

SCALE OF AMENITIES FOR GENERAL POOL ACCOMMODATION

Item No.	Item	Type I	Type II	Type III	Type IV	Type V A1
1	Kitchen Shelves in tiers not more than 400mm wide along one wall 1" thick	Yes	Yes	Yes	Yes	Same as Type I
(i)	Same as Type I	Yes	Yes	Yes	Yes	Same as Type I
(ii)	Stainless steel sink without drain board	Yes	Yes	Yes	Yes	Same as Type I
(iii)	Kitchen sink 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 above kitchen platform above and along the work top and around and below kitchen sink excluding areas where boards in cupboards fixed. Yes with 2 drawers
(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 Cooking platform standing	Yes	Yes	Yes	Yes	Yes
2(i)	Wardrobes 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) 7'-00" 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	All rooms	Drapery rods
(v)	Set of Pegs	In bath and bed rooms	In bath and bed rooms	In bath and bed rooms	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	Type VI
1.	Indian W.C. Pan with dual flushing cistern	One WC Pan with low level PVC Flushing Cistern	One Same as Type I	One same as Type I	One same as Type I	One with low level dual PVC flushing cistern	One (syphonic type) with matching low level cistern
2.	European type W.C. with low level dual flushing cistern						
2(a)	Water Jet with low level European W.C.						
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	Three CP Brass (CP brass) 12 (1 PTMT + 11 CP brass)
4.	Tap (kitchen bath & W.C.) C.P. Brass/ PTMT bib cock	4 PTMT	4 PTMT	4 C.P. brass	5 C.P. 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						
10.	Storage tank	500 ltr.	500 ltr.	500 ltr.	750 ltr.	1000 ltr. - 500 ltr. for servant quarters	Three
11.	Nitch with Kota stone sill in bath room	One	One	One	Two	3 - 1 for servant quarters	
12.	Plumbing for water purifier and Geyser	Yes	Yes	Yes	Yes	Yes	Yes

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

14 SPECIFICATIONS FOR ELECTRICAL INSTALLATION IN RESIDENTIAL QUARTER

PUNTH AREA R

Item No.	Description	Type I	Type II	Type III	Type IV	Type V (excluding servant quarter & garage)	Type I (excluding servant quarter & garage)	Serv Qtrs Gara	
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.	Ligh/Fans/Call bell/SA 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	1	1	1	-	-	-	1	
	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	1	

SPECIFICATION FOR NON - RESIDENTIAL BUILDING

ITEM NO.	DESCRIPTION	SPECIFICATION
1.0	FOUNDATION	As per structural design based on soil investigation.
2.0	SUPER STRUCTURE	
2.1	Structure	R.C.C. framed construction with filler walls with fly ash bricks brick work or load bearing construction in fly ash brick/brick stone masonry with intermediate columns as per design.
2.2	Internal partitions	Light weight auto caved aerated concrete blocks.
2.2.1		Gypsum Blocks.
2.2.2		Non asbestos double skin cement boards.
2.2.3		Fly ash bricks.
3.0	DOORS & WINDOWS	
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 Aluminum 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 Aluminum 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 aluminum frames & shutters for windows.
3.4	Fittings	Anodized aluminum/stainless steel or equivalent.
3.5	Fire check door	As per fire safety specifications.
4.0	FLOORING	
4.1	Main entrance hall	Pre polished granite flooring.
4.2	Corridors	Man 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	STAIRCASE	
5.1	Internal staircases	Single piece Granite or marble flooring in treads & risers with dado of matching permanent finish specifications.
5.2	Fire escape staircase	Single piece Kota stone flooring in treads & risers with dado of matching permanent finish specifications.
6.0	RAILING	Stainless steel railings.
7.0	TOILETS	Granite flooring. Glazed tiles of size not less than 300 x 450 mm in dado. Granite counters. Stainless steel sinks. Mirrors with moulded PVC frame. FRP PVC doors with frames.

8.0	ROOFING	
8.1	Roof treatment	Coba treatment over deck insulation with Puf slab
8.2	False ceiling	False ceiling in office area & toilets to cover the services as per design requirer
9.	FINISHING	
9.1	External	Dry stone cladding, washed grit plaster, water proof weather coat paints, struc glazing, ACP cladding conforming to Energy Conservation Building Code.
9.2	Internal	Gypsum plaster in dry areas Cement plaster in wet areas Dry distemper in service area & basement 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	PROVISION FOR BARRIER	Ramps, toilets for physically challenged, chequered tiles use of Braille signals & lifts etc GRC (Glass reinforced concrete) tiles in Ramp area.
11.0	LANDSCAPING	10% of the building cost will be kept in Preliminary Estimate for murals and Landscape related construction v/c pavement paving.

