Annexure-A

NOTES ON PLINTH AREA RATES (PLAR)

1. **PLAR** are the rates to assess the cost of buildings when detail architectural and structural design are not available.
2. **PLAR** are formulated by studying plenty of variables, data and assumptions only to provide hints on the cost of construction over a couple of years.
3. A wide range variation of actual cost from PLAR directs to study- (i) architectural & structural design, (ii) site condition, (iii) finish schedule, (iv) decision built up.
4. Exclusive works related to high density of cost like exclusive ornamental works/cladding are beyond the scope of **PLAR**.
5. **PLAR** never resembles an actual cost; instead, it's a probabilistic cost for fund conformity after time dependent tender and agreement procedure to run a smooth project.
6. **PLAR** costs for buildings are to be assessed after confirming the building category namely 'standard', 'super' and 'special'.
7. 'Special' category for office buildings is to be decided by Chief Engineer, PWD and Chief Architect, Department of Architecture.
8. **PLAR includes 22.703% extra cost for providing contractor's profit, overhead charge and VAT.**

SCOPE OF PLINTH AREA

Plinth area is the area bounded by exterior perimeter of a floor or the perimeter formed by joining the lines on the outer faces of columns in the floor, including any area kept opening what so ever, except courtyard open to sky.

SCOPE OF BUILDING CATEGORY

The category of buildings should be understood by the terms- standard, super, special according to the facilities and finishing components provided there. As a guide- Standard category of buildings is that, made in quality and provided with general basic facilities and finished components are mostly of local materials, bricks, sand, cement and lime based but a hygienic finish in toilets, lavatory and kitchen.

TABLE-1: PWD PLAR 2022 SUBSTRUCTURE, Foundation Up to Plinth Level

(Rate in BDT Per sqm)

Storey (basement shall be counted as storey)	Shallow Foundation							Deep Foundation					Storey (basement shall be counted as storey)
	f'c=25MPa f'cr = 30MPa, concrete with crushed stone chips, Cement Content to Nominal Mix Ratio 1: 1.5:3 and Cement CEM - 1, 52.5N[9,10,11]												
	INDIVIDUAL OR COMBINED FOOTING SYSTEM							MICRO PILE		PILE FOUNDATION*[2,3,4,5,6,7,8]		MAT FOUNDATION *[1]	
	Allowable Bearing capacity, q_a							without basement floor	with 300mm infill basement slab	without basement floor	with 300mm infill basement slab		
	qa = 2.0 ksf	qa = 2.50 ksf	qa = 3.0 ksf	qa=3.5 ksf	qa = 4.0 ksf	qa = 4.50 ksf	qa = 5.0 ksf	Df=1.25m	Df= 3.0m	Df=1.25m	Df=3.0m	Df=3.0m	
	per sqm	per sqm	per sqm	per sqm	per sqm	per sqm	per sqm	per sqm	per sqm	per sqm	per sqm	per sqm	
	1	2	3	4	5	6	7	8	9	10	11	12	
1	9440	9174	9014	8909	8835	8782	8741	7123	15556	19798	24694	10779	1
2	11193	10438	9984	9686	9478	9326	9211	8857	16890	20731	25628	14958	2
3	13460	12073	11238	10690	10308	10029	9818	11076	18675	21735	26631	18039	3
4	16145	14009	12724	11880	11291	10862	10536	13597	20641	23345	28191	20774	4
5	19482	16416	14570	13359	12514	11897	11430	16528	22765	24640	29408	23273	5
6	23214	19107	16635	15013	13881	13055	12429	19731	25034	27435	32024	25595	6
7		21558	18499	16491	15090	14067	13293	21010	27196	31296	35667	27537	7
8			20565	18138	16445	15209	14274	23763	29568	34045	38219	29461	8
9			22549	19706	17722	16273	15177	26369	31749	38617	42486	30998	9
10			24934	21616	19301	17610	16331	29397	34426	42685	46304	32846	10
11			27442	23624	20961	19016	17544	32525	37206	48392	51762	34628	11
12			30066	25726	22698	20487	18814	35751	40082	53682	56802	36350	12
13				27918	24510	22021	20138	39070	43051	57989	60859	38020	13
14				30195	26392	23615	21514	42479	46110	62296	64915	39643	14
15				32206	28039	24996	22694	45481	48728	66773	69118	40783	15
16					29954	26614	24087			70901	72992	42195	16
17					31717	28096	25357			76222	78273	43287	17
18					33658	29734	26765			81047	82623	45205	18
19						31550	28333			86219	87664	48583	19
20						33415	29942			91623	92713	52054	20
21							31593			97274	98121	55618	21
22										102534	103137	59271	22
23										107687	108047	63011	23
24										112284	112401	66837	24
25										117945	118152	70747	25
26										123741	123371	74739	26
27										129208	128595	78812	27
28										133922	133065	82964	28
29										138635	137536	87194	29
30										143348	142006	91501	30
31										148961	147375	95882	31
32										154631	152802	100338	32
33										160359	158287	104866	33
34										166145	163830	109467	34
35										171989	169431	114138	35
36										177892	175090	118879	36
37 to 45[*12]													37 to 45[*12]

