Excellence Foundation

An ISO 9001:2015 Certified Company

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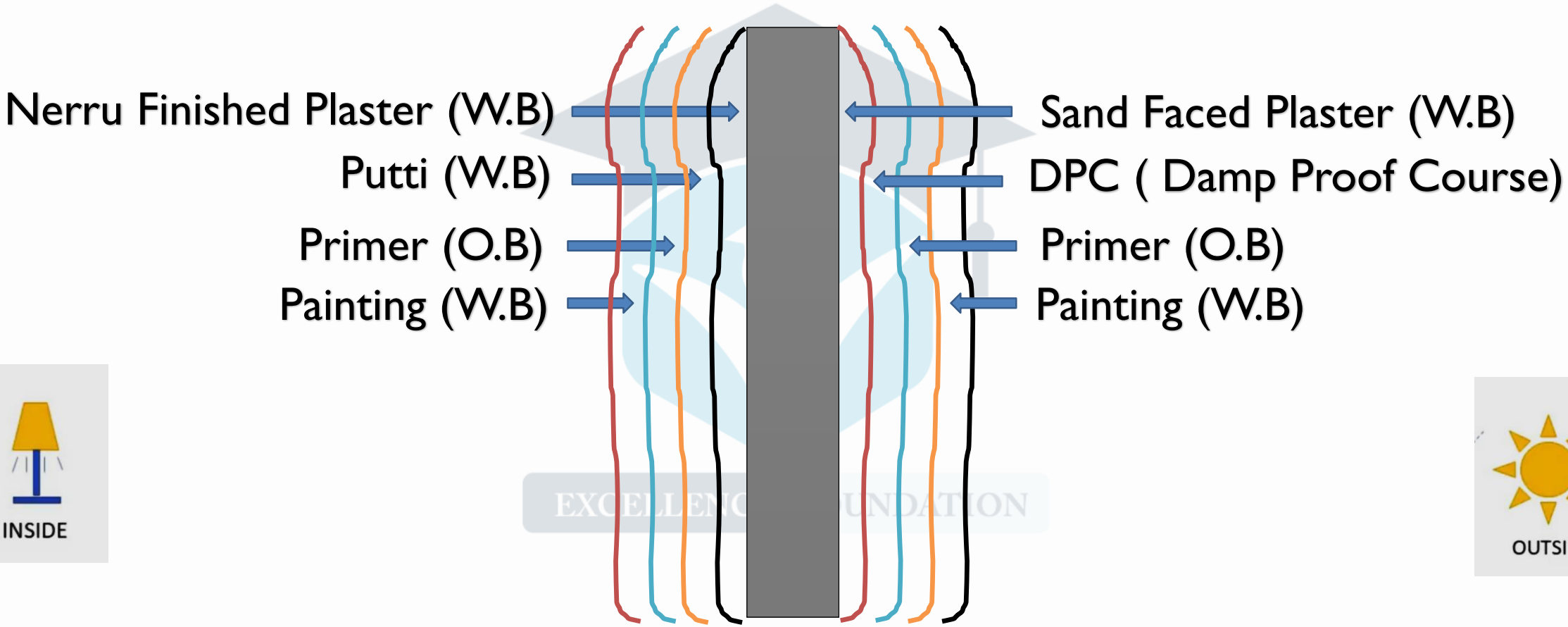
FINISHING WORK PART - 1

FINISHING PROCESS STEP BY STEP

- Block Work / Brick Work
- Plastering
- Flooring
- Painting

LAYERS OF FINISHING WORK



STEPS TO FINISHING WORK CONSTRUCTION

- ✓ Brickwork / Blockwork
- ✓ Plaster (Curing : 10-12 Days)
- ✓ Tiling / Flooring (tiles) (Curing : 3-4 Days)
- ✓ Putti
- ✓ Primer
- ✓ Painting

Starts after the all plastering & Flooring done

BRICKS	AAC BLOCK (AUTOCLAVED AERATED CONCRETE BLOCK)
Clay	Mortar & Flyash
Non-Eco-friendly	Eco-friendly
Strength is less	Strength is more
Water absorption is more	Water absorption is less
Sizes – 190 x 90 x 90 mm	Sizes – 600 x 200 x 300 mm 600 x 200 x 200 mm 600 x 200 x 150 mm 600 x 150 x 150 mm 600 x 150 x 100 mm 600 x 100 x 100 mm
Speed of construction is less	Speed of construction is more
Surface is uneven after construction	Surface is even after construction

BRICKS	AAC BLOCK (AUTOCLAVED AERATED CONCRETE BLOCK)
Plastering Quantity is more Required	Plastering Quantity is less Required
Rate – Rs. 4 – 10 / Brick	Rate – Rs. 40 – 100 / Block
Mortar Act as a binder material	Polymer based adhesive chemical act as a binder material
Heat and sound insulation power is less	Heat and sound insulation power is more
Weight of per 10 Brick as compared to one block – 36-40 kg	Weight of 1 Block = 14-16 Kg
For 1 Cum , Bricks – 500 Nos Cement – 2 Bags Sand – 0.15- 0.2 Brass = 15 - 20 Cuft Price of Mortar = Rs. 1100-1500 / CUM	For 1 Cum , Blocks – 45-50 Nos Adhesive Chemical – 1 Bags Price of Adhesive = Rs. 400-650 / CUM

