

# Technical information

# FLOWING (40N) CONCRETE



#### DESCRIPTION

Flowing 40N Concrete is a high performance flowing C40 concrete suitable for general concreting applications, and is the perfect solution for applications where site access is limited and bulk concrete cannot be delivered. The one component blend of cements, additives and graded aggregates is available in 25kg water resistant plastic bags and only requires the addition of water on site.

#### USES

Flowing 40N Concrete is perfect for any concreting application that requires a high final strength in line with that of a C40 concrete. Flowing 40N Concrete when set dries to a light grey colour and is suitable for both surface and sub-surface use. Flowing 40N Concrete being a preblended product ensures a high quality, consistent concrete is produced every time and reduces waste in comparison to site batched concrete.

#### **SPECIAL PROPERTIES**

- Flowable
- High final strength
- Easy to use, pre-blended, one component product just add water and mix
- Available in 25kg water resistant plastic bag

#### PREPARATION

All application substrates must be sound, clean and free from dust, dirt, debris, oil, grease and other contaminants.

Proper surface preparation is vital to ensure the successful application and durable performance of the concrete.

All substrates should be pre-wetted with water prior to the application of the concrete, however any standing water should be removed.

#### **MIXING INSTRUCTIONS**

For best results Flowing 40N Concrete should be mixed using a mechanical mixer such as a forcedaction high shear mixer or a slow-speed drill and paddle mixer. Alternatively, the product can be mixed by hand using a shovel.

Mix each 25kg unit with 3.0 – 3.5 litres of clean cold water. Pre-measure the required volume of water into a clean mixing vessel and steadily add the powder to the water. The product should be mixed for 2-3 minutes until a smooth, homogeneous concrete consistency is achieved.

Flowing 40N Concrete is a standard set product, giving a working time of 60 minutes. Never remix or add extra water to extend the working time of the material. Over watering the product will detrimentally affect the strength gain of the material.

## **Product Data Sheet**

#### **APPLICATION INSTRUCTIONS**

Flowing 40N Concrete can be placed at a thickness of 10mm - 300mm in a single pass. If thicker sections are required this can be achieved using the layer-onlayer method.

Flowing 40N Concrete should be poured on to the pre-wetted application area without delay after mixing. The fluid nature of the material ensures it will self-compacts into place easily and requires minimal trowelling to finish.

Recommended ambient application temperature is 5°C - 25°C.

#### **CLEAN UP**

Tools and equipment can easily be cleaned using water. Cleaning of tools and equipment should be carried out as soon as possible after application.

#### **PERFORMANCE DATA**

Water Addition (per 25kg)	3.0 to 3.5 litres	
Workability	60 minutes	
Set Time	8 hours	
Density	2200-2300kg/m <sup>3</sup>	
Yield (per 25kg)	12.5 litres	

	Compressive	Flexural
1 day	20.0 N/mm <sup>2</sup>	3.5 N/mm <sup>2</sup>
7 day	40.0 N/mm <sup>2</sup>	5.0 N/mm <sup>2</sup>
28 day	52.0 N/mm <sup>2</sup>	7.0 N/mm <sup>2</sup>

The above figures are derived from laboratory testing at 20°C and at a WSR of 0.13.

#### PACKAGING AND STORAGE

Flowing 40N Concrete is available in nominal 25kg bags palletised and shrink wrapped.

Palletised Flowing 40N Concrete should be stored in cool dry areas clear of the ground, sheeted or under cover and stacked not more than two pallets high. The product should be used on a first in – first out basis. Shelf life is 12 months' subject to temperature and humidity. Individual bags of Flowing 40N Concrete should be stored in sealed original packaging in a dry location at temperatures between 5°C and 30°C. Avoid exposure to water, frost or heat – extremes in temperature and high humidity will lead to a reduced shelf life.

#### **QUALITY CONTROL**

All Tarmac products are factory blended, tested and packaged to quality control procedure in accordance with BS EN ISO 9001.

#### **HEALTH & SAFETY**

Health and safety advice, which must be followed, can be found on the Material Safety Data Sheet. Users are advised to wear face mask, goggles, gloves and overalls when handling, mixing and applying cementitious products.

Contains Portland Cement Contains Chromium (VI), which may produce an allergic reaction. Clothing contaminated by wet cement should be removed immediately and washed before reuse. R38 - Irritating to skin. R41 - Risk to serious damage to eyes. S26 - In case of contact with eyes, rinse immediately with water and seek medical advice. S37/39 - Wear suitable gloves and eye/face protection. S2 - Keep out of reach of children.

#### **INFORMATION, PRICES & ORDERING**

For technical information, pricing and to place orders contact our Sales Office on the following:

Telephone: 03444 630 046

Email: specialistproducts@tarmacbp.co.uk

Visit our website: www.tarmac.com

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For more details contact: 03444 630 046 specialistproducts@tarmacbp.co.uk

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### **Product Data Sheet**