Notes:

*1. Mat foundation leading to basement floor Tk. 900.00 per sqm to be deducted, but to add cost from basement construction system (Table-4)
*2. Precast Pile of length 18m and size 350mmx350mm considered
*3. For pile length of 18m to 24m, Tk.11,855 per sqm to be added,
*4. For pile length of 24m to 30m, Tk.20,387 per sqm to be added,
*5. For pile length of 30m to 36m, Tk.28,919 per sqm to be added,
*6. For pile length of 36m to 42m, Tk.37,451 per sqm to be added,
*7. For pile length of 42m to 45m, Tk.41,717 per sqm to be added,
*8. For Cast-in-situ pile foundation, 20% cost to be added,
*9. Add 2% for f'c=32MPa f'cr = 40MPa, with crushed stone chips, Cement Content to Nominal Mix Ratio 1: 1.25: 2.5 and Cement CEM - 1, 52.5N
*10. Add 3% for f'c=40MPa f'cr = 50MPa, with crushed stone chips, Cement Content to Nominal Mix Ratio 1: 1: 2 and Cement CEM - 1, 52.5N.
*11. Add 4% for f'c=50MPa f'cr = 60MPa, with crushed stone chips, Cement CEM - 1, 52.5N and High-range water reducing chemical admixture Type-G
*12. For buildings with more than 36 stories (including basements), rate to be increased by 3% for each additional floor upto 45 stories (including basements).
Df = Depth of Foundation

TABLE 2: PWD PLAR 2022 - SUPER STRUCTURE: rates in BDT per sqm

ADD STRUCTURAL MEMBER WEIGHTAGE RATES (TABLE - 3) IN ADDITION TO THE RATES OF THIS TABLE

BUILDING CATEGORY

Level Index	FLOOR	RCC FRAME STRUCTURE:f'c = 19 To 21 Mpa(Not suggested in Coastal Area)						RCC FRAME STRUCTURE: f'c= 22 To 25 Mpa (ADD 2% for 32 Mpa, ADD 3% for 40 Mpa Concrete, ADD 4% for 50 Mpa Concrete)						Level Index	FLOOR
		NON RESIDENTIAL: NRRCB A2 (Concrete with Brick-chips)			RESIDENTIAL: RRCB A2 (Concrete with Brick-chips)			NON RESIDENTIAL: NRRCS C2 Concrete with Stone-chips			RESIDENTIAL: RRCS B2 Concrete with Stone -chips				
		Standard	Super	Special	Standard	Super	Special	Standard	Super	Special	Standard	Super	Special		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	GF Park	13593	15089	17201	14472	16064	18313	14776	16401	18697	15865	17611	20076	1	GF Park
1	: Habitat	23968	26605	30329	25736	28567	32567	25779	28615	32621	27974	31051	35398	1	: Habitation
2	1st Floor	22744	25246	28780	24422	27108	30903	24463	27153	30955	26545	29465	33590	2	1st Floor
3	2nd Floo	23085	25625	29212	24788	27515	31367	24829	27561	31419	26944	29907	34094	3	2nd Floor
4	3rd Floo	23431	26009	29650	25160	27927	31837	25202	27974	31890	27348	30356	34606	4	3rd Floor
5	4th Floo	23680	26284	29964	25429	28226	32178	25469	28270	32228	27640	30681	34976	5	4th Floor
6	5th Floo	23930	26562	30281	25723	28552	32549	25738	28569	32569	27959	31035	35380	6	5th Floor
7	6th Floo	24063	26710	30449	25847	28690	32706	25881	28728	32750	28094	31185	35551	7	6th Floor
8	7th Floo	24237	26903	30670	25991	28850	32889	26007	28868	32909	28184	31284	35664	8	7th Floor
9	8th Floo	24431	27119	30916	26155	29032	33096	26155	29032	33096	28296	31409	35806	9	8th Floor
10	9th Floo	24669	27382	31216	26317	29212	33302	26348	29247	33341	28407	31532	35947	10	9th Floor
11	10th Floo							26448	29357	33467	28542	31681	36117	11	10th Floor
12	11th Floo							26570	29493	33622	28650	31801	36254	12	11th Floor
13	12th Floo							26691	29627	33775	28782	31948	36421	13	12th Floor
14	13th Floo							26883	29840	34018	28938	32121	36618	14	13th Floor
15	14th Floo							26954	29919	34108	29094	32294	36815	15	14th Floor
16	15th Floo							27024	29996	34196	29223	32437	36978	16	15th Floor
17	16th Floo							27091	30071	34281	29299	32522	37075	17	16th Floor
18	17th Floo							27157	30145	34365	29373	32604	37169	18	17th Floor
19	18th Floo							27222	30216	34446	29446	32685	37261	19	18th Floor
20	19th Floo							27284	30285	34525	29516	32763	37350	20	19th Floor
21	20th Floo							27345	30353	34602	29585	32840	37437	21	20th Floor
22	21st Floo							27455	30475	34741	29652	32914	37522	22	21st Floor
23	22nd Floo							27589	30624	34911	29718	32986	37605	23	22nd Floor
24	23rd Floo							27749	30801	35113	29781	33057	37685	24	23rd Floor
25	24th Floo							27908	30978	35315	29843	33125	37763	25	24th Floor
26	25th Floo							28040	31125	35482	29902	33192	37838	26	25th Floor
27	26th Floo							28172	31271	35649	29960	33256	37912	27	26th Floor
28	27th Floo							28304	31417	35816	30017	33318	37983	28	27th Floor
29	28th Floo							28435	31562	35981	30071	33379	38052	29	28th Floor
30	29th Floo							28614	31761	36208	30261	33589	38292	30	29th Floor
31	30th Floo							28788	31955	36429	30445	33794	38525	31	30th Floor
32	31st Floo							28958	32144	36644	30625	33994	38753	32	31st Floor
33	32nd Floo							29123	32327	36852	30799	34187	38974	33	32nd Floor
34	33rd Floo							29283	32505	37055	30969	34375	39188	34	33rd Floor
35	34th Floo							29439	32677	37252	31133	34558	39396	35	34th Floor
36*6	35th Floo							29586	32840	37438	31289	34730	39593	36	35th Floor
Roof Top LC/ Treatment		3360	3360	3360	3360	3360	3360	3360	3360	3360	3360	3360	3360	Roof Top LC	
Porch		6854	6854	6854	6854	6854	6854	7540	7540	7540	7540	7540	7540	Porch	

