

i.tech

i.tech

ALI PRE
GREEN

ALI CEM
GREEN

Benefits

i.tech ALI PRE GREEN and i.tech ALI CEM GREEN allow:

- > Controlling the shrinkage and adjusting the setting time
- > Achieving a rapid strength development
- > Ensuring strengths in the medium and long term which are higher than those of the most performing Portland cements
- > Extending the shelf life of end products due to their excellent stability over time

Applications

i.tech ALI PRE GREEN and i.tech ALI CEM GREEN are recommended for the preparation of:

- > Technical rapid-setting mortars (repairing, fixing etc.)
- > Screeds (rapid, semi-rapid, self-leveling)
- > Rapid or semi-rapid pouring mortars
- > Shrinkage compensating mortars
- > Mortars for joints
- > Rapid sealants



Italcementi Group

A world class local business

Italcementi S.p.A.

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www.i-nova.net



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Italcementi Group

With sales amounting to about 4.1 billion Euro, Italcementi Group is one of the world's leading cement producer. The Group's companies combine the expertise, know-how and cultures of 22 countries across four continents.

Italcementi Group is a member of WBCSD, the World Business Council for Sustainable Development, and has adhered to the UN Global Compact, a strategic initiative promoted by the United Nations to align companies' operations and plans with universally accepted principles in the areas of ethics.

The business strategy of the Group is focused on two fundamental assets: research and innovation. This vision, with a multidisciplinary approach to research, has enabled Italcementi Group to develop cutting-edge high-tech products – photocatalytic and transparent cements, for instance - and realize state-of-the-art buildings like i.lab, the Group's new Research & Innovation centre, designed by Architect Richard Meier and certified Leed Platinum. Investment in new products, solutions and services to best meet the needs of the building community as well as customer focus are the Group's strengths. That is why the company is committed to continuously developing new marketing tools able to foster an even more effective and satisfactory relationship with the customer.

i.nova

i.nova

is the innovative market approach adopted by Italcementi Group to offer its innovation leadership to the building sector. i.nova groups all products (different types of cement, concrete, mortar and lime) in 11 performance families which simplifies the purchasing process and ensures the same easily understandable approach based on a common language for all customers of the world markets. The i.nova brand system is designed as an explanatory guide that uses a direct and intuitive visual language able to provide customers clear and simple information on the Group product ranges, so that the right solution can be immediately identified.

With i.nova Italcementi Group confirms its focus on customers placing them at the center of a strategy aimed at providing solutions (yield) according to their needs instead of simply selling a product (best price-best product approach).

