

2.2 STANDARD DATA FOR MAN HOURS AND MACHINERIES FOR COMMON CIVIL WORKS

LABOUR (MAZDOOR) REQUIRED FOR DIFFERENT WORKS

Extracts from the report on productivity projects in building industries issued by National Building Organization are given below:-

(A) Earthwork per 28.30, cu m (1000 cu ft)-

(1) Excavation in foundations, trenches, etc. in ordinary soil including disposal up to 30 m (100') and lift of 1.5 m (5 ft)-5 Beldars and 4 Mazdoors can do 28.30 cu m (1000 cu ft) per day.

(2) Refilling excavated earth in foundations, plinth, etc., including consolidation in 15 cm (6") layers-3 Beldars, 2 Mazdoors and 1 Bhishti can do 28.30 cu m (1000 cu ft) per day.

(3) Disposal of surplus earth within a lead of 30 m (100')—1 Mazdoor can do 2.83 cu m (100 cu ft) per day.

(B) Cement concrete work per 2.83 cu m (100 cu ft)-

Laying cement concrete-2 Beldars, 3 Mazdoors, 1 Bhishti and 1 Mason can do 2.83 cu m (100 cu ft) per day.

(C) R.C.C. Work-

(1) Laying reinforced concrete --- 3 Beldars, 3 Mazdoors, 1/3 Bhishti and 1 Mason can do 2.83 cu m (100 cu ft) per day.

(2) Centering and shuttering for flat surfaces --- 4 Beldars and 4 Carpenters (II class) can do 9.6 sq m (96 sq ft) per day.

(3) Reinforcement work for R.C.C.—1 Blacksmith or fitter and 1 Beldar can bend and place in position 1 quintal (2 cwt) of steel per day.

(D) Stone work per 2.83 cu m (100 cu ft)-

Random rubble masonry with blue stone in foundations-3 Masons, 3 Beldars, 2 Mazdoors and 14 Bhishti can do 2.83 cu m (100 cu ft) per day.

(E) Brickwork per 2.83 cu m (100 cu ft)-

First class brickwork in 1:4 cement mortar in superstructure partition walls, junctions of roof, parapet walls and string course—244 Masons, 417 Mazdoors and 12 Bhishti can do 2.83 cu m (100cu ft) per day.

(F) Wood work-

(1) For the frames of doors and windows-2 Carpenters and 1 Beldar can work 0.18 cu m (6.40cu ft) of wood equivalent to 4 door frames 7.5 cm x 10 cm of 1.2 m * 2.1 m (3"x4" of 3' — 11"X7') size per day.

2) For pannelled, glazed, etc., shutters-15 Carpenters and 4 Beldars can make and fix 4shutters 40 mm thick of size 2.00 mx 1.15 m (173" thick of size of 6–9"*3'—9") per day. Quantityof wood per shutter - 0.075 cu m, i.e., 2.66 cu ft.

(G) Iron work-

(1) Fixing 40 mm 3 mm x 38 cm (1% *!%" X 15") flat iron holdfasts-1 Blacksmith (II class),1 Mason and I Beldar can fix 36 holdfasts per day.

(2) Fixing 16 mm dia (% " dia.) M.S. Todds1 Blacksmith (II class), 2 Carpenters (II class) and 3Beldars can fix 16.5 m (54 r ft) per day.

(H) Flooring-

4 cm thick (112") thick cement concrete flooring of 40 sq m (400 sq ft) require- 5 Masons,4 Beldars, 3 Mazdoors and 1 Bhishti per day for mixing, laying and finishing.(I) Finishing-(1) Plastering with any mortar 12 mm (1") thick_3 Masons, 3 Mazdoors and 1 Bhishti canplaster 40 sq m (400 sq ft) per day.

(2) White washing or colour washing (3 coats)--1 White washer and 1 Mazdoor can do 60 sqm.(600 sq ft) per day.

(3) Painting two coats such as chocolate; red, grey, etc., on wood or steel - 3 Painters and2 Mazdoors can paint 10 sq m (100 sq ft) per day.

LOAD FOR TRUCKS

On pucca metalled road-

Trucks	... 3 Tonners	5 Tonners	8 Tonners
Brick or Allahabad tiles	1000Nos	1500 Nos	2000 Nos.

Cement, steel and other heavy materials 3 Tonne 5 Tonne 8 Tonne

Other materials-Ballast, kankar, grit, sand 2.8 cum 4.20 cu m 5.6 cum
coal, etc. (100 cu ft) (150 cu ft) (200 cu ft)

On kachcha earthen road the load will be less by 33 per cent.

