelines as indicated above.
4. All the Chief Engineers are requested to approve the cost indices as per the revised guidelines effective from June 1, 1996 and issue the same within next two months. The position of preparation of cost indices of the various cities under your zone may also be intimated before September 1, 1996 for favour of information of DG(W).
5. A copy of cost indices approved for the places in your zone may please be endorsed to the Superintending Engineer (S&S), CDO, CPWD, Room No. 418 A, Nirman Bhawan, New Delhi for compilation of All India Cost Indices periodically.

This issues with the approval of DG(W).

[No. SE/S&S/EEII/CI/AEII/2168, Dated July 3, 1996]

## PROFORMA FOR COST INDEX (EFFECTIVE FROM 1.6.96) WITH BASE 1.1.92

S. No.	Description	Unit	Rate as on 1.1.1992 (Rs.)	Weightage
1.	Bricks	1000 Nos	800.00	10.50
2.	Cement OPC	QTL	213.28	14.50
3.	Steel	QTL.	1342.50	19.50
	(a) 50% 8 & 10 MM (Tor Steel)			
	(b) 50% 12 & 16 MM (Tor Steel)			
4.	Aggregate 20 mm size	CUM	185.00	7.00
5.	Sand (Coarse Sand)	CUM	146.60	3.00
6.	Paints		68.32	3.00
	(a) Synthetic Enamel Paint	LIT.		
	(b) Dry Distemper	KG.		
7.	Ply and Commercial Wood	SQM.	224.00	5.00
	(i) 12 mm Particle Board			
	(ii) 12 mm Medium Density Fibre Board			
	(iii) Steel Window Standard Z Section			
8.	Pipes	MTR.	53.92	2.50
	(i) 15 mm G.I. Pipe			
	(ii) 100 mm H.C.I. Pipes			
	(iii) 20 mm Black Conduits			
9.	Lamps and Fans	EACH	366.50	3.50
	(i) Ceiling Fans 48"			
	(ii) 1.20 m Flourescent Fitting with Single Tube			
10.	Elect. Machinery	EACH	24,800.00	2.50
	(i) Motors 7.5 H.P. (Pump Set) 1500 R.P.M. (Kirloskar)			
11.	Wires and Cables Copper Wires	100 MTR.	447.70	4.00
	(a) 1.50 sq. mm.			
	(b) 4.00 sq. mm.			
12.	Labour	EACH	45.00	25.00
	(i) Unskilled			
	(ii) Skilled			
			<b>Total</b>	<b>100.00</b>



## APPENDIX 2

# CENTRAL PUBLIC WORKS DEPARTMENT (CPWD) PLINTH AREA RATES OF VARIOUS TYPE OF CONSTRUCTIONS AS ON JANUARY 1, 1992 WITH BASE 100 WITH SPECIFICATIONS

## MEMORANDUM

Plinth Area Rates as applicable on 1.10.76 were last circulated under Memo No. SSW(NDZ)/SWI/ASWV/98/1377 dated 7.7.79 alongwith annexure I to IV Relevant cost indices with reference to base 100 as 1.10.76 shall continue to be applicable on these plinth area rates for works in progress etc.

However, the need for issuing fresh plinth area rates with reference to base 100 as on 1.1.92 has been felt for quite some time to account for rise in prices in the last 15 years, and also to account for changed specifications in Type I, II and III Qrs, approved by MUD in Nov. 1989, vide No. 28/9/86-WI(DG)/Cir. No. 10/89 dated 8.11.89 Revised Specifications for type IV Qrs as issued subsequently by DG(W) vide circular No. 28/1/90/WI(DG) Cir. No. 4/92 dated 21.4.92 have also been incorporated.

It is stated that the matter of revising specification of type V Qrs. is under consideration, and as soon as those are revised, the revised specification will be incorporated in the plinth area rates.

Accordingly, fresh plinth area rates with reference to base 100 as on 1.1.92 has been prepared for circulation in the department. In future, the preliminary estimates may be prepared on the basis of these plinth area rates.

The basic plinth area rates for construction of load bearing/RCC framed structures are based on data of actual expenditure for structures completed recently, as received from various field formations.

The latest plinth area rates as on 1.1.92 hereby issued with following Annexures:

Annexure I : Fresh Plinth Area Rates with base 100, as on 1.1.92 (for residential/non-residential buildings, services and development).

Annexure II : Broad specifications and scale of amenities for sanitary/electrical fittings for which plinth area rates are applicable.

Annexure III : Memo No. 29/21/58/WI of 10/83 indicating the rules for working out plinth area from plans, to be observed while adopting these plinth area rates given in Annexure I.

Annexure IV : Proforma for calculating cost index for future cost index with base 100 as 1.1.92 indicating revised weightages also.

Encls: Annexure I : Page 1 to 9  
Annexure II : Page 10 to 17  
Annexure III : Page 18 to 21  
Annexure IV : Page 22

} These are the page Nos. of Memorandum. Text of these Annexures is reproduced in the following pages.

[No. SE(S&S)/EEII/AEIII/289, Dated: 29.6.92].

