

# Fillbeton®

*Cement mix for filling*

**Fillbeton** is a lightweight concrete mix specifically designed for **backfilling** pipeline **excavations**.

**Fillbeton** is particularly suitable for filling:

- trench excavations for laying gas and sewage pipelines, and electricity and fibre optic cables;
- temporary excavations;
- difficult-to-access cavities.

**Fillbeton**® is easy to excavate when carrying out inspections and/or maintenance. For this purpose, the product is available in **different colours (Fillbeton Color)** for easy and immediate identification of the underlying pipes/tubes.

Compared to traditional backfill materials, **Fillbeton**® has the advantage that it does not require compaction after pouring (something that is essential when using traditional materials such as soils, or granular or cement-based mixes).

When backfilling an excavation with traditional materials, there is always a degree of settling that often results in dangerous depressions in the asphalt; this problem can be easily avoided by using **Fillbeton**® since, by eliminating the settling, the characteristics of the product prevent subsidence of the asphalt pavement.

**Fillbeton**® is formulated using special additives that impart a cellular microstructure to the concrete, giving it a reduced density and a solid skeleton. This gives **Fillbeton**® a much better geomechanical performance than that of soil, which is normally spread and compacted in a short time.

Due to its high fluidity, absence of bleeding and segregation, when **Fillbeton**® starts to cure the top surface is level and does not require further levelling or remediation.

These characteristics are guaranteed by the use of aggregates, cements and additives in accordance with current standards and with FPC (Factory Production Control) certified production plants.

The high presence of micro-cavities within the hardened product gives the material a reduced mechanical resistance that is nevertheless higher than that of a soil filling.

The low strength of the material means that it has a low resistance to pneumatic drills, making **Fillbeton®** easy to remove if maintenance work needs to be carried out on the underlying systems.

**Fillbeton®** enables road surfacing to be carried out in a very short time, with considerable cost savings, thus improving the efficiency and safety of the road network.

**Fillbeton®** gives compressive strengths in the range 1.0–2.0 N/mm<sup>2</sup>. In this way it is possible to modify the choice to the required load bearing characteristics.

DEFINITION (AND ORDER)	STRENGTH AT 28 DAYS	CONSISTENCY	VOLUMETRIC MASS	MAXIMUM DIAMETER
<b>FILLBETON</b>	from 1 to 2 MPa	SUPERFLUID	from 1500 and 1800 KG/M <sup>3</sup>	16 mm