

New Method For Masonry Wall Calculation

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I. New Derived Formula:

Number of bricks per unit area with mortar = $\frac{\text{Number of bricks} \cdot \text{weight of mortar} \cdot \text{thickness}}{\text{Volume of mortar} \cdot \text{Parts of mortar}}$

For example:

Number of Bricks=70 Bricks

Weight of mortar=6 Kg

Thickness of mortar=0.02 m

Volume of mortar=50 m³

Parts of mortar=sand:cement=6:1=7 Kg

Number of bricks per unit area with mortar = $70 \cdot 6 \cdot 0.02 / 50 \cdot 7 = 0.024 \text{ m}^{-2}$

II. Conclusion:

This formula is used to calculate number of bricks, weight of mortar, thickness of mortar, volume of mortar, parts of mortar and number of bricks per unit area with mortar.