The ultimate free-flowing, self-compacting concrete
Every project is different. Some are more technical, others more aesthetic. Whatever the challenge, all must be completed on time and on-budget. While conventional compacted concrete has its limitations with placement often requiring considerable manpower, machinery and time, Agilia provides solutions, fast.

Agilia. The ultimate free-flowing, self-compacting concrete.

Highly fluid, Agilia is the ultimate self-compacting concrete. It can be poured quickly, flowing and spreading effortlessly to provide an exceptional, highly aesthetic finish. And it’s not just time and money that can be saved; Agilia also reduces noise and eliminates vibration, considerably improving conditions on site.
ULTIMATE INNOVATION
With fewer pouring points and no vibration needed, Agilia can be placed fast.

BENEFITS

Fast flowing
Free flowing Agilia concrete can be placed quickly, with the material consolidating easily and effortlessly into the required pour locations.

Easier placement
Placement is not just quick, it’s easy. Fewer pour points, less formwork, reduced manpower, no vibration, excellent surface finish and flexible applications make Agilia easy to work with to speed up your construction schedule.

No vibration
By eliminating vibration and greatly reducing noise pollution, working conditions on-site are greatly improved, while pours can be safely carried out even in built-up environments.

Smoother surfaces
Agilia provides an excellent, smooth surface quality that can be laid perfectly flat for slabs and floors, eliminating the need for floating.

Total flexibility
Whatever your project, there is an Agilia for the job. For horizontal applications its self-leveling qualities enable fast coverage of large surfaces. Complex vertical constructions can be filled simply and quickly, while it can also be easily used alongside reinforcing cages for deep foundations.

HOW IT WORKS

Agilia uses innovative mix technology to combine the benefits of two seemingly opposite physical properties: fluidity and stability. Fluidity is essential to provide easy concrete placement and a high-quality finish with minimum effort. Stability is necessary to prevent segregation. Together, this dynamic fusion delivers the ultimate free-flowing, self-compacting concrete.

The science of concrete
Agilia’s product formulas are a culmination of the latest discoveries in organic chemistry, mineral chemistry and fluid mechanics. It is these innovations that allow Agilia to retain fluidity for more than two hours, with no need to add water on site, while achieving early compressive strength that is comparable to conventional concrete.
**APPLICATIONS**

**Agilia Precast**
- Developed specifically to suit the demands of precasting
- Bespoke solutions can be tailored to individual requirements
- Advanced technology for the highest surface quality
- No vibration required
- High early strength and high final strength versions available
- Expert advice and guidance

**Agilia Fibre**
- Mix incorporates macro-synthetic or steel fibres
- Cost-effective solution to replace crack-control mesh
- Significant on-site health & safety benefits
- Provides uniform multi-directional concrete reinforcement
- Design service available
- Enhanced performance over the equivalent grade of conventional concrete

**Agilia Fibre Macro**
- Replaces most grades of A-type crack-control top mesh
- Suitable for ground bearing or structural topping applications
- Provides substantial crack control and resistance to dry shrinkage cracking
- Enhanced impact, abrasion and shrinkage resistance of the finished concrete

**Agilia Fibre Steel**
- Replaces all A-type mesh of crack, top and bottom and also some heavier mesh types
- Suitable for heavy duty ground bearing or suspended slab applications
- High tensile strength results in increased load-bearing capacity

**Agilia Deck**
- Approved for use in conjunction with composite steel decking systems including ®Tata Comflor, ®CMF Metfloor and ®Lewis
- Fibre-deck options are also available including design service if required, eliminating the need for installation of crack-control mesh
- Enhanced flowing and self-compacting properties ensure ease of installation over difficult profile shapes
- Expert advice and guidance

**Agilia Piling**
- Specially designed, cost-effective, self-compacting mix
- Enables easier placement of reinforcement cages within the poured pile
- High early strength and high ultimate strength versions available
- Excellent workability/extendibility provides greater on-site flexibility
- Efficient pumping characteristics
- High sulphate-resisting mixes available (up to DC-3)
- Eco mixes available
ULTIMATE VERSATILITY

With no fewer than ten different mixes, Agilia provides flexible solutions for everything from horizontal applications to complex vertical constructions.