ITALCEMENTI

**Sulfoaluminate
clinker and cement
with low
environmental impact**

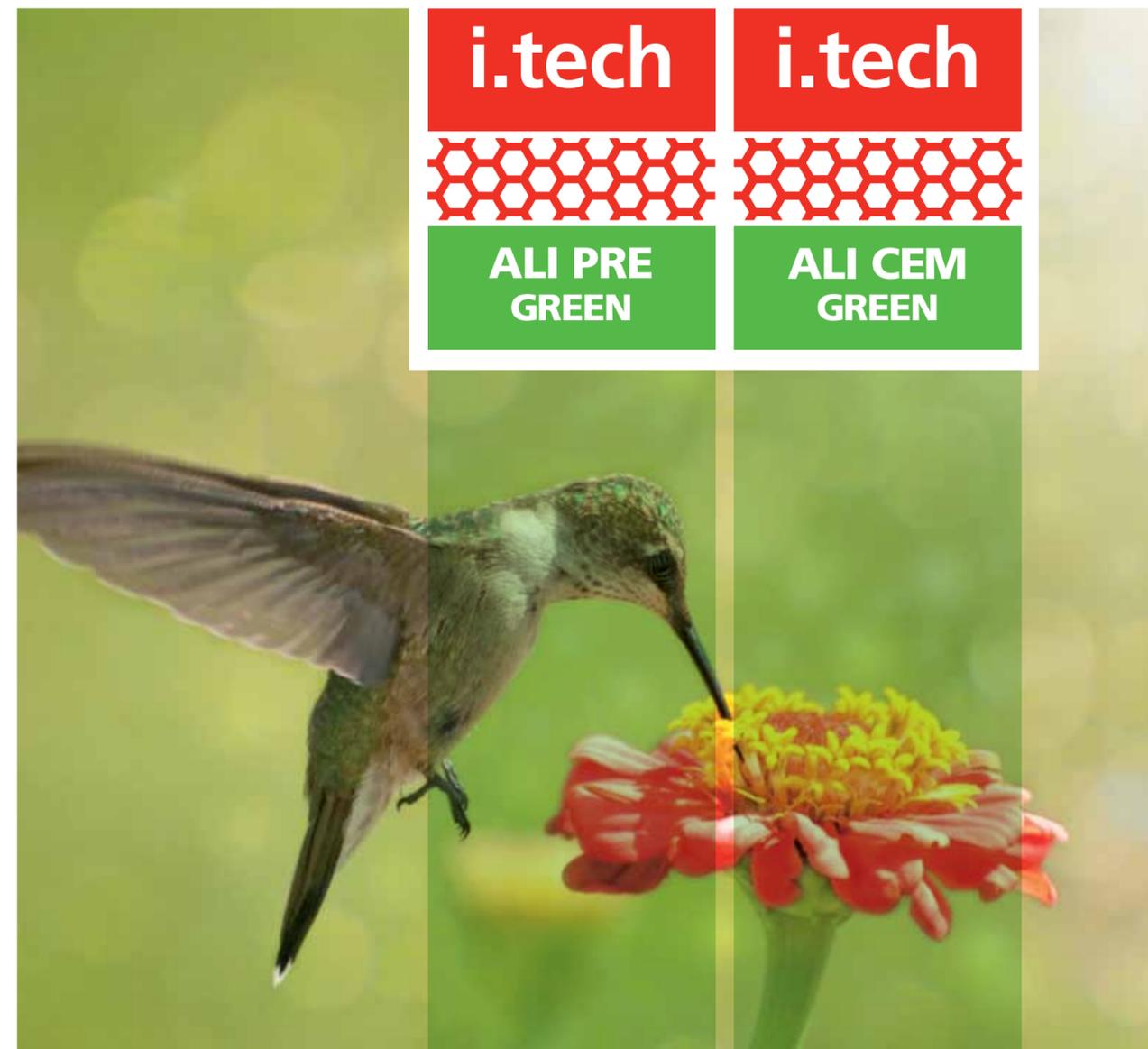


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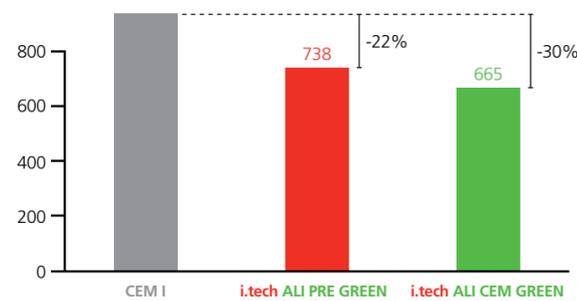
High performance and sustainability in one single product?

Discover the **i.tech ALI range**: sulfoaluminate cement and clinker with low environmental impact

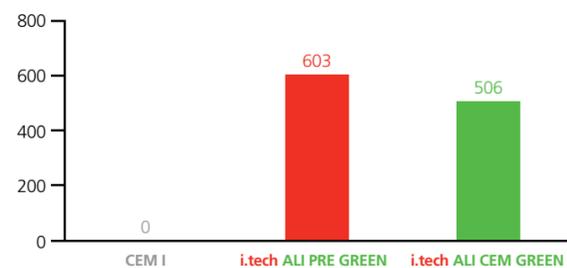
-30% CO₂ emissions + **+** Shrinkage control, rapid-setting and strength + **+** Recycled material + **100%** Local raw materials

i.tech ALI PRE GREEN and **i.tech ALI CEM GREEN** are two products of the ALI range, Italcementi line of sulfoaluminate products, an example of high technology combined with a production cycle with