Kilsaran KPRO GROUT | TECHNICAL DATA SHEET

NSG 2601-HF Non-Shrink Grout – High Flow

Description

KPRO NSG 2601-HF is a pre-blended, highly flowable non-shrink grout that fully complies with the requirements of EN 1504 parts 3 and 6, and also the Specification of Highway Works Volume 1:Clause 2601 in NRA and Department of Transport Publications. The product is mixed with a controlled amount of clean water to produce a highly flowable grout. NSG 2601-HF is formulated to give high flow characteristics with a low water demand, thus ensuring high early strength, no shrinkage, and long term durability.

Applications

NSG 2601-HF is suitable for use at horizontal gap thicknesses of 10-100mm, in the following applications,

- Large baseplate grouting for stanchions, plant and machinery
- Jointing of precast concrete units
- Bedding of precast concrete units
- Soil, ground and rock anchoring
- Anchoring of reinforcing steel bars
- Fixing rails and bolts
- Duct filling for pre-stressed and post tensioned elements.
- Underpinning

Product Use

Mixing: To achieve a high fluidity grout mix the contents of a 25kg bag with 3.5-4.25 litres of clean potable water. Using excessive water (above 0.2 water/solid ratio) will affect the overall performance of the product. Mixing should be carried out in a suitable container by forced action using a paddle or high shear vane mixer, or grouting pump. The powder should be added gradually to the measured water in the mixing vessel and mixed for 5 minutes until a smooth, cohesive consistency is achieved. Once mixed no further water should be added.

Placing: NSG 2601-HF is used for applications from 10 – 100mm in thickness. All surfaces must be clean and free from laitance, dust, debris and all oils etc. The area to be grouted should be pre-soaked for a minimum of 2 hours to avoid absorption. The grout should be placed within 20 minutes of mixing to guarantee the maximum physical properties performance. Formwork should be prepared effectively to contain the fluid grout. Place grout from a sufficient height and flow to ensure no air entrapment. On competition of process all exposed areas should be cured with a suitable curing membrane.

Baseplate: Ensure that a sufficient supply of material will be mixed in order to avoid interruption when filling. Always pour from one side and use air vents where necessary to avoid air entrapment. Pour from a height to ensure maximum compaction and use a rod to aid filling. Do not vibrate the grout. Temporary levelling shims should be greased if they are to be removed after grout hardens.

Grout Sleeve Splice Connections: NSG2601-HF can be pumped or poured into the grout sleeve in a continuous fashion to avoid cold bridging. Care should be taken to ensure complete filling of the sleeve.

Formwork: As the grout is free flowing it is important to ensure the formwork is sufficiently prepared to avoid leaks. A sacrificial concrete mix can be used to fix the baseplate shutter or as a bern. Keep unrestrained areas around the baseplate to less than 150mm.

Benefits

- Non-Shrink formula
- High early and ultimate strength
- High flowability with no segregation
- Can be pumped or poured
- Long term durability
- Convenient and User-Friendly
- Eliminates wastage
- Chloride free

Approximate Yield

No. 25kg bags	Approximate litres
1	13.0

Application Temperatures

+5°C to +30°C

Health & Safety

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

Pack Size

- 25kg premixed bags
- Bulk Silos

Get in touch

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Kilsaran ideas taking shape

Curing: Should be as per standard practices for cement based products. Grout should be protected from strong sunlight and cold weather.

Technical Data

KPRO NSG 2601-HF fully complies with the requirements of EN 1504 parts 3 and 6, and also the Specification of Highway Works Volume 1:Clause 2601 in NRA and Department of Transport Publications.

Characteristic	1 Day	7 Day	28 Day
Compressive Strength	21 MPa	45 MPa	60 MPa
Flexural Strength	5 MPa	7 MPa	10 MPa
Fresh Density	2200 kg/m³		
Early Expansion	1.50%		
Segregation (Glass Plates)	Nil		
Bleeding (Glass Plates)	Nil		
Initial Set	5 hours		
Final Set	7 hours		
Compressive Strain	< 1.00%		

Compliance

KPRO NSG 2601-HF is tested and marketed in accordance to CPR 305/2011 and complies with classification R4 according to EN 1504-3 and the requirements of EN 1504 -6 : Anchoring of reinforced steel bar.

CE	
Kilsaran Concrete, Piercetown Dunboyne Co. Meath Ireland 20	
EN1504-3 :EN 1504-6 Concrete repair products for structural repair CC mortar (based on hydraulic cement) : Anchoring of reinforcing steel bar.	
Compressive Strength	R4 (≥ 45 MPa)
Adhesive Bond by pull-off	≥ 2.0 MPa
Chloride ion content	≤ 0.05%
Carbonation Resistance	Pass
Elastic Modulus	23 GPa
Thermal Compatibility – Part 1: Freeze-thaw	≥ 2.0 MPa
Testing of anchoring products By pull-out method	≤ 0.6mm @ 75kN load
Resistance to fire	Class A1
Dangerous Substances	Complies with 5.4 of EN 1015 parts 3 & 6