Notes:

*1 .Cost of Retaining walls etc included in Table-4

*2 . Floor height (h) is considered as 3.35 meter (11'-0"),

*3 . If floor height h > 3.35 meter (11'-0") and ≤ 3.66 meter (12'-0"), add 3%,

*4 . If floor height h > 3.66 meter (12'-0") and ≤ 4.0 meter (13'-0"), add 5%,

*5 . Regular shaped building with span up to 7.5 meter has been considered.

*6 . For buildings with more than 36 stories, rate to be increased by 1% for each additional floor upto 45 stories.

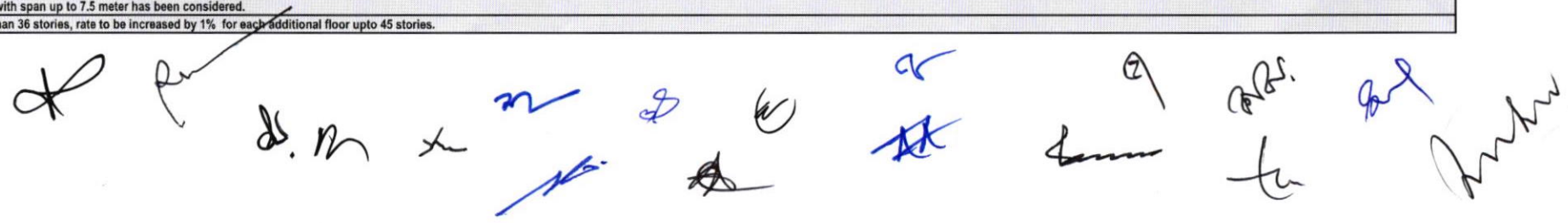


TABLE 3 : PWD PLAR 2022 - STRUCTURAL MEMBER WEIGHTAGE : ADDITIONAL COST PER SQUARE METER in BDT

To deduct 15% for f'c = 19-21MPa (min f'cr = 24-28 MPa) , To increase 2% for f'c = 32 MPa (min f'cr = 40 MPa) , To increase 3% for f'c = 40 MPa (min f'cr = 50 MPa) and To increase 4% for f'c = 50 MPa (min f'cr = 60 MPa)