# PLINTH AREA RATES OF RCC STRUCTURES PRESCRIBED BY CPWD

**Rates as on 01.01.1992**

S no	Description	Rates in Rupees per Sqm			
		Offices/ colleges & Hospitals	Schools	Hostels	Residential
1	2	3	4	5	6
<b>1.0.0</b>	<b>RCC Framed Structures</b>	<b>Rates in per square metre</b>			
1.1.0	RCC Framed Structures upto six storeys				
1.1.1	Floor Height 3.35m (11'0")	2920	2665	-	-
1.1.2	Floor Height 2.9m (9' 6")	-	-	2740	2810
1.2.0	<b>Extra for-</b>				
1.2.1	Every additional storey over six storeys upto nine storeys.	50	50	50	50
1.2.2	Every additional storey over nine storeys upto twelve storeys.	75	75	75	75
1.2.3	Every 0.30m,additional height of floor above normal floor height 3.35 m/2.9m.	125	125	125	125
1.2.4	Every 0.30m higher plinth over normal plinth height of 0.60m (2.'0") (on G.F.area only)	125	125	125	125
1.2.5	Every 0.30 m deeper foundations over normal depth of 1.20 m (4'0") (on G.F.area only)	125	125	125	125
1.2.6	Making stornger foundations to take load of one additional floor at a later date (on area of additional floor at a later date)	365	365	365	365
1.2.7	Destrip foundations in poor soil having a bearing capacity less than 10 T/Sqm.	110	110	110	110
1.2.8	Resisting earthquake forces.	250	250	250	250
1.2.9	R.C.C.raft foundations	440	440	440	440
1.2.10	Pile foundations upto a depth of 15 m (50'0")	615	615	615	615
1.2.11	Stronger structural members to make heavy loads above 500 K/Sqm.	190	190	190	190
1.2.12	Larger modules over 35 Sqm. (400 sft.)	220	220	220	220
1.2.13	Termite proof treatment (on ground floor area only)	75	75	75	75
1.2.14	Fire fighting	185	185	185	185
1.2.15	O.P.D.Operation theatres etc.	475	-	-	-
1.3	<b>BASEMENT FLOOR:</b>				
	Floor height 3.35 m (11'0") with normal provision of water proofing treatment with bituminous felt.	4020	-	-	-
1.4	<b>Extra for basements with ...</b>				
1.4.1	Mastic asphalt water proofing treatment.	440	-	-	-
1.4.2	Every 0.30 m additional height above normal height of 3.35 m (11'0")	490	-	-	-
1.4.3	Reduction for every 0.30 m less height of basement than normal height of 3.35 m (11'0")	(-)280	-	-	-

## PLINTH AREA RATES PRESCRIBED BY CPWD - SERVICES

**Rates as on 01.10.1992**

### Rates in Rupees per Sqm

S no	Description	Non Residential				Residential				
						Type Of Quarters				
		Offices/ Colleges	Hospitals	Schools	Hostels	I	II	III	IV	V
1	2	3	4	5	6	7	8	9	10	11

**3 SERVICES**

3.1	Internal water supply & sanitary	4%	10%	5%	15%	10% / 14600	10% / 15400	10% / 18300	10% / 22000	10% / 43800
				(with attached toilets & 10% with common toilets)						% means percentage of building cost

3.2	External service connections	5%	5%	5%	5%	5%	5%	5%	5%	5%
3.3	Internal electric installations	12.5%	12.5%	12.5%	12.5%	12.5% / 10600	12.5% / 12000	12.5% / 14100	12.5% / 17100	12.5% / 20400

Note: The above does not include service connection charges and electrification

3.4	Internal electric installations for laboratories of schools			15% Building cost						
		-	-		-	-	-	-	-	-

3.5	Internal electric installation for terminal building & other allied structures in airports	15% Building cost								
-----	--	-------------------------	--	--	--	--	--	--	--	--

**3.6 Extra for:**

3.6.1	Power wiring and plugs	4%	4%							
3.6.2	Central Call Bell Systems	1%								
3.6.3	Lightning conductors									
(a)	Upto 4 storeyed buildings	0.50%	0.50%	0.50%	je means percent of building cost					
(b)	5 to 8 storeyed buildings	0.33%	0.33%	0.33%						
(c)	Beyond 8 storey buildings	0.25%	0.25%	0.25%						
3.6.4	Telephone conduits	0.50%	0.50%	0.50%						

## PLINTH AREA RATES PRESCRIBED BY CPWD - PASSENGER LIFTS

Rates as on 01.10.1992

### 3.7 PASSENGER LIFTS

S no	Type Of Lifts	Capacity: Persons	Weight	Speed in M/Sec.	Travel	Doors	Control	Price (Rs. In lacs)	Addl Price for each add. floor Rs.
3.7.1	Passenger	8	544 Kg.	1.00	G+4	Power operated	AC V V	7.25	50,000
3.7.2	Passenger	8	544 Kg.	1.50	G+4	Power operated	AC V V	9.50	50,000
3.7.3	Passenger	13	884 Kg.	1.00	G+4	Power operated	AC V V	9.50	50,000
3.7.4	Passenger	13	884 Kg.	1.50	G+4	Power operated	AC V V	10.00	50,000
3.7.5	Passenger	16	1088 Kg.	1.00	G+4	Power operated	AC V V	9.00	60,000
3.7.6	Passenger	16	1088 Kg.	1.50	G+4	Power operated	AC V V	10.25	60,000
3.7.7	Passenger	16	1088 Kg.	2.50	G+9	Power operated	AC V V	29.00	60,000
3.7.8	Passenger (Bed Lift)	20	1360 Kg.	0.75	G+4	Power operated	AC V V	11.25	50,000
3.7.9	Passenger (Bed Lift)	20	1360 Kg.	1.50	G+4	Power operated	AC V V	14.00	60,000
3.7.10	Passenger (Bed Lift)	20	1360 Kg.	2.50	G+9	Power operated	AC V V	30.00	75,000
3.8	<b>GOOD LIFTS (2 Speed)</b>								
3.8.1		1 TON	-	0.50	G+4			7.75	30,000
3.8.2		2 TON	-	0.50	G+4			10.00	30,000
3.8.3		3 TON	-	0.25	G+4			12.25	35,000

## PLINTH AREA RATES PRESCRIBED BY CPWD - WATER TANKS (RCC Only)

**Rates as on 01.10.1992**

S no	Description	Rates in Rupees
<b>4.0</b>	<b>WATER TANKS (RCC Only)</b>	
4.1	Overhead tank without independent staging	4.75 per litre
4.2	Overhead tank upto staging height 20 metres	8.05 per litre
4.3	Overhead tank with staging height between 20 metres & upto 30 metres	9.15 per litre
4.4	Overhead tank with staging height between 30 metres & 40 metres	11.00 per litre
4.5	Underground sump:	4.75 per litre
5.0	<b>DEVELOPMENT OF SITE:</b>	<b>RATES:</b>
5.1	Levelling	10.95 per Sqm.
5.2	Internal roads and paths	33.95 per Sqm.
5.3	Sewer	24.45 per Sqm.
5.4	Filter water supply	
5.4.1	Distribution lines 100 mm. Dia. And below	17.90 per Sqm.
5.4.2	Peripheral grid 150mm to 300 mm. Dia. Pipes	13.50 per Sqm.
5.4.3	Unfiltered water supply distribution lines	10.20 per Sqm.
5.5	Storm water drains	29.20 per Sqm.
5.6	Horticulture operations	18.25 per Sqm.
5.7	Street Lighting	
5.7.1	With flourescent lamps	14.10 per Sqm.
5.7.2	With HPMV Lamps	18.75 per Sqm.
5.7.3	With HPSV Lamps	22.65 per Sqm.
	Note: Cost of HT distribution is not included in above rates	

