

Application of expanded polystyrene (EPS) beads

A construction technique using lightweight geomaterials has many practical advantages because of their light self-weight, which makes it possible to reduce large deformations and differential settlement of soft ground or a foundation with poor bearing capacity. Nowadays expanded polystyrene (EPS) blocks are used with soil to make it lightweight material. Few applications like embankment construction, retaining walls and road construction can be mention. These blocks are manufactured by industry in regular shapes only. It becomes difficult to use these blocks for constructing irregular shapes on site. Also it is very difficult to control their density on site. This may be overcome by using expanded polystyrene beads which has different sizes and density. Handling of EPS beads is easy as compared to EPS blocks. Raw beads are available in powder form which can be expanded on site, it can reduce transportation cost. We are trying to explore the use of EPS beads along with soil and flyash.



Flyash mixed with EPS beads



Cube casted using EPS beads and flyash