Q. Quantity Calculation of Bricks for one cubic meter (without cement mortar)

Ans.   As we know that the standard brick size (India) = 19 x 9 x 9 cm

i.e., 0.19 x 0.09 x 0.09 m

length (L) = 0.19m

width (B) = 0.09m

thickness (D) = 0.09m

volume of single brick (V) = 0.19 x 0.09 x 0.09

$$(V) = 0.001539 \text{ m}^3$$

$$(V) = 1,539 \text{ cm}^3$$

$$(V) = 1539 \text{ x } 10^3 \text{ mm}^3$$

No. of Bricks required for 1 m^3 = 1 / 0.001539

$$= 649.77 \text{ no's}$$

Quantity Calculation of Bricks for one cubic meter (with cement mortar)

Ans.   As we know that the standard brick size (India) = 19 x 9 x 9 cm

With mortar thickness of (1cm) = 20 x 10 x 10 cm

length (L) = 20 cm

width (B) = 20 cm

thickness (D) = 20 cm

volume of single brick (V) = 0.2 x 0.1 x 0.1

$$(V) = 0.002 \text{ m}^3$$

$$(V) = 2000 \text{ cm}^3$$

$$(V) = 2000 \text{ x } 10^3 \text{ mm}^3$$

No. of Bricks required for 1 m^3 = 1 / 0.002

$$= 500 \text{ no's}$$

Assuming percentage of wastage of bricks = 2 to 3 %

Therefore, total no. of bricks for (1m^3) = 500 + [500 x (3/100)]

$$= 515 \text{ no's}$$

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