**NOTE:**

1. The rates are per Sqm. And are to be applied on the entire areas of the plot to be developed
2. These rates will supply 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 or bulk services (water supply, sewage disposal e.g.)
  - i) Tubewells, pumps, open wells, treatment plants, extension of lines from source to local bodies, head works at water source etc.
  - ii) Sewage pumps, sewage treatment plants, septic tanks, extension of cut-fall sewer upto point of disposal etc. are not included in these rates. Extra provision depending upon site conditions may be made for these.
4. Breakup of services item 3
  - 3.1 Internal water supply & sanitary installations
  - 3.2 Internal electric installations

**SPECIFICATIONS FOR BUILDINGS - NON-RESIDENTIAL  
AS ON 01.01.1992**

S no	Description	Item No.	Office	Hospital	Schools
1	Foundations	1.1	Bearing capacity 10 tonnes/Sqm.		
		1.2	Type-spread foundation-isolated/ combined		
		1.3	Depth upto 1.2 m. below ground level		
2	Super structure	2.1	RCC framed construction with filler walls in brick work or load bearing construction in brick/ stone masonry with intermediate columns where found necessary		
		2.2	Internal partition in brick masonry		
		2.3	RCC chhajjas, fins, jallis etc.		
3	Doors & Windows	3.1	Frames of 2nd class Indian teakwood or equivalent or T iron frame, pressed steel frame as per CPWD specifications		
		3.2	Door shutters, panelled type in 2nd class teak wood or flush door with commercial ply as per CPWD specifications		
		3.3	Window shutters 2nd class Indian teak wood	Window shutters 2nd class Indian teak ply proof shutters for all doors & windows & iron grills for windows in ground floor shall be provided for which provision for extra rate will be made OR steel windows Anodised aluminium or equivalent	Window shutters 2nd class Indian Teak wood or steel windows
		3.4	Fittings		
4	Flooring	4.1	Main entrance half terrazo tiles, Kotah stone and the like, lavatory blocks & some officers rooms	Main entrance hall terrazo tiles, kota stone & the like. Lavatory blocks corridors and other rooms, except stores weather - maker rooms etc. mosaic flooring with dado upto 7'0" height In corridors & upto sill level in other rooms. The flooring and dado to be limited to 50% in ordinary cement and 50% in white cement.	Main entrance, halls, staircase - lavatory blocks insitu mosaic.
			Mosaic limited upto 25% of total area		

		4.2	Rest of the area ordinary cement concrete	Rest of the area ordinary cement concrete	Rest of the area ordinary cement concrete
5	Roofing	5.1	Filling for drainage lime concrete	Filling for drainage lime concrete	Filling of drainage lime concrete finish with brick tiles.
		5.2	Water-proofing treatment 4 course treatment finished with brick tiles	Water-proofing treatment 4 course treatment finished with brick tiles	Water proofing treatment 4 course treatment finished with brick tiles
6	Finishing	6.1	External water-proofing cement paint	External water-proofing cement paint	External water-proofing cement paint
		6.2	Internal-officers rooms & important rooms such as Committee Rooms dry distemper to be limited upto 25% of the total area.Rest either colour or white wash.Main entrance hall plastic emulsion paint or the like.	Internal dry distemper in doctor's room,operation theatre,other important rooms such as committee rooms,X-Ray room etc.Limited upto 25% of total area.Rest either colour or white wash.Main entrance hall plastic emulsion paint or the like.	Internal entrance hall.Principles room, committee room etc. dry distemper.Rest of the area white or colour wash
		6.3	Doors and windows painting	Doors and windows painting	Doors and windows painting

# SPECIFICATIONS FOR BUILDINGS - RESIDENTIAL

**AS ON 01.01.1992**

Item No.	Type I, II, III & Servant Qtrrs.	Type IV	Type V	Hostel
1.1	Bearing capacity 10 tonnes per Sq.m.	<b>Applicable to all</b> (Note: Specification for type V under revision)		
1.2	Type-spread foundation in RCC isolated/ combined, continuous wall footing with lean concrete.			
1.3	Depth upto 1.2 m. below ground level			
2.1	RCC framed construction with filler walls in brick work or load bearing construction in brick/stone masonry with intermediate columns where found necessary.			
2.2	Internal partition-half brick masonry in cement mortar 1:4			
3.1	Frames 1st class Kail wood or 2nd class deodar wood or mild steel	T iron frames with a) 35mm panelled shutters with first class deodar wood for all rooms	2nd class wood or 1st class deodar wood or mild steel	
3.2	Shutters: a) 1st class Kail wood or 2nd class deodar wood b) Wire gauge shutters for kitchen doors only	b) 35mm panelled shutters with 2nd class deodar wood for bath, WC, kitchen, scooter shed & balcony	2nd class Indian teak wood or commercial ply flush door	
3.3	Fittings: Oxidised iron	c) Aluminium fittings	Anodised aluminium in external doors, internal doors, oxidised iron	Same as for type V
3.4	Peep hole and security chain for external doors only	<b>Applicable to all</b>		
4.1	Mosaic flooring and skirting in 50% area and kotah stone work top in kitchen	a) marble chips flooring with ordinary cement in all rooms, kitchen internal circulation area, store, WC & bath b) Cement concrete flooring with matching skirting in common circulation area, staircase c) Kotah stone slab for kitchen platform	Mosaic flooring in living room, dining, drawing, bath & WC. Rest cement concrete.	Mosaic flooring in entrance hall, staircases, lavatory blocks. Rest cement concrete.



