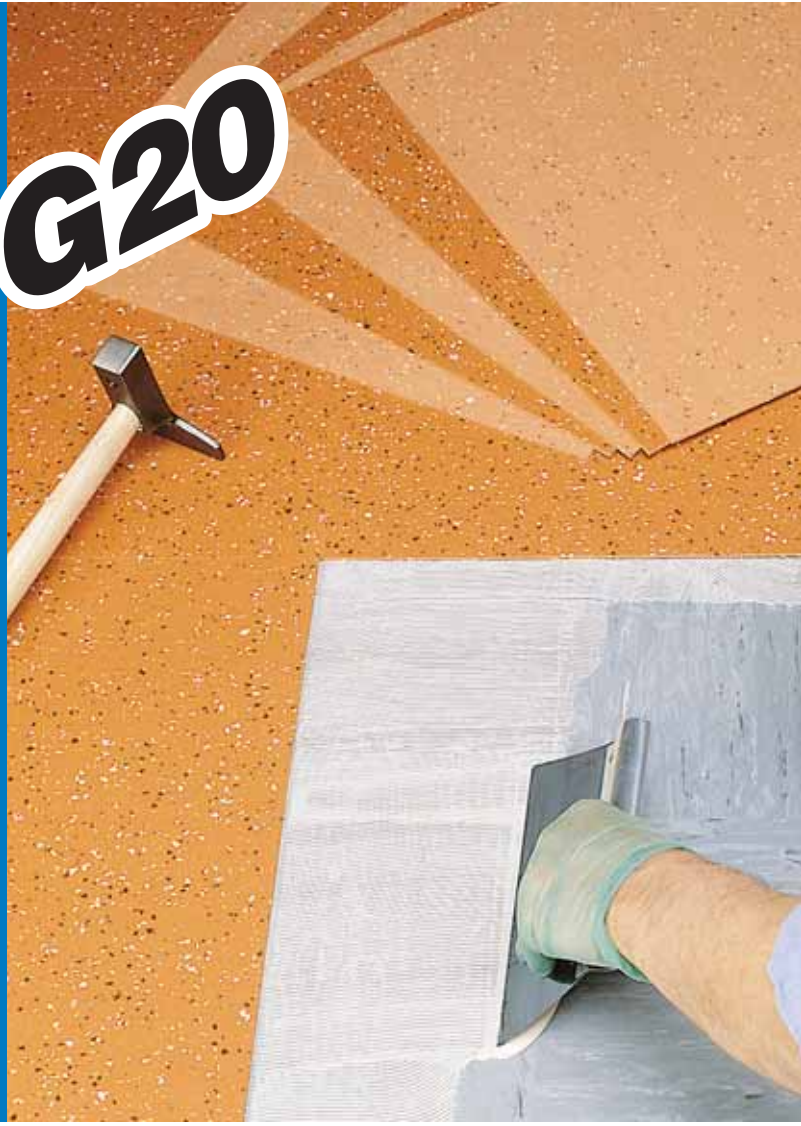
MAPEI

Adesilex G20



Low viscosity two-component polyurethane adhesive for rubber, PVC and linoleum

WHERE TO USE

- Interior and exterior bonding of flooring in rubber, PVC, textiles, needlepunch, linoleum, polystyrene and polyurethane panels, fibrous cement, wood, sheet metal, plastic laminates.

- Bonding of synthetic reinforcing mesh for the backings of ceramic tiles for ventilated building façades.

Some application examples

Adesilex G20 is a highly flexible and strong adhesive for general purpose use, and is particularly suitable for non-absorbent substrates or substrates sensitive to humidity.

Adesilex G20 is used for bonding:

- floors in homogenous, mixed, semi-flexible PVC;

- external fabric and needle-punched floors;

- exterior textile and needlepunch flooring.

ON

- cement screeds, hot poured asphalt and non-absorbent or water sensitive flexible supports (sheet metal, plastic laminates, fibrous cement, rubber, PVC, wood, old ceramics).

