



الأكاديمية العربية للعلوم والتكنولوجيا والنقل البحري
Arab Academy for Science, Technology & Maritime Transport

Quantity Surveying Finishing Items

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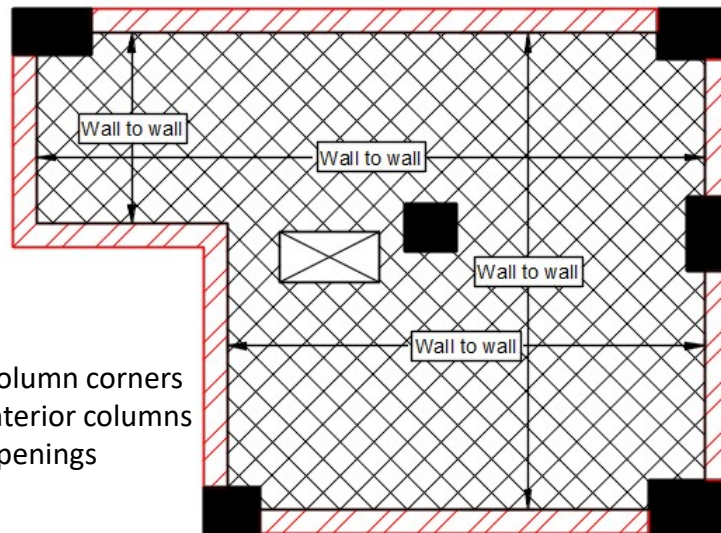
Finishing Items

- **Flooring**
- **Internal Plastering** (same calculations could be used for painting, ceramic tiling and all types of internal cladding and facades)
- **External Plastering** (same calculations apply for all types of external facades and cladding)
- **Roof insulation** (same calculations apply for roof P.C. and roof tiling)

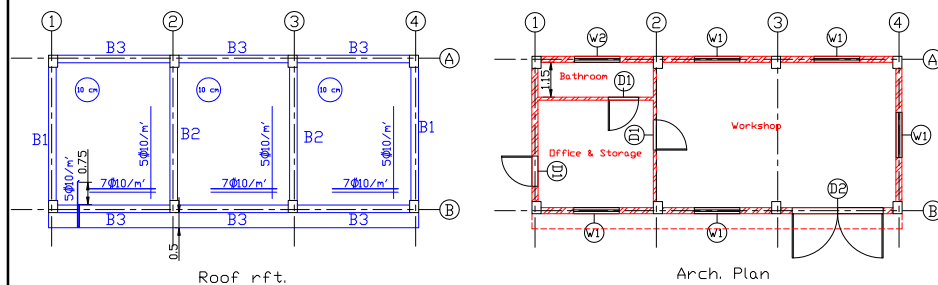
Flooring

Deduct

- Column corners
- Interior columns
- openings

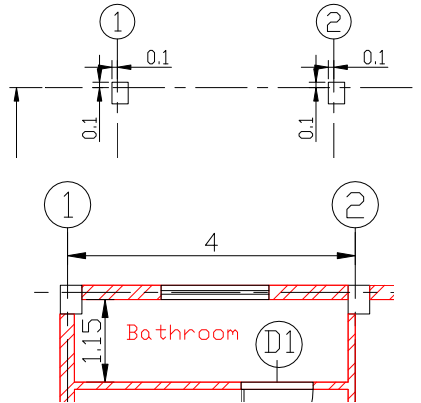


Example



All external walls are 20 cm thick and all internal walls and parapet are 10 cm thick
 Roof finishing level +3.7 m
 Internal floor finishing level +0.30 m
 Window W1 is 1.50 x 1.0 m
 Window W2 is 1.50 x 0.5 m
 Door D1 is 1.0 x 2.2 m
 Door D2 is 3.0 x 2.5 m
 Roof parapet height is 50 cm
 Ceramic flooring is used for the bathroom and concrete flooring for the office and workshop
 Ceramic tiling is used on the bathroom up to the bottom level of the beams
 Plastering and painting is used for all other internal surfaces and roofs

Flooring Example (Bathroom)



