

TOPROC RAPID

The ideal high early strength concrete





Tarmac TOPROC RAPID delivers a range of concretes that provide both rapid setting and high early strength properties resulting in increased turnaround and productivity.

TOP EXPERIENCE -SPORTPARK, LOUGHBOROUGH UNIVERSITY

The use of TOPROC RAPID for the construction of the central core and walls of the SportPark, on Loughborough University Science and Enterprise Parks, allowed formwork to be removed after hours instead of days. In the fast moving, competitive world of construction even the slightest delay can result in costly penalties. In many applications such as civil engineering works and road surface repair, the need to quickly restore services to normal is paramount in order to keep disruption to an absolute minimum.

To meet this challenge Tarmac offers a range of technologically advanced, easy to place readymix concretes that ensure fast turnaround and site efficiency. TOPROC RAPID is as easy to place as conventional concrete and develops the high strength that traditional mixes would achieve in 28 days in just hours. Also, unlike other concretes that require up to 20 hours before formwork can be removed, TOPROC RAPID becomes effective in as little as fifteen hours allowing construction to continue more quickly.

A range of ready-formulated TOPROC RAPID products are available to meet all different types of strength requirements, within time frames ranging from 15 hours to 48 hours.

TOP SOLUTIONS

BENEFITS



Less disruption and cost penalties

Attains strength within hours, a crucial consideration when early trafficking is necessary and delays can incur severe financial penalties.



Accelerate construction

In relation to the rotation of formwork TOPROC RAPID can increase the number of daily rotations for walls, columns, slabs on grade and grade beams, significantly reducing project length.

Easy to place

TOPROC RAPID is as easy to place as conventional concretes, meaning minimal effort to the contractor.



More flexible construction schedules

Users can choose the specific time the guaranteed early strength is achieved e.g. 24 hours or 48 hours, enabling them to make up lost programme time due to weather, breakdowns etc. This is essentia in time-critical projects.



Bespoke concrete solutions

To offer further cost and value engineering benefits, TOPROC RAPID can also be combined with macro fibres to replace 'A' grade crack-control mesh, providing a very robust concrete solution.



Time saving

Significant time is saved optimising building processes on all construction sites.



Innovative technology

TOPROC RAPID works with innovative accelerating systems, enabling good durability, performance and acquisition of long-term strength.