- Sandwich panels for prefabricated walls with elements of plasterboard, wood or its derivatives, aluminium, expanded polystyrene and polyurethane, fibrous cement, sheet metal, PVC etc.

- As a levelling screed on concrete and asphalt prior to laying rubber and PVC flooring bonded with **Adesilex G19**.

TECHNICAL CHARACTERISTICS

Adesilex G20 is a low viscosity two component adhesive consisting of a polyurethane polymer, part A, and a special hardener, part B.

By accurately mixing the two components together a uniformly coloured paste is obtained, that can easily be applied with a trowel, roller or spreader.

Adesilex G20 can only be applied on horizontal surfaces.
Due to its low viscosity it can be applied with rollers in industrial continuous production lines.

After hardening (around 24 hours), solely by chemical reaction and without shrinkage, **Adesilex G20** becomes elastic, resistant to water, humidity, heat, atmospheric agents, with high caracteristics of adhesion on nearly all commonly used construction materials.

RECOMMENDATIONS

- Do not install on substrates subject to rising damp (always lay a vapour-proof barrier between the ground and screed).

- Do not install on wet surfaces.

- Do not install on freshly laid asphalt (wait at least 20 days).

Adesilex G20

Installation of PVC with Adesilex G20

Bonding of reinforcing mesh on the backing of ceramic tiles

- Do not use on bituminous surfaces which might bleed oils.
- Do not use **Adesilex G20** at temperatures below +10°C or above +35°C.
- Do not use **Adesilex G20** on curved surfaces or steps if it is not capable of forming a perfect bond between the finishing material and substrate until it has set (use a two way stick, polychloroprenic adhesive, such as **Adesilex VZ**, **Adesilex LP** or **Ultrabond Aqua-Contact**).

APPLICATION PROCEDURE

Preparation of the substrate

The substrate must be uniformly dry, flat, free of cracks, resistant to compression and tension; free of dust and loose particles, varnish, wax, oil, rust, traces of gypsum and other products that may prevent bonding.

The moisture content must be as prescribed: for cement substrates max. 2.5-3%; for those with a gypsum or anhydrite base max. 0.5%.

It is essential to ensure that there is no rising damp present.

Floating screeds installed on lightened sub-layers or insulating material and screeds laid directly on the ground must be isolated by laying an efficient, long-lasting vapour barrier.

If necessary: to repair cracks in substrates, consolidate screeds, use quick-drying screeds and level off the laying bed, please refer to the catalogues which illustrate the various ranges of MAPEI products for the preparation of substrates or contact the MAPEI Technical Assistance Department.

External surfaces may only be levelled with **Planicrete** mixed with sand with a suitable grain size and cement or with **Adesilex P4**.

For asphalt surfaces, use **Adesilex G20**, adding up to 25-30% of clean, dry sand if required.

Lay **Adesilex G20** as soon as the smoothing layer is ready to be stepped on.

Acclimatization

Before starting the installation, make sure that the floor covering, the adhesive and the substrate are acclimatized at the recommended temperature.
Floor coverings must be removed from the packaging several hours before installation; the lengths must be freely laid or at least loosened from the rolls to allow acclimatization and the reduction of tensions produced by the packaging.

Mixing

The two components of **Adesilex G20** are supplied in drums with the correct proportions:

component A: 9.4 parts by weight;

component B: 0.6 parts by weight.

Mixing must be carried out with a mechanical stirrer until a homogeneous paste is obtained. Setting time and pot life are closely linked to the ambient temperature (see relative table).

Never use at temperatures below +10°C as the resulting setting time will be too prolonged.

Attention: the ratio between the resin (part A) and the catalyst (part B) is unvariable. Any modification of the dosage will compromise the proper reticulation of the adhesive.

Spreading the adhesive

The choice of the system of application (trowel, roller or spreader) depends on the type of flooring and substrate.