4.2	Mosaic on white glazed dado in WC & bath (90/150 cm)	d) White glazed tiles in WC, bath (90/150 cm height) white glazed tiles dado for 60 cm above work top of		Dado in lavatory blocks upto 2 metres high in mosaic.
5.3	Mud phuska or lime concrete finished with tiles	<b>Applicable to all</b>		
6.1	External colour wash (only servant qrtrs.)			
6.2	<b>EXTERNAL:</b> Water proof cement paint or washed stone grit plaster of exposed brick work (Type I, II & III only)	a) Washed mosaic plaster in ordinary cement for external walls b) Water proof cement paint on roof parapets (inner side), soffit and inner fins of chhajjas etc.		
6.3	<b>INTERNAL:</b> Dry distemper in all rooms and synthetic enamelled paint on wood/ steel work white washing on ceilings (Type I, II & III only)	Dry distemper in drawing and dining space. White wash/colour wash in other rooms including staircase.	Distemping dining and drawing, bedrooms & study room & white washing in rest.	Distemping in entrance hall and white or colour washing in rest of the area.
6.4	Internal white wash (in servant qrtrs.)			

## SCALES OF AMENITIES FOR RESIDENTIAL QUARTERS

REVISED ON 01.01.1992

S. NO.	Description	Type I	Type II	Type III	Type IV	Type V
1	<b>KITCHEN:</b>	<b>Built in fixtures</b>				
	i) Open shelves in tiers not more than 400mm wide along one wall 1" thick	Yes	Yes	Yes	Yes	Yes
	ii) a) sunken floor in kitchen kitchen sink	One	One	One	One	One
	b) fibre glass sink with drain board	One	Same as Type I	Same as Type I	White glazed kitchen sink be provided with drain board of same material as working platform	Same as Type IV
	iii) DADO:					
	a) White glazed tiles for 60 cm. above work top and around sunken floor	Yes	Yes	Yes	-	-
	b) Dado 1-0 high along working platform and upto window sill level around sunk floor	-	-	-	Yes	Yes
	iv) Built in cupboard with shelves & shutters (300mm depth) below window sill level of seeking platform along one wall	-	-	-	One	One
	v) Cooking platform standing.	Yes	Yes *	Yes *	Yes *	Yes *
	<b>NOTE: Unless the habits of the people warrant, they may not be provided in type I quarters.</b>					* depending upon local habit of people
2	<b>OTHER ROOMS:</b>					
	i) Built in cupboard with shelves not exceeding 100 mm in width Cupboard:	One	One shelf & one cupboard	3 nos.	One in living room	One in store
	ii) Built in cupboard with wooden shelves & shutters not exceeding 1100 mm in width	-	One in one bedroom	One in one bedroom	Two in two bedrooms	Three in three bedrooms

iii) 25mm thick shelves (Not more than 400mm wide)	-	-	Yes, in store room if provided)	Yes, in store room if provided)	Yes, in store room if provided) & in servant qtr. along one wall
iv) Storage space above cupboard in bedroom (open)	-	One	One	One	One
v) Judge eye in front door	-	-	One	One	One
vi) Curtain rods	All rooms	All rooms	All rooms	Yes, same as type III	Yes with pelmets
vii) Set of pegs	In bath & bedroom	In bath & bedroom	In bathroom	In bathroom	In bathroom
viii) Coal box	Yes	-	-	-	-
ix) Curtain brackets	Yes	Yes	-	-	-

### REVISED SCALES OF SANITARY FITTINGS FOR GENERAL POOL RESIDENTIAL QUARTERS

S. NO.	Description	Type I	Type II	Type III	Type IV	Type V
1	Indian type WC with overhead flushing	One	One	One	One	1+1 (for servant qtr.
2	European type WC with high level flushing cistern	-	-	-	One	One
3	Wash basin with one tap each	One (550x450mm)	One (550x450mm)	One (550x450mm)	One (18"x14" size) 450mm x 400mm	Two (22"x16" size) 550x 400mm
4	Tap (kitchen, bathroom & WC)	Three	Three	3+1 (for sink)	3+1 (for sink)	5+2 ( for servant qtr. One for inner fittings)
5	Showers	-	One	One	One	Two
6	Towel rail	One	One	One	One	(One towel rail outside near the wash basin)
7	Mirror	One	One	One		One
8	Glass shelf 24"x5" or niche depending upon thickness of wall where constructed	-	-	-	One	Two
9	Soap rack niche (in WC/bath)	One	One	One	One	One
10	Storage tank	One	One	One	One	One
11	Niche with kotah stone sill in bath room	One	One	One	-	-

## REVISED SCALE OF ELECTRICAL FITTINGS FOR GENERAL POOL RESIDENTIAL QUARTERS

S. NO.	Description	Type I	Type II	Type III	Type IV	Type V
1	Power points	Three	Three	Three	Three (One in kitchen, one in drawing & one in dining room)	Four (one in kitchen, drawing, dining & bedroom)
2	Fans (Ceiling)	Two fans	Three fans	Four fans	a) five points with five fans b) Exhaust fan in kitchen	Seven points with five fans
3	Door call bell (Mini Buzzer)	One	One	One	One	One
4	Power meter	One	One	One	One	One
5	Electrical meter	One	One	One	One	One
6	Type of wiring	Recessed conduit wiring	Same as for Type I	Same as for Type I	Concealed conduit pipe	Concealed conduit pipe
7	Telephone connections	-	-	-	One	One
8	Light/Fans points including one call bell	Seventeen, one bell	Twenty, one bell	Twenty three, one bell	Twelve	Seventeen (to be finally approved after detailed examination by CE Electrical) for reduced plinth area
9	Plug points	-	Two	Four fans	Five	Seven
10	Flourescent light fittings excluding tube & starter	Two fans	Two	Three	Four (One each in bedrooms, drawing room & dining room)	-
11	Distribution board with MCBs	-				-

