

Estimating & Costing -1

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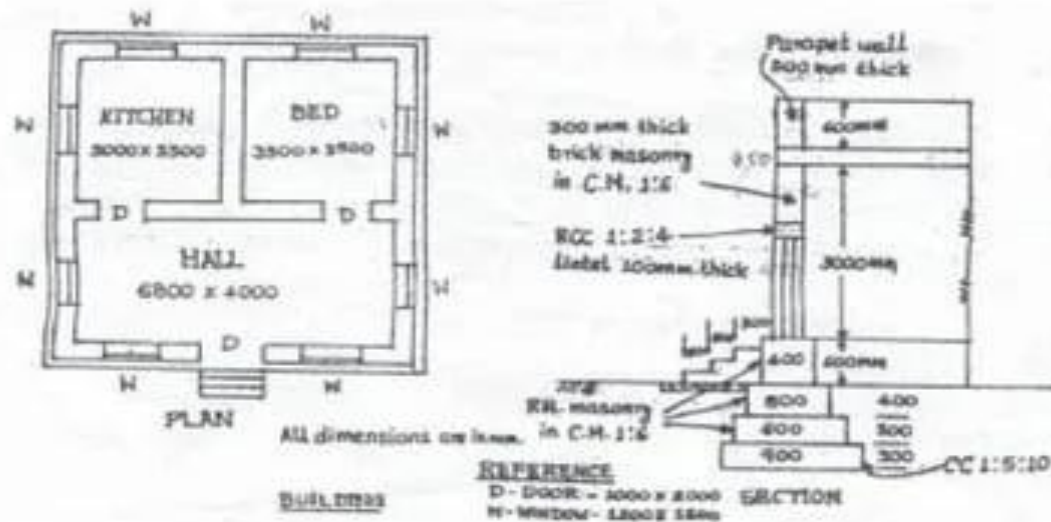
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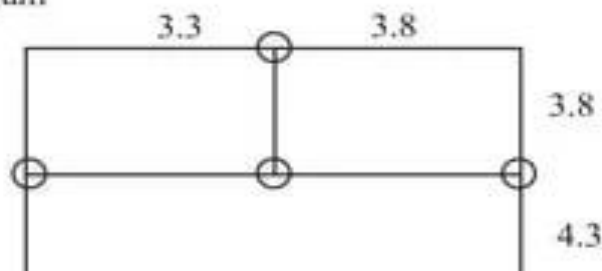
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Estimation and Costing

Example 3 :- From the given figure below calculate the details and abstract estimate for the single Storeyed residential building with no of rooms (Load bearing type structure) by Centre Line Method

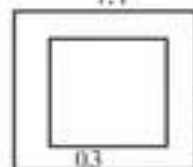


Centre line diagram



Detail & Abstract Estimates of Buildings

S.No.	Particulars of Items	No	L	B	H	Q	Explanation
1.	Earth work Excavation	1	39.5	0.9	1.0	35.55	$41.3-4 \times 0.9/2=39.5$
2.	C.C. bed(1:5:10)	1	39.5	0.9	0.3	10.665	m^3
3.	R.R. Masonary in CM 1:6						
	1st Footing	1	40.1	0.6	0.3	7.218	$41.3-4 \times 0.6/2=40.1$
	IIInd Footing	1	40.3	0.5	0.4	8.06	$41.3-4 \times 0.5/2=40.3$
	Basement	1	40.5	0.4	0.6	9.72	$41.3-4 \times 0.4/2=40.5$
					Total	25.00	m^3
4.	Damp proof course over basement alround the building with CC (1:2:4)	1	40.5	0.6	---	16.2	m^2
	Deduct for Door sills	3	1.0	0.3		- 0.9	m^2
	Net Quantity = $16.2-0.9=15.3$				sq.m	---	
5.	First class brick work in wall in						
	a) superstructure with CM 1:6	1	40.7	0.3	3.0	36.63	$L = 41.3-4 \times 0.3/2$
	b) Parapet wall	1	30.4	0.3	0.6	5.472	$L=2(7.1+8.1)$
					Total	42.102	m^3
			7.1				
		8.4			8.1		
			0.3				
	Deductions:						
	Doors	3	1.0	0.3	2.0	1.80	



Estimation and Costing

S.No.	Particulars of Items	No.	L	B	H	Q	Explanation
	Doors	3x2	1.0	---	2.0	12.0	
	windows	8x2	1.2	---	1.5	28.8	
					Total	40.8	
	Plastering for parapet wall (sides)	1x2	30.4	---	0.6	36.48	
	Top	1	30.4	0.3	---	9.12	
					Total	45.60	
	Net Plastering = 240.6 - 40.8 + 45.6 = 245.4 m ²						
7.	Flooring with 25mm th CC(1:2:4)						
	Kitchen	1	3.0	3.5	--	10.5	
	Bed	1	3.5	3.5	--	12.25	
	Hall	1	6.8	4.0	--	27.20	
	Sills of Doors	3	1.0	0.3	--	0.90	
					Total	50.85	
8.	Ceiling = Same as Flooring					50.85	m²
9.	white washing = Same as Plastering for walls and ceiling 245.4 + 50.85 = 296.25 m ²						
10.	RCC(1:2:4) for						
	a) Slab	1	7.40	8.40	1.5	9.324	
	b) lintels over Doors	3	1.2	0.3	0.1	0.108	
	Windows	8	1.4	0.3	0.1	0.336	
	c) beams	1	40.7	0.3	0.3	3.663	
					Total	13.431	m³

Detail & Abstract Estimates of Buildings

Abstract estimate of single storeyed residential building with no of rooms (lead beary type)

S.No.	Description of item	Quantity	Unit	Rate	Per	Amount
1.	Earth work excavation	35.55	m ³	465	10m ³	1653.00
2.	Cement concrete(1:4:8)	10.665	m ³	1545	1m ³	164.77.50
3.	RR.masonry in C.M.(1:5)	25.00	m ³	1391	m ³	34775.00
4.	Sand filling in basement	23.775	m ³	195.20	10m ³	464.00
5.	Brick masonry in country bricks of standard size in CM(1:8)	35.535	m ³	2291	m ³	81417.60
6.	R.C.C. (1:2:4) for lintels, beams etc.	4.107	m ³	6030	m ³	24765.20
7.	R.C.C.(1:2:4) for slabs,	9.324	m ³	6030	m ³	56223.70
8.	Cement concrete (1:5:10) for flooring	5.085	m ³	1452	m ³	7383.40
9.	Supplying and fixing of country wood for doors.	6.00	m ²	1650	m ²	9900.00
10.	Supplying and fixing of country wood for windows and ventilators.	14.40	m ²	2300	m ²	33120.00
11	Plastering to all exposed surfaces of brick work and basement with C.M (1:5)	245.40	m ²	582	10m ²	14282.30
12	White washing with best shell lime	296.25	m ²	116	10m ²	3436.50
13	Flooring with spartek tiles set in C.M (1:3)	50.85	m ²	4230	10m ²	21509.50
14	Painting with ready mixed enamel paint	45.90	m ²	335	10m ²	1537.65
						306045.35