# **TECHNICAL DATA SHEET**







# **105 - RAK NS GROUT**

(Non-Shrink Grout)

**RAK NS GROUT** is a pre-mixed, cementitious non-shrink grout which requires only the addition of water to obtain a free flowing non-shrink grout of excellent performance.

## **ADVANTAGES**

#### Non-shrink

- · Pre-mixed and packed to avoid site variations and errors
- High bond strength to steel and concrete
- · High early strength characteristics for rapid return
- Adjustable consistency
- · High strength, impact resistance and durability
- Non-shrink properties give maximum contact with bearing surfaces
- Can be used up to a 80 mm thickness between plate and foundation

### **USES**

- Repair to pre-cast concrete
- Bedding bearing plates and grouting
- Floor repairs and toppings
- · Heavy machinery and equipment foundations
- · Pre-fabricated unit joints and cable grouting

# **TYPICAL PROPERTIES**

Appearance Apparent Density Grain Size Adhesion on -
Concrete
Color
Expansion Perios
Expansion -
Chracterstics

0.4mm 1.2mm 26.8 Bar Grey 120 Minutes Max 2.2% @ 24 Hours

Powder

1.4gm/cc

## **BOND TO STEEL**

The bond of RAK NS Grout to steel. calculated by applying loads to the bars undergoing pull-out tests and by the grout steel contact surface is:

For plain bars: 3 N/mm<sup>2</sup> at 7 days 4 N/mm<sup>2</sup> at 28 days For deformed bars: 20 N/mm at 7 days 30 N/mm at 28 days **RESISTANCE TO HIGH TEMPERATURE: ORDERING GUIDE** 

RAK NS Grout can withstand high temperature (+400°C) for very long periods without deterioting substantially.

#### **RESISTANCE TO CHEMICAL ATTACK**

RAK NS Grout is watertight and is against protected environmental aggressive agents in solution.

## **APPLICATION**

Mix the powder with measured quantity of water for a minimum of 5 minutes to obtain a smooth, uniform lump free consistency. Approximately 5-6 liters of water is needed for 25 kg of powder. Pour the grout continuously to eliminate air pockets. For a thick consistency, 4-5 litres of water should be used and for dry packs 2.5 - 3 liters of water should be used.



# SUPPORT

Supports should be sound, clean and free of dust, demoulding materials, oil, paint, etc. Clean the area to be grouted with water 24 hours prior to grouting. The surface should be damp but strictly free of standing water. The bolt holes and other areas should be water free. Bare plates, bolts, etc. must be clean and free of oil, grease paint, etc. The form works should be leak proof.

#### **CLEANING**

Tools should be cleaned with water

# S

PRODUCT NO.

STANDARDS	ASTM C - 191, 878, 230
	ASTM C - 827-78
PACKAGING	25kg Paper / Plastic Bags
COLOR	Grey

105

## **STORAGE**

RAK NS Grout should be stored in dry premises, away from direct sunlight, wind and humidity

#### **COMPRESSIVE STRENGTH**

N/MM2AT 20°C	; (BS/1881 Pt 116-1983)
Day	
1	28
7	57
28	65

# **FLEXURAL STRENGTH**

N/MM2AT 25°C (BS-4551	1980)
Day	
1	5.2
7	8.7
28	10.8

## **HEALTH AND SAFETY**

As with all chemical products, caution should always be exercised. Protective clothing, such as gloves and goggles, should be worn (see packaging for specific instructions). Treat any splashes to the skin or eyes with fresh water immediately. Should any of the product be accidentally swallowed, do not induce vomiting but call for medical assistance immediately. Ensure the container is available for the medical attendant to examine any relevant instructions and contents details. Reseal all containers after use and ensure product is stored as instructed on the safety section of the labelling