Agilia Horizontal
• Enables rapid and effortless construction of slabs and floors
• High finishing characteristics and surface quality eliminate the use of power floating
• Floor finish tolerance to BS 8204-1 SR2

Agilia Concrete
• Specially designed to flow easily through congested heavily reinforced areas
• Meets the demands of all construction types
• Self-compacting for use in all mass fill concrete foundation applications
• Eco mixes available

Agilia Trenchflow
• Reduces labour overheads – typically one man can place, level and finish
• Delivered in highly fluid form with high deformability, allowing quick changes of direction and easy flow around the foundation trench
• Self-compacting for use in all mass fill concrete foundation applications
• Can be formulated to meet up to DC-3 Sulphate resistance classification
• Eco mixes available

Agilia Architectural
• Exceptional quality on vertical applications with no remedial work
• Mix is specified and designed for each project
• Placing techniques and strength can be tailored to suit project requirements
• Advanced technology for the highest surface quality
• High fluidity replicates shape and texture of formwork to match complex design applications

Agilia’s strength lies not just in its fluidity, but in its flexibility. It is suitable for a wide range of applications, including horizontal, vertical and complexly shaped structures.

The consultative and technical nature of Lafarge Tarmac’s approach was invaluable in helping to realise the material concept into architecture. Tree early involvement was key to the successful development of high quality architectural concrete supplied for the building facades and roof.

London Bridge Station, London

CHALLENGE
As part of the redevelopment of London Bridge Station, the main contractor required a very high specification of finished concrete to the main exposed columns and beams within the finished station. This presented a challenge in terms of both the timescales involved and in meeting the expectations of client and architect.

SOLUTION
Due to the high specifications of the finish required, it was decided to explore the use of self-compacting concrete (SCC). Lafarge Tarmac was subsequently contacted to provide a self-compacting concrete mix with the required characteristics and to undertake trials. We were also able to demonstrate the benefits of high deformability and placement and finish requirements, that self-compacting concretes can provide. Full trials were undertaken with the local London Bridge station working closely with Lafarge Tarmac’s product specialists to further fine-tune the Agilia mix into the exact performance that the contractor was looking for.

RESULT
Lafarge Tarmac was awarded the contract comprising some 1,500m³ of Agilia Architectural concrete to be supplied over 18 months in three main phases. Following a successful first pour in August 2013, a concrete finish of the highest order was achieved with the client and architect both stating the result exceeded expectations.

The Hepworth, Wakefield

CHALLENGE
Sterling prize winning architectural practice Chipperfield were commissioned to design a striking structure to be a fitting home for some of the UK’s finest art. Known for their challenging use of concrete structures, their design featured a series of smooth, coloured concrete trapezoidal blocks with striking forms throughout.

SOLUTION
Due to the high levels of complexity and performance demanded, only one concrete answered the brief; Agilia self-compacting concrete. The bespoke aubergine called Hepworth Brown was developed and complex trials were undertaken to achieve the required finish and colour uniformity.

RESULT
As the first large full-scale construction in the UK to utilise coloured Agilia, the Hepworth’s finish is a striking example of how decorative results can be achieved.

EXPERIENCE
Lafarge Tarmac is committed to providing construction materials and solutions that make a positive contribution to the built environment. By working closely with our customers, together we can reduce the environmental footprint of projects and deliver innovative, more sustainable solutions. We take a 'whole life' approach, addressing not only the extraction, manufacture and transport of our products but also consider their sustainable performance in use and opportunities for reuse and recycling at end of life. We use management systems certified to ISO 9001, ISO 14001 and OHSAS 18001 across our operations to continuously improve social, economic and environmental performance.

Our commitment to support our customers and provide sustainable solutions is further demonstrated by certification across our product range to BES 6001, the framework standard for Responsible Sourcing and 5* accreditation in the Achilles BuildingConfidence scheme.

