

# TECHNICAL INFORMATION

## TOPROC RAPID 24 HOUR

Tarmac Toproc Rapid 24hr delivers a high early strength concrete solution resulting in increased turnaround and productivity

### PRODUCT DESCRIPTION

Toproc Rapid 24hr is a technologically advanced, readymix concrete that ensures fast turnaround and increased construction site efficiency. Easy to place, it develops extremely high mechanical resistance soon after pouring making it suitable for all construction sites and applications.

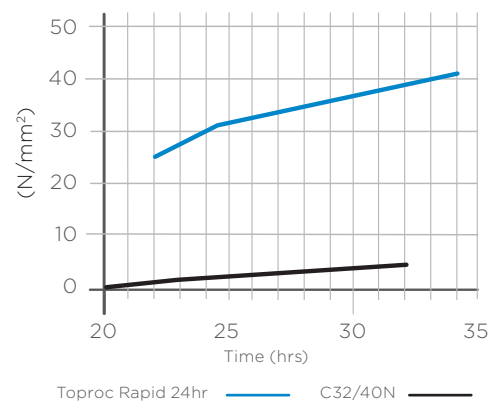
### BENEFITS

- Quickly attains strength, a crucial consideration when early trafficking is necessary and delays can incur severe financial penalties
- Users can choose the specific time the guaranteed early strength is achieved, enabling them to make up lost programme time due to weather, breakdowns etc.
- Placing technique of Toproc Rapid 24hr is similar to conventional concrete
- High early strength is achieved, but also a high ultimate strength can be reached providing a very durable concrete
- Introduces a new flexibility into construction schedules

### APPLICATIONS

- Ideal for yards, car parks, access roads and floor areas where early trafficking is required
- Infrastructure contracts such as road, rail, airports and dockyards
- Water control structures where long-term diversion of water is impractical
- Releasing areas for use earlier causing less disruption for the client during repair and refurbishment contracts

TYPICAL STRENGTH DEVELOPMENT OF TOPROC RAPID 24HR



### GUIDANCE

Toproc Rapid 24hr has a rapid early strength gain in accordance with table 12 of EN 206-1. When ordering, the following information should be provided to Tarmac:

- The intended end use
- Strength gain criteria (including the compressive strength)
- The required workability

Please note, when the concrete needs to be coated the curing times are shorter than that of conventional concrete.

## CHARACTERISTICS

- Compressive strength: 24hr 10–40N/mm<sup>2</sup> (Please contact Tarmac for any requirement outside of this strength)
- Fully compliant with EN 206-1:2000 and BS 8500-2:2002
- Its make up and production techniques comply with the above standards in regard to:
  - Compressive strength
  - Slump/consistence requirements
  - Aggregate specification
- Exposure classes of up to XF4 can be achieved

## PLACING

- Toproc Rapid 24hr can be placed by all conventional methods
- Placing of Toproc Rapid 24hr follows guidelines laid out in BS 8000-2.1 and 2.2/Eurocode 2, BS 8500/2: 2002 and EN 206-1 :2000
- Appropriate curing agents need to be used on horizontal slab applications

## PACKAGING AND DELIVERY

Toproc Rapid 24 hr is supplied in readymix form:

- Readymix trucks up to 8m<sup>3</sup>
- Minimix trucks 2 to 3m<sup>3</sup>

## BESPOKE FORMULATIONS

In the past where the need has arisen to formulate a product to meet a specific application, Tarmac has worked alongside customers to achieve design requirements.

Please contact Tarmac's customer helpline with your specific requirements.

## TYPICAL SPECIFICATION STATEMENT

The concrete shall be Tarmac Toproc Rapid 24hr in accordance with BS 8500-2.

The maximum aggregate size and consistency shall be agreed between the specifier and Tarmac. Toproc Rapid 24hr can also incorporate macro fibres within the mix to replace A grade crack control mesh.

The concrete shall be placed, compacted and cured in accordance with current good practice, the specification for the contract and any additional requirements of Tarmac Limited.

## PRECAUTIONS OF USE

### SAFETY

All health and safety regulations must be adhered to when handling concrete. Wearing of goggles, hard hats, gloves, boots and reflective clothing is highly recommended.

### ORDERING

Additional factors to consider when ordering:

- Compressive strength
- Exposure class
- Consistence class or slump
- Aggregates specification
- Chloride class
- Exact volumes required

### TRANSPORT

- Confirm site access is suitable for truck deliveries
- For sites with access difficulties, the use of a concrete pump should be considered
- Ensure there are no height restrictions that hinder access

### USE

- Water addition is not permitted as it can lead to non-conforming product by site personnel
- Toproc Rapid 24hr has a similar workability to conventional concrete from the time of batching indicated on the delivery ticket – this limit must not be exceeded

### PLACING

- Toproc Rapid 24hr can be placed by all conventional methods
- Appropriate curing agents need to be used on horizontal slab applications

For more details visit  
[tarmac.com/contact](http://tarmac.com/contact)  
[toproc@tarmac.com](mailto:toproc@tarmac.com)