Storey Designed For

Level Index (Floor)	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Level Index (Floor)
Basement	6135	6026	5916	5807	5697	5588	5478	5369	5259	5150	5040	4931	4821	4712	4602	4493	4383	4191	3999	3807	3614	3422	3230	3038	2846	2653	2461	2187	1914	1640	1366	1093	819	545	271		Basement
GF	6137	6028	5918	5809	5699	5590	5480	5371	5261	5152	5042	4933	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	547			GF
1st	6028	5918	5809	5699	5590	5480	5371	5261	5152	5042	4933	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274			1st
2nd	5918	5809	5699	5590	5480	5371	5261	5152	5042	4933	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274				2nd
3rd	5809	5699	5590	5480	5371	5261	5152	5042	4933	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274					3rd
4th	5699	5590	5480	5371	5261	5152	5042	4933	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274						4th
5th	5590	5480	5371	5261	5152	5042	4933	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274							5th
6th	5480	5371	5261	5152	5042	4933	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274								6th
7th	5371	5261	5152	5042	4933	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274									7th
8th	5261	5152	5042	4933	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274										8th
9th	5152	5042	4933	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274											9th
10th	5042	4933	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274												10th
11th	4933	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274													11th
12th	4823	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274														12th
13th	4714	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274															13th
14th	4604	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274																14th
15th	4495	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274																	15th
16th	4385	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274																		16th
17th	4193	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274																			17th
18th	4001	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274																				18th
19th	3809	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274																					19th
20th	3617	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274																						20th
21st	3425	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274																							21st
22nd	3232	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274																								22nd
23rd	3040	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274																									23rd
24th	2848	2656	2464	2190	1916	1642	1369	1095	821	548	274																										24th
25th	2656	2464	2190	1916	1642	1369	1095	821	548	274																											25th
26th	2464	2190	1916	1642	1369	1095	821	548	274																												26th
27th	2190	1916	1642	1369	1095	821	548	274																													27th
28th	1916	1642	1369	1095	821	548	274																														28th
29th	1642	1369	1095	821	548	274																															29th
30th	1369	1095	821	548	274																																30th
31st	1095	821	548	274																																	31st
32nd	821	548	274																																		32nd
33rd	548	274																																			33rd
34th	274																																				34th
35th																																					35th

Notes:

1 . For building with more than 1 (one) basement, member weightage rate shall be taken from the immediate left cell(s) of the selected column for each additional basement.

example: For 20 storied building with 3 no.of basements, values from column-20 to be read on the basis of no.of storey,

- **for the 1st basement- Tk. 4383 to be taken.
- **for the 2nd basement- Tk. 4493 to be taken from the immediate left column, i.e. from column-21
- **for the 3rd basement- Tk. 4602 to be taken from 2nd left column, i.e. from column-22

2 . For building with more than 36 stories, member weightage rate for the top most floors shall be same as the top floors rate for 36storeid building. And member weightage rate for the remaining floors (not in the table) shall be successively increased by 3% from the ground floor for each additional storey upto 45 stories.

example: For 38 storied building, member weightage for the 36th floor shall be same as the 34th floor of 36storied building, i.e. Tk. 274.

Member weightage for the 2nd floor shall be same as the ground floor of 36storied building, i.e. Tk. 9599.

Member weightage for the 1st floor shall be same as the ground floor of 37storied building, i.e. (1.03x Tk. 9599) = Tk. 9887.

Member weightage for the ground floor shall be (1.03x1.03x Tk. 9599) = Tk. 10184.

