NSD 600
CEMENT MORTAR 3-10 cm

CT-C20-F5 ACCORDING TO **EN 13813**

DESCRIPTION

The NSD 600 product is a one component, cement based ready mortar, suitable for floor facing and normalization. It consists of cement, quartz sand of chosen granulometry with 2.5 mm maximum grain size and special additives. It is applied at a thickness up to 3-10 cm, It is produced and controlled according to the EN 13813 European standard.

FIELDS OF APPLICATION

Suitable for floor construction (filling – leveling).
It presents very good workability and optimum adhesion to the substrate.
It is recommended for:

- creation of inclinations of flat roofs and outdoor places
- ramps
- preparation of concrete floors for the installation of any type of tile, marble, parquet, decorative materials, etc.
- indoor and outdoor areas
- If we desire the final floor surface to be completely even, it is recommended to coat its surface, with THRAKON MSF 380 material at a thickness of 0.5 – 1 cm.

ADVANTAGES - CHARACTERISTICS

- It is produced with quartz sand
- High compressive and bending strength – Quick application
- Strong adhesion on concrete
- Possible application on inclined substrates
- Excellent workability and thixotropic behavior
- Certified with CE - according to the EN 13813 European standard

SUBSTRATE PREPARATION

The substrate must be free from frail materials, dust, colors, wax, oils. The absorbent as well as the old surfaces are stabilized by the application of the GLX 290 acrylic primer, diluted at a ratio of 4 parts water: 1 part primer. Apply the product after the primer has completely dried (approximately 2 - 6 hours). The primer consumption (diluted in water) is 250 g/m2. Before the application place metallic guides which must be removed after the application.

METHODS OF PREPARATION

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 of low viscosity that is easy to spread.

Material preparation by hand

In a clean container we add 5.8-6.2 litres of clean water and we gradually empty the content of a 40Kg bag of the NSD 600 product while continuously mixing with an electrical agitator, in order to produce a homogenous mortar mass. We allow the produced mixture to mature for 5 minutes and we agitate again for a little. The mixture is ready to use within the next 2 hours. After the mixture is prepared, do not add additional water to correct the workability of the mortar. This shall lead to a decrease of resistances and to the increase of its shrinkage.

METHOD OF APPLICATION

Apply the mortar on the prime coated substrate and lay the desired thickness using a wooden or metallic rod. Before the application place wooden or metallic guides which shall give the desired thickness to the mortar. Additionally, parametrically and low along the walls and at the places where the floor comes in contact with the wall place pieces of polystyrene (2 – 3 cm thickness). Finally make expansion joints every 2.5 to 3 meters. For applications where there is no direct adhesion of the mortar to the substrate (like on polyethylene sheets, insulating plates, etc.) an appropriate support with reinforcement is required. The floor is walkable after 12 hours at +20^{o}C. If conditions that cause a sharp drying of the product prevail, such as high temperatures, a slight water spraying is required for the first 2 days after the application. Leave the product to dry completely before the next applications. This duration shall depend on the climatic conditions. The facing of the surface with ceramic tiles, parquet, mosaic, etc. must be performed after 28 days at +20^{o}C. Generally the recommended time for complete drying is 1 day per mm of thickness. During the application and also during the following 24 hours the ambient and the floor temperature must be between +5ºC and+ 35ºC. During the application we must not exceed the recommended thickness.

MATURATION

After the application is completed maintain the surface wet for the first 24 - 48 hours, in order to protect the floor from the atmospheric conditions, like air, rain and direct sunlight. It is recommended. to follow the usual maturity procedures like soaking with water (attention: slight spraying without large quantities of water), use of protective fabrics etc.

PACKAGING - STORAGE

The NSD 600 product is packaged in 40Kg valve paperbags and in big-bags for THRAKON silos.
It is stored on wooden palettes and in a dry environment with temperature above 0ºC for 12 months from the production date.

CONSUMPTION

Approximately 15 –17 Kgr of dry mortar per 1 m^2 for 1 cm thickness.

CLEANING OF TOOLS AND MACHINES

With water immediately after use.

NOT RECOMMENDED

The application of the product is not allowed:
• 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 on warm substrates.

NSD 600
CEMENT MORTAR 3-10 cm

CT-C20-F5 ACCORDING TO **EN 13813**

PRECAUTIONS

The NSD 600 product contains cement and reacts with water to produce 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 product's Technical Brochure 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 – C20 – F5

TECHNICAL CHARACTERISTICS	UNITS	STANDARD	VALUE
Appearance			dry powder
Color			grey
Maximum thickness of application	(mm/layer)		30-100
Resistance temperature	(^{0}C)		-30 to +90
Reaction to fire	(% organic)		≤1,0
Maximum grain size	(mm)		2,0
Working time	(h)	EN 1015-9	1,5-2
Dry bulk density	(Kg/l)		1,50-1,60
Bulk density of fresh mortar	(Kg/l)	EN 1015-6	1,65-1,80
Compressive strength	(N/mm^2)	EN 1015-11	≥20
Flexural strength	(N/mm^2)	EN 1015-11	≥5,0
Strength development time	(days)		28
Walkability	(h)		12
Consumption	(Kg/m^{2}per cm)		15-17
Water demand	(ml water /100g dry mortar)		14,5-15.5

Note: *The measurements were taken in laboratory environment under a temperature of +23^{0}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.*