CELLFLOW™

Commercial Product Data Sheet

Product Description
CellFlow is low strength foam-enhanced cementitious fill material, which is purchased from your local ready mix supplier. CellFlow is manufactured by mixing portland cement, sand and CellFlow liquid concentrate in the concrete mixer according to exact pre-engineered mix designs.

CellFlow material is delivered ready for placement by factory-trained ready mix drivers directly to your jobsite. CellFlow Flowable Fill is priced competitively and eliminates the contractor's need for the labor involved in compacting material.

Product Uses
Low Strength CellFlow Flowable Fill concrete mixes may be formulated to a wide range of flow, strength, and weight characteristics. Rather than searching for soil of a specific density, trucking it to the jobsite, trying to artificially control the water content, compacting with equipment, and facing quality control problems; simply fill the excavated void and all its small fissures completely with easy to use CellFlow flowable fill.

Product
CellFlow Flowable Fill is a consistent, pumpable material. The air cell structure of CellFlow is a very stable, well-distributed, air void system. CellFlow foaming agent when mixed in the ready mix truck has consistently created a 20-24% volume increase due to the air cell system, mix after mix, on project after project. CellFlow Flowable Fill is fluid by nature because it contains an engineered air bubble system, not excess water. The air cell structure moves like a pile of lubricated ball bearings sliding one over the other.

CellFlow material looks and flows like highly watered mixes. Because CellFlow mix designs do not need an overabundance of water, very little bleed water is present to migrate out of CellFlow Flowable Fill. Due to the low water content, and the ability of CellFlow formulations to be used with richer cement rates, as well as fast setting cements, CellFlow Flowable Fill can be formulated for faster set times.

The Ready-Mix Supplier can increase trucking efficiency. The flowable low strength CellFlow mixes enable suppliers to maximize their load deliveries with little concern for weight requirements. With lightweight CellFlow Flowable Fill, ten and twelve yard trucks can legally, and profitably, carry full loads of lighter material.

Limitations
Common Portland cement/fly ash CLSM flowable fill mixes sometimes settle after placement. And this will require an additional fill. CellFlow Flowable Fill exhibits minimum settlement and very little shrinkage, and is easy to place and trouble free.

The compressive strengths of most cement/fly ash mixes can, in time, build to unacceptable levels for flowable fill. By definition (ACI 116R-90 Pg. 19) Controlled Low Strength Materials are limited to a maximum of 1,200 psi. If extreme care is not used in mix designing, cement / fly ash mixes can often harden in excess of 1,200 psi. Although 1,200 psi is a "low" strength by typical concrete laboratory standards, it certainly does not feel "low" from the viewpoint of the laborer who is trying to excavate the material with common hand tools. The misuse of power equipment to excavate flowable fill can result in damage to the buried cables, pipes and lines in utility work. Flowable Fill should be 50-150psi, in compressive strength, if there is the slightest likelihood of future excavation by hand tools. (Ref: NRMCA CIP 17 What, Why & How? Flowable Fill Materials)

7020 Snowdrift Road, Suite 102 • Allentown, PA 18106 USA
Phone: 610-398-7833 • Fax: 610-398-7050
Email: info@cellular-concrete.com • Website: www.cellular-concrete.com