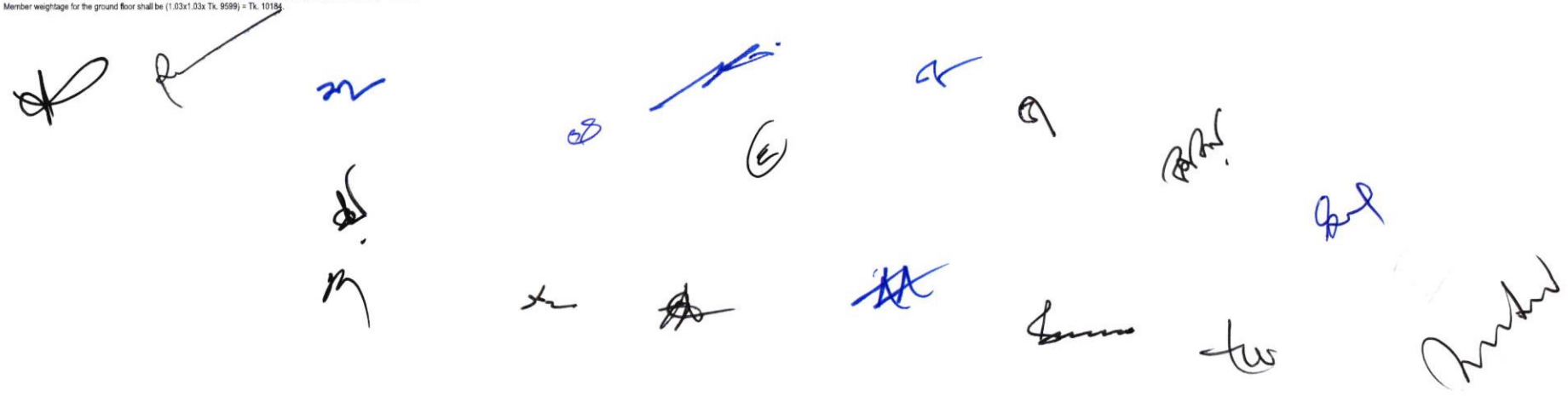


Table - 4 : PWD PLAR-2022: BASEMENT CONSTRUCTION*[1]

(Rate in BDT per sqm)

Concrete, f'c = 25 MPa & min f'cr = 30 MPa, fy = 400 MPa (max. fy= 418MPa & Ratio fu to fy ≥1.25) Cement BDS EN-197 CEM-I,52.5N

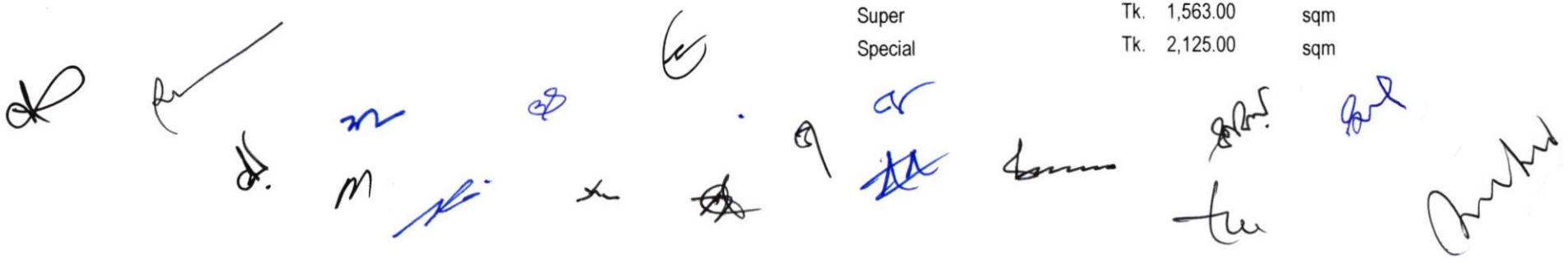
Elements Of Basement Construction

RCC Retaining Wall	Basement Floor as Parking	Retaining Piles and Bracing					Water proofing: Wall & Foundation Bed	Back Wall to Retaining Wall (125mm brick work)	Excavation, carrying & safety	System management
		Single basement	Two Basements	Three Basements	Four Basements	*Bracing*[*2] : *(Steel truss, fy 36ksi)*				
		Retaining Pile	*Retaining Pile*	*Retaining Pile*	*Retaining Pile*					
Tk. per sqm of wall	Total Taka/sqm	Taka per meter of perimeter	Taka per meter of perimeter	Taka per meter of perimeter	Taka per meter of perimeter	Taka per sqm of Basement	Taka per sqm of horizontal/vertical surface	Taka per sqm of wall	Taka per m depth per sqm of Basement	Taka per sqm of Basement
Tk. 7,061.00	Rate from Structural weightage Table-3 + Tk. 11,848.00	Tk. 106,230.00	Tk. 264,046.00	Tk. 305,478.00	Tk. 586,458.00	Tk. 1,755.00	Tk. 1,742.00	Tk. 1,790.00	Tk. 1,380.00	Tk. 161.00

*[1] PLAR (Plinth Area Rate) to be calculated as sum of the costs divided by plinth area.

