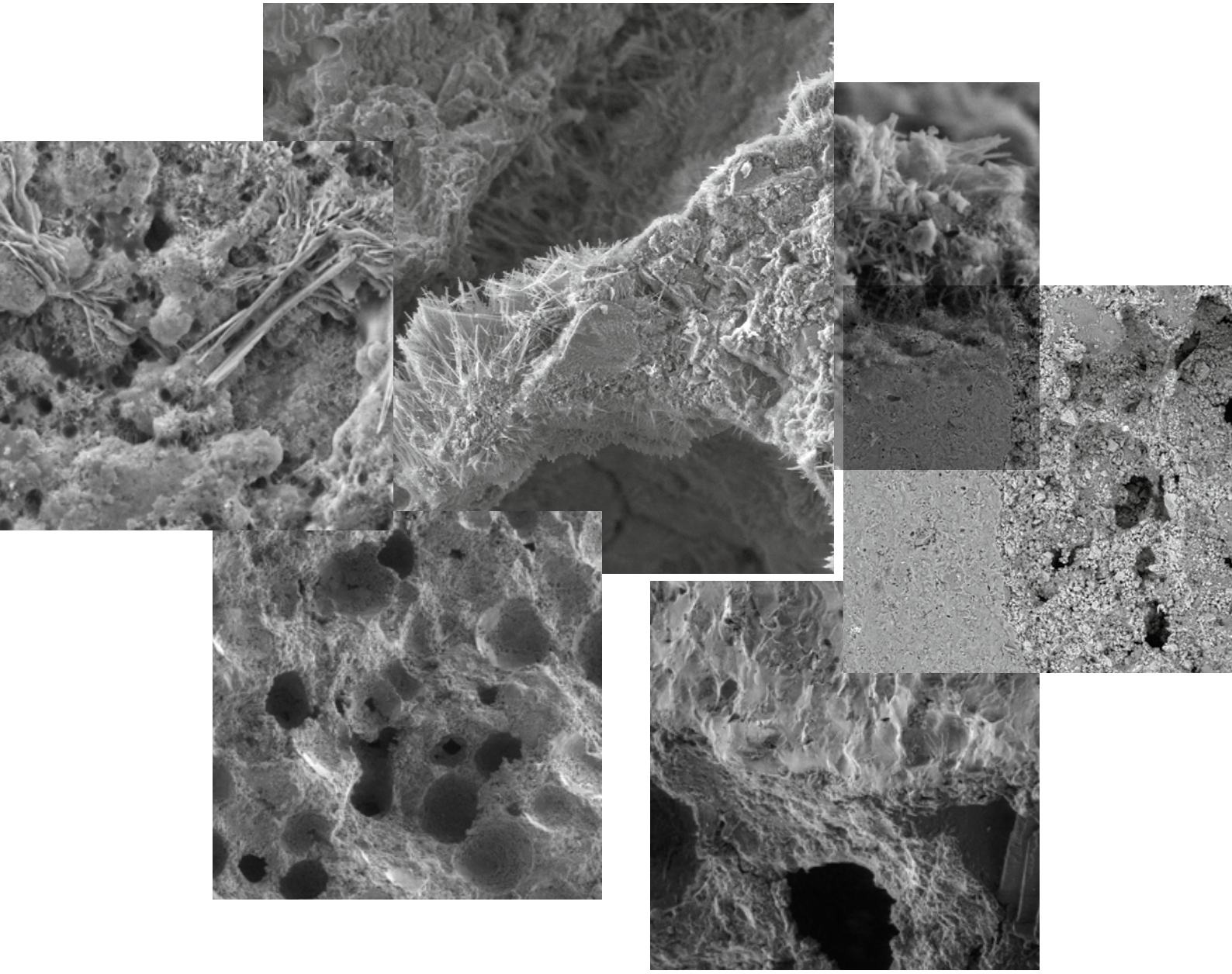
gel technology
GEL SYSTEMS FOR ADHESIVES



ATLAS GEL TECHNOLOGY

One of unique solutions introduced in ATLAS adhesives for tiles is the technology of siliceous gel. Its idea is based on utilization of special absorbable mineral admixtures in the mortars compositions. Water, when in contact with these minerals – fine crystals distributed among layers – penetrates in between and forms a "sandwich" structure (two layers of crystals with one layer of water between them). Water present in such structure is trapped within and forms gel deciding about the outstanding material performance. Siliceous gel broadens the range of mixing water needed for the adhesive preparation. It does not only eliminate the risk of overwatering, but most of all gives possibility of adjustment of mortar workability depending on actual needs and user's preferences. Each adhesive with **ATLAS GEL TECHNOLOGY** can be prepared as a mortar of limited slip allowing tiling from top to bottom and as a self-spreading one guaranteeing excellent filling of spaces beneath large tiles with no phenomenon of sinking of heavy cladding.

