

QUANTITY SURVEY AND VALUATION

Unit II

S Sreelatha

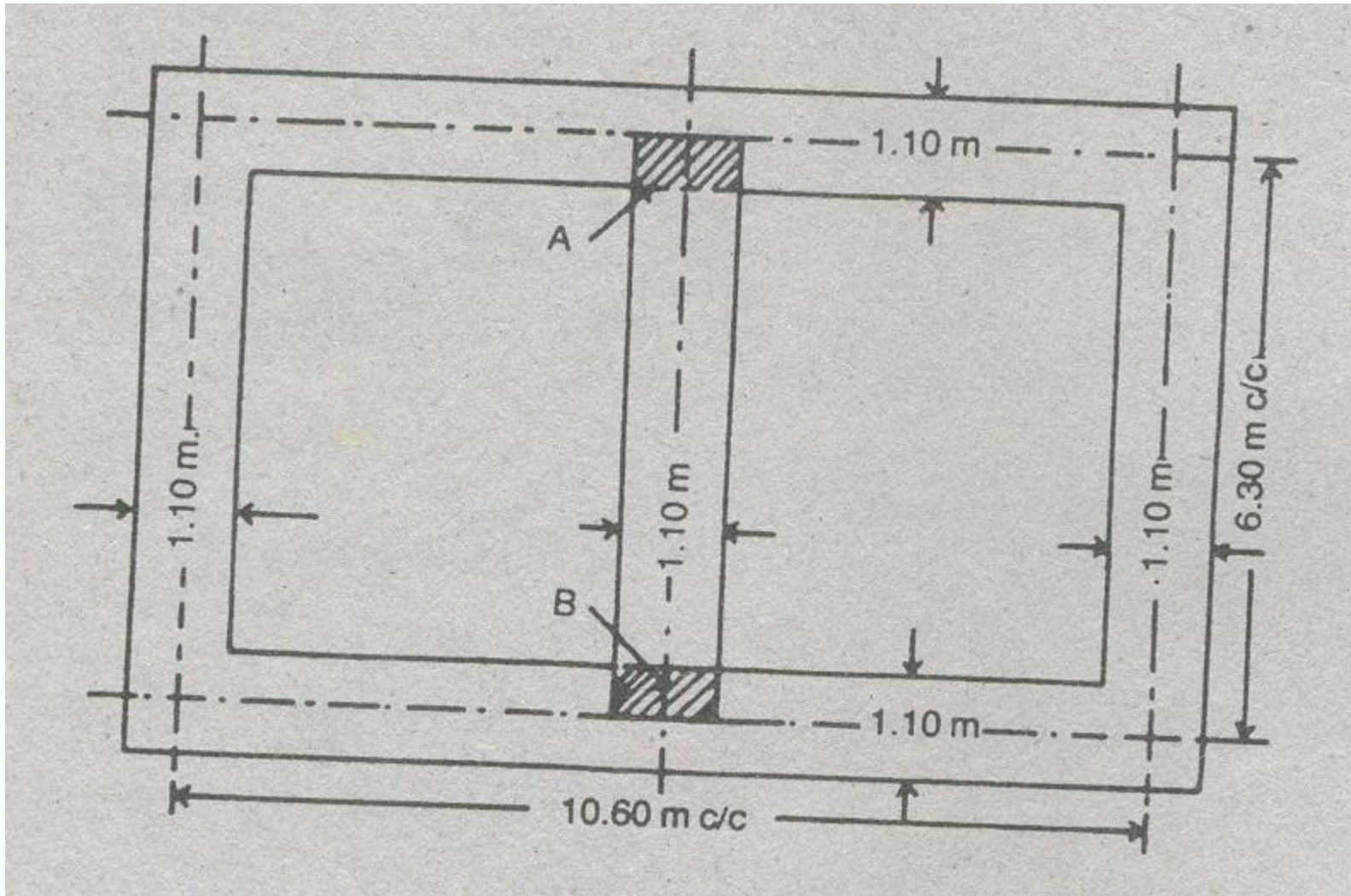
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CENTRE LINE METHOD

- **For buildings having different types of walls, each set of walls shall have to be dealt separately.**
- **Find the total centre length of all walls of one type and proceed in the same manner as described above. Similarly find the total centre length of walls of second type and deal this separately, and so on.**
- **Suppose the outer walls (main walls) are of A type and inner cross walls are of B type.**
- **Then all A type walls shall be taken jointly first, and then all B type walls shall be taken together separately.**
- **In such cases, no deduction of any kind need be made for A type walls, but when B type walls are taken, for each junction deduction of half breadth of A type walls (main Walls) shall have to be made from the total centre length of B type walls.**

FILLING IN TRENCHES

- **Filling in trenches** after the construction of foundation masonry is ordinary neglected. If the trench filling is, also taken in account, it may be calculated by deducing the volume of masonry in trenches from that of the volume of excavation.

FOUNDATION CONCRETE (P.C.C.)

- The type of concrete must be clearly mentioned. The mix proportions and the type of cement, sand and coarse aggregate must be specified.
- This item is measured in cubic ft and the unit for measurement is, generally Rs. per 100 cubic ft.
- When the soil is soft or weak, one layer of dry bricks or stone soling is applied below the foundation concrete. The soling layer is computed in sq.ft (length X breadth), specifying the thickness in description of item.

BRICKWORK IN FOUNDATION UP TO PLINTH

- Care must be taken, while taking dimensions from the drawings in the bill of quantities because the walls in this part of the structure are in the form of steps with changing dimensions.
- **This item is calculated in cft and the unit for payment is Rs. per 100 cft.**
- In the description of work, the quality of bricks and mortar ratio must be specified. For example,
"Brickwork in foundation and plinth using first class bricks laid in (1:4) or (1:6) cement-sand (c/s) mortar_____"

ROOFING & RCC WORKS

- Area of the **Roof slab** is calculated by taking inside dimensions of the room plus a bearing of the roof slab on the walls, on all sides.
- For **R.C.C. Roof slabs and beams**, the total quantities of concrete and steel are estimated, separately.
- The quantity of plain concrete is estimated in cft and the standard unit for payment of concrete is Rs. per 100 cft.
- Volume of **Reinforcing Steel** is not deducted , while estimating the volume of plain concrete for payment.
- c = **R.C.C. lintels** over wall openings such as doors and windows are also included in R.C.C. work.

FLOORS

- **Cement concrete floors. Mosaic floors, and brick floors are most commonly used.**
- **Payments are made separately for different layers, like, topping, lean concrete, sand filling, earth filling, etc.**
- **Earth filling, sand filling and lean concrete are paid by volume, whereas, topping is paid on area basis, mentioning thickness in the description.**
- **Standard unit for payment of topping is, usually, Rs. per 100 sft.**
- **The skirting is estimated in running ft.**

DAMP PROOF COURSE (D.P.C.)

- **Horizontal D.P.C.** shall extend the full width of the super structure walls, however, it shall not be provided across doorways and veranda openings. It is also provided in roof and floors.
- **Vertical D.P.C.** is provided in external walls, especially, in the walls of basements.
- The quantity of D.P.C. is estimated in square ft.(on area basis) and standard unit for payment is Rs. per 100 sft.