Central Public Works Department

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

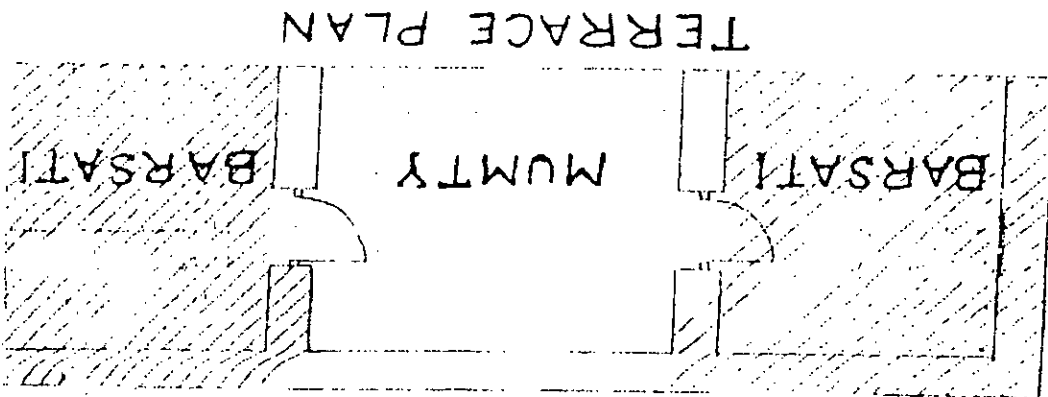
Dated: New Delhi, Oct. 1983

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

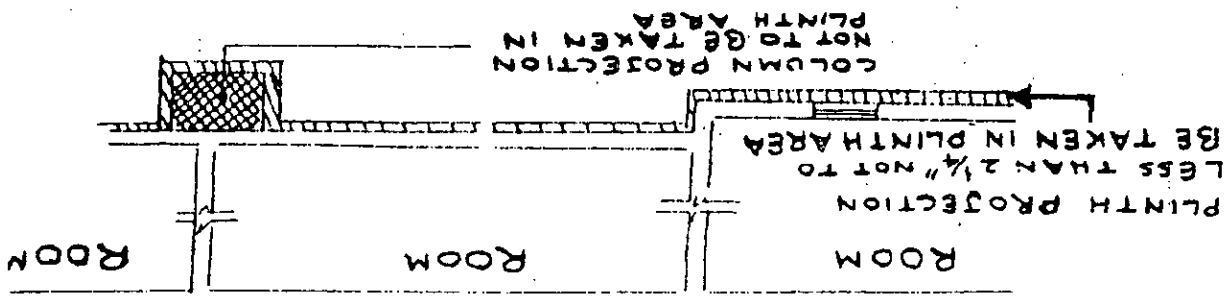
- (a) The total plinth area of a building shall be the sum total of the plinth area at every floor including the basement, if any.
- (b) Internal sanitary shafts shall not be included in the plinth area in the case of a residential building at any floor level.
- (c) In case of non-residential building 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 mummy at terrace level shall not be included in the plinth area. If a Barsati is provided jointly with mummy then the area of the Barsati excluding mummy at the terrace level shall be included in the plinth area as shown below in the hatched area.



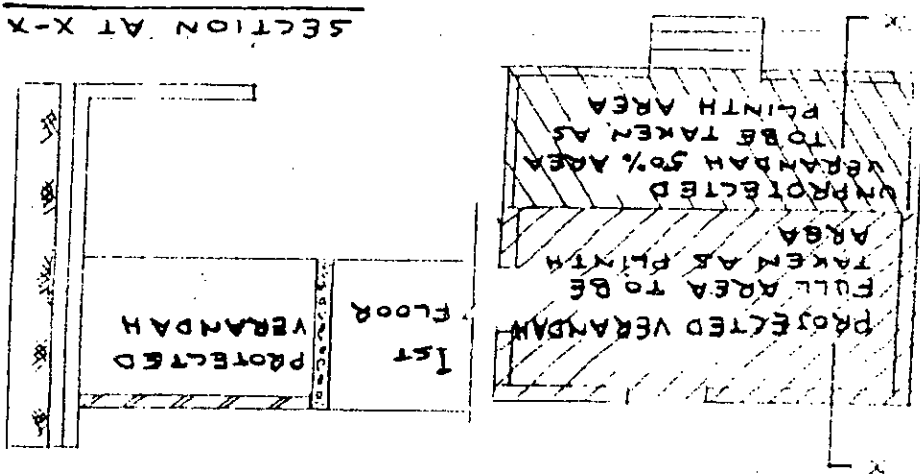
- (e) Towers, turrets domes projecting above the terrace shall not be included in the plinth area at terrace level, but shall be allowed for separately for costing purposes.