Bathroom

$$L = 4 + (0.1 - 0.2) - 0.1 = 3.8 \text{ m}$$

$$W = 1.15 \text{ m}$$

Deduction

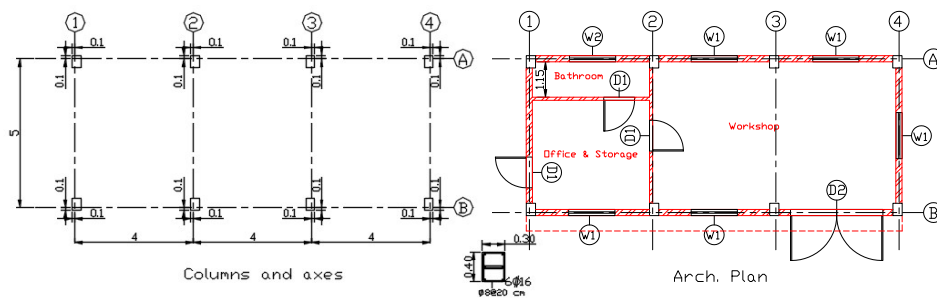
Column Corner Axis 1

$$L = 0.4 - 0.2 = 0.2 \text{ m}$$

$$W = 0.3 - 0.2 = 0.1 \text{ m}$$

Item	Description	Unit	No.	L	W	H	Add	Deduct	Total
Ceramic	Bathroom	m²	1	3.80	1.15		4.370		
Flooring	Column corner		1	0.20	0.10			0.020	
									4.350

Flooring Example (Storage & Workshop)



Office and Storage

$$L = 4 - 0.1 + (0.1 - 0.2) = 3.8 \text{ m}$$

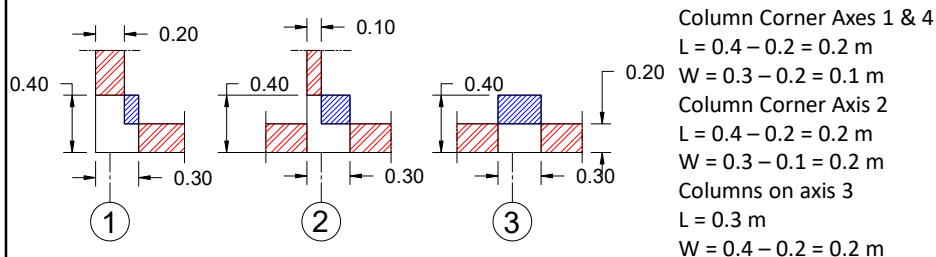
$$W = 5 + (0.1 - 0.2) + (0.1 - 0.2) - 1.15 - 0.1 = 3.55 \text{ m}$$

