

ULTRA-THIN SEMI-PREFABRICATED CONCRETE SLAB AND MANUFACTURING METHOD THEREOF

5 ABSTRACT

The present invention discloses a method for preparing an ultra-thin semi-prefabricated concrete slab, which is made of a composition including 45.4-49.2% of aggregate, 26.4-29.1% of stone powder, 15.6-17.7% of cement, 0.24-0.56% of super plasticizer, 1.0-2.98% of nano silica sol,
10 and 7.41-8.78% of water. In the method the above materials are stirred and mixed in sequence to obtain concrete slurry, which is then injected into a mold to obtain the concrete slab according to the present invention after curing, demolding and watering. The concrete slab according to the present invention has high early strength, whereby demolding after 12 hours is possible. In addition, the thickness of the slab can be reduced to 50 mm with the same strength, thus increasing
15 the space for piping arrangement in the slab. In addition, no shearing reinforcing bars are necessary during pouring, thus facilitating moving, transportation and installation.

(Fig. 1)