

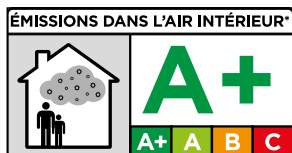
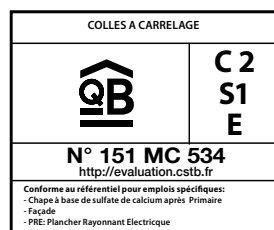


BENFERFLEX LIGHT

Universal flexible adhesive - especially light with high yield

- High yield • Easy and smooth application • High initial grab • Good sag resistance
- Variable, use also as a flow-bed adhesive • For interior and exterior use
- Fulfils the required criteria for a "flexible adhesive"
- Tested to DIN EN 12004, C2 TE S1
- **CE**

This product improvable with CEMLATEX 600



TECHNICAL FEATURES:

BENFERFLEX LIGHT is a thixotropic, powder adhesive, consisting of cements, graded particle size aggregates, synthetic resins and special additives. It has been formulated and developed for rapid and reliable installation of all ceramic materials with minimal effort. The high resistance to vertical sliding allows to tile from the top down.

AREAS OF APPLICATION:

Laying of porcelain, ceramic tiles and water stable natural stones on:

- Interior and exterior walls and floors
- Heavy duty areas
- Public and private swimming pools

Suitable as an adhesive for lightweight construction boards e.g. composed of extruded polystyrene. Levelling uneven wall or floor (substrates up to a thickness of 15 mm).



TECHNICAL ASSISTANCE



INSURANCE GUARANTEE



TECHNICAL MEETINGS



PROFESSIONAL USE

CONTRACT ITEM SPECIFICATIONS:

Floor and wall coverings must be applied with a flexible, one part, cement based adhesive, light (mass - 0,81 kg/Lt), application thicknesses up to 15 mm, classified C2TE S1 in accordance with EN 12004, like BENFERFLEX LIGHT by Benfer.

SUITABLE SUBSTRATES:

- Concrete
- Cement-based screeds, standard or heated with water system or electric resistance
- Cement-based plaster
- Flexible waterproofing membranes made up of cement and polymers (ACQUASHIELD-2KF)
- Cement based blocks

INSIDE ONLY:

- Fluid cement-based screeds (prior application of an appropriate primer if demanded), standard or heated with water system or electric resistance
- Fluid anhydrite-based screeds (prior application of an appropriate primer), standard or heated with water system or electric resistance
- Old ceramic tiles (prior application of an appropriate primer)
- Standard or waterproof plasterboard
- Elastomeric waterproofing membranes (ACQUASHIELD-GEL)
- Wooden boards (prior application of an appropriate primer)

MAXIMUM SIZES:

- Internal floors with maximum length of longest tile side up to 360 cm
- External floors with maximum length of longest tile side up to 120 cm
- Internal walls coverings with maximum length of longest tile side up to 360 cm
- External walls coverings with maximum length of longest tile side up to 90 cm

See the choice table to verify size limits by tile/substrates characteristics



METHOD OF USE:**SUBSTRATES PREPARATION:**

The substrates must be solid, free from oil, grease and dust. Any paint-work must be in good condition, washed and degreased. If this is not the case, the paint must be removed.

Gypsum or calcium sulphate based substrates must be previously treated with BENFERPRIM. Do not use on plastics or metals. Absorbent substrates must be treated with BENFERPRIM.

PRODUCT PREPARATION:**Mixing ratio:**

- as a thin-bed adhesive: 7.5–8.1 litres water: 15 kg BENFERFLEX LIGHT
- as a smoothing mortar: 7.4–7.9 litres water: 15 kg BENFERFLEX LIGHT
- as a flow-bed adhesive: 10.2–10.8 litres water: 15 kg BENFERFLEX LIGHT

Allow to stand for 4 minutes, then mix thoroughly through once again. When using as a flow-bed adhesive firstly mix BENFERFLEX LIGHT with approx. 8 litres of water and subsequently mix in the remaining water until a pourable consistency is achieved. Do not mix more material than can be used within the pot life. Spread the mixed adhesive over the substrate and dependent on the tile format comb through with the appropriate notched trowel. Fix the finishing material within the adhesive open time.

TILING:

INTERIOR: Lay the tiles while exerting a good pressure on the tiles surface, so that contact between tile and adhesive will be at least of 95-100%.

EXTERIOR: The contact between tile and adhesive must be 100% so to avoid the eventual rain infiltrations that in case of frost could cause the detachment of the tiles. Therefore, it is suggested to spread also a layer of BENFERFLEX LIGHT on the back of the tiles.

We suggest to do the same things even inside for:

- Floor tiles largest than 500 cm² with water absorption of the tiles $\geq 0.5\%$ (e.g. porcelain tiles)
- Floor tiles largest than 1100 cm² with all the other types of tiles
- Wall tiles largest than 120 cm² with water absorption of the tiles $\geq 0.5\%$ (e.g. porcelain tiles)
- Wall tiles largest than 500 cm² with all the other types of tiles
- Special applications such as industrial refrigerators, basins, swimming pools, etc.

It is essential to leave a joint of at least 3 mm between each tile, and to ensure that the tiling conforms with the expansion joints of the structure, to be elastically sealed, as well as the joints between walls, and the joints between wall and floor.