**CPWD CONSTRUCTION COST INDEX CALCULATION EFFECTIVE  
FROM 01.01.1992**

Cost Index of Place X based on Plinth Area Rate as on 01.01.1992

Place	DELHI	New Date		New Index	
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S.no.	Description	Unit	Rate as on 1.1.92	Weigh- tage	Rate as on New Date	Cost Index as on New Date	% Contri- bution
1	Bricks	1000 no	800.00	16.00			
2	Sand	Cum	146.60	4.00			
	Coarse sand 66.67%						
	Fine sand 33.33%						
3	Cement OPC	Qtl	213.28	19.00			
4	Aggregate	Cum	185.00	4.50			
	20mm size 50%						
	10mm size 50%						
5	Timber	Cum	12334.00	9.50			
	II Class Teak wood 25%						
	Country hard wood 75%						
6	Steel	Qtl	1342.50	23.50			
	8-10mm Tor Steel 50%						
	12-16mm Tor Steel 50%						
7	Mason	Each	55.71	8.00			
	I Class Mason 50%						
	II Class Mason 50%						
8	Carpenter	Each	55.71	3.50			
	I Class Carpenter 50%						
	II Class Carpenter 50%						
9	Beldar	Each	34.30	12.00			
	Male labour 50%						
	Female labour 50%						
				100.00			

## APPENDIX 1

# CENTRAL PUBLIC WORKS DEPARTMENT (CPWD) PLINTH AREA RATES OF VARIOUS TYPE OF CONSTRUCTIONS AS ON OCTOBER 1, 1976 WITH SPECIFICATIONS

## MEMORANDUM

Plinth area rates as applicable on Oct. 1, 1976 were circulated under Memo No. SSW(NDZ)/SWV/PW-674/165 dated March 7, 1977 along with specification and proforma for cost index. A re-edited version of the same was circulated under Memo no. SSW(NDS)/SWV/674/763 dated Nov. 21, 1977. Some changes in plinth area rates were circulated under Memo no. SSW/(NDS)/SWV/674/618 dated Sept. 1, 1978. Rates for development of areas were also revised under Memo No. SSW(NDZ)/SWV/674/731 dated Oct. 16, 1978.

Some further changes have been approved in view of the changed classification of residential quarters and reduction in plinth area. Circular no. SSW(NDZ)/SWV/PW-674/165 dated March 7, 1977 has been updated and hereby issued.

**Annexure I** : The updated version of the plinth area rates with base on Oct. 1, 1976.

**Annexure II** : The broad specifications and scale of amenities sanitary fittings for which the plinth area rates apply.

**Annexure III** : Proforma for calculating cost index.

**Annexure IV** : Copy of Memo no. 29/21/58/-WI of 10/58 indicating the rules for working out the plinth area from plans which shall be observed while adopting the plinth area rates given in Annexure I.

Relevant cost indexes with reference to base 100 on Oct. 1, 1976 would continue to be applicable on the plinth area rates.

*Encl:* Standard plinth area rates schedule Oct. 1, 1976.

[No SSW(NDZ) SWI/ASW/97/1377, New Delhi, the 7th July, 1979]

PLINTH AREA RATES AS ON OCT. 1, 1976

ANNEXURE I

Sl. No.	Description	(Rates in rupees per square metre)					
		Offices and Colleges	Hospitals	Schools	Hostels	Residential	
						Type A,B, C,D, & Servant's Quarters	Type E and above
1	2	3	4	5	6	7	8
<b>1. R.C.C. Framed Structures</b>							
1.1	R.C.C. framed structure up to 6 storeys.						
1.1.1.	Floor height 3.35 m (11'-0").	400	400	365	-	-	
1.1.2	Floor height 2.9 m (9'-6").	-	-	-	375	385	
1.2	Extra for—						
1.2.1	Every additional storey over 6 storeys up to 9 storeys.	7	7	7	7	7	
1.2.2	Every additional storey over 9 storeys and up to 12 storeys.	10	10	10	10	10	
1.2.3	Every 0.30 m additional height of floor above normal floor height 3.35/2.9.	17	17	17	17	17	
1.2.4	Every 0.30 m higher plinth over normal plinth height of 0.60 m (2'-0") (on ground floor area only).	17	17	17	17	17	
1.2.5	Every 0.30 m deeper foundations over normal plinth depth of 1.20 (4'-0") (on ground floor area only).	17	17	17	17	17	
1.2.6	Making stronger foundations to take load of one additional floor at a later date (on area of additional floor at a later date).	50	50	50	50	50	
1.2.7	Strip foundations in poor soil having bearing capacity less than 10 tonnes/sq.m.	15	15	15	15	15	
1.2.8	Resisting earthquake forces.	34	34	34	34	34	
1.2.9	R.C.C. raft foundations.	60	60	60	60	60	
1.2.10	Pile foundations up to a depth of 15 m (50' - 0")	84	84	84	84	84	
1.2.11	Stronger structural members to take heavy loads above 500 kg/sq. m. upto 1000 kg/sqm.	26	26	26	26	26	
1.2.12	Larger modules over 35 sq. m. (400 sq. ft.)	30	30	30	30	30	
1.2.13	Termite proof treatment (on ground floor area only)	9	9	9	9	9	
1.2.14	Fire fighting.	25	25	25	25	25	
1.2.15	O.P.D. operation theatres, etc.	-	65	-	-	-	
1.3	Basement floor, floor height 3.35 m (11'-0") with normal provision of waterproofing treatment with bitumenous felt.	550	550	-	-	-	
1.4	Extra for basements with—						
1.4.1	Mastic asphalt waterproofing treatment.	60	60	-	-	-	
1.4.2	Every 0.30 m additional height above normal height of 3.35 m (11'-0").	67	67	-	-	-	
1.4.3	Reduction for every 0.30 m less height of basement than normal height of 3.35 m (11'-0").	(-) 38	(-) 38	-	-	-	
<b>2. Load Bearing Construction</b>							
2.1	Floor height 3.35 m (11'-0")						
2.1.1	Single storeyed.						
2.1.2	Double storeyed.	355	355	310	-	-	
2.1.3	Three storeyed.	340	340	290	-	-	
2.1.4	Four storeyed.	355	355	310	-	-	
		375	375	325	-	-	

