HOPE
Construction Materials

HOPEFlow Finish™ significantly reduces the effort of laying slabs and floors. This superior performance product flows gently into position with no need to undertake time-consuming and costly compacting processes. Power floating is not required as this product has been expertly designed to achieve a high quality finish.

HOPEFlow Finish™ is able to flow and consolidate on its own. At the same time it is cohesive enough to fill spaces of almost any size and shape without segregation or bleeding.

This makes HOPEFlow Finish™ particularly useful wherever placing is difficult, such as in heavily reinforced concrete members or in complicated formwork.

HOPEFlow Finish™ is highly flowable, non-segregating concrete that can spread into place under its own weight to fill formwork and encapsulate extremely congested reinforcing steel, with little or no mechanical vibration. The unique properties of HOPEFlow Finish™ give it significant economic, constructability and aesthetic performance on conventional construction projects. HOPEFlow Finish™ allows for rapid concrete placement with significantly reduced labour requirements, consolidation and finishing. The outstanding flow characteristics of HOPEFlow Finish™ can also result in dramatically improved surface finishes. Its use for architectural applications is increasing significantly.

Uses

- Slabs
- Structural toppings
- Domestic floors
- Commercial slabs including deck construction
- Low traffic industrial floor slabs

Benefits

- Flows efficiently into place from single point
- Speed of placement
- Helps attain superior quality finish

HOPE™ Flow FINISH

DATASHEET

HOPEFlow Finish™ – for flooring applications and other horizontal slabs

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Testing HOPEFlow Finish™

Slump Flow – test method evaluates the ability of the concrete to flow under its own weight in an unconfined condition. This test method involves filling an inverted slump cone full of concrete without consolidating the material on a non-absorbent rigid surface, lifting the slump cone and measuring the diameter of the resulting concrete that is formed. This is usually the primary acceptance test method used on the jobsite requiring a slump flow value between 650 – 750 mm.

Pumping HOPEFlow Finish™

Pumping places the concrete as close as possible to its final position and provides an easily controlled rate of placement. When placing HOPEFlow Finish™ with a concrete pump the hose of the pump should be placed inside the formwork and under the concrete surface whenever possible. This installation method reduces the possibility of entrapping additional air within HOPEFlow Finish™.

Floor slab preparation

The building envelope should be sealed before preparation commences i.e.; wind and watertight. Prior to laying down insulation all debris & high spots must be removed. If they are not removed they can imprint on the thickness of the finished concrete. In cases where the substrate is particularly uneven, a slurry grout may be required.

Damp Proof Membrane - Lay a polythene membrane on substrate with an approximately 100mm upstand at the edges, ensuring it is free from punctures, creases and lies flat on the base. Ensure all joints in the membrane overlap by a minimum of 100mm and are sealed with tape.

Final Check – Any dust or debris must be removed from all floors either swept or vacuumed as dust may affect final finished floors. Upon completion of installation, inspect the whole system for tears / holes / damage etc and make sure that the whole system remains watertight to receive HOPEFlow Finish™.

Finishing HOPEFlow Finish™ When the material has been placed to the desired, it should be dappled immediately to obtain the best surface finish. Generate a wave-like ripple across the surface. The dappling should occur in two directions,

1st pass:	Create wave motion, immerse bar to approx two-thirds bar depth
2nd pass:	At 90° to 1st pass, lighter motion, immerse bar to approx one-third bar depth

Curing Requirements for HOPEFlow Finish™

While curing is obviously critical for all concrete construction, this is especially true for the top surface of HOPEFlow Finish™. Because of the increased quantity of paste, and lack of bleed water at the surface, HOPEFlow Finish™ is susceptible to surface drying. It is essential to ensure complete coverage of the surface as per curing agent manufacturer's guidelines.

Following placing

Light foot traffic after 24 hours. The surface can be worked on after a period of 72 hours from placing. Floor finishes should ideally be applied within a 60-day period after placing. The slab should be protected from excessive winds or drying for 48 hours after placing. Saw cut joints should be detailed at 40 times the depth of the slab (in mm) e.g. A slab that is 75mm deep = 40 x 75 = 3,000mm, therefore joints must be at 3m x 3m.

SPECIFICATION OVERVIEW	
Maintenance of workability	= two hours
Minimum thickness	= 75mm
Compressive strength at 28 days	= 35N/mm^2
Workability of slumpflow between 650-750mm	

Britain's leading independent concrete supplier