36 - 40 KG

14 -16 KG

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BRICK WORK CALCULATIONS

- Brick Size Without Mortar = 0.19m X 0.09m X 0.09m

  Consider 10 mm Mortar On Each Face of Brick

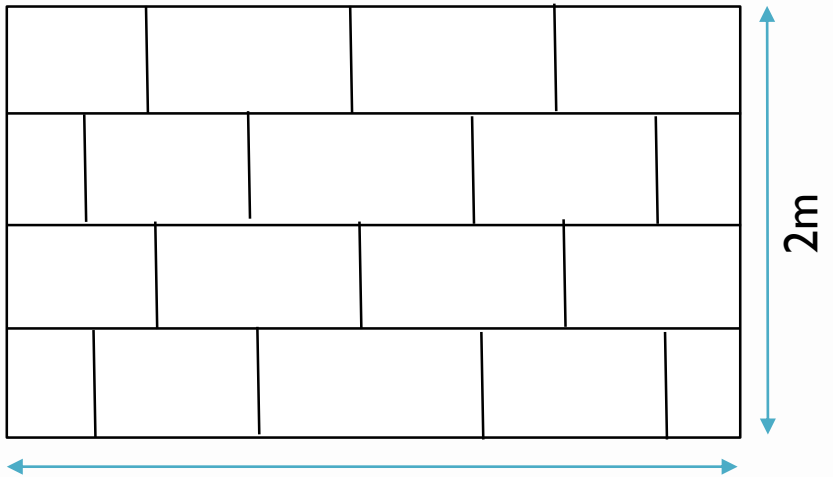
- Brick Size With Mortar = 0.2m X 0.1m X 0.1m

  Volume of Brick With Mortar= 0.2m X 0.1m X 0.1m = 0.002 m^3

  Volume of wall = 3 X 2 X 0.2 m = 1.2 m^3

- No. of Bricks =

$$\frac{\text{Volume of wall}}{\text{Volume of single Brick with Mortar}} = \frac{1.2}{0.002} = 600 \text{ Nos}$$



Thickness of wall = 200 mm

Consider 5 % Wastages ,

Total Nos. of Bricks Required = 600+30 = 630 NOS

- Mortar Quantity = 1.2 m^3 – 600 X 0.19x0.09x0.09m = 0.276 m ^3

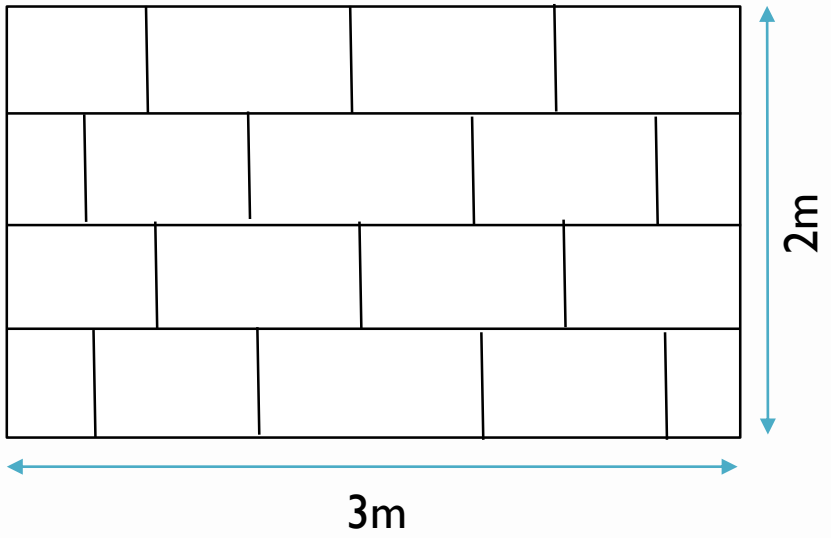
BLOCK WORK CALCULATIONS

- Block Size = 0.6m X 0.2m X 0.15m
- Volume of Block = 0.6m X 0.2m X 0.15m = 0.018 m^3

  Volume of wall = 3 X 2 X 0.2 m = 1.2 m^3

- No. of Blocks =

$$\frac{\text{Volume of wall}}{\text{Volume of single Block}} = \frac{1.2}{0.018} = 67 \text{ Nos}$$



Thickness of wall = 200 mm

Consider 5 % Wastages ,

Total Nos. of Blocks Required = 67+3 = 70 NOS

Adhesive Chemical Material Required,

As per CPWD & Site, 30-40 Kg Polymer Adhesive Chemical Required for 1 Cum BlockWork
Means, For 1 Cum = 1 Bag of adhesive chemical Needed

MORTAR CALCULATIONS

Dry Quantity is 30 % Extra of a Wet Quantity

- **Dry Volume = Wet Volume X 1.3**

- Wet Area of Plaster = 10 m^2
- Thickness of Mortar is 12 mm
- Wet Volume of Plaster = 10*0.012= 0.12 m^3
- Dry Volume is **30 % Extra** of Wet Volume
- So,
  - Dry Volume = Wet Volume X 1.3

= 0.12 X 1.3 =0.156 m^3

Cement Mortar	
1	6

Cement =

$$\frac{\text{Cement Ratio X Dry Volume of Plaster}}{\text{Total Ratio}} = \frac{1 \text{ X } 0.156}{1+6} = 0.022 \text{ m}^3$$

Sand =

$$\frac{\text{Sand Ratio X Dry Volume of Plaster}}{\text{Total Ratio}} = \frac{6 \text{ X } 0.156}{1+6} = 0.133 \text{ m}^3$$

FINISHING WORK DIMENSION RULES

- Height for Brick work – Floor Top To Beam Bottom **(only below beam)**
- Height of Plaster, Putti, Primer, Painting – Floor top to next floor bottom – Skirting Height SQ.m/Sq.Ft.
- Flooring – Size of room as per architectural plan
- Ceiling Dimension - Size of room as per architectural plan