Workshop

$$L = 4 + 4 + 0.1 - 0.1 + 0.1 - 0.2 = 7.9 \text{ m}$$

$$W = 5 + 0.1 - 0.2 + 0.1 - 0.2 = 4.8 \text{ m}$$

Flooring Example

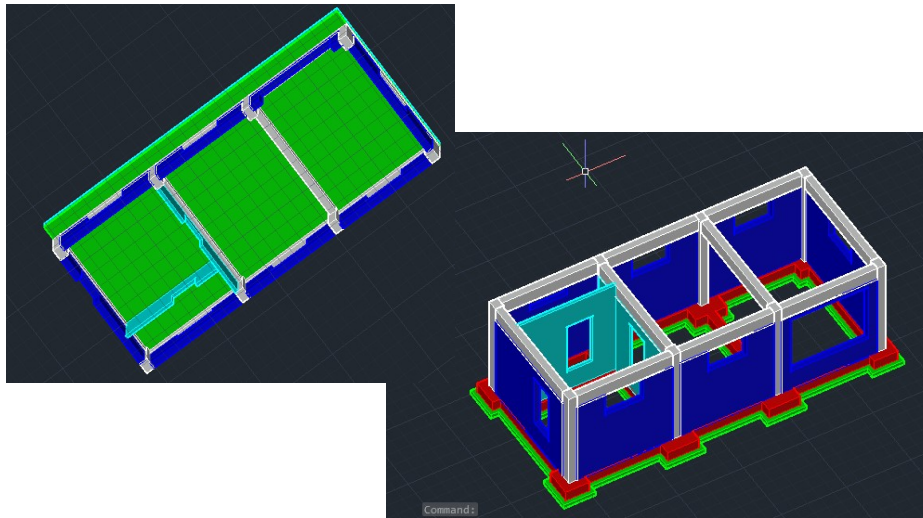


Item	Description	Unit	No.	L	W	H	Add	Deduct	Total
Concrete flooring	Office & Storage	m ²	1	3.80	3.55		13.490		
	Workshop		1	7.90	4.80		37.920		
	Column deduction axes 1 and 4		3	0.20	0.01			0.006	
	Column deduction axis 2		2	0.20	0.20			0.080	
	Column deduction axis 3		2	0.30	0.20			0.120	
									51.2

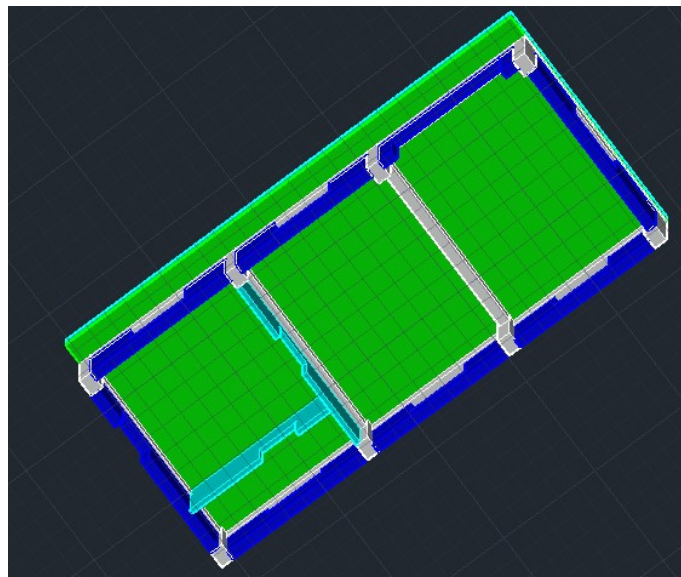
Internal Plastering

- Internal plastering is used as a finished surface or a substrate for painting
- In some cases ceiling and sometime ceilings and beams will have different type of plastering than walls
- Full area of walls beams and ceilings are calculated then openings are deducted
- Height of plastering is calculated from the finishing floor to the bottom of the slab

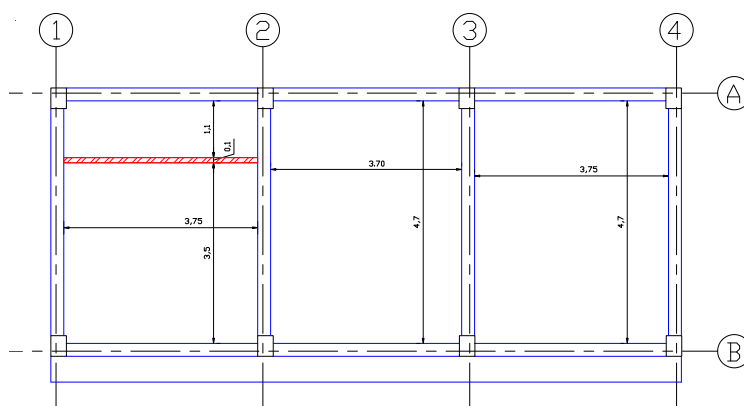
Internal Plastering



Internal plastering



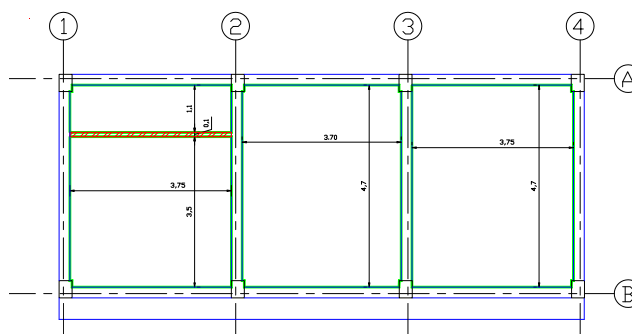
Internal Plastering Example (Ceiling)