Additionally, owing to strong reaction between water and crystals, evaporation of water, resulting from temperature around or absorption by absorbable, improperly prepared substrate, is significantly reduced. Presence of water held in the adhesive structure allows complete cement hydration at almost any application conditions, regardless the cladding type. Owing to appropriate water management, gel adhesive guarantees full bonding to so called difficult substrates. Greater retention brings wider range of conditions during application, both concerning temperature of use and substrate absorptiveness. This range is unavailable for commonly marketed standard cement adhesive mortars.

ATLAS GEL TECHNOLOGY decides about universality and versatility of mortars use. Adhesives can be applied on the most difficult substrates, i.a. terrazzo, OSB boards or existing cladding. These products are designed for the most demanding operational use, e.g. in industrial halls loaded with intensive vehicle traffic. The range of use of mortars with gel technology also includes full scope of cladding types and sizes, natural stone tiles, cladding vulnerable to discolouration and tiles of largest formats, even above 1 m^2.

The main advantages of ATLAS GEL TECHNOLOGY are:
- possibility of adjustment of consistency to needs and individual user's preferences – based on broader range of mixing water ratio than available with standard cement mortars,
- safe cladding fixing on substrates exposed to direct sunlight, both during mortar application and setting, e.g. on sunny terraces and balconies,
- excellent rheology, therefore easy application and outstanding workability,
- full adhesive spread, even beneath large tiles, which improves bonding and fixing durability,
- safe installation of cladding of any type – both absorbable and non-absorbable.

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INNOVATIVE SILICEOUS GEL

GEL TECHNOLOGY

Special mix of minerals forms siliceous gel accumulating vast amount of water, owing to which GEOFLEX line adhesives get unique properties:
- exceptionally easy application
- broader range of use
- extended time of cladding adjustability
- rapid and full setting in extreme application conditions and on difficult substrates

Range of use:
- floor and wall heating systems
- kitchens, bathrooms, washrooms, garages
- communication routes,
- terraces,
- balconies, loggias,
- external stairs,
- building façades and plinths
- pools, fountains, saunas
- public access, industrial objects, car washes, etc.

Substrates:
- concrete
- plasterboards, gypsum fibre boards, cement fibre boards
- cement screeds and floors
- anhydrite screeds
- walls of cellular concrete, bricks, blocks
- waterproofing
- old tiles (tile on tile)
- old paint coatings
- timber floors
- OSB boards and timber
- insulating and acoustic panels
- metal and steel surfaces
- plastic surfaces
- terrazzo
- asphalt screeds

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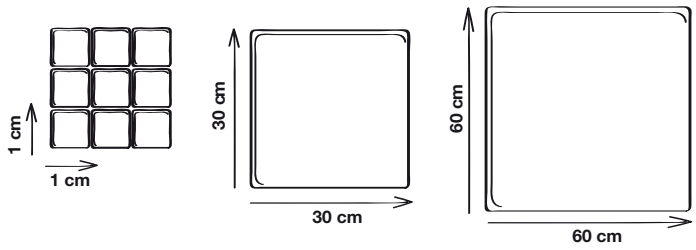
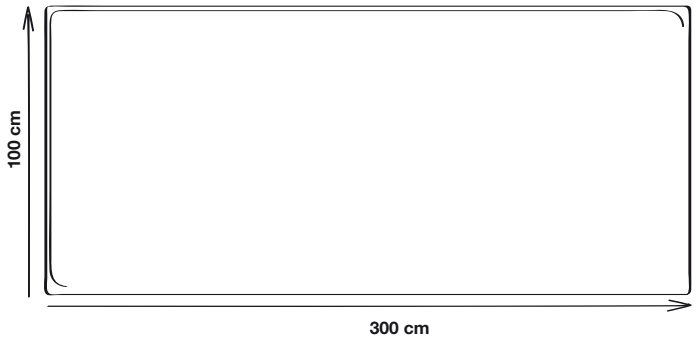
TYPES OF TILES





Any sizes of tiles:
- small and medium format (≤ 0.1 m²)
- large format (≤ 0.25 m²)
- extra large format (> 0.25 m²)
- mega format (≥ 1 m²)
- slim type tiles (≥ 3 m²)

Any types of tiles:
- glazed tiles
- terracotta
- porcelain and laminated gres
- natural stone (granite, marble, travertine, syenite, slate, etc.)
- clinker
- stoneware
- ceramic mosaic
- glass mosaic
- glass, coloured, printed tiles, etc.
- concrete/ cement mortar tiles
- composite panels
- insulating and acoustic panels