Eco Mix Variations

- Agilia concrete can now be designed to assist with sustainability requirements including BREEAM specifications
- Options available are as follows:
  - Cementitious replacements - depending on plant location, Agilia concrete can be supplied with either Ground Granulated Blast Furnace Slag (GGBS) or Pulverised Fuel Ash (PFA) cement replacement
  - Recycled aggregates - certain Agilia mixes can now be supplied with a maximum of 25% total recycled aggregate content
  - Low heat - Agilia concrete can be designed in a bespoke mix to offer low heat solutions. This can either limit the heat evolution in the mix and/or the ultimate temperature within the mix.

Agilia Concretes

- Self-compacting, no need to vibrate - working conditions on site are improved (vibration white finger eliminated)
- Substantial reduction in noise pollution due to elimination of machinery (cranes, vibrators, power floats and personal demands on-site)
- Ease of placement due to minimised pour points
- Fluidity enables placement in heavy reinforced structures safely (reducing crane handling)
- Efficient labour utilisation - less labour needed to place concrete. Larger/more areas can be placed at the same time
- Reduction in site traffic and emissions associated with this
- The final smooth surface can eliminate the need for further surfacing materials, reducing the materials needed on-site, floor tiles, wall tiles, plasterboard etc.

Lafarge Tarmac converts over 6.5 million tonnes of construction and industry waste into new products each year.
As one company, Lafarge Tarmac provides unrivalled solutions and expertise. Combining industry-leading innovation and market-leading supply and distribution, together we offer the ultimate range of products and services:

**Aggregates**
- for concrete, asphalt and mortar production, sub-base construction, capping, drainage and landscaping.
- Asphalt and Contracting Services for infrastructure, motorways, roads, car parks, footpaths, sports facilities, stadiums and runways.

**Readymix Concrete and Cement**
- for the construction of homes, power stations, water treatment works, freight depots, ports, office buildings and shopping malls.
- Lime and Powders for water purification, soil stabilisation, land reclamation and the manufacture of iron and steel, plastics, glass, pharmaceuticals and animal feed.

Our solutions play a pivotal role in delivering the services on which we all rely. Fresh food on supermarket shelves. Clean water on tap. Electricity at the touch of a button. Maintaining these services is a big responsibility. And one that we don’t take lightly. We work closely with clients, contractors and partners across the supply chain to make sure that the solutions we deliver are not only practical and cost-effective, but also long-lasting and sustainable.

All of our products are responsibly sourced in accordance with BES 6001. Our asphalt and concrete mixes increasingly contain up to 50% recycled content, and we are the UK’s leading supplier of recycled construction materials.

Delivering sustainable solutions is what our business is all about. It’s what we do. It’s what Britain’s built on.

ReadyMix Concrete
Lafarge Tarmac is the No.1 supplier of innovative readymix concrete solutions:
- 1,000’s of unique formulations
- 90+ concrete production facilities across the UK
- 10 mobile batching plants
- 17 regional sales and technical teams
- 560 employees
FAQs

Why choose Agilia free-flowing self-compacting concrete over conventional compacting concrete?

Conventional compacted concrete has limitations with placement often requiring considerable manpower, machinery and time. Highly fluid, Agilia is the ultimate self-compacting concrete. It can be poured quickly, flowing and spreading effortlessly to provide an exceptional, highly aesthetic finish.

What applications can it be used in?

Agilia concrete can be used in a wide range of applications that require a realistic concrete finish, from footings and floor slabs to precast applications in some of the most prestigious bespoke projects.

How fast is it?

In comparison to the normal methodology of placing concrete, Agilia can be rapidly placed, speeding up the process.

Self-compacting?

That’s right. Agilia provides an excellent, smooth surface quality that can be laid perfectly flat for slabs and floors, eliminating the need for vibration and power floating. Agilia Architectural can give a flawless, free surface with virtually no defects in vertical and horizontal applications.

Why is it so easy to place?

Fewer pour points, less formwork, reduced manpower, no vibration, excellent surface finish and flexible applications make Agilia easy to work with to speed up your construction schedule.

How does it improve conditions on-site?

By eliminating vibration and greatly reducing noise pollution, working conditions on-site are greatly improved, while pours can be safely carried out even in built-up environments.

How long does it stay fluid for?

Agilia can be specified exactly for your requirements, and can stay fluid for up to six hours in specific applications.