

Title (en)

METHOD AND APPARATUS FOR CONSTRUCTING RAMMED EARTH WALLS WITH INTEGRAL RENDER

Publication

EP 0385980 B1 19930303 (DE)

Application

EP 88901527 A 19880129

Priority

AU PI014687 A 19870202

Abstract (en)

[origin: WO8805849A1] A method for constructing render jacketed, rammed earth walls for buildings which utilizes a rectangular container (10) which functions as a mould and also a hopper and skip, the container has an open top and a bottom closable by two half trapdoors (15a, 15b), maintained in inclined closed position up from the bottom by cam trapdoor-retaining bars (17, 18) releasable by hand pull rods (19, 20) attached to retainer chains (23, 24); the container (10) is removably carried with trapdoors (15a, 15b) closed upon a rubber-tyred, wheeled, ground level trolley (58) during level-filling with loose earth; two, three-sided trays (27, 28) of lateral dimensions substantially equal to those of the container (10) are level-filled with a powdered cement/sand render mix of low moisture content and stacked upon the container (10), each end (13, 14) of which is provided with a pair of pivot brackets (35, 36, 39, 40) of unequal length which respectively have a hole (37, 38) for detachable fixture of render trays (27, 28) to the container (10); the filled container (10) and trays (27, 28) are lifted by a hoist (55) and lowered into a wall mould formwork of plywood panels (62, 50), the external, lateral dimensions of the container (10) being sufficiently less than the internal dimensions of the formwork to create outer or veneer moulding cavities. When the container (10) rests upon a concrete footing (49), or previously rammed earth layer, the trays (27, 28) are tipped in mutually opposite directions in a vertical arc to put the loose render into the veneer mould cavities between formwork members (62, 50) and the container (10); the trapdoors (15a, 15b) are opened by undoing chains (23, 24), then freeing retainer rods (19, 20) to allow cam retainer bars (17, 18) to fall, the trapdoors (15a, 15b) opening under the weight of loose earth, the container (10) is lifted and loose earth pours out between outer render layers (68, 69) which are rammed simultaneously with the earth as a core (67) to obtain a rammed earth, render jacketed, integral mass.

IPC 1-7

E04B 2/84; **E04B 2/86**

IPC 8 full level

E04G 11/08 (2006.01); **E04B 2/84** (2006.01); **E04B 2/86** (2006.01)

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