ADDITIONAL COST CHART

1.	**Saline zone, to use concrete of min f'c = 25 MPa**			1 %	of PLAR
2.	**For** i) severe and very severe earth-quake zone, or- ii) coastal area affected by cyclone & water surge, or- iii) special type of structure such as-hospitals, fire service stations etc. (building occupancy category III and IV as per BNBC Table-6.1.1) **:to use concrete of min f'c = 25 MPa**			3 %	of superstructure cost (table-2 + table-3)
3.	**Roof top RCC parapet**		Tk. 4,642.00		sqm of parapet
4.	**Roof-top RCC water tank in/c beams & supports etc.:**		Tk. 178.00		gallon
5.	**For difficultly accessible area (as per Division-33: Added rate for difficultly accessible area)**				
	i) Category A (Accessibility with moderate difficulty)			5 %	of PLAR
	ii) Category B (Accessibility with high difficulty)			10 %	of PLAR
	iii) Category C (Accessibility with extreme difficulty)			15 %	of PLAR
6.	**Internal Sanitary and Water Supply: Rate in BDT**				
	(i)	Residential Building	Standard	Tk. 1,313.00	sqm
			Super	Tk. 1,907.00	sqm
			Special	Tk. 2,688.00	sqm
	(ii)	Non-Residential Building	Standard	Tk. 1,063.00	sqm
			Super	Tk. 1,563.00	sqm
			Special	Tk. 2,125.00	sqm



7. Internal Electrification:

(i)	Residential Building	Standard	Tk.	2,130.00	sqm
		Super	Tk.	2,490.00	sqm
		Special	Tk.	2,760.00	sqm
(ii)	Non-Residential Building	Standard	Tk.	1,605.00	sqm
		Super	Tk.	1,930.00	sqm
		Special	Tk.	2,140.00	sqm

8. Gas Connection:

(i)	Ground Floor	Tk.	455.00	sqm
(ii)	Other Floors	Tk.	182.00	sqm

9. External Water Supply and Sanitation:

(i)	Underground Water Reservoir:			
	(a) Up to 20,000 gallons	Tk.	106.00	gallon
	(b) Above 20,000 gallons	Tk.	89.00	gallon
(ii)	Distribution line, water pump, pump house, WASA / Municipal Charge as per requirement.	**Estimate to be prepared on the basis of requirements.**		
(iii)	Septic Tank, Soak well, Inspection pit.			
(iv)	Sewage Treatment Plant (STP) and Water Treatment Plant (WTP)			
(v)	Rain water harvesting system			

10. External Electrification:

(i)	Sub-station building.	**Estimate to be prepared on the basis of requirements.**
(ii)	Sub-station equipment/transformer.	
(iii)	Pump & motor set including installation.	
(iv)	H.T./ LT Line.	
(v)	PDB /DESA /DESCO /REB charge.	
(vi)	Standby power & source.	
(vii)	Earthing system.	
(viii)	Overhead transmission.	
(ix)	Underground cable laying.	
(x)	Compound light, wiring system & other safety systems.	
(xi)	Solar PV system.	

11. Boundary Wall:

(i) Boundary wall in RCC Frame, 1.80 m in height, level difference between FGL and EGL up to 0.45m:

Construction of RCC (fc'=22 MPa, minimum fcr=27 MPa in nominal mix ratio of 1:2:4 with stone chips) frame boundary wall of height 1.8m above FGL and foundation depth 1.5m from EGL, having column size 250mm X250mm @ 10'-0" c/c, 250 mm X 250 mm size grade beam at FGL, 75mm thick and 375mm width RCC coping, 125mm thick brick work with mortar (1:4) in between columns. 12mm plaster (1:6) on brick surface and 6mm plaster (1:4) on RCC and providing standard acrylic emulsion paint at exterior surface etc.	Tk. 13,960.00	meter

(ii) Boundary wall in RCC Frame, 1.80m in height, level difference between FGL and EGL= 0.45 m to 1.50m:

Construction of RCC (fc'=22MPa, minimum fcr=27 MPa in nominal mix ratio of 1:2:4 with stone chips) frame boundary wall of height 1.8m above FGL and depth of foundation 1.5m from EGL, having column size 250mmX250mm @ 10'-0" c/c, 250 mmX250 mm size grade beam at FGL and one additional grade beam on EGL, 75mm thick and 375mm width RCC coping, 125mm thick brick work with mortar (1:4) in between columns. 12mm plaster (1:6) on brick surface and 6mm plaster (1:4) on RCC and providing standard acrylic emulsion paint at exterior surface etc.

Tk. 23,129.00 meter

(iii) Boundary wall in RCC Frame, 1.80m in height, level difference between FGL and EGL= 1.50m to 3.00m:

Construction of RCC (fc' = 22 MPa, minimum fcr = 27 MPa in nominal mix ratio of 1:2:4 with stone chips) frame boundary wall of height 1.8 m above FGL and depth of foundation 1.5 m from EGL, having column size 250 mm x 250 mm @ 10'-0" c/c with 250 mm x 250 mm RCC struts, one grade beam at ground level and 2 (two) additional grade beams in between EGL and FGL, 75 mm thick and 375 mm width RCC coping, 125 mm thick brick work with mortar (1:4) in between columns. 12 mm plaster (1:6) on brick surface and 6mm plaster (1:4) on RCC and providing standard acrylic emulsion paint at exterior surface etc.

