PRODUCT DATA SHEET

S-BOND FLEX

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ONE-PART SIMP HIGH-ELASTIC STRENGTH WOOD-FLOORING ADHESIVE EMICODE EC 1PLUS & EUROFINS IAC GOLD CERTIFIED

DESCRIPTION

S-Bond Flex is a ready-to-use, one-component, high-elastic strength wood-flooring SiMP – Silyl Modified Polymer adhesive. S-Bond Flex provides moisture protection by assuring low vapor permeability as well as sound insulation. The product does not contain isocyanates, is solvent- and water-free and has very low emission according to EMICODE EC 1PLUS & EUROFINS IAC GOLD protocols.

RECOMMENDED FOR

S-Bond Flex is suitable for:

- Full surface bonding of multilayer pre-finished parquet
- Solid and engineered wood floors with tongue and groove
- Chipboards on cement screeds
- Fast setting screeds
- Anhydrite screeds
- Pre-existent wood
- Ceramic tile
- Marble and marble tile flooring

It is preferable the use of stable woods. It is also suitable for under-floor heating systems. The adhesive is suitable for all species, according to the UNI EN 13556.

ADVANTAGES

- SiMP - Silyl Modified Polymer
- Ready-to-use. No mixing required
- Environmentally friendly – Free of isocyanates and solvents
- Very low emissions according to EMICODE EC1 Plus protocol
- Easy to apply with excellent ridge holding
- Rapid grab and high filling capacity
- Reduces transversal stress between the wood floor and the substrate
- Elastic, footfall-sound-dampening adhesive
- Suitable for subfloor heating
- Residues on woods and hands can be easily removed

TECHNICAL CHARACTERISTICS

Characteristics	Test Result	Test Method
Appearance	Non-sag thixotropic paste	
Color	Oak	
Chemical nature	SiMP Silyl-Modified Polymer	
Curing mechanism	Moisture-curing	
Density	~ 1,71 g/cm³ (106,75 lb/ft³)	At 23 °C (73,4 °F) and RH 50%
Tack-free time	~ 50 min	At 23 °C (73,4 °F) and RH 50%
Tensile strength	~ 1,30 N/mm²	ISO 37 DIN 53504
Shear strength	~ 1,30 N/mm²	wood-wood;- DIN 14293
Tear strength	~ 3,10 N/mm	ISO 34-1
Water vapour permeability WVT	<0,69	DIN 52615 (<0,69)
Acoustic sound reduction L'nT,w	43 dB	ISO 16283-2; ISO 717-2
Application temperature	5 to 40 °C (41 to 104 °F)	
Plank setting time	~1 h	

ONE-PART SIMP HIGH-ELASTIC STRENGTH WOOD-FLOORING ADHESIVE
EMICODE EC 1PLUS & EUROFINS IAC GOLD CERTIFIED

Characteristics	Test Result	Test Method
Trafficability	~ 12 h	
Sandpapering	~2,5 days	
Consumption	0,9-1,4 kg/m^2 (0,18 – 0,29 lb/ft^2)	
Operative temperature	-10 to 60 ºC (14 to 140 ºF)	
Temperature Resistance	-40 to 100 ºC (-40 to 212 ºF) with brief points at 120 (248 ºF)	

Note: All data are average values obtained under laboratory conditions. Impractical use, temperature, humidity and absorption of the substrate may influence the above given values.

DIRECTIONS FOR USE

Surface Preparation: The parquet must be installed on a clean, firm, solid, compact and dust-free screed, without traces of varnish, powder, grease or oil, etc.

Cement Screeds: The screed must be properly treated and separated from the rest of the floor base with a suitable vapor barrier with a high edge on the surrounding walls. If necessary, sand the screed and remove the dust with a vacuum cleaner.

Anhydrite screeds: After sweeping, remove dust with a vacuum cleaner.

Pre-existent flooring in ceramic and marble: Make sure that the surface is free of oily substances, greases or acid or basic residues and cleaning detergents. If these characteristics are lacking, then careful clean and dry the surface prior to installation of the parquet flooring; adhesion testing is recommended prior to application.

Pre-existent wood flooring: once the adhesion of the new parquet to the previous one has been verified, proceed to sand the surface of the wood to remove the varnished layer and carefully remove the dust with a vacuum cleaner.

Application: Once the bucket is open, remove the aluminum foil that covers the product and keep it apart. Apply the adhesive with a dented spatula, distributing it evenly to obtain a good "wetting" of the surface. Proceed with laying the wood within 40 minutes.

NOTE: In the case of partial use of the bucket, cover the adhesive with the original aluminum foil, making sure that it adheres to the product, and close the bucket with a lid. The bucket should be used in a relatively short period of time after opening. The product must not be diluted in any way.

Finishing: Parquet flooring must be treated according to industry regulations. Place the wooden planks in position with the necessary pressure to ensure good contact between the wood and the adhesive. Leave a border of approximately 1 cm between the parquet and the wall.

Application conditions:

Ambient temperature: Apply at a temperature between 5 °C and 40 °C (41 ºF and 104 ºF). The optimal temperature is between 15 °C and 25 °C (59 ºF and 77 ºF).
Ambient humidity: Apply at a humidity between 40% and 80%.

Screed Humidity: Cement maximum content allowed is 2% (1,7% for under-heated floors), measured by a Carbide hygrometer.

Anhydrite maximum content allowed is 0,5%.

SPECIAL CONSIDERATIONS

Clean tools with acetone or alcohol immediately after use.

When the adhesive has still not hardened, it can be removed from the trowel, using some paper or a cloth. Once it has hardened, then removal must be effected mechanically.

Contact PENETRON HELLAS S.A. for additional information, regarding your project.

PACKAGING

S-BOND FLEX can be purchased in PE-pails of 16 kg (35,27 lb) and 7 kg (15,43 lb) foil bag (2 pieces in a pail).

STORAGE / SHELF LIFE

S-BOND FLEX can be stored for 12 months in its original packaging (unopened container) at 10°C - 25°C (50 ºF - 77 ºF) in a cool, dry place. The storage temperature should not exceed 25°C (77 ºF) for extended periods of time. Keep away from wet areas, direct sunlight and heat sources.

SAFE HANDLING INFORMATION

Avoid skin contact by using latex, rubber or polyethylene gloves. Avoid skin and eye contact. If in eye, flush immediately with lots of water and seek medical advice. If skin contact occurs, remove immediately and wash with soap and water. KEEP OUT OF REACH OF CHILDREN. For further information please refer to Safety Data Sheet. PENETRON HELLAS S.A. has recently updated Safety Data Sheet on the safe use of PENETRON® products. Each Safety Data Sheet contains health and safety

information for the protection of your employees and your customers.

CERTIFICATION

Certified according to:
EMICODE EC1PLUS protocol
EUROFINS IAC GOLD protocol
VOC Emission class label A+

Compliant to:
EN 14293 Adhesives for bonding parquet subfloor
LEED iEQc 4.1 ; SCAQMD Rule 1168 ; BAAQMD Reg 8 Rule 51
CARB VOC levels regulation
ISO 16283 – Acoustic sound reduction

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