
ABSTRACT

A Lightweight Concrete Canopy (LCC)

The invention is a great 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 and steel structure member, 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 Lightweight Concrete Canopy for separate building units over an opening of a wall is disclosed herein. In a preferred embodiment, the Lightweight concrete canopy a

#1 Aerated lightweight aerated concrete and

#2 Steel structure member and

#3 steel mesh and

#4 joint mortar

Figure 1 is an end view of a lightweight concrete canopy according to a preferred embodiment of the present invention; the groove line (106) between vertical wall and lightweight concrete canopy use install water stop materiel or flexible materiel improve wall waterproof performance. As surface shape concave (107) is surrounding panel Prevent water from top along panel below through to indoor. The lightweight concrete canopy fix that joint should be use NS mortar (110) and backed rod and sealant (106) bond together.

And Figure 2 shows internal structure of Figure 1 and structural design and excellent fire rated of present invention; Present invention utilizes lightweight concrete as the surface layer (103), the steel mesh (102) is used as the transmit structural forces, lightweight concrete (103) use as the improved wall fire, waterproof and sound transmission and lightweight. Steel mesh cage (102) can be insure lightweight concrete (103) according to the design. Steel L bracket support (101) use for steel structure member (105) transfer load from canopy there is no deformation. The steel L bracket (101) and steel structure member (105) use bolt or weld joint together.

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

Figure for publication: Figure 1