

## OVERVIEW

Terraroc NS 100 is a general purpose cementitious non-shrink grout designed for narrow void grouting, flow screeds and anchoring of a wide variety of fixings. Its non-shrink and free flowing properties are ideally suited for ramming, pumping or pouring. The simple addition of a required amount of water determines its wide range of applications. Due to its early strength development it allows for quick return to service of grouted areas.

## PROPERTIES

Terraroc NS 100 is a pre-mixed blend of graded silica, Portland cement and additives with the following properties:

- Early strength development.
- Non-shrink.
- Can be poured or pumped.
- High compressive strength.
- Chloride free.
- Extensive workability.

## AREAS OF USE

Terraroc NS 100 is designed for use in the following areas:

- Narrowing void grouting (flowable state).
- Grouting of anchor bolts and manholes.
- Installation of fencing or boundary posts.
- Where grouting of between 10 to 100mm is required (refer to bulking procedure).
- Concrete floor repairs and screeds.
- Machine and pump plinths.

## PREPARATION OF SURFACE

Ensure that all dust, dirt and foreign matter are brushed and scraped away. Also ensure the surfaces are free from salts, oil, grease and ridges, and protect all adjacent surfaces not to be covered.

This must be removed either chemically or mechanically. The surface where Terraroc NS 100 is to be applied must be saturated with water for not less than 2 hours prior to application. Alternatively TERRACO Terrabond A or an epoxy primer (TERRACO Epirok EP 1) must be applied to the substrate and the Terraroc NS 100 placed whilst primer is still wet.

## MIXING INSTRUCTIONS

Place 3.5 Litres of cold water (25°C) in the mixing vessel. Empty entire contents of 25kg bag Terraroc NS 100 into the water whilst mixing with a mechanical mixer. Add additional 500ml water (maximum) to mixture to desired consistency. Mix for 5 minutes and then place or pump.

## SPECIFICATION

Ensure adequate labour is at hand to have continuous mixing and placing of Terraroc NS 100. Remove excess water from substrate if saturated with water, if temperature is above 33°C place grout immediately after mixing. When grout is partially set, trim edges and float to desired finish.

Bulking of Terraroc NS 100 for floor screeds:

- a) Terraroc NS 100 can be bulked using clean silica sand (0.6 – 1.2mm) at a mixing ratio of 1:1 where screeds of between 20 – 50mm are required.
- b) For screeds above 50mm, Terraroc NS 100 can be bulked with clean 10mm graded stone at the ratio of 1:1.
- c) The stone size should never exceed one third of final thickness of floor.

When bulking with silica aggregate or stone the quantity of water required will be between 9% and 10% (4.5 – 5.0 L per 50 kg mix).

## CURING

Keep surface damp and covered with plastic sheeting or damp hessian cloth. The surface can also be kept damp with a fine water spray. The curing must be continuous for 3 days. Care must be taken where grout is covered by hessian cloth or plastic, ensure that these surfaces are kept damp. On exposed vertical surfaces a curing compound can be applied.

## HEALTH & SAFETY

Avoid contact with eyes and skin. For detailed information refer to relevant material safety data sheet.

## PACKAGING & STORAGE

Terraroc NS 100 is supplied in 25kg paper bags.

Product should be stored in a clean, dry area, protected from direct sunlight and extreme heat and cold. Unopened containers can be stored for 6 months. Use oldest material first.

## TECHNICAL DATA

<b>Product</b>	Pre-mixed blend of graded silica, Portland cement and additives.	
<b>Binder</b>	Hydraulic.	
<b>Colours</b>	Grey	
<b>Setting Time</b>	<b>Initial setting time:</b> 300 minutes. <b>Final setting time:</b> 480 minutes.	BS EN 196-3-95 BS EN 196-3-95
<b>Compressive Strength</b>	25.0 N/mm <sup>2</sup> @ 1 day. 53.5 N/mm <sup>2</sup> @ 7 days. 64.5 N/mm <sup>2</sup> @ 28 days.	BS 1881 part 116:1983 BS 1881 part 116:1983 BS 1881 part 116:1983
<b>Flexural Strength</b>	7.3 N/mm <sup>2</sup> @ 7 days. 8.9 N/mm <sup>2</sup> @ 28 days.	BS 4551 part 1:1998 BS 4551 part 1:1998
<b>Wet Density</b>	2320 kg/m <sup>3</sup> (80 Bags Terraroc NS 100 mixed will yield 1 m <sup>3</sup> ).	
<b>Expansion Characteristics</b>	Controlled expansion will occur in the unset material to ensure that the grout, when cured, will continue to occupy its original volume within the confines of the void in which it was placed. ASTM 940	
<b>Material Consumption</b>	One bag (25kg) of Terraroc NS 100 mixed with water will yield 12 litres.	
<b>Packaging</b>	25kg paper bags.	
<b>Storage</b>	6 months in original unopened containers.	

TERRACO offers a comprehensive range of products and services for most concrete and finishing needs. Please contact the TERRACO Technical Service Department or your local TERRACO agent for further information, samples, demonstrations and instructor services. The information given in this leaflet is based upon laboratory research, as well as extensive field work and application. All products are sold subject to standard conditions of sale which are available on request. This information is based on TERRACO's present state of knowledge and is intended to provide general information on TERRACO's products and their methods of use. The prospective user is recommended to determine the suitability of TERRACO's suggestions and products before adopting them on a commercial scale.

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