



## **Functional Geopolymer Pervious/permeable Concrete (FGPC):**

### **Application areas**

The pervious/permeable concrete is a special concrete that contains voids and possesses high water permeability, and it is useful for:

- i) Permeable pavements necessary for infiltration of water,
- ii) Water purification by removing pollutants,
- c) Thermal insulation,
- d) Acoustic absorption that is sound insulation and
- e) Dynamic absorption of carbon dioxide etc.

### **Urgent Need of FGPC:**

The frequent occurrence of storms is responsible for the problems of stormwater runoff. To control the stormwater runoff and reduce the water and soil pollution there is an urgent need to develop FGPC which are capable of a) on-site infiltration of stormwater and b) useful for removal of pollutants from them as geopolymer are the advanced material for water and wastewater treatment due to its alkaline nature. The high porosity possessing geopolymer concrete namely FGPC, allows water to drain naturally and thus helps in removing the surface water in the drainage infrastructure. It can be used in pedestrian walkways, park areas, tennis courts, and light traffic and especially at the **seashore to protect coastal areas' infrastructure and populations.**