

Name of Inventor: Mr. Kodag Pradeep B., Magdum Manisha M., Mr. Anawkar Mahadev P., Mr. Chandak Pankaj P. et al.

Title of Invention: - Light Weight Concrete for Structural Applications

Patent Application No.: - 201621009888

Date: 22/03/2016

Status: Complete patent filed

Abstract: Lightweight concrete possess many advantages over conventional one such as, reduction in dead load, attract less earthquake forces, higher shock absorption capacity etc. Concrete is obtained by mixing hydraulic binding material, water, aggregates and sometimes admixtures in required proportions. The conventional concrete is heavy material having density of 2400-2500 kg/m<sup>3</sup>, whereas the structural light weight concrete as per ASTM C330 (American Standards Specification for Light Weight Aggregates for Structural Concrete) has density less than or equal to 1920 kg/m<sup>3</sup>. There is a growing need to reduce the weight of structures and structural light weight concrete has a low density results in reduced dead weight of structure which may be advantageous in seismic design of structure. This concrete is helpful in erection and transportation cost. Generally, light weight aggregates such as pumice, shale, perlite, expanded clay, slag etc. and air entraining agents are used to produce light weight concrete. The structural light weight concrete have a wide range of applications in high-rise structures, prefabricated buildings sections etc.