Item	Description	Unit	No.	L	W	H	Add	Deduct	Total
Internal Plastering	Ceiling bathroom	m ²	1	3.75	1.10		4.125		
	Ceiling of storage room		1	3.75	3.50		13.125		
	Ceiling between axes A, B and 3, 4		1	4.70	3.75		17.625		
	Ceiling between axes A, B, 2 & 4		1	3.70	4.70		17.390		
	Column corner deduction		8	0.15	0.05			0.060	

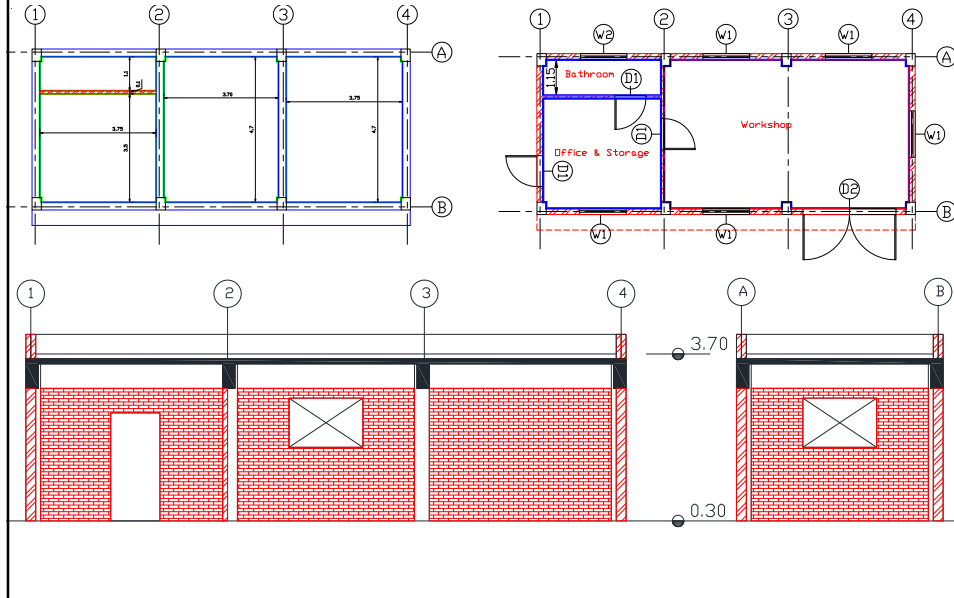
Internal Plastering Example (Beam & Wall Sides to From Beam bottom to Ceiling)

Height of beam side plastering = $0.6 - 0.1 = 0.5$ m

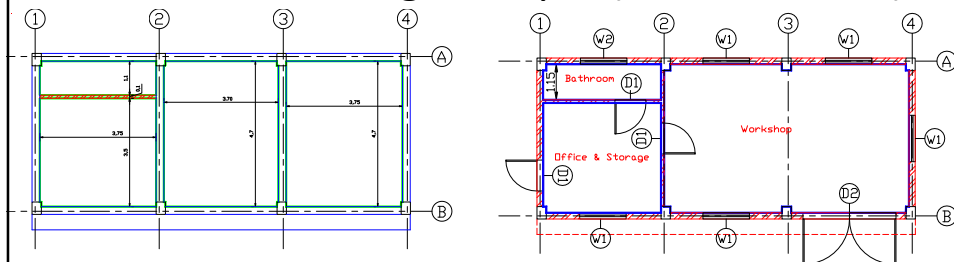


Item	Description	Unit	No.	L	W	H	Add	Deduct	Total
Internal Plastering	Beam sides on Axes 1,2,3,4	m ²	6	4.70		0.50	14.100		
	Beam sides between axes 1,2 & 3,4		6	3.75		0.50	11.250		
	Beam sides on Axes A and B between 2 & 3		2	3.70		0.50	3.700		
	Intersection of bathroom wall and beam sides		2	0.10		0.50		0.100	

Internal Plastering Example (Beam Bottom)