CPWD Plinth Area Rates of various type of Constructions as on October 1, 1976 with Specifications

1	2	3	4	5	6	7	8
2.2	Floor height 2.9 m (9'-6")						
2.2.1	Single storeyed.	-	-	-	315	275	325
2.2.2	Double storeyed.	-	-	-	300	260	310
2.2.3	Three storeyed.	-	-	-	315	275	325
2.2.4	Four storeyed.	-	-	-	330	290	340
2.3	Scooter and cycle sheds.	-	-	-	-	250	250
2.4	Garages.	-	-	-	-	235	235
2.5	Extra for—						
2.5.1	Every 0.30 m additional height of floor above normal height 3.35/2.9 m.	10	10	10	10	10	10
2.5.2	Every 0.30 m higher plinth over normal plinth height of 0.60 m (2'-0") on ground area only.	10	10	10	10	10	10
2.5.3	Every 0.30 m deeper foundations over normal depth of 1.20 m (4'-0") on ground floor area only.	12	12	12	12	12	12
2.5.4	Making stronger foundations to take load of one additional floor at a later date (on area of additional floor at a later date).	25	25	25	25	25	25
2.5.5	Foundations in poor soils.						
2.5.5.1	Foundations on poor soil having bearing capacity less than 10 tonnes/sq.m.	15	15	15	15	15	15
2.5.5.2	Foundations requiring under-reamed piles 6 m. long.	68	68	68	68	68	68
2.5.6	Resisting earthquake forces.						
2.5.6.1	In Zone V.	25	25	25	25	25	25
2.5.6.2	More than two-storeyed building in Zone III & IV.						
	(a) With a design seismic coefficient greater than 0.06.	12.50	12.50	12.50	12.50	12.50	12.50
	(b) Design seismic coefficient equal to or less than 0.06.	12.50	12.50	12.50	1.50*	1.50*	1.50*
					(*Extra cost covers full bearing of RCC slab only)		
2.5.6.3	Zone I & II and less than 3 storeyed buildings in Zone III & IV.	-	-	-	-	-	-
2.5.7	R.C.C raft foundations.	60	60	60	60	60	60
2.5.8	Pile foundations up to a depth of 15 m.	84	84	84	84	84	84
2.5.9	Stronger structural members to take heavy loads above 500 kg./sq. m. up to 1000 kg./sq. m.	26	26	26	26	26	26
2.5.10	Larger modules over 3.35 sq. m. (400 sq. ft.)	30	30	30	30	30	30
2.5.11	Termite proof treatment (on ground floor area only).	9	9	9	9	9	9
2.5.12	Fire fighting.	25	25	25	25	25	25
2.5.13	O.P.D., operation theatres, etc.	-	65	-	-	-	-

Note: Rates for items are applicable on entire plinth area except for items 1.2.4, 1.2.5, 1.2.6, 1.2.13, 2.5.2, 2.5.3, 2.5.4, 2.5.11.



Sl. No.	Description	Offices & Colleges	Hospitals	Schools	Hostels	Residential				
						A	B	C	D	E
1	2	3	4	5	6	7	8	9	10	11

Vide SSW(NDZ)/SWV/674/618 dated Sept. 1, 1978

### 3. Services

3.1	Internal water supply and sanitary installations.	4%	10%	5%	15% (with attached toilets) 10% with common (toilets)	2000/-	2100/-	2500/-	2950/-	6000/-
3.2	External service connections.	5%	5%	5%	5%	5%	5%	5%	5%	5%
3.3	Internal electric installations	12.5%	12.5%	12.5%	12.5%	1250/-	1350/-	2000/-	3000/-	5700/-
3.4	Internal electric installations for laboratories of schools.	-	-	15% of bldg. cost	-	-	-	-	-	-
3.5	Internal electric installation for terminal building and other allied structures in airports.	15% of bldg. cost	-	-	-	-	-	-	-	-
3.6	Extra for—									
3.6.1	Power wiring and plugs.	4%	4%	-	-	-	-	-	-	-
3.6.2	Central Call bell system.	1%	-	-	-	-	-	-	-	-
3.6.3	Lightening conductors:									
	(a) Upto 4 storeyed buildings.	0.5%	0.5%	0.5%	-	-	-	-	-	-
	(b) 5 to 8 storeyed buildings.	0.33%	0.33%	0.33%	-	-	-	-	-	-
	(c) Beyond 8 storeyed buildings.	0.25%	0.25%	0.25%	-	-	-	-	-	-
3.6.4	Telephone conduits.	0.5%	0.5%	0.5%	-	-	-	-	-	-
3.7	Passenger Lifts		<i>Unit</i>	<i>8-Passenger Capacity</i>	<i>13-Passenger Capacity</i>	<i>16-Passenger Capacity</i>	<i>20-Passenger Capacity</i>			
3.7.1	Lifts for 8 floors									
	(a) Speed 0.7 m/second	Each		1,25,000	1,40,000	-	-			
	(b) Speed 1.0 m/second	Each		1,50,000	1,60,000	1,90,000		2,20,000		
	(c) Speed 1.5 m/second	Each		1,80,000	2,10,000	2,30,000		2,50,000		
	(d) Speed 2.5 m/second	Each		2,70,000	3,00,000	3,50,000		4,00,000		
	(e) Add/deduct for each floor more/less than 8 floors.	Each		10,000	12,000	15,000		20,000		
3.8	Goods lift			<i>Upto 4 floors</i>						
3.8.1	Upto two tonnes.	Each		1,40,000						
3.8.2	More than two tonnes but up to 4 tonnes.	Each		2,20,000				8,000		
								12,000		

Note: % means percentage of building cost.

