

**EUROTILES NON SHRINK GROUT BEDDING 114** is a high strength structural grout used most for grouting installations. Gaseous expansion in the plastic states ensures positive contact and load transfer in grouting applications.

## **ADVANTAGES**

- High compressive
- · Extended working time
- Shrinkage-compensated in the plastic (wet) state
- Economical
- Ready-to-use, just add water
- Controlled gaseous expansion in the plastic state ensures positive contact and load transfer which is essential for structural grouting application.
- · Appearance similar to concrete when cured.
- Reaches in excess of 80% of final compressive strength in seven days enabling early operation of plant and equipment
- Low water requirement particularly in the plastic state results in high early strength and long performance.
- May be pumped, hand-rodded, troweled, rammed and flowed into intricate or other areas where normal grouting methods do not surface this makes application more effective and convenient.

## TECHNICAL DATA

	Days	mpa	psi
Compressive Strength ASTM C109	7	50-57	≥5,000
	28	60-65	<u>≥</u> 8,000
Bond strength by Pull-off Test ASTM C1583	28	1.0	145

Appearance	Grey Powder
Expansion Time	4 hours
Application thickness	10-100mm
Packaging	25kg bag
Storage	cool, dry place
Shelf life	6 months (unopened bag)

## **HOW TO USE**

# A. Substrate Preparation

- Provide a reasonably rough but strong surface, loose contaminants and unsound concrete must be chipped away.
- All surfaces must be free from dust, oil and grease. This particularly applies to the underside of bed plates, bolts, pipes or other materials which may have surface contact with the grout.
- · Clean and remove any loose particles in holes and depressions using compressed air.
- The perimeter of any grouting area in a concrete substrate must be saw-cut at a minimum of 10 mm to provide a mechanical key for the grout.

## **B. Surface Priming**

- After cleaning, soak the substance for approximately 2 hours in clean water before applying Eurotiles Non-Shrink Grout Bedding 114.
- For horizontal holes, fill the holes with rags soaked in water. These rags can be periodically re-wetted.
- Make sure that no freestanding water is present on the surface of the foundation or in bolt holes.
- Use compressed air or a dry towel for removing excess water.

## C. Mixing Instructions

- Combine 3.75 to 4.5 liters of water with 25 kg of Eurotiles Non-Shrink Grout Bedding 114, mix well until a fine consistency is achieved.
- · Adjustments may be required in the mixing ratio depending on the site condition.
- Preferably, the mixing water and the substrate should be above the lower application temperature limit of 10°C and below 30°C to avoid problems with the setting time of the mix. It is recommended to do small trial batches first to ascertain the best working consistency for the operation.
- Do not mix by hand. Use an electric drill and paddle, a pan, or a revolving barrel type mixer. Mix for approximately 5 minutes to achieve maximum results.

## D. Pre-application

- Holes intended for sealing may either be cylindrical or rhombic (dove tailed).
- The diameter of bore holes in which rebars or rods are to be sealed should be at least 20mm more than the diameter of the board.
- The depth of the hole must not be less than 10 times the diameter of the bar or rod.

## E. Application Techniques

- Eurotiles Non-Shrink Grout Bedding 114 should be used within 30 minutes of mixing. Within that time, keep the material well agitated in the mixer. After this time, discard any grout that shows signs of stiffening.
- Flowable Eurotiles Non-Shrink Grout Bedding 114 may be placed with low-pressure cement grouting equipment or may be hand rodded into retained sections. High points must be adequately vented to allow entrapped air to escape.
- Eurotiles Non-Shrink Grout Bedding 114 mortar consistency can range from thick cream to a smooth plastic. It may be rodded into place or trowel-handed where freedom of movement permits.
- Throbbing Eurotiles Non-Shrink Grout Bedding 114 into position may cause segregation of the mix
- Dry pack Eurotiles Non-Shrink Grout Bedding 114 must be firmly pressed or rammed into place.
  Use metal or hardwood tamping tools and suitable trowel equipment. Its consistency should allow for pressuring into a firm hard ball without cracking.
- For sealing rebar or steel rods and bolts into bore holes, please follow these guidelines:
  - a) For vertical holes, position the bar into the hole, and then pour in the flowable Eurotiles Non-Shrink Grout Bedding 114. Alternatively, fill the hole with Eurotiles Non-Shrink Grout Bedding 114, then insert the rod or bolt into the wet mix, pushing in and pulling back several times to ensure sound bonding.
  - b) For horizontal holes, fill the hole with plastic consistency Eurotiles Non- Shrink Grout, then insert the rod or bolt, pushing and pulling as above-mentioned.
  - c) Eurotiles Non-Shrink Grout Bedding 114 may be pumped for large grouting installations.
  - d) Placing Eurotiles Non-Shrink Grout in unrestrained environments will result in lower final compressive and flexural strength.

### F. Aggregate Extensions

- 3/8 inches washed coarse aggregate may be added to Eurotiles Non-Shrink Grout Bedding 114 for pours of over 100mm in depth.
- Do not add more than 10 kg of aggregate to each 25 kg bag of Eurotiles Non-Shrink Grout Bedding 114.
- After extending with gravel, do not place Eurotiles Non-Shrink Grout Bedding 114 in thicker sections than 200mm.

#### G. Return to Service

 The required time period of bringing the grouted area to service is dependent on the required service load. Do not put the area to service for 3-7 days if it has a high load installation. The ambient temperature should be taken into consideration since cold weather delays hardening and hot weather quickens hardening.

## H. Cleaning Instructions

• All tools and equipment used with Eurotiles Non-Shrink Grout Bedding 114 should be immediately cleaned with water. Any cured materials may be removed by mechanical means.

### **PRECAUTIONS**

- Make sure that all surface preparation and priming instructions are carefully and precisely followed.
- Eurotiles Non-Shrink Grout Bedding 114 must be protected from rapid drying due to high temperatures or strong winds just like all cementitious mortars.
- It is highly recommended for the applicators to use hand gloves and safety goggles while using Eurotiles Non-Shrink Grout Bedding 114 since it is a cement-based product (an alkali in nature), and can cause dermatitis. Wear dust mask if applicable.
- Do not re-use the product by adding water.

**DISCLAIMER:** Due to different working methods, the manufacturer is not liable for any damages and faulty outcomes arising from incorrect use of this product. Please follow the instructions mentioned above.

PRODUCT MADE IN THE PHILIPPINES

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