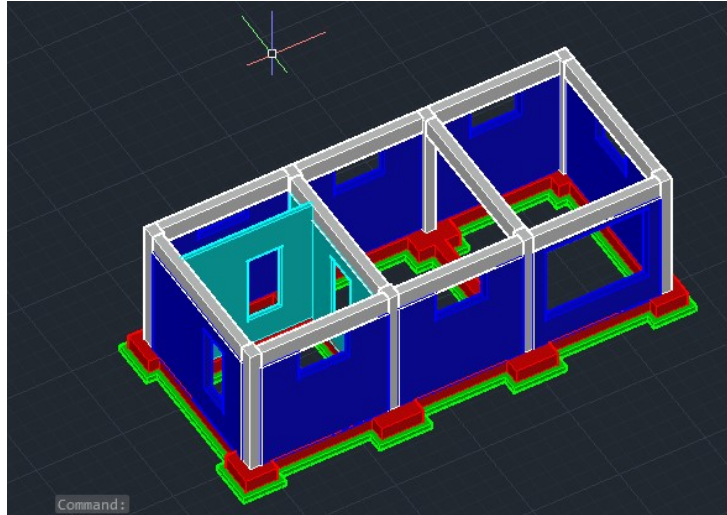


Internal Plastering Example (Beam Bottom)



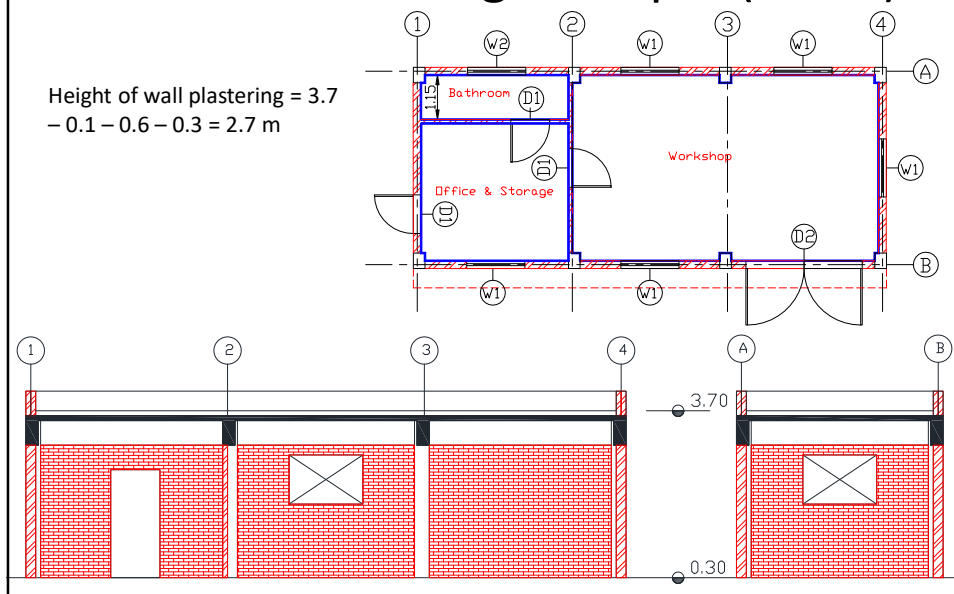
Item	Description	Unit	No.	L	W	H	Add	Deduct	Total
Internal Plastering	Beam bottom on A & B between 1 & 2 and 3 & 4	m ²	4	3.70	0.05		0.740		
	Beam bottom on A & B between 2 & 3		2	3.60	0.05		0.360		
	Beam bottom on axis 1 bathroom		1	0.95	0.05		0.048		
	Beam bottom on axis 1 storage room		1	3.35	0.05		0.168		
	Beam bottom axis 2		1	4.40	0.15		0.660		
	Beam bottom axis 3		1	4.40	0.25		1.100		
	Beam bottom on axis 4		1	4.40	0.05		0.220		

Internal Plastering

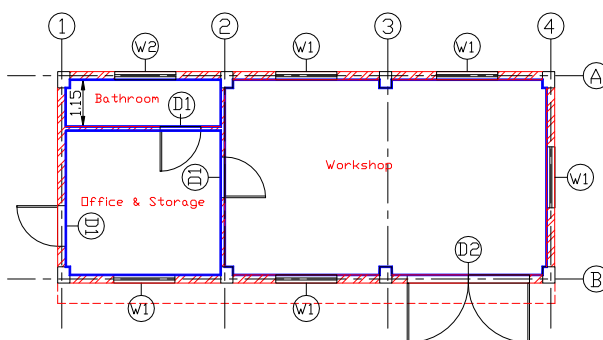


Internal Plastering Example (Walls)

