
ABSTRACT

A Composite Lightweight Concrete Panel (CLC)

The invention is a great improvement and innovation of the precast panel for construction, a distinguishing feature of this invention is that use concrete with Aerated Lightweight Concrete, cast in together and steel Mesh. One-off Die casting.

The invention has the beneficial effects that Lightweight, easy installation, affinity well for bonding with other material, excellent fireproof performance and environmental protection.

A Composite Lightweight Concrete for separate building units over an opening of a wall is disclosed herein. In a preferred embodiment, the Composite Lightweight Concrete comprises a

#1 Aerated lightweight aerated concrete and

#2 concrete and

#3 steel mesh and

#4 joint mesh

Figure 1 is an end view of a composite lightweight concrete panel according to a preferred embodiment of the present invention; The groove line (106) surrounding panel use install water stop materiel or flexible materiel improve wall waterproof performance. As surface shape concave (107) is connect to other panel protrude part (108) integral a full wall. The panel fix that joint should be use adhesive mortar (109) and nylon mesh (110) bond together.

And Figure 2 shows internal structure of Figure 1 and structural design and excellent fire rated of present invention; Present invention utilizes CONCRETE as the surface layer (101), the steel mesh (102) is used as the transmit structural forces, lightweight concrete (103) use as the improved wall fire, waterproof and sound transmission. Steel mesh cage with fiberglass mesh (104) can be insure lightweight concrete (103) according to the design. Steel support (105) use for surface layer (101) load transmit and insure steel mesh cage (104) there is no deformation.

Figure 3 shows an ISO view of a variation of the preferred embodiment of Figure 1 which is adapted to support building units of a different dimension.