



AVAFLEX GEL

Multipurpose, GEL-Adhesive, thixotropic & fluid.

C2TE

AVAFLEX GEL – The next generation standard-setting-gel-adhesive.

The new FLEX GEL gel-adhesive combines unique workability and high performance. Its thixotropic and fluid mix ensures 100% coverage without beating and no back-buttering.

Warranty – The conformity of FLEX GEL is declared in ITT certificate n. 20234818/n issued by the MODENA CENTRO PROVE laboratory (Italy).

- **Unique workability**

FLEX GEL is easy to apply and holds its shape supporting the weight of heavy tiles, making work on site easier.

- **Thixotropic & Fluid**

AVAFLEX GEL can be mixed to thixotropic (with 7L of H₂O) and fluid (with 8L of H₂O) consistencies; thanks to its variable rheology, total wettability is guaranteed throughout. Gel technology revolutionizes the way that adhesive is used on site, which is in complete contrast to traditional adhesive that could be inconsistent and difficult to use.

- **Multi-purpose**

Performs outstandingly with all materials and substrates, making it the Drop-and-Go adhesive for all situations.

- **Superior performance**

The adhesion performance of AVAFLEX GEL has been subjected to strict testing and is formulated to perform in actual on site conditions. Avalon has developed its own unique strain tests to mimic the stresses that an installation will face in the real world to ensure the product's durability on site.

Where to use:

- Adhesive and plaster skim - On walls and floors - Indoors and outdoors - Tile over tile - Terraces and balconies - Facades - Swimming pools and fountains - Saunas and SPA areas - Bathrooms - Commercial spaces - Industrial sites;

What materials can be laid with AVAFLEX GEL:

- Porcelain stoneware — Small-thickness tiles - Ceramic tiles – Tiles of size 60x120 cm - Marble - Natural stones - Composite stone – Glass-ceramics - Glass tiles - Thermal insulation panels - Cotto - Clinker;

What ground coats AVAFLEX GEL is applied on:

- Existing tiling - AQUA BARRIERA-series waterproofing - Underfloor heating - Cement screeds - Asphalt screeds - Concrete - Plasterboard - Fibre cement slabs - Gypsum - Cellular concrete – Bricks - Cement lime plaster - Thermal insulation systems - Thermal insulation panels - Sound insulation panels - Wood - Metal - PVC;

Substrate preparation:

All substrates must be dry, clean, level, solid, free of crumbly areas, free of moisture. For highly-absorbent substrates the use of AVAGRUND is recommended. Cement-based substrates must be sufficiently hardened - at least 28 days /or 1 week per centimetre of thickness/. Substrates that are exposed to direct sunlight should be cooled by moistening. Gypsum substrates and anhydrite screeds must be completely dry (maximum residual moisture 0.5%), sufficiently hard and dust-free and must be pre-treated with AVAGRUND.

Water for preparation (EN 1348):

- $\approx 7,5 \text{ L} / 25 \text{ kg}^* = 30\%$ by weight;

For thin application and 100% transfer to the back of the tile:

- $\approx 8,0 \text{ L} / 1 \text{ bag of } 25 \text{ kg}^*$

For walls and thick coat application:

- $\approx 7,0 \text{ L} / 1 \text{ bag } 25 \text{ kg}^*$

*Water consumption data are approximate. A mixture with a more or less thixotropic consistency can be obtained, depending on the use.

Use:

In order to obtain a solid and secure bond, a layer of adequate thickness must be provided on the tiles, covering all irregularities on the back of the tiles. Large tiles with a width of more than 60 cm and thin tiles (3-5 mm) can be treated directly on the back with AVAFLEX GEL. Check by testing whether the adhesive has stuck to the tile.

Making expansion joints that absorb linear temperature expansion: -

- approximately 10 m² in the open air;

- approximately 25 m² indoors;

- every 4 m for long and narrow spaces;

Observe all structural joints.

Pre-treatment primers:

Asphalt substrates (interior only), old tiles covering: AVAGRUND T/T

Gypsum and anhydrite substrates (interior only): AVAGRUND

Special use:

On facades, if it is necessary to install tiles larger than 30 cm, assess the need for their additional mechanical fixing to the facade.

TECHNICAL DATA SHEET



In all cases, when preparing AVAFLEX GEL for facades it is recommended to add AVALATEX to the mixture in an amount of 50% of the required water. On facades, always apply FLEX GEL on the substrate and on the back of the tile.

Technical data:

Life of the mixture at +23 °C	≈ 6 h
Open time at +23 °C	≥ 30 min.
Open time at +35 °C	≥ 20 min.
Correction time at +23 °C	≥ 25 min.; and ≥ 15 min at +35 °C.
Protection time after laying, in cases of frosting risk from +5 °C to -5 °C	≈ 8 h
Ready to walk on / grout at +23 °C	≈ 24 h
Ready to walk on / grout at +5 °C	≈ 50 h
Wall grouting at +23 °C	≈ 20 h
Ready for use at +23 °C	Walk on ≈ 2 – 3 days
	Heavy load ≈ 7 – 9 days
	Swimming pools (+23 °C) ≈ 14 days

Technical data after hardening:

Adhesion in normal conditions	≥ 1 N/mm ²	GEL Technology
Adhesion after heat exposure:	≥ 1 N/mm ²	EN 1348
Adhesion after immersion in water:	≥ 1 N/mm ²	
Adhesion after freeze-thaw cycles	≥ 1 N/mm ²	
Vertical slip	≤ 0,5 mm	
Temperature of use	-40 °C to +90 °C	

*All data are given at +23 °C air temperature, 50% humidity and wind speed of 0 m/s.

TECHNICAL DATA in conformity with:	
EUROPEAN STANDARD EN 12004	AVAFLEX GEL meets the requirements of the C2TE class

LEGEND OF CLASSIFICATION ACCORDING TO EN 12004:

- C1 - Normal cementitious adhesive
- C2 - Improved cementitious adhesive
- F - Fast setting
- T - Reduced slip
- E - Extended open time
- S1 - Deformable
- S2 - Highly deformable

TECHNICAL DATA SHEET



Packaging - 25 kg bag, 48 bags on pallet = 1200 kg;

Laying thickness - 2 to 15 mm;

Consumption - 1,5 kg/m² per mm thickness;

Storage - 12 months from the date of manufacture in the original unopened packaging, in dry places;

QUALITY STANDARDS

Manufacturing quality assurance standards conform to EN ISO 9001.

All Avalon products are supplied with product guarantee to be free from manufacturing defects and to be fit for purpose. The guarantee covers materials replacement costs and labor.

This guarantee is subject to use of product in accordance with Avalon's instructions and technical data, and good working practice.

No liability can be accepted for any loss or damage arising from incorrect use of products or poor workmanship, over which Avalon has no control.

Contact Avalon Marketing Department for full details.

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.

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