CPWD Plinth Area Rates of various type of Constructions as on October 1, 1976 with Specifications

S. No.	Description	Rate in rupees
<b>4. Water tanks</b>		
4.1	Overhead tank without independent staging.	0.65 per litre
4.2	Overhead tank up to staging height 20 m.	1.10 per litre
4.3	Overhead tank with staging height between 20 and 30 m.	1.25 per litre
4.4	Overhead tank with staging height between 30 and 40 m.	1.50 per litre
4.5	Underground sump	0.65 per litre
<b>5. Development of site</b>		
5.1	Levelling.	1.50 per square metre
5.2	Internal roads and paths.	4.65 per square metre
5.3	Sewers.	3.35 per square metre
5.4	Filtered water supply	
5.4.1	Distribution lines 100 mm dia and Less.	2.45 per square metre.
5.4.2	Peripheral grid 150 mm to 300 mm dia pipes.	1.85 per square metre
5.4.3	Unfiltered water supply distribution lines.	1.40 per square metre
5.5	Storm water drains	5.00 per square metre
5.6	Horticulture operation.	2.50 per square metre
5.7	Street lighting.	
5.7.1	With incandescent lamps.	0.35 per square metre
5.7.2	With incandescent lamps and with high pressure mercury vapour lamps/ flourescent lamps in important places.	0.80 per square metre
5.7.3	Completely with high pressure sodium vapour lamps or flourescent lamp.	1.30 per square metre
5.8	H.T. Sub-station and L.T. distribution (to be provided in areas where expected electric load is such that electric company will not give L.T. supply).	2.60 per square metre

**Note:**

1. The rates are per square metre and are to be applied on the entire area of the 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 labour involving filling, cutting or services from large distances, then additional provision should be made.
3. Cost of bulk services (water supply, sewage disposal, etc.)
  - (i) Tubewells, pumps, open walls, treatment plant, extension of lines from source of local bodies head works at water source, etc.
  - (ii) 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 condition may be made for these.

## SPECIFICATIONS FOR BUILDINGS

### I. NON-RESIDENTIAL

S.No.	Description	Item No.	Office	Hospital	School
1.	<b>Foundations</b>	1.1	Bearing capacity 10 tonnes/square metre.		
		1.2	Type—spread foundations-isolated/combined.		
		1.3	Depth—up to 1.2 m below ground level.		
2.	<b>Superstructure</b>	2.1	R.C.C. framed construction with filler walls in brick work or load bearing construction in brick/stone masonry with intermediate columns where found necessary.		
		2.2	Internal partition in brick masonry.		
		2.3	R.C.C. Chajjas, fins, jalis, etc.		
3.	<b>Doors and windows</b>	3.1	Frames of 2nd class Indian teakwood or equivalent.		
		3.2	Door shutters: Panelled type in 2nd class teakwood or flush door with commercial ply.		
		3.3	Window shutters 2nd class Indian teakwood	Window shutters 2nd class Indian teakwood. Flyproof shutters for all doors & windows and iron grills for windows in ground floor shall be provided for which provision for extra rate will be made.	Window shutters 2nd class Indian teakwood.
			or Steel windows	or Steel windows.	or Steel windows.
3.4	Fittings.	Anodised aluminium or equivalent.			
4.	<b>Flooring</b>	4.1	Main entrance hall terrazo tiles, kotah stone and the like Lavatory blocks and corridors & some officers room. Mosaic limited up to 25% of total area.	Main entrance hall terrazo tiles, kotah stone and the like. Lavatory blocks, corridors & other rooms except stores, weather maker rooms, etc. mosaic flooring with dado up to 7'-0" height in corridors and up to sill level in other rooms. The flooring and dado to be limited to 50% in ordinary cement and 50% in white cement.	Main entrance halls, staircases, lavatory block in-situ mosaic.
		4.2	Rest of the area ordinary cement concrete	Rest of the area ordinary cement concrete	Rest of the area ordinary cement concrete
5.	<b>Roofing</b>	5.1	Insulation for air-conditioning foam concrete.	Insulation for air-conditioning foam concrete.	—
		5.2	Filling for drainage lime concrete	Filling for drainage lime concrete.	Filling for drainage lime concrete finished with brick tiles.
		5.3	Waterproofing treatment 4 course treatment finished with brick tiles.	Waterproofing treatment 4 course finished with brick tiles.	Waterproofing treatment 4 course treatment finished with brick tiles.
6.	<b>Finishing</b>	6.1	External—water proofing cement paint.	External—water proofing cement paint.	External—waterproofing cement paint.
		6.2	Internal—Officers rooms and important rooms such as committee rooms dry distemper to be limited up to 25% of the total area. Rest either colour or white wash. Main entrance hall plastic emulsion paint or the like.	Internal—dry distemper in doctors' room, operation theatre and other important rooms, X-ray rooms, etc. limited upto 25% of total area. Rest either colour or white wash. Main entrance hall, O.P.D., plastic emulsion paint or the like.	Internal—entrance hall, Principals room, Professors room, committee room etc., dry distemper. Rest of the area white or colour wash.
		6.3	Doors & windows -Painting	Doors & windows -Painting	Doors & windows -Painting.

## II. RESIDENTIAL

Item No.	Type A, B, C, D & Servants quarters	Type E	Hostels
1.1	Bearing capacity—10 tonnes per square metre.		
1.2	Type—spread foundations in R.C.C. isolated/combined, continuous wall footing with lean concrete.		
1.3	Depth—up to 1.2 m below ground level.		
2.1	R.C.C. framed construction with filler walls in brick work or load bearing construction in brick/stone masonry with intermediate columns where found necessary.		
2.2	Internal partition—half brick masonry in cement mortar 1:4.		
3.1	Frames: 1st class kail wood or 2nd class deodar wood, or mild steel.	2nd class teak-wood or 1st class deodar wood or mild steel.	
3.2	Shutters: 1st class kail wood or 2nd class deodar wood.	2nd class Indian teak wood or commercial ply flush door.	
3.3	Fittings: Oxidised iron	Anodised aluminium in external doors, internal doors oxidised iron.	Same as for type E.
4.1	Cement concrete flooring 1 : 2 : 4 30 mm thick (40 mm in sleeping balcony). Specification for flooring of type D is same as type E.	Mosaic flooring in living room, dining drawing, bath & W.C. Rest cement concrete.	Mosaic flooring in the entrance halls, staircase lavatory blocks. Rest cement concrete.
	Dado shall be 15 cm high in W.C's and 90 cm high in bath-room except in the shower portion where it shall be up to 150 cm high.		Dado in lavatory blocks up to 2 m high mosaic.
	In types A, B, C it shall be in cement plaster and in types D & E in mosaic.		
5.1	Mud phuska or like concrete finished with tiles—applicable to all.		
6.1	External—colour wash.	External—colour wash	Colour wash.
6.2	Internal—white wash	Internal—distempering in dining & drawing bedrooms & study room and white washing in rest.	Distempering in entrance hall & white or colour washing in rest of the areas.

