

Title (en)
DURABLE CONSTRUCTION OBJECT MADE OF THREE LAYERED PREFABRICATED FERROCEMENT CONSTRUCTIVE ELEMENTS

Title (de)
BESTÄNDIGES BAUOBJEKT AUS DREI GESCHICHTETEN FERROZEMENTFERTIGBAUTEILEN

Title (fr)
OBJET DE CONSTRUCTION DURABLE CONSTITUÉ DE TROIS ÉLÉMENTS DE CONSTRUCTION EN FERROCIMENT PRÉFABRIQUÉS EN COUCHES

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Application
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Abstract (en)
[origin: WO2021010851A1] The invention relates to a construction of permanent high rise residential and commercial buildings made of three layered prefabricated ferrocement constructive elements in which final internal layer does not participate in the static system. Building is made on prior constructed reinforced concrete foundations (1) and a floor slab (2). On the construction site, on the foundations (1), wall elements (E1) are temporarily supported by raking struts (5), until reinforced concrete columns (3) are constructed in a space between the two adjacent element (E1). Anchor sets (A1) are implemented in the structural edge ribs (6) at all four comers of the wall element (E1). Reinforced concrete ring beams (4) are made over top structural edge ribs (6) away from finishing interior layer (8) with tapered edges (9). Roof elements (E2), which carry all standard constructions of the suspended ceilings (S) are anchoring on the reinforced concrete ring beams (4). Anchor sets (A2) are implemented at arbitrary points in structural ribs (24) of the prefabricated elements (E2). The insulation (I1) of the wall element (E1) is continuous and uninterrupted in the entire structure in the both, horizontal and vertical cross sections. The insulation (I1) is in contact with insulation (I3) of the suspended ceiling (S), insulation (I2) on the roof element (E2) and insulation (I4) of the floor plate (2). The foundations (1) are insulated from the outside by insulation (I5). Such constructed and insulated building represents an object made of prefabricated elements with virtually invisible interior joints and without thermal bridges.

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