Tk. 37,164.00 meter

(iv) Boundary wall in RCC Frame, 1.80m in height, level difference between FGL and EGL= 1.50m to 3.00m; with PILE foundation:

Construction of RCC (fc' = 22 MPa, minimum fcr = 27 MPa in nominal mix ratio of 1:2:4 with stone chips) frame boundary wall of height 1.8 m above FGL and depth of foundation 1.5 m from EGL, having column size 250 mm x 250 mm @ 10'-0" c/c, one grade beam at ground level and 2 (two) additional grade beams in between EGL and FGL, 75 mm thick and 375 mm width RCC coping, 125 mm thick brick work with mortar (1:4) in between columns. 12 mm plaster (1:6) on brick surface and 6 mm plaster (1:4) on RCC and providing standard acrylic emulsion paint at exterior surface. 2 nos. of (250 mm x 250 mm) 10 m long precast pile per column.

Tk. 51,998.00 meter

(v)	**Boundary wall in RCC Frame, 1.80m in height, level difference between FGL and EGL= 3.00m to 4.50m; with RCC retaining wall (without PILE):** Construction of RCC (fc' = 22 MPa, minimum fcr = 27 MPa in nominal mix ratio of 1:2:4 with stone chips) frame boundary wall of height 1.8 m above FGL and depth of foundation 1.5 m from EGL, Retaining wall up to FGL and column size 250 mm x 250 mm @ 10'-0" c/c above FGL, 75 mm thick and 375 mm width RCC coping, 125 mm thick brick work with mortar (1:4) in between columns; 12 mm plaster (1:6) on brick surface, 6 mm plaster (1:4) on RCC, exterior standard acrylic emulsion paint. Soil Bearing Capacity assumed=1.5 Ksf	Tk. 89,448.00	meter
(vi)	**Boundary wall in RCC Frame, 1.80m in height, level difference between FGL and EGL= 3.00m to 4.50m; with RCC retaining wall (with PILE):** Construction of RCC (fc' = 22 MPa, minimum fcr = 27 MPa in nominal mix ratio of 1:2:4 with stone chips) frame boundary wall of height 1.8 m above FGL and depth of foundation 1.5 m from EGL, Retaining wall up to FGL and column size 250 mm x 250 mm @ 10'-0" c/c above FGL, 75 mm thick and 375 mm width RCC coping, 125 mm thick brick work with mortar (1:4) in between columns; 12 mm plaster (1:6) on brick surface, 6 mm plaster (1:4) on RCC, exterior standard acrylic emulsion paint. Assumed 2 (two) nos. of 300 mm X 300 mm size 12 m long pile @ 1.5 m c/c along the length of the retaining wall.	Tk. 119,944.00	meter
(vii)	**Additional cost for ornamental works at the front side of the Boundary Wall** (considered only portion of work above GB)	Tk. 2,645.00	meter
(viii)	**Main Gate (SS):** Manufacturing, supplying, fitting and fixing main gate made of S.S. Grade A304 of any design and shape as per drawing and design and accepted by the Engineer.	Tk. 38,690.00	meter
(ix)	**Main Gate (MS):** Manufacturing, supplying, fitting and fixing main gate made of M.S. rod and angle of any design and shape as per drawing and design and accepted by the Engineer.	Tk. 26,538.00	meter

12. Barbed wire fencing over boundary wall:

(i) Type-1 (Y-shape): barbed wire in fencing work @ 150 mm c/c in both horizontally and vertically

Supplying, fitting and fixing 12 BWG barbed wire (2 ply, 4 points) in fencing work @ 150 mm c/c in both horizontally and vertically, supported by 38 mm x 38 mm x 6 mm M.S. Y-shape angle post (300 mm embedded in R.C.C. or in brick work with a cement concrete base of 75 mm x 75 mm x 300 mm) 600 mm vertical and 450 mm inclined @ 2.4 m c/c including straightening, binding the joints with 18 BWG wire making holes in the angle etc. in /c supplying of all necessary materials complete in all respect and accepted by the Engineer-in-charge. (Rate is excluding the cost of R.C.C. or brick work or C.C. which is to be paid as per corresponding items in the schedule)	Tk. 1,122.00	meter