Height of wall plastering = 3.7
 $- 0.1 - 0.6 - 0.3 = 2.7 \text{ m}$



Internal Plastering Example (Walls)

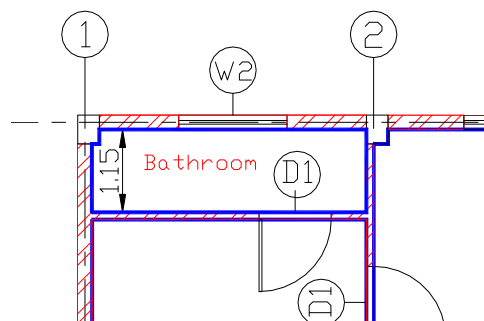


Item	Description	Unit	No.	L	W	H	Add	Deduct	Total	
Internal Plastering	Workshop walls on axes 2 & 4	m ²	2	4.80		2.70	25.920			
	Walls on axes A & B between 2 & 4		2	7.90		2.70	42.660			
	Storage room walls on axes 1 & 2		2	3.55		2.70	19.170			
	Storage room walls on axes between A&B and B		2	3.80		2.70	20.520			
	Column sides axis 4		4	0.20		2.70	2.160			
	Windows W1		5	1.50		1.00		7.500		
	Doors D1		4	1.00		2.20		8.800		
	Doors D2		1	3.00		2.50		7.500		

Internal Plastering (Example)

Item	Description	Unit	No.	L	W	H	Add	Deduct	Total
Internal Plastering	Ceiling bathroom	m ²	1	3.75	1.10		4.125		
	Ceiling of storage room		1	3.75	3.50		13.125		
	Ceiling between axes A, B and 3 & 4		1	4.70	3.75		17.625		
	Ceiling between axes A, B, 2 & 4		1	3.70	4.70		17.390		
	Column corner deduction		8	0.15	0.05			0.060	
	Beam sides on Axes 1,2,3,4		6	4.70		0.50	14.100		
	Beam sides between axes 1,2 & 3,4		6	3.75		0.50	11.250		
	Beam sides on Axes A and B between 2 & 3		2	3.70		0.50	3.700		
	Intersection of bathroom wall and beam sides		2	0.10		0.50		0.100	
	Beam bottom on A & B between 1 & 2 and 3 & 4		4	3.70	0.05		0.740		
	Beam bottom on A & B between 2 & 3		2	3.60	0.05		0.360		
	Beam bottom on axis 1 bathroom		1	0.95	0.05		0.048		
	Beam bottom on axis 1 storage room		1	3.35	0.05		0.168		
	Beam bottom axis 2		1	4.40	0.15		0.660		
	Beam bottom axis 3		1	4.40	0.25		1.100		
	Beam bottom on axis 4		1	4.40	0.05		0.220		
	Workshop walls on axes 2 & 4		2	4.80		2.70	25.920		
	Walls on axes A & B between 2 & 4		2	7.90		2.70	42.660		
	Storage room walls on axes 1 & 2		2	3.55		2.70	19.170		
	Storage room walls on axes between A&B and B		2	3.80		2.70	20.520		
Column sides axis 4	4	0.20		2.70	2.160				
Windows W1	5	1.50		1.00		7.500			
Doors D1	4	1.00		2.20		8.800			
Doors D2	1	3.00		2.50		7.500			
									171.080