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 1/2". 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.

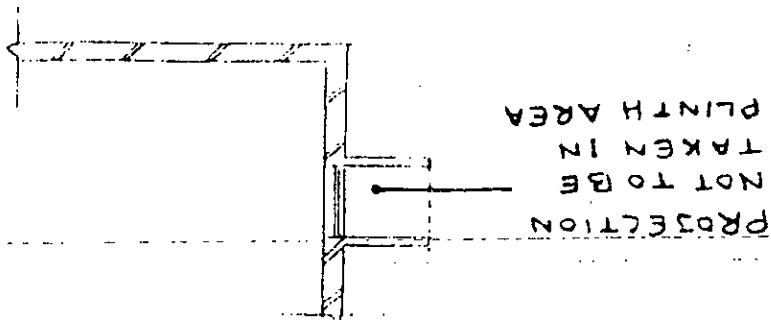


In case open verandah with parapets are protected at the ground floor projecting out of the building full area shall be taken up to the outer line of the external verandah lintel and only 50% of area shall be taken for the unprotected verandah. Open platform without parapets and terraces at ground floor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



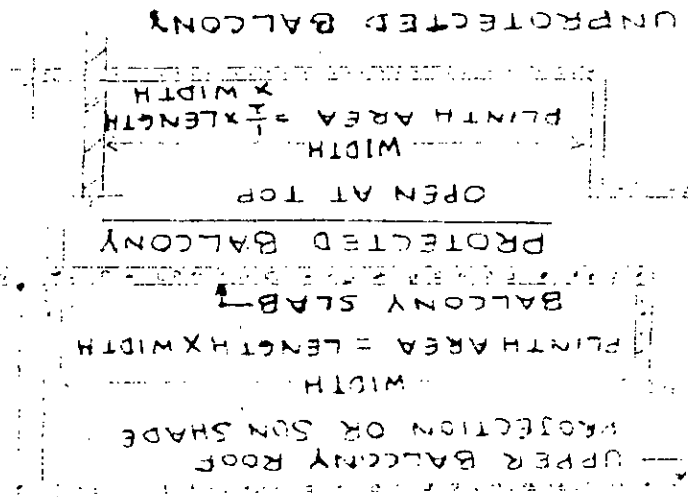
PLINTH AREA AT FIRST AND HIGHER FLOORS

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 included in plinth area. See illustration below :



BOX, CHAJJAS, LOUVERS ETC. (SECTION)

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

- (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

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

(ET. M.K.KAVCHAN)
 SUPPLD. ENGINEER (S&S)
 (P.W.D. NIRMAL BHAWAN
 NEW DELHI

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

(ET. RAM DIYA)
 ASST. ENGINEER-III
 S&S-II CPWD
 NIRMAL BHAWAN, N.D.

PROFORMA FOR CALCULATION OF COST INI

S.No.	Description	Unit	Rate as on 1.10.2012 in Rs.	Weights
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)	QTL	4669.00	19.50
4	AGGREGATE 20 MM SIZE	CUM	1350.00	6.50
5	SAND(COARSE SAND)	CLM	1293.00	3.00
6	FLOORING ITEMS (a) MOSAIC TILES (b) CERAMIC TILES (c) KOTA STONE (d) GRANITE STONE	SQM	467.00	3.00
7	PAINTS (a) SYNTHETIC ENAMEL PAINT (b) O.B.D PAINT (c) PLASTIC EMULSION PAINT	LITRE	151.00	3.00
8	PLY AND COMM. WOOD (i) 12 MM THICK PARTICLE BOARD (ii) STEEL WINDOW (iii) ALUMINIUM WINDOW	SQM	1476.00	5.00
9	PIPES (i) 15 MM GI PIPE (ii) 100MM SCI PIPES (iii) 20 MM Black Conduit	MTR.	300.00	2.50
10	LAMPS & FANS (i) CEILING FANS 48" (ii) 1-20 M.FLUORESCENT TUBE WITH FITTINGS	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 (a) 1.5 SQMM (b) 4.0 SQMM	100 MTR	1790.00	4.00
13	LABOUR (i) SKILLED (ii) UNSKILLED	EACH	309.38	25.00