(ii) Type-2 (Spiral-type): barbed wire of 600 mm dia in fencing work

Supplying, fitting and fixing 12 BWG barbed wire fencing in a circular shape of 600 mm dia and 76 mm pitch fitted with ms rod casing (made by 8 nos. 10 mm dia plain bar in a circular pattern and placed at equal interval), 38 x 38 x 6 mm M.S. angle post (300 mm embedded in R.C.C. or in brick work with a cement concrete base of 75 mm x 75 mm x 300 mm) and 600 mm vertical and 450 mm inclined placed @ 3000 mm c/c including straightening, binding the joints with 18 BWG wire, making holes in the angle etc. including supply of all necessary materials complete in all respect and accepted by the Engineer-in-charge. (Rate is excluding the cost of R.C.C or brick work or C.C. which is to be paid as per corresponding items in the schedule)	Tk. 2,436.00	meter

13. Road Work:

(i) R.C.C. Road:

Construction of R.C.C. (minimum f'cr = 30 MPa, and satisfying a specified compressive strength f'c = 25 MPa at 28 days on standard cylinders, crushed stone chips as coarse aggregate, cement content related to mix ratio 1:1.5:3) road with 250mm thick guide wall of height 0.30 meter, 150 mm thick R.C.C work over one layer 1st class brick flat soling and polythene sheet including the cost of reinforcement 10 mm dia MS rod 175 mm c/c in both direction.	Tk. 3,163.00	sqm

(ii)	**Bituminous Carpeting Road:**		
	Construction of 38 mm thick compacted bituminous carpeted road over 150 mm thick sand surface with 75 mm thick end edging, 62 mm–37 mm size brick bats khoa consolidation and compacted water bound macadam of 150 mm thickness, providing tack coat, seal coat and prime coat as per requirement.	Tk. 2,886.00	sqm
14.	**Semi-Permanent Structure:**		
	Plinth area rates for standard semi-permanent building with C.I sheet roofing on metal truss, supported on brick pillars & walls in 1:4 cement sand mortar having 75 mm thick D.P.C in/c earth work, back filling in foundation and plinth ≤ 1 m & 125 mm thick panel brick work in superstructure with 150 mm x 250 mm intermediate pillar at 2.4 m to 3 m C/C, doors and windows made of best local timber with standard window grills, R.C.C work (1:2:4) in lintel, patent stone flooring (1:2:4), minimum 12 mm thick cement plaster (1:4) in plinth, steps and dado, aesthetically accepted low cost false ceiling, white /color washing and necessary earth work in foundation, earth and sand filling in plinth and other petty items as required and complete to function in all respect.	Tk. 12,938.00	sqm
15.	**Drain and Apron:**		
(i)	**Surface drain of 300 mm clear width and depth up to 300 mm:**		
	Constructing RCC (fc' = 22 MPa, minimum fcr = 27 MPa in nominal mix 1:2:4 with stone chips) surface drain of 300 mm clear width and depth up to 300 mm with 125 mm thick check walls and 125 mm thick base over one layer of brick flat soling. The surface having minimum 12 mm thick cement sand (F.M. 1.2) plaster (1:3) and neat cement finishing with cement curing at least for 7 days including excavation in all kinds of soil, back filling with fine sand (F.M. 0.8), consolidating and dressing, cost of water, electricity, other charges etc. complete and accepted by the Engineer in charge. (Cement: CEM-II/A-M)	Tk. 3,196.00	meter

(ii) Surface drain of 225 mm clear width and 600 mm (av.) depth:

Constructing RCC (fc' = 22 MPa, minimum fcr = 27MPa in nominal mix 1:2:4 with stone chips) surface drain of 600 mm (av.) depth and 225 mm clear width at the bottom and 525 mm at the top, having 125 mm thick check walls maintaining side slopes and 125 mm thick base over one layer of polythene on top of brick flat soling. The surface having minimum 12 mm thick cement sand (F.M. 1.2) plaster (1:3) including neat cement finishing the surfaces and back of the drain up to 150 mm below ground level with fresh cement (conforming to BDS 232) curing at least for 7 days, including excavation of all kinds of soil, back filling with fine sand (F.M. 0.8) consolidating and dressing, including cost of water, electricity, other charges etc. complete and accepted by the Engineer in charge. (Cement: CEM-II/A-M)	Tk.	5,614.00	meter

(iii) Apron:

Providing apron with 50 mm thick cement concrete (1:2:4) with cement, coarse sand and picked jhama chips including breaking chips and one layer brick flat soling at bottom with first class or picked jhama bricks including cutting earth for preparation of bed and filling the interstices with local sand (F.M. 0.8) including finishing, dressing, curing at least for 7 days etc. all complete, including cost of water, electricity, other charges accepted by the Engineer-in-charge. (Cement: CEM-II/A-M)	Tk.	1,055.00	sqm

16. Special Considerations:

(i)	Safety canopy, safety net and other environmental considerations	**Estimate to be prepared on the basis of requirements.**
(ii)	Construction lift (for 7 storied building and above)	