Bathroom Ceramic Walls Covering

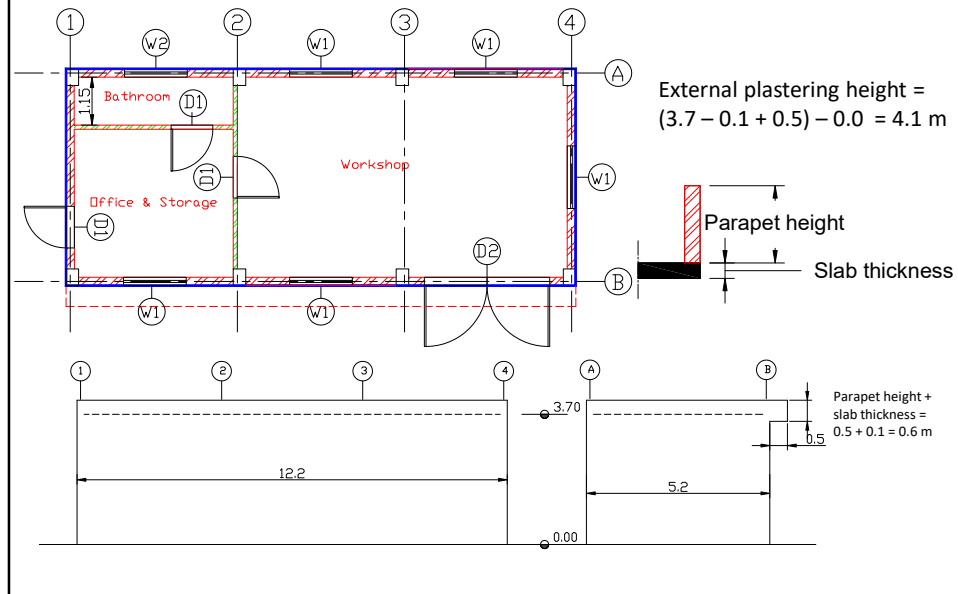


Item	Description	Unit	No.	L	W	H	Add	Deduct	Total
ceramic walls	Bathroom Walls long sides	m²	2	3.8		2.70	20.520		
	Bathroom Walls short sides		2	1.15		2.70	6.210		
	Door D1		1	1.00		2.20		2.200	
	Window W2		1	1.50		0.50		0.750	
									23.78

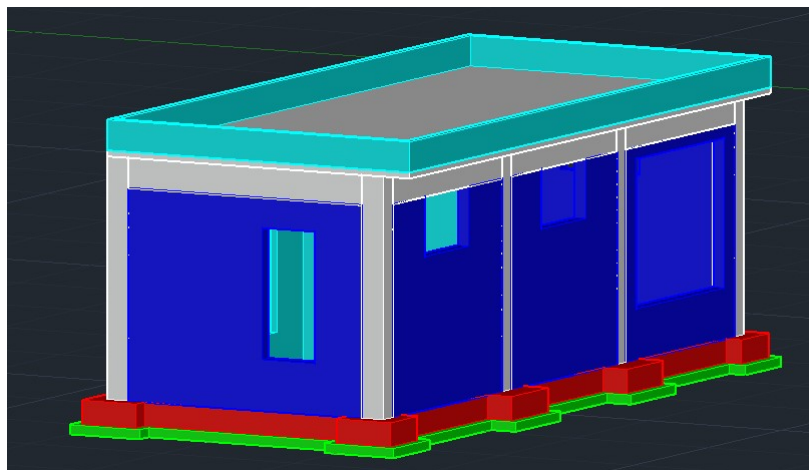
External Plastering

- External plastering covers all areas of the building exterior faces including walls, balconies and any extended slabs or features
- External plastering also covers internal areas like ducts and internal courts
- External plastering extends from the ground level or the sidewalk level to the top of the roof parapet
- Openings are deducted

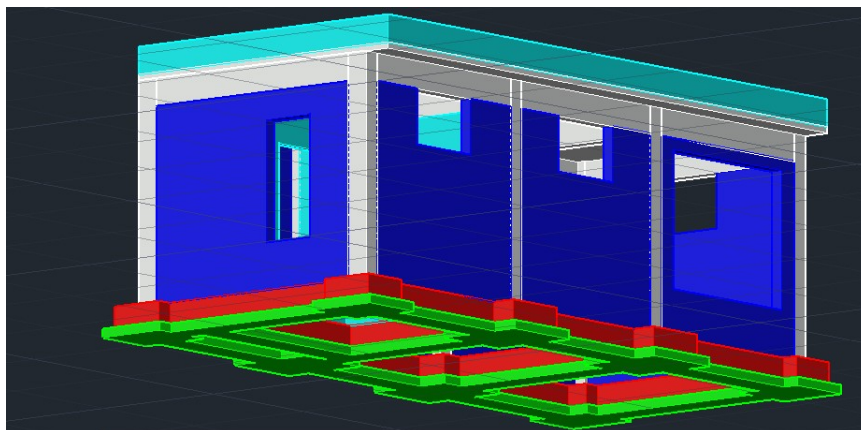
External Plastering (Example)



