

Title: *Future Houses By Future Concrete (Kancrete)* - (KanCret) considered as a *combination of high performance concrete and structural lightweight concrete* , can do play constructive roles in enhancing the environment, meeting green-building objectives & attaining sustainable development, as an innovative product for the human civilization, for the days to come & is expected to show its multi-various facets in all the spheres of construction yet to be explored in the hands of future researchers.

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We aim to reach concrete structures (low to medium rise) resist external environmental factors (hot climates - humidity - coastal environment - earthquake - frost areas - noisy areas- industrial areas - weather fluctuation - stormy areas.. etc), characterized by high fire resistance (externally and internally), achieves higher structural balance rates, higher sustainability rates & higher durability with longer life than counterparts. All of that achieved by using *lightweight high performance structural concrete* with totally environmentally friendly materials that donot involve any harmful substances, *we called it :(KanCrete)* it is the concrete of the future because, with all these features we do not use any (unconventional) materials, as they are composed of (coarse & fine aggregates) and (ordinary or resistive cement) have the same composition proportions as any conventional concrete, but with the addition of some elements to get all of these advantages, Without a significant increase in cost. (KanCrete) density = (1600 to 1850 kg / m3), reducing 25 % to 35% of conventional concrete weight, Compressive strength = 423 to 523 kg/cm2, with 40% to 75% more than conventional concrete, Heat gain %age = 2.47% to 2.58%, with heat transfer resistance 25 times of insulated conventional concrete, Not permeable to liquids and harmful substances & Chemically balanced in the face of harmful environments. we obtain fully structural system integral components and members, with full distribution of loads in various loading states, high stable & tough structure system.

Biography

Mr.Ibrahim Kandil is a Civil Engineer consultant, BSc. 1977, Alexandria university, Egypt. He has+30 years of extensive experience in structural engineering & Soil mechanics with all its applications. worked as an executive director and consultant for large and diverse projects in Egypt & Gulf region, has engineering studies in buildings restoration and maintenance. has +300 Courses "CEUs" From :AIA, ACI, PCA, ASTM, USGBC, AISC, McGraw Hill Constr., CED Inc., WP council, BD+C university, NFBA, Gr. Builder College, NIBS, Green CE Inc., RON BLANK &Associates Inc., BUILDER College, WBDG. And Civil Engineer Consultant (Saudi council of engineers).

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