

#### **DESCRIPTION**

VKW 121 is a thin layer adhesive for absorbent and nonabsorbent tiles based on cement and modified with polymer additives for usage on both horizontal and vertical surfaces. It consists of cement, quartz sand, lime fillers and improvement additives. VKW 121 has very strong adhesion on all common substrates and high resistance against weather conditions (rain – heat-wave - frost). It avails extended open time (up to 30 minutes) increasing thus the productivity of crews. It is ranked as an adhesive type C2E as per EN 12004 for interior and exterior applications.

# **FIELDS OF APPLICATION**

Adhesive SKW 121 is adequate for coating walls and floors with small and large dimension tiles in both interior and exterior areas. It is particularly recommended for non-absorbent tiles subjected to intense stresses.

It is adequate for the adhesion of:

- small or large ceramic tiles of all types
- thin marble rock tiles
- natural or artificial granite tiles
- Cotto tiles
- Klinker tiles
- glass inlays

- porcelain tiles
- decorative elements and inlays

On common substrates such as:

- concrete
- light concrete
- Porous concrete
- renders
- · flat walls with filled joints
- self-leveling floors
- cement screeds
- mosaics

# **ADVANTAGES - CHARACTERISTICS**

- Produced with quartz sand
- Adequate for the adhesion of non absorbent tiles
- Adequate for substrates submitted to intense stress
- Extended open time (up to 30 minutes)
- Resistance to weather conditions

- Excellent workability
- High tolerance Fast application
- Resistance to humidity and frost
- CE certified- as per the European standard EN 12004

# SUBSTRATE PREPARATION

The tile layering sub-layer must be flat, free from any brittle and foreign bodies such as for example plaster residue, paint, oils, etc. and must not have any cracks. Moreover the sub-layer must be stable and free from any shrinkage and distortion forces.

Further more it should not be subject to vibrations. The absorbent sub-layers are primed using GLX 290 primer before application.

The technical information and instructions contained in the present brochure and referring to the application and end use of Thrakon products are based on the up to now know-how and experience of the Company with regards to the products and are provided in good faith as long as such products are stored, used and applied as per Thrakon recommendations. Due to the inability, on our part, to directly inspect the conditions prevailing at the worksite as well as the application procedures of the product, the Company does not provide any guarantee with regards to the adequacy of its products for specific purpose while the Company shall not bear any legal responsibility based on the information stated in the present brochure or any other written, oral, or otherwise provided recommendations and instructions. The users of the products are advised to perform a limited surface testing of the products adequacy for the eventual application and use intentions. Thrakon reserves the right to modify the features of its products without prior notification. All orders shall be approved only following acceptance of the above and under the eventual Commercial Policy terms of the Company. The issuance of the present brochure voids any prior version.



### **APPLICATION**

In a clean container add 7,0-7,5 liters of clean water and gradually empty the content of a 25 Kg sack of product VKW 121, mixing continuously with an electric mixer in order to acquire a uniform slurry mass. Let the resulting mixture age for 5 minutes and mix again. The mixture is ready to be used within the next 4 hours. Following the preparation of the mixture do not add more water in order to correct the workability of the slurry. This would lead to the reduction of its tolerances and the increase of its shrinkage. VKW 121 is spread on the surface and then the adhesive layer is combed using a special toothed spatula. The spatula teeth size is

determined depending on the tile size. Then the tile is placed and pressed on the adhesive. The tiles layering time is equal to the open time (30 min).

The excess adhesive must be cleaned off the joints prior to ts drying. On surfaces larger than 25m2 it is necessary to install expansion joints. At the areas of contact of floors with walls it is recommended to use adequate silica-containing pastes. During application and for the next 24 hours the environmental and sub-layer temperature must be between +5°C and +35°C. The adhesive is cleaned with water while still wet. When it hardens it is removed mechanically.

### **MOUNTING**

Mounting and passability is allowed after 24 hours. For mounting there is usage of the tile

grouts of THRAKON FMF150 (based on cement) or FMF155 (based on epoxy).

#### CONSUMPTION

The consumption of VKW 120 is approximately 2,0 - 4,0 kg /  $m^2$ . It depends on the tiles type.

Tiles	Spatulla	Consumption
Size	mm	kg / m <sup>2</sup>
small	6	2,4
medium	8	3,3
large	10	4,0

### **MODIFICATION**

If during mixture preparation there is addition of 1-2 kg/sack of 25Kg, of VLX 186 emulsion and the necessary water quantity, there is enhancement of the product characteristics which shall respond to class S1 of EN 12002.

Following modification the adhesive is adequate for the adhesion of tiles on non-absorbent sub-layers subject to temperature variations, vibration and contractions-expansions, such as pools, heated floors, old tile layers, etc.

### **PACKAGING - STORAGE**

The product is packed in valve-sacks of 25 Kg and is preserved stored on wooden pallets

in dry environment at temperatures greater than  $0^{\circ}$ C for 12 months since its production date.

# **NOT RECOMMENDED**

It is not recommended for usage in:

- substrates made of plaster without prior priming
- glass, plastic, iron, wood
- heated floors

- pools, tanks
- floors submitted to distortions and vibratn

In these cases, there should be usage of special THRAKON adhesive types.

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#### **PRECAUTIONS**

VKW 121 contains cement that reacts with water producing an alkaline solution. For this reason protect your eyes and skin. In case of contact wash with plenty of water. In case of contact with the eyes seek immediately medical advice. Read

the information contained on the label and the Technical Sheet of the product before use. Use adequate protective clothing and gloves. The Safety Sheet of the product is availed to professionals upon request.

TYPE C2E OF THE EUROPEAN STANDARD EN 12004					
TECHNICAL CHARACTERISTICS	UNITS	STANDARD	VALUE		
Form			dry powder		
Color			grey / white		
Application thickness	(mm)		10		
Resistance to temperature	(°C)		-30 to +90		
Maximum grain size	(mm)		0,5		
Working time	(h)	EN 1015 - 9	5		
Correction time	(min)	EN 1015 - 9	≥30		
Open time (30min)	(N/mm <sup>2</sup> )	EN 1346	≥0,5		
Initial tensile adhesion strength	(N/mm <sup>2</sup> )	EN 1348	≥1		
Tensile adhesion strength after water immersion	(N/mm <sup>2</sup> )	EN 1348	≥1		
Tensile adhesion strength after heat ageing	(N/mm <sup>2</sup> )	EN 1348	≥1		
Tensile adhesion strength after freeze-thaw cycles	(N/mm <sup>2</sup> )	EN 1348	≥1		
Slip	(mm)	EN 1308	≤0,5		
Walking	(h)		24		
Strength development	(days)		14		
Wall grouting	(h)		12		
Floor grouting	(h)		24		
Consumption	(Kg/m <sup>2</sup> )		2 - 4		
Water demand properties	(ml water /100g of dry mortar)		28 - 32		

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, sub-layer and frame absorbance

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