External Plastering



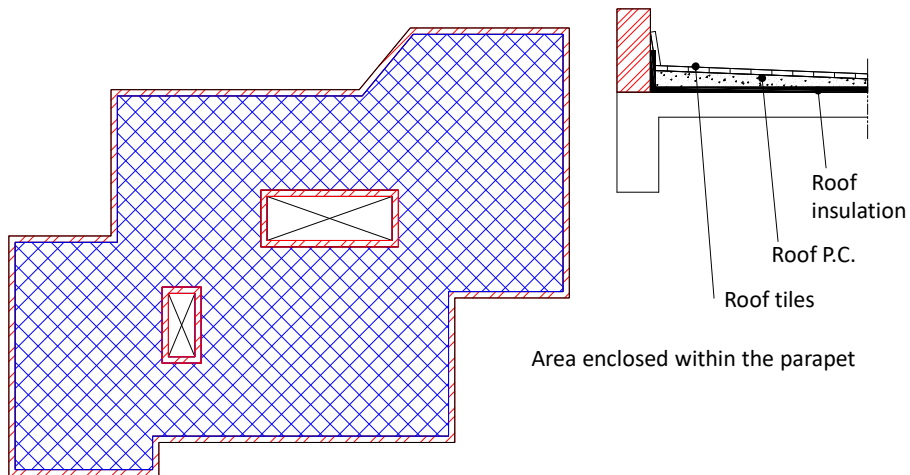
External Plastering



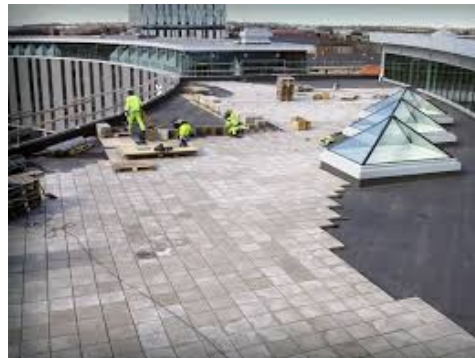
External Plastering (Example)

Item	Description	Unit	No.	L	W	H	Add	Deduct	Total
Ext. Plastering	Wall Axes A	m²	1	12.20		4.10	50.020		
	Wall Axes 1 & 4		2	5.20		4.10	42.640		
	Cantilever outside axis B		2	0.50		0.60	0.600		
	Parapet Axes B		1	12.20		0.60	7.320		
	Wall at axis B		1	12.20		3.50	42.700		
	Roof bottom outside axis A		1	12.20	0.50		6.100		
	Windows W1		5	1.50		1.00		7.500	
	Windows W2		1	1.50		0.50		0.750	
	Door D1		1	1.00		2.20		2.200	
	Door D2		1	3.00		2.50		7.500	
									131.43

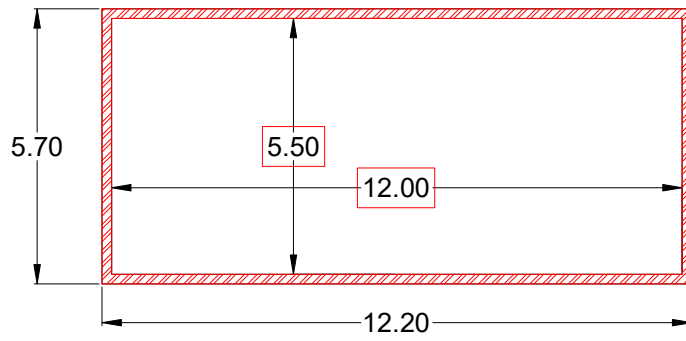
Roof Insulation, P.C. & Tiling



Roof Insulation, P.C. & Tiling



Roof Insulation, P.C. & Tiling (Example)



Item	Description	Unit	No.	L	W	H	Add	Deduct	Total
Roof insulation	Roof	m ²	1	12.00	5.50		66.000		
									66.000
Roof P.C.	Roof	m ²	1	12.00	5.50		66.000		
									66.000
Roof Tiling	Roof	m ²	1	12.00	5.50		66.000		
									66.000