In every case the adhesive must be applied evenly and on as much of the surface that can be covered with flooring in approximately 60 minutes (with attention to the ambient and substrate temperature).

Installing the floor covering

Follow the installation instructions given by the floor covering manufacturer.
The flooring, both sheets or tiles, must be applied to the **Adesilex G20** while it is still fresh, within 1 hour at +23°C, and then accurately smoothed from the centre towards the edges, in such a way to make complete contact, and at the same time allow any air bubbles to escape from the edges.
When the flooring is uneven, the deformed sections, joints and ends must be weighted down (with sandbags or other) until the **Adesilex G20** has cured (12 to 24 hours).

Special care must be taken for exterior installations at high temperatures or wide temperature differentials (install at the coolest time of day).

Flooring bonded with **Adesilex G20** is ready for foot traffic after approximately 12-24 hours. In an ambient temperature of +23°C final setting takes place after approximately 3 days.

Setting time of Adesilex G20 in relation to temperature:

Temperature in °C	30	25	20	15	10	5
Time in hours	4	6	10	12	20	36

CONSUMPTION

Consumption is approximately 0.35-0.5 kg/m^2.

Cleaning

Adesilex G20 can be removed from flooring, tools and clothing with alcohol before hardening occurs. After hardening it can only be removed mechanically or with **Pulicol**.

Colour

Adesilex G20 is available in beige.
Special colours can be supplied on request (min. 600 kg).

TECHNICAL DATA (typical values)

PRODUCT IDENTITY		
	component A	**component B**
Consistency:	thick paste	low viscosity liquid
Colour:	beige	transparent
Density (g/cm³):	1.45	0.95
Dry solids content (%):	97	100
Brookfield viscosity (mPa·s):	70,000 (rotor 7 - 10 rpm)	30 (rotor 1 - 50 rpm)
Storage:	**Adesilex G20** is stable in storage for at least 24 months if the buckets are kept sealed. Component B "catalyst", must be kept in a warm environment in order to avoid crystallization due to the cold. In the case of crystallization it will be necessary to warm up in a water bath before using	
Hazard classification according to EC 1999/45:	irritant	corrosive, hazardous to the environment Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
Customs class:	3506 99 00	

APPLICATION DATA (at +23°C - 50% R.H.)	
Ratio of the mix:	component A : component B = 94 : 6
Brookfield viscosity (mPa·s):	30,000 (rotor 7 - rpm 10)
Density of the mix:	1.43
Pot life of the mix:	40-50 min.
Application temperature range:	+10°C to +30°C
Workability time:	1 hour
Adjustment time:	90 minutes
Initial setting time:	9 hours
Final setting time:	10 hours
Ready for traffic:	after 12-24 hours
Final curing time:	after 3 days

FINAL PERFORMANCE	
Resistance to moisture:	excellent
Resistance to ageing:	excellent
Resistance to solvents and oils:	good
Resistance to acids and to alkalis:	good
Resistance to temperature:	from -40°C to +100°C
Flexibility:	yes
Test of adhesion PEEL 90° (N/mm): in compliance with EN 1372 after 7 days at +23°C:	dimpled rubber > 4 homogeneous PVC: > 4

Adesilex G20

PACKAGING
Adesilex G20 is supplied in units of 10 and 5 kg.

STORAGE
Adesilex G20 under normal conditions and in its original unopened packaging, is stable for at least 24 months.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION
Adesilex G20 component A is an irritant for the eyes and skin. Component B is corrosive and may cause severe burns. It is also harmful if it comes into contact with the skin or if swallowed. Both component A and component B may provoke rashes in those subjects who are allergic to such substances. Use protective clothing, gloves and goggles. If they come into contact with the eyes, wash well with plenty of clean water and seek medical attention.
Adesilex G20 is hazardous for aquatic life: do not dispose of the product in the environment.

PRODUCT FOR PROFESSIONAL USE.

WARNING
Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

All relevant references for the product are available upon request and from www.mapei.com

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