

UNISIL

Single-component adhesive with a silanic termination (MS technology)



Description

UNISIL is a prepolymer based, single-component hydro-curing adhesive with a silanic termination (MS technology). This adhesive is classified as "ELASTIC" according to ISO 17178. Recommended for gluing pre-finished wooden floor onto marble, grit, tiles, ceramic or marble-chip floor, etc. Also suitable for gluing wooden floor onto underfloor heating and cooling system. CERTIFICATES: EC1; ATTESTATION CCA-Environmentally Compatible Product (Certificate issued by Department ABC - Politecnico of Milan CCA Registration No. 20226); Sound Reduction (CSI Test Report No. 0056/DC/ACU/06); Heat conductivity (CSI Test Report No. 0020/DC/TTS/06).

UNISIL can contribute to the achievement of QI CREDIT 4.1 according to the parameters of the GEV dated 03 March 2009, because it meets the certification LEED protocol (Leadership in Energy and Environmental Design).

Characteristics

Mixture ratio	single-component
Application temperature	+10°C ÷ +25°C
Application	notched trowel n.5
Maximum open time	1 h ⁽¹⁾
Hardening	36-48 h ⁽¹⁾
Specific weight	1,45 Kg/l +/- 0,02
Coverage	700-1200 g/m² depending on the subfloor
Colour	oak
Classification (ISO 17178)	ELASTIC
Tensile strength (ISO 17178, p.4.3)	>1 N/mm²
Shear strength (ISO 17178, p.4.4)	>1 N/mm²
Shear elongation (ISO 17178, p.4.4)	>1,0
Storage stability	9 months ⁽²⁾
Packaging	15 Kg, 1000 ml, 600 ml, 290 ml
Tool cleaning	DILUENTE ACETONE - DILUENTE DMC 50 (before the hardening of the adhesive)

1 at 20°C and 65% R.H.

2 in original sealed containers at temperatures between +10°C and +25°C

Laying conditions

Subfloor

dry, clean, no-dust creating, not too rough.

Humidity of Subfloor

2,0% max with cement subfloors.

1,7% max with radiant floor heating cement subfloors.

0,5% max with anhydrite subfloors.

0,2% max with radiant floor heating anhydrite subfloors.

Wood humidity

9%±2 for solid wood elements and parquet mosaic (UNI EN 13226, UNI EN 13227, UNI EN 13228 e UNI EN 13488)

7%±2 for plywood elements (UNI EN 13489)

Other uses

Adhering of heat and sound insulating panels (cork, expanded polyurethane, rock-wool).

Adhering of tiles on asbestos cement and chipboards.

Adhering of wood and building materials (ceramics, stoneware-marble tiles) on to metal bases.

How to use

Before use, mix the product until it is uniform.

The subfloor, according to local regulations, must be dry, free of cracks, uniform and completely clean from the elements that can damage its adherence.

Apply UNISIL paying attention to lay the wood blocks side by side and knock them down well, making sure the adhesive glues well to the entire surface. Perfect adhesion to the subfloor is ensured if at least 65% of each wooden component is in direct contact with the adhesive.

The application of a primer usually is not required, if the substrate is problematic (for example: absence of an impermeable layer, fragile surfaces, ignition cycle on radiant heating not carried out, anhydrite substrate, etc.), we recommend the use of a primer in order to improve the characteristics of the substrate.

For subfloor with radiant floor heating, where the use of a primer is required, apply one coat of PRYMER SF 1105 (see technical data sheet) and after 24 hours proceed with the application of UNISIL.

If the subfloor is porous or friable, we suggest to apply a coat of PRYMER A, PRYMER SF 1105, PRYMER PUB 77, PRYMER 100 or PRYMER FAST 500. The drying time for the subsequent coats depends on the primer used (see technical data sheets).

If you need to glue the wooden floor onto glazed subfloors (such as ceramic, enamelled tiles or polished marble, etc.) remove and clean the surface from dust, grit, glue and waxes. Apply by cloth the adhesion promoter DILUENTE APA following the correct application time (see technical data sheet), then apply UNISIL.

In case of anhydrite subfloors, thoroughly sand using 24 or 36 grit sandpaper; remove dust and apply primer using PRYMER SF 1105 (do not dilute) or PRYMER PUB 77 with DILUENTE DMC 50 thinner at a ratio 70:30.

UNISIL must be acclimatized at room temperature before being applied.

The next sanding should take place after 3-4 days, depending on the atmospheric conditions and humidity level of the wood species used.

The possible excess of glue can be removed with a cleaning humid cloth. In case of left over product, seal the bucket properly by using both lids to avoid waste.

Note:

Do not apply UNISIL in presence of high evaporative fluxes as they cause the increase of pH of the substrate (pH>=10) and they cause

Technical Datasheet

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problems with the screed/glue/wood system. In case of doubt apply one coat of PRYMER SF 1105 (see technical data sheet) and after 24 hours proceed with the application of UNISIL.

In order to have a stabilized and dried subfloor with radiant floor heating, after a proper ageing, it is necessary to test the system and we strongly recommended to follow exactly all the instructions of the radiant floor heating producers (we suggest to view the installation certificate). A not-fully seasoned and stabilized subfloor with radiant floor heating can release plasticizers (not fully cured) and residual humidity, that can compromise the adhesion properties of the glue during the time. It is important to follow the "Best conditions for laying wooden floors" as listed in this technical data sheet.

Shipping notes.

If the storage temperature exceeds +25°C, the time of storage is noticeably reduced, at temperatures above +50°C there is a real risk of thickening/gelatinization of the product even in the original packaging. For transport by sea it's advisable to use the special thermo-containers.

Warnings

- * The subfloor should have a temperature of at least +12°C / +15°C.
- * Do not apply the adhesive if the relative humidity of the room exceeds 75%.
- * Do not lay wooden floor if the walls or ceilings are still wet after plastering or white-washing, etc.
- * Never dilute the adhesive.
- * Do not walk on the wooden floor for at least 24-36 hours after laying.
- * Small quantities of methyl alcohol can be released during the drying phase.

Label elements

For more information about the safe use of the product it is recommended to consult the latest version of the Safety Data Sheet.

Web link

Be sure to have the latest version of this technical data sheet downloadable also from the following link:



http://www.chimiver.com/tds/EN_UNISIL.pdf

These information are given from the best of our knowledge and technical experience. They are of general character and not binding in any way our company. Every single case should be put to a practical test by the user who assumes the full responsibility of the final result of his work.