

QUICK AND DURABLE SULFO-ALUMINATE CEMENT

FINISHING WORKS, SPECIAL WORKS, ROAD WORKS, OPTIMISATION OF WASTE

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AREAS OF USE



ROADWORKS INTENSIVE-USE INDUSTRIAL SLABS, AIRPORT RUNWAYS

FINISHING WORKS FLUID SCREEDS, ADHESIVE MORTARS, SELF-LEVELLING FINISHING PRODUCTS



OPTIMISATION OF WASTE TREATMENT OF RIVER OR MARINE SEDIMENT, INERTING OF POLLUTED SOIL, CAPTURE OF HEAVY METALS AND RADIOACTIVE ELEMENTS



DEVELOPED EXCLUSIVELY BY VICAT, **ALPENAT^{VV}** IS A SULFO-ALUMINATE CEMENT BRINGING:

High mechanical performance

ALPENAT-UP develops double the compressive strength after 8 hours and half the shrinkage after 28 days compared to conventional Portland cement. The performance gain is even greater when ALPENAT-UP is used in conjunction with Portland cement in concrete formulation.

High durability

ALPENAT-UP develops very good resistance in aggressive environments (in particular acid and sulphate attacks) and against biogenic attacks.

▼ A limited environmental footprint

ALPENAT-UP is made from local raw materials using lower-temperature firing than a conventional Portland cement.









FINISHING WORKS

ALPENAT-UP is a component of choice in place of aluminate cement.

- Speed: ALPENAT-UP has a high ye'elimite content. This mineral phase confers a rapid onset of strength on the final product.
- Stability: the low residual anhydride and free lime content in ALPENAT-UP allows more precise formulations that are more stable over time.



TILING ADHESIVE

SPECIAL WORKS

ALPENAT-UP is recommended for aggressive environments like sanitation networks, waste water treatment plants, methanisation plants etc.

- Durability: ALPENAT-UP offers high resistance in aggressive environments (in particular acid and sulphate attacks) but also against biogenic attacks, often responsible for degrading concrete.
- Easy to use: setting time, onset of strength and rheology of ALPENAT-UP based mortars are easily adjustable.



OPTIMISATION OF WASTE

ALPENAT-UP is recommended for the optimisation of sediment and reactive materials.

- Eco-responsible: ALPENAT-UP has a low environmental footprint during manufacture, and allows quick and in situ elements prefabrication using recycled waste.
- Performance: polluting elements (lead and zinc in particular) are captured and do not degrade the characteristics of ALPENAT-UP based concretes.



VALORISATION OF RECYCLED AGGREGATES FROM DECONSTRUCTION

ROADWORKS

Without major modification of the admixtures dosage, ALPENAT-UP replaces some Portland cement and allows innovative concretes to be formulated for rapid commissioning.

- Productivity: ALPENAT-UP based concrete offers gains of up to a day in terms of returning a structure to service compared to conventional concrete. Finishing works (grouting and floor markings) can be performed quickly. ALPENAT-UP is also recommended for use in cold weather (< 5°C).
- Aesthetics: shrinkage phenomena often causes cracking problems. These are compensated for by ALPENAT-UP.



VICAT EXPERTISE

- Our Usclades mine (Hérault, France) ensures the long-term sourcing and quality stability of bauxite, a key raw material of ALPENAT-UP.
- Vicat's pilot site in Chambéry (Savoie, France) tested 100 different clinkers before deciding on the final formulation of ALPENAT-UP.
- The Vicat cement plant in Saint-Egrève (Isère, France) industrialises the process. This high-performance production apparatus also produces ULTIMAT-UP.
- The Centre Technique Louis Vicat in Isle d'Abeau (Isère, France), a centre of reference for sulfoaluminate cements, helps customers with their formulations. ALPENAT-UP is protected by 2 process patents and 4 product patents.













UP ULTRA-HIGH PERFORMANCE THE VICAT WAY

The Vicat Group's technical expertise, combined with its innovative spirit, means you benefit from exceptional solutions based on cement and concrete for anything involving high technicity, high creativity or high environmental demands.

VICAT

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