

## **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

(Rates in rupees per square metre)

Sl. No.	Description	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.	355	355	310	-	-	
2.1.2	Double storeyed.	340	340	290	-	-	
2.1.3	Three storeyed.	355	355	310	-	-	
2.1.4	Four storeyed.	375	375	325	-	-	

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	Unit	8-Passenger Capacity	13-Passenger Capacity	16-Passenger Capacity	20-Passenger Capacity				
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		Upto 4 floors		Extra for every additional floor above 4 floors					
3.8.1	Upto two tonnes.	Each	1,40,000		8,000					
3.8.2	More than two tonnes but up to 4 tonnes.	Each	2,20,000		12,000					

Note: % means percentage of building cost.

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:**

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

**Annexure II**

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 or Steel windows	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. or Steel windows.	Window shutters 2nd class Indian teakwood. 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
1. Kitchen				Built in fixtures		
(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.						
2. Other rooms						
(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.	-	-	One	One	One
(vi)	Curtain roads.	-	-	Yes with pel-mets for drawing dining only & without pel-mets for others.	Yes same as type C.	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

## ANNEXURE III

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	