### III. REVISED SCALES OF AMENITIES FOR GENERAL POOL RESIDENTIAL QUARTERS

S.No.	Description	Type A	Type B	Type C	Type D	Type E
<b>Built in fixtures</b>						
<b>1. Kitchen</b>						
(i)	Open shelves in tiers not more than 100 mm wide along one wall 1" thick.	Yes	Yes	Yes	Yes	Yes
(ii)	Sunken floors (in Kitchen)	One	One	One In addition a white glazed kitchen sink be provided with drain board of same material as working platform.	One Same as for type C	One Same as for type D
(iii)	Dado 1'-0" high along working platform and up to window sill level around sink floors.	Yes	Yes	Yes	Yes	Yes
(iv)	Built in cupboard with shelves & shutters (300 mm depth) below window sill level of cooking platform along one wall.	-	-	-	One	One
(v)	Cooking platform standing.	Yes	Yes	Yes	Yes	Yes
Depending upon local habit of people.						
<b>Note:</b> Unless the habits of the people warrant they may not be provided in type I quarters.						
<b>2. Other rooms</b>						
(i)	Built in open cupboard with shelves not exceeding 1100 mm in width.	One in living room.	One in living room.	One in living room.	One in living room.	One in store room.
(ii)	Built in cupboard with wooden shelves & shutters not exceeding 1100 mm in width.	-	One in one bed-room	One in one bed-room.	Two in two bed-rooms.	Three in three bed-rooms
(iii)	25 mm thick shelves. (not more than 400 mm wide).	-	-	Yes in store-room, if provided	Yes in store-room, if provided	Yes in store-room & in servants' quarters along one wall
(iv)	Storage space above cupboard in bedroom (open).	-	-	One	One	One
(v)	Judes eye in front door.	-	-	-	-	-
(vi)	Curtain roads.	-	-	One Yes with pelmets for drawing dining only & without pelmets for others.	One Yes same as type C.	One Yes with pelmets
(vii)	Set of pegs.	In bath & bed room.	In bath & bed room.	In bathroom.	In bathroom.	In bathroom.
(viii)	Coal box.	Yes	-	-	-	-
(ix)	Curtain brackets	Yes	Yes	-	-	-

**REVISED SCALES OF SANITARY FITTINGS IN GENERAL POOL RESIDENTIAL QUARTERS**

S.No.	Description	Type A	Type B	Type C	Type D	Type E
1.	Indian type W.C. with overhead flushing.	One	One	One	One 1+1 (for servants quarters)	
2.	European type W.C. with high level flushing cistern.	-	-	-	One	One
3.	Washbasin with one tap each.	-	-	One (15" x 12" size) 450 mm x 300 mm	One (18" x 14" size) 550 mm x 400 mm	One (18" x 14" size) 550 mm x 400 mm
4.	Tap (kitchen, bath & W.C.).	Three	Three	3+1 (for sink)	3+1 (for sink)	5+2 (for servants' quarters) One for inner fitting.
5.	Showers.	-	One	One	One	Two
6.	Towel rail.	-	-	-	One	One towel ring outside near the wash-basin.
7.	Mirror.	-	-	One	One	Two
8.	Glass shelf 24" x 5" or nitch depending upon thickness of wall where constructed.	-	-	-	One	Two
9.	Soap rack (nitch in W.C. Bath).	One	One	One	One	One
10.	Storage tank.	One	One	One	One	One

**IV. REVISED SCALES OF ELECTRICAL FITTINGS FOR GENERAL POOL RESIDENTIAL QUARTERS**

S.No.	Description	Type A	Type B	Type C	Type D	Type E	Remarks
<b>Electrical</b>							
1.	Power points.	-	One	One in kitchen, one in living room.	Three (one in kitchen, one in drawing & one in dining room).	Four (one each in kitchen drawing, dining and bedroom).	
2.	Fans (ceiling).	One point with one fan.	Two points with one fan.	Three points with three fans.	Five points with four fans.	Seven points with five fans.	
3.	Door call bell (mini bazar).	-	-	One	One	One	
4.	Power meter.	-	One	One	One	One	
5.	Electrical meter.	One	One	One	One	One	
6.	Type of wiring.	Surface wiring within the cost limitation of 10%.	Same as for type A	Same as for Type A.	Concealed conduit pipe.	Concealed conduit pipe.	
7.	Telephone connection.	-	-	-	One	One	
8.	Light points.	4	7	10	12	17	
9.	Plug points.	-	2	4	5	7	

**PROFORMA FOR CALCULATING COST INDEX**

S. No.	Description	Unit	Rate at New Delhi corresponding to base 100	Rate at the station at the time of revising cost index	Percentage Increase	Weightage	Cost index
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>Materials</b>							
1.	Bricks	1000 number	106.15			16	
2.	Sand	cu. m.	21.92			5	
3.	Cement	Quintal	35.28			21	
4.	Aggregate	cu. m.	27.10			6.5	
5.	Timber	cu. m.	2021.00			18	
6.	Mild Steel	Quintal	183.20			10	
<b>Labour</b>							
7.	Mason	Each	9.89			8.5	
8.	Carpenter	Each	9.89			4	
9.	Coolie/Beldar	Each	4.11			11	

**RULES FOR WORKING OUT PLINTH AREA FROM PLANS**

CPWD MEMO NO. 29/21/58-WI, NEW DELHI, DATED OCTOBER, 1958

See in Chapter 1

**DIRECTOR GENERAL'S ORDER**

**(SUB: RULES FOR WORKING OUT PLINTH AREAS FROM PLANS)**