Product properties sheet
Issue B' - 01/08/2011

NSD 620 LIGHT

THERMAL INSULATING FLOOR 3 - 20cm

CT-C7-F2 ACCORDING TO **EN 13813**

DESCRIPTION

The NSD 620 product is a one-component, ready, thermal insulating, light floor mortar, suitable for floor facing and normalization. It consists of cement, crushed YTONG, quartz sand of chosen granulometry with 3,5mm maximum granule and ameliorative additives. It is applied at a thickness up to 3-20 cm, It is produced and controlled according to the EN 13813 European standard.

FIELDS OF APPLICATION

It is particularly recommended for applications which require reduced loads. It is suitable for floor construction (filling – levelling). 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 the concrete floors for the installation of any type of tile, marbles, 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 610 material at a thickness of 0.5 – 1 cm

ADVANTAGES - CHARACTERISTICS

- It contains crushed YTONG
- It is produced with quartz sand
- Suitable for applications that require reduced loads
- 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 3 parts water: 1 part 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^2. Before the application place metallic guiding rails, 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 with low viscosity that is easy to spread.

Material preparation by hand:
In a clean container we add 13.5 litres of clean water and we gradually empty the content of a 30 Kg bag of the NSD 620 product while continuously mixing with an electric stirrer to yield a homogeneous mass of mortar. Let the mixture results to mature 5 minutes and stir a bit back. The mixture is ready for use for the next 2 hours. After preparation of the mixture are prohibited. The further addition of water to correct workability of the mortar.
This will lead to reduce resistance and increase the shrinking.

PRECAUTIONS

The NSD 620 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 – C7 – F2

TECHNICAL CHARACTERISTICS	UNITS	STANDARD	VALUE
Appearance			dry powder
Color			grey
Thickness of application	(mm/ layer)		30-200
Resistance temperature	(^{O}C)		-30 εως +90
Reaction to fire	(% organics)		<1,0
Maximum grain size	(mm)		3,5
Working time	(h)	EN 1015-9	1,5-2
Dry bulk density	(Kg/l)		1,0-1,1
Bulk density of fresh mortar	(Kg/l)	EN 1015-6	1,45-1,55
Dry bulk density of hardened mortar	(Kg/l)	EN 1015-10	1,10-1,20
Thermal conductivity coefficient λ	(Kcal/mh^{o}C)	EN 1745	0,232
Compressive strength	(N/mm^2)	EN 1015-11	>7,0
Flexural strength	(N/mm^2)	EN 1015-11	>2,0
Strength development time	(days)		28
Walking after	(h)		12
Consumption	(Kg/m^2 per 1 cm)		10-11
Water demand	(ml water / 100g of dry mortar)		41-44

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.*