

## NSF 610

SELF-LEVELING FLOOR SCREED  
UP TO 10mm

**CT-C30-F5**

ACCORDING TO  
**EN 13813**

### DESCRIPTION

The NSF 610 product is a one component, cement based, self-leveling mortar suitable for floor facing and normalization. It consists of cement, quartz sand of chosen granulometry with

0.5mm maximum grain size and special additives. It is applied at a thickness up to 0,5-1 cm, It is produced and controlled according to the EN 13813 European standard.

### FIELDS OF APPLICATION

The product is suitable for:

- construction of self-leveling floors with thickness from 0.5 to 1.5 cm.
- filling and leveling of cavities
- evening and repair of defects in existing floors

floor preparation in order to install wall-to-wall carpeting, tiles, plastic or wooden floors glued or not. It can also be left completely uncovered or painted. It presents optimum workability and it levels itself, providing a smooth and hard surface.

### ADVANTAGES - CHARACTERISTICS

- It is produced with quartz sand
- It is self levelling
- Easy and rapid application
- Rapid development of compressive and bending strengths
- Strong adhesion on concrete
- It does not present shrinkage or crevices
- Smooth surface with superior hardness
- Resistance to humidity and vapors
- Resistance to ageing
- Resistance to oils and solvents
- Certified with CE according to the EN 13813 European standard

### SUBSTRATE PREPARATION

The substrate must be dry, firm, stable, free from frail materials, dust, colors, wax, oils. Before the application the substrate must be washed well with water and after it dries it must be primed with the GLX 290 acrylic primer, diluted at ratio 3 parts water: 1 part primer. The absorbent as well as the old surfaces are stabilized using the same primer. Apply the product after the complete drying of the primer (approximately 2-6 hours). The primer consumption

(diluted in water) is 350-400 g/m<sup>2</sup>. You must take into consideration that the material is self-leveling, so if there are any inclinations on the substrate, they shall be covered by the product until a level and horizontal floor is created. Therefore wherever there are great inclinations and great amount of the material (more than 1 cm) are anticipated it would be better to pre-fill with the NSF 610 material.

### MIXING

#### Preparation with a continuous mixing machine:

Fill the machine's container with the product and adjust the water flow rate, in order to produce a mass with low viscosity that is easy to spread.

#### Material preparation by hand:

In a clean container add:

- 4.5-5.0 lt of clean water for the 25 Kg bag
- 7,2-8,0 lt of clean water for the 40 Kg bag

and gradually empty the content of the bag of the product while continuously mixing with an electrical agitator, in order to produce a homogenous mortar mass. Allow the mixture to mature for 5 minutes and agitate again for a little. The mixture is ready to use within the next 2 hours. After the preparation of the mixture do not additionally add water to correct the mortar's workability. This shall lead to a decrease of resistances and to the increase of its shrinkage.

### METHOD OF APPLICATION

The prepared product is cast and assisted with a wide toothed metal trowel in order to cover the desired area. While the floor is still fluid, treat the surface with a special radial roller, so as to release any entrapped air. In this way it will prevent the joints between the different layers, and result in a uniform and leveled surface. It is recommended the use of plaster beds in order to achieve uniform thickness. To avoid crack formation on the substrate it is recommended the use dilatation joints.

If the weather conditions cause abrupt drying of the product, such as high temperatures product protection is required until the completion of setting. Allow the product to completely dry before the next application. The duration will depend on the climatic conditions. During the application and during the following 24 hours the temperature of the environment and the substrate must be between +5<sup>0</sup> C and +35<sup>0</sup> C.

### PACKAGING - STORAGE

The product is provided in 25, 40Kg valve paperbags and in big-bags for THRAGON silos. It is stored on wooden palettes and in a dry environment.

with temperature above 0<sup>0</sup>C for 6 months from the production date.

### CONSUMPTION

Approximately 1,8 kg/m<sup>2</sup> per 1 mm of thickness.

With water immediately after use.

### NOT RECOMMENDED

The application of the product is not allowed:

- Where great friction strength is required (industrial applications)
- When there is a frost forecast for the 24 hours following the application.
- Under wet conditions (like rain).
- On places directly exposed to intense solar radiation or on warm substrates.

### CLEANING OF TOOLS AND MACHINES

The application at great thickness (more than 1 cm) must be avoided due to the risk creating crevices. In such a case it would be preferred to apply the material in two or more layers, casting each layer only after the previous one has dried. Additionally, the floor surface should be carved at 2.5-3 m distances.

### PRECAUTIONS

The NSF 610 product contains cement and reacts with water, producing an alkaline solution. For this reason protect your eyes and skin. In case of contact rinse with plenty of water. In case of contact with eyes seek medical advice immediately. Read the

information on the label and in the Technical Leaflet of the product before use. Wear appropriate protective clothing and gloves. The product's Safety Sheet is available to professionals upon request

**TYPE ACCORDING TO THE EN13813 EUROPEAN STANDARD – CATEGORY CT – C30 – F5**

TECHNICAL CHARACTERISTICS	UNITS	STANDARD	VALUE
Appearance			dry poeder
Color			grey
Thickness of application	(mm/layer)		5-10
Resistance temperature	(°C)		-30 to +90
Reaction to fire	(% organic)		≤1,0
Maximum grain size	(mm)		0.5
Working time	(Kg/l)		1,4
Dry bulk density	(Kg/l)	EN 1015-6	2.0
Bulk density of fresh mortar	(cm)		12
Compressive strength	(N/mm <sup>2</sup> )	EN 1015-11	≥30
Flexural strength	(N/mm <sup>2</sup> )	EN 1015-11	≥5
Setting time	(min)	EN 196-3	110-130
Strength development time	(h)		12
Shrinkage (16x4x1cm moulds)	(mm)		0.046
Walkability	(h)		3
Consumption	(Kg/m <sup>2</sup> per cm)		1.8

**Note:** The measurements were taken in laboratory environment under a temperature of +23°C, Relative humidity 50 % and without ventilation. It is possible for them to vary depending on the conditions prevailing at the worksite, such as temperature, humidity, ventilation, absorbability of the substrate.

The technical information and instructions of this leaflet which refer to the application and final use of Thrakon products are based on the Company's current know-how and experience regarding the products and are supplied in good faith since they are stored, used and applied according to Thrakon's recommendations. Due to inability to perform a direct check of the conditions in the work site and of the product's application procedure, the Company provides no guarantee regarding the suitability of its products for a specific purpose and also it bears no legal responsibility based on the written information of this leaflet, on written or verbal recommendations and instructions. The users of the products are advised to examine the suitability of the products for the specific application and intention of use by conduction a trial test. Thrakon reserves the right to modify the properties of its products without any prior notice. All orders are accepted only after the acceptance of the above as well as under the current terms of the Commercial Policy of the Company. The issue of the present technical leaflet replaces any previous issue.