In any case expansion joints and perimeter joints must be carried out every about 20 m².

FULL SERVICE:

At 23°C and with 50% relative humidity, the open time of the mix is approximately 30 minutes. In unfavourable conditions, these times may be significantly reduced. You are therefore advised to spread the adhesive a little at a time and to check frequently that it has not formed a surface film before laying the tile. To improve workability, especially in summer, it is beneficial to exclude draughts. In the first 48 hours after application, the adhesive does not withstand frost.

Flooring installed using BENFERFLEX LIGHT can be walked over cautiously after about 24 hours for grouting (48 hours for temperature below 15°C), and are fully loadable after 7 days.

ADVICE:

- For fixing tiles in heavy duty areas in exterior locations (balconies and terraces) install the highly elastic bonded waterproofing system ACQUASHILED-2KF
- Levelling layers produced with BENFERFLEX LIGHT can be tiled over after approx. 8–24 hours dependent on thickness applied *
- Where BENFERFLEX LIGHT is used as a flow-bed adhesive, tiles are generally ready for foot traffic and grouting after 48 hours.
- When fixing natural and synthetic stone to avoid curling effects through water absorption, we recommend the use of BENFERJOLLY.
- Prime calcium sulphate based substrates with BENFERPRIM or STARPRIM.
- Adhesive that has already started to set should not be re-lifted by adding more water or fresh adhesive. There is a risk of inadequate strength development.
- In continuously wet areas (swimming pools, containers etc) we recommend the use of the system based thinbed adhesive BENFERFLEX onto the BENFER waterproof membrane suitable for the particular application.
- Direct contact between cement-based tile mortars and magnesium-based screeds leads to the destruction of the magnesite screed through a chemical reaction. Negative moisture penetration from the rear must be prevented through appropriate measures.
- BENFERFLEX LIGHT is a hydraulically setting adhesive and should be protected from the influences of water and frost until fully cured, which may take a few days under unfavourable weather conditions.
- Protect areas not to be treated from the effects of BENFERFLEX LIGHT.

CONSUMPTION: The consumption changes according to planarity of the support, to the used trowel and to the laying system (simple or double gluing).

MIXED with 10,8 liters water (as a flow-bed adhesive):

Support	Tiled surface	Laying System	Trowel type mm.	Consumption kg / m ²
Int.floor	1100<S<3600	simple gluing	5	3,2
	3600<S<10000	simple gluing	20	3,6
Ext.floor	1100<S<3600	simple gluing	5	3,2

MIXED with 8,1 liters water

Support	Tiled surface	Laying System	Trowel type mm.	Consumption kg / m ²
Int.floor	S<1100	simple gluing*	8/10	1,8/2,2
	1100<S<3600	double gluing	10/15	3,0/3,8
	3600<S<10000	double gluing	20	4,6
Ext.floor	400<S<1100	double gluing	8/10	2,6/3,0
	1100<S<3600	double gluing	10/15/20	3,0/3,8/4,6
Int.floor	S<400	simple gluing	6	1,3
	400<S<2000	double gluing	8/10	2,6 / 3,0
	2000<S<3600	double gluing	10	3
Ext.floor	S<400	double gluing	6	1,9
	400<S<2000	double gluing	8/10	2,6/3,0
	2000<S<3600	double gluing	10	3,0

* For local classified U4 P4S and pools double gluing

CLEANING: The cleaning of the coating must be effected by means of a damp cloth or sponge when the adhesive has already started to set and it can be done using greater quantity of water only after 48 hours from tiling.

PACKAGING: BENFERFLEX LIGHT is available in 15 kg poly-lined bags, in pallet of 630 kg.

STORAGE: In the original unopened packaging in a dry and cool place.

SHELF LIFE: 12 months from the date printed on the packaging.

PRODUCT TECHNICAL DATA

Basis:	Lightweight fillers, cement, additives
Bulk density:	Approx. 0.8 kg/dm ³
maximum grain size:	0,3 mm
Storage and Duration:	12 months in the original closed package in a cool dry place
Danger of harm:	No. Possible irritation of the eyes and skin upon contact
Inflammability:	No
Mixture ratio:	50-54%, 7,5-8,1 lt water/15 kg bag 68-72%, 10,2-10,8 lt water/15 kg bag (flow bed)
Consistency:	Creamy
Apparent mass volume:	1,25 kg/dm ³
Application temperature:	From + 5°C to + 35°C
Pot Life:	About 3 hours*
Open time:	About 30 minutes
Vertical sliding to EN 1308:	< 0,5 mm
Maximum thickness:	20 mm
Foot traffic:	12 hours*
Grouting:	12 hours*
Ready for use:	7 days*
Final hardening:	28 days*
Final performance:	
Adhesion (after 28 days):	> 1,0 N/mm ²
Adhesion after warming:	> 1,0 N/mm ²
Adhesion after water immersion:	> 1,0 N/mm ²
Adhesion after frost-thaw cycles:	> 1,0 N/mm ²
Deformability to EN 12004:	> 2,5 mm
Temperature resistance:	-30°C to +90°C

* at 23°C and 50% relative humidity

PLEASE NOTE: The information given in this chart is based on our best experience and indicative only. It must in any event be verified by the end user, who assumes all liabilities deriving from utilization of the product.