SPECIFICATIONS FOR RESIDENTIAL BUILDING

Item no.	Item	Type I, II, III & Servant Qtrs.	Type-IV
11	Foundation	Bearing capacity 10 tonnes per sq. metre.	Type - spread foundation in RCC isolated combined, continuous wall footing with lean concrete.
12			
13	Super structure	Depth upto 1.2 metres below ground level	RCC framed construction with filler walls in brick work or load bearing construction in brick/stone masonry with intermediate columns where found necessary.
21			
22		Internal partition - half brick masonry in cement mortar 1:4	

S.No.	Item	Type I, II, III & Servant Qtrs.	Type IV
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/propylene windows
3.1.1	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 single rebate/factory manufactured precast RCC frames.
3.1.2	Door	T-Iron/Pressed steel/Pre-cast R.C.C. frames.	
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. Shutter to match with frame.
3.2.1	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. Shutter to match with frame.
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.	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.
3.2.3	W.C/ Bath room	Solid PVC shutters 28 mm thick	
3.2.4	Kitchen door	Partly panelled and partly wire mesh with stainless steel wire mesh. The paneling with pre-laminated particle board, one side decorative-35 mm thick panelled shutter with hard wood style and rails	

SPECIFICATIONS FOR BUILDINGS NON-RESIDENTIAL

Item no.	Description	3	4	5	6
			Office	Hospitals	Schools
1.1	FOUNDATIONS	Bearing capacity 10 tonnes/square metre			
1.2		Type - Spread foundations isolated combined			
1.3		Depth - Up to 1.2 metres below ground level			
2.1	STRUCTURES	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.			
3.1	DOORS & WINDOWS	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 or Steel windows. Window shutters 2nd class Indian teak wood which provision for extra rate will be made or steel windows.			
3.4		Fittings	Anodized aluminium or equivalent		
4.1		Main entrance hall terrazzo tiles, Kota stone and the like, Lavatory, blocks and corridors & some officers room.	Main entrance hall terrazzo tiles, Kota stone & the like, Lavatory blocks staircase, lavatory blocks in-situ mosaic	In corridors & upto sill level in other rooms, the flooring & dado to be limited to 50% in ordinary cement and 50% in white cement.	Rest of the area ordinary cement concrete
4.2	Rest of the area ordinary cement concrete				
5.1	FINISHING	Filling for drainage lime concrete	Filling for drainage lime concrete		
5.2		Water-proofing treatment & course brick tiles	Water-proofing treatment & course brick tiles	Water-proofing treatment & course brick tiles	Water-proofing treatment & course brick tiles
6.1		External water proofing cement paint	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 emission 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 plastic emission 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)	Internal - entrance hall, principals room, Committee room etc. dry distemper. Rest of the area white or colour wash (Low V.O.C)
6.3		Door & windows - painting	Door & windows - painting	Door & windows - painting	Door & windows - painting

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.	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.	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.	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.
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	Type V and VI
Fittings	Powder coated M.S. fittings	Powder coated aluminium	Same as type IV
Deep hole and security chain for external	Yes	Yes	Yes

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.	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.	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.	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.
Rooming, internal 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
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
Kitchen work	Kota stone	Udaipur green marble/Granite	Granite stone
Toilets	Mosaic	Ceramic Tiles	Ceramic Tiles
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.
Finishing	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.
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 & 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.

External sliding door bolt and handles will be in powder coated M.S. or stainless steel. Over deck insulation with PUF Slab/Koba treatment on roofing in all type of quarters.

SCALE OF AMENITIES FOR GENERAL POOL ACCOMM

Item No.	Item	Type I	Type II	Type III	Type IV
1	Kitchen Shelves in tiers not more than 400mm wide along one wall 1" thick	Yes	Yes	Yes	Covered cup board laminated decor board.
(ii)	Kitchen sink	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 drain board size 510 mm with bowl depth 200 mm
(iii)	Dado Ceramic glazed tiles for 60cm. above work top and around sunken floor	Yes	Yes	Yes	Yes
(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
(v)	Cooking platform standing	Yes	Yes	Yes	Yes
2(i)	Wardrobes 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 Room 7'-00" height	One in each Bed Room upto ceiling height
(ii)	Magic eye in front door	One	One	One	One
(iii)	Window sill lining 18mm thick projected with Kota stone/marble	Kota Stone	Kota Stone	Kota Stone	Kota Stone
(iv)	Curain rods with brackets	All rooms	All rooms	All rooms	Drain rods
(v)	Set of Pegs	In bath and bed rooms	In bath and bed rooms	In bath and bed rooms and wardrobes	In bath, bed room wardrobes

SPECIFICATIONS FOR ELECTRICAL INSTALLATION IN RESIDENCE

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