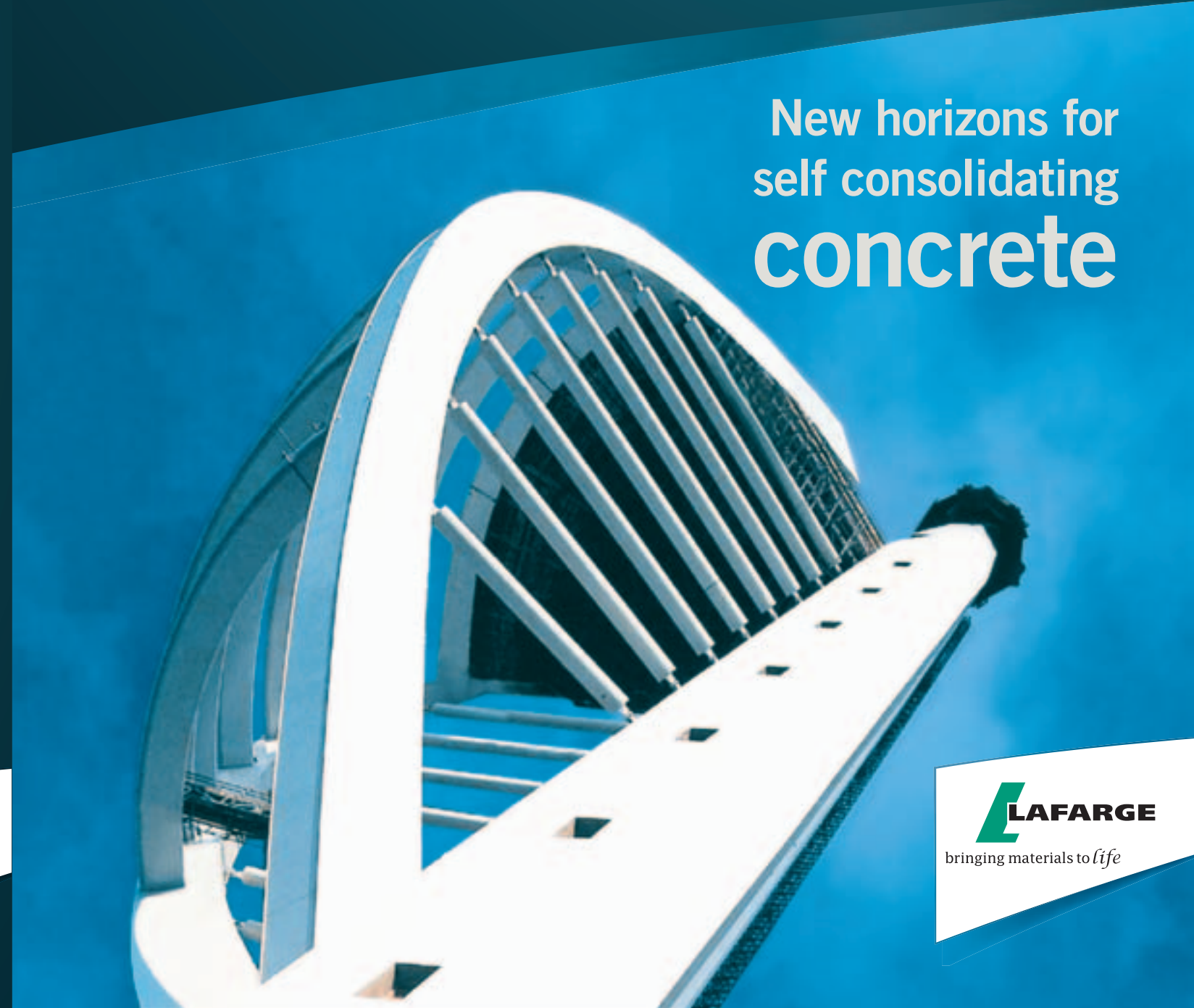


# Agilia

CONCRETE IN MOTION



## New horizons for self consolidating concrete



NO VIBRATION

EASIER TO PLACE

WORKSITE FLEXIBILITY

REDUCES LABOUR TIME

## Customer driven innovation

Each second Lafarge delivers concrete to one of countless construction projects around the world. Every day 1,200 technical sales representatives from Lafarge interact with customers at over 6,000 different sites. Innovation is our way of addressing the needs we encounter through these interactions.

Our research and development teams are dedicated to innovation, exceeding even the greatest demands of our clients. Our new concretes attain new levels of technical performance and anticipate changing industry requirements. Each new product is designed to be more effective in the construction process and help our clients achieve greater success.



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# Agilia™ advantages

The new concrete technology used in Agilia™ products allows for placing without difficulty, providing excellent quality concretes and screeds with superior surface finishes. Agilia™ gives flexibility on worksites at all levels, for all types of applications (foundations, toppings, horizontal and vertical structures).

- Reduced effort on site when placing concrete
- Faster placing process
- High-quality fill for vertical components
- Fewer pouring points
- High surface quality designed to suit our customers needs
- Virtually self leveling for slabs and floors
- No vibration required  
Reduced noise impact
- Opportunity for LEED® credit points



## Agilia™, a complete range of self consolidating concretes and screeds

### NO VIBRATION

Eliminates the need for **vibration**. Improves safety and working conditions. Reduces excess noise on worksites.

### EASIER TO PLACE

The flowing properties of Agilia™ concretes **ease placement** significantly, by reducing the number of **pour points** and **operations** on the worksite. Structures with complex configurations can be poured, especially where heavy reinforcement or very long formwork is involved. For **horizontal applications**, the product's impressive ease of leveling enables swift and easy coverage of large surfaces and flat toppings. Agilia envelops reinforcing cages more effectively in deep foundation applications. Also available is a range of Agilia™ screed with similar properties and benefits to Agilia Concrete.

### WORKSITE FLEXIBILITY

The characteristics and reliability of the Agilia™ family of products offers better worksite organization, with **reduced pouring points**, **crane handling** and more efficient labour utilization for concrete work. Depending on the application, superior surface quality can be attained with reduced finishing work.

### REDUCES LABOUR TIME

Agilia™ speeds up concrete work due to fewer concrete delivery points, the possibility of pouring up to thirty feet at a time, less placing labour requirement, no vibration needed and excellent smoothness that eliminates the need to float horizontal concrete surfaces.

## Agilia™ innovation

Agilia™ mix design stems from tight control on two seemingly opposite physical properties: **fluidity and stability**.

**Fluidity** is necessary to provide easy concrete placement and a high-quality finish with minimum effort. At the same time, it can increase segregation, which can lead to uneven hardened material, cracks and blemishes. On the other hand, **Stability** is necessary to prevent segregation but can lead to high viscosity and poor placement. Reconciling these two opposite requirements is a further challenge since fresh concrete is subject to a wide variety of mechanical stresses from the batching plant to placement depending on the process, environment and application.

Agilia™ offers a robust solution based on **granular packing** concepts and on the latest discoveries in **organic chemistry**, **mineral chemistry** and **fluid mechanics** applied to fresh concrete.

Strict control of mix design technology enables optimal application of cement properties and allows Agilia™ to **retain its slump for up to two hours**. **No water is to be added on site**. Yet **setting time is controlled** and **early strength** is comparable to conventional concrete.

Lafarge provides a complete range of Agilia™ products suited to the needs of each worksite application, with mechanical or aesthetic benefits, in horizontal and vertical applications.

### RHEOLOGIK

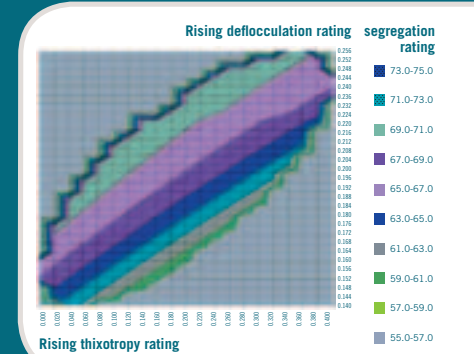
A LAFARGE TECHNOLOGY

1. Fluidity control;
2. Hydration control;
3. Integration of green-concrete dynamics.

Agilia™ offers a full range of products adapted to individual applications.

The product formulas are based on cutting-edge knowledge of mechanical and chemical phenomena that govern green-concrete rheology, from in-plant mixing to formwork setting.

### Segregation rating model



Source: Lafarge Research Center

### Granular packing model