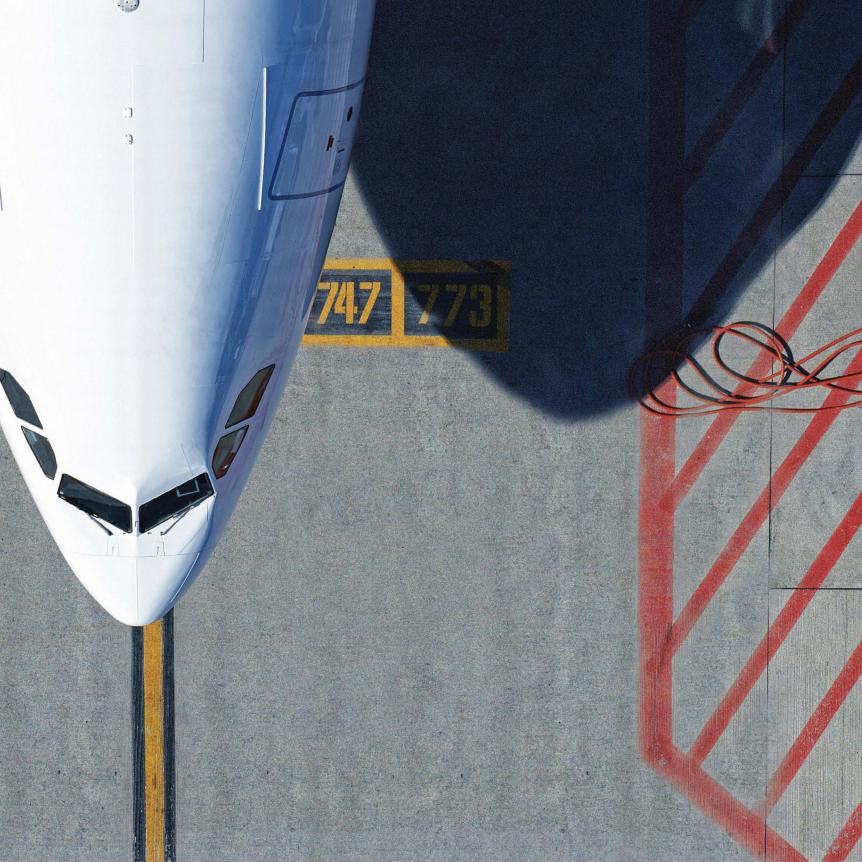
Durability

TOPROC RAPID achieves both high early strength and high ultimate strength, providing a very durable concrete.

HOW IT WORKS

TOPROC RAPID'S exceptional early strength gain is possible thanks to the technological advances in its formulation.

Following extensive research and development the microstructure of the concrete is optimised at an early age by fine-tuning the growth of the initial hydration process. This provides the early strength without disturbing the mineralisation process through the addition of additives. It's the introduction of this innovative accelerating system that ensures early strength and long-term durability are achieved.



TYPICAL APPLICATIONS

TOPROC RAPID is specifically designed for use in applications where early trafficking is required, where programme times need recovering following delays and in areas where disruption needs to be kept to a minimum.

Example applications include car parks, access roads, floor areas, airports, dockyards, rail networks and water control structures where long-term water diversion is impractical.

A range of ready-formulated concretes are available in the range:

Product	Typical compressive strength (at specified time)	Specification
TOPROC RAPID 15hr	10 to 30 N/mm²	Where guaranteed high strength is specified at 15 hours
TOPROC RAPID 24hr	10 to 40 N/mm ²	Where guaranteed high strength is specified at 24 hours
TOPROC RAPID 48hr	10 to 50 N/mm²	Where guaranteed high strength is specified at 48 hours
TOPROC RAPID Specify	10 to 70 N/mm²	Where guaranteed high strength is required within a timeframe specified by the project

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 Building Confidence scheme.

TOP COMMITMENT

Tarmac converts over 6.5 million tonnes of construction and industry waste into new products each year.



FAQs

What is the difference between TOPROC RAPID and conventional concrete?

TOPROC RAPID's technologically advanced formulation provides 28 day strength in as little as 15 hours.

How does it reduce construction time?

TOPROC RAPID can increase the number of daily rotations for walls, columns, slabs on grade and grade beams, significantly reducing project length. TOPROC RAPID's rapid setting ensures construction delays are kept to a minimum, even on the most challenging projects.

What are the potential cost savings?

For contractors less time on site means lower labour costs and equipment costs, whilst their customers benefit from high strength, durable construction that require less repair work over time. TOPROC RAPID's early strength also enables contractors to recover programme delays by switching to an alternative formulation during construction. Naturally, on-schedule delivery of the project also ensures no costly penalties are incurred for missing deadlines.

Where is TOPROC RAPID most effectively used?

TOPROC RAPID is best used when early trafficking is required, construction programme times need recovering and where early strength is essential. Example applications include car parks, access roads, floor areas, airports, dockyards, rail networks and water control structures.

How many TOPROC RAPID products are available?

There are four types of TOPROC RAPID - 15hr, 24hr, 48hr, and Specify.

Are bespoke TOPROC RAPID products available?

We can design a unique TOPROC RAPID formulation to meet the specific needs of almost any project. Simply get in touch with us so we can discuss your requirements.

What are the sustainability benefits?

Thanks to its superior early strength and durability TOPROC RAPID is proven to last longer than conventional concretes in similar applications. All TOPROC RAPID products are manufactured in accordance with BES 6001 standards.

MORE ANSWERS

For more information about Tarmac TOPROC RAPID contact your local regional office or visit **TARMAC.COM/TOPROCRAPID** toprocrapid@tarmac.com

T3 Tarmac Ground Floor T3 Trinity Park Bickenhill Lane Birmingham B37 7ES

TARMAC.COM



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