



## **Buildinject-EP** (2K Low Viscosity, Epoxy Injection for Sealing Cracks Permanently)

**Buildinject-EP** is a two component low viscosity epoxy injection system used for injecting into cracks in concrete or masonry to form a permanent bond and seals cracks permanently. It produces a volume stable floor repair where the mechanical properties, low permeability and chemical resistance of the hardened surface are of the highest order.

**Uses:** Buildinject-EP is used for permanently repairing and sealing cracks in concrete floors such as basement foundations, industrial warehouses, and residential floors, etc.

**Advantages:** Buildinject-EP is a professional choice, one step epoxy resin crack sealer, with controlled expansion properties, high structural strength, and contains no added chlorides, iron or gypsum. Will not rust, bleed or harm metal on contact.

### **Directions for use:**

**Surface Preparation:** The surface should be free from laitance, dust, oil, water stagnation, and grease or any loosely adherent material. If the concrete surface is defective or has laitance, it must be cut back to a sound base. Bolt holes or fixing pockets must be blown clean of any dirt or debris etc. Concrete surface must be structurally sound clean & free from deteriorated concrete particles that could impair adhesion.

All surfaces must be substantially dry. All free standing water must be removed. Ensure that the form work is secure and watertight to prevent movement and leakage during the placing and curing of the material. The area should be free of excessive vibrations until the material has hardened.

**Mixing:** The entire contents of the hardener should be poured into the base container and mixed until homogeneous. Place the mixed base and hardener into a suitable forced action mixer making sure that the entire volume is poured in and mixed properly. Mix required quantity which can be used in 20 minutes.

**Application:** Buildinject-EP should be used with the standard fluid injection equipment. Install the required size of the nozzles into the concrete by drilling deep to the required depth. Place the Pump the mixed material through one nozzle till the material starts coming out of the next nozzle or from the cracks. Continue the process until all the cracks are filled.

After completion of the injection works; the system shall be allowed to cure for 24 hours and should be left without disturbances e.g. installation of equipments in the nearby areas which may create vibrations, traffic movement, any other application on top of it etc.

Any cleaning etc of the area shall be done after curing of the injected materials i.e. 24 hours.

### **Curing:**

Proper curing of the material is very important. Initial hardening takes place in 2 hours; and full curing takes 7 days for high strength structural bearing capacity.

### **Workability:**

Working time of Buildinject-EP is 20 minutes at 25°C, after 30 seconds standing time.

### **Standards:**

The cured material exhibits a minimum compressive strength of 88 N/mm<sup>2</sup>; a minimum flexural strength of 28 N/mm<sup>2</sup> and a minimum tensile strength of 24 N/mm<sup>2</sup> when tested after 7 days in accordance with BS 6319. The water penetration shall be Nil after 7 days, when tested in accordance with DIN 1048: Part 5: 1991.

### **Coverage:**

5 Litre pack will cover approximately 5 linear meter crack of size 2mm wide and 50mm deep.

### **Typical Properties:**

Pot life	:	1 hr @ 25°C
Full cure	:	7 days @ 25°C
Surface dry for use	:	3 hours @ 25°C
Compressive Strength	:	88 N/mm <sup>2</sup> at 7 days
Flexural Strength	:	28 N/mm <sup>2</sup> at 7 days
Tensile Strength	:	24 N/mm <sup>2</sup> at 7 days
Water Penetration	:	Nil at 7 days
Chloride Permeability	:	Negligible

### **Composition:**

It is supplied as a two component system consisting of epoxy base & epoxy hardener. The components are supplied in the correct mix proportions designed for whole pack mixing or proportionate mixing on site and no other materials should be added.

**Pack Size:** 5 Litre & 20 Litre pack (Hardener + Base)



# BUILD PLUS

## CONSTRUCTION CHEMICALS

### Technical support:

GMC offers comprehensive technical support service & specification assistance in locations to our channel partners, end users, and contractors.

### Quality & Care:

All the products manufactured and originated from Gulf Minerals and Chemicals, UAE facility are independently tested and certified under a GMC Management System to conform to the requirements of the quality, environmental, health & safety Standards.

### Shelf Life & Storage:

12 months if stored properly in original unopened packing in a cool, dry, and ventilated conditions away from direct sunlight.

### Handling:

Buildinject-EP is a non- flammable and non-toxic in nature. Avoid contact with eyes and skin as it may cause irritation due to its alkaline nature. Splashes of Buildinject-EP should be washed off immediately with clean water. Wear necessary gloves and dust mask.

### Precautions:

- Do not add any admixture or fluidifiers
- Proper curing is required
- Do not use as a topping
- Do not use material at freezing temperatures
- Rate of strength gain is significantly affected at temperature extremes

### Health & Safety Precautions:

This product contains epoxy resin which is slightly alkaline. For people with sensitive skins may cause irritation. Wear suitable protective clothing, gloves, eye protection and respiratory protective equipment. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. In an emergency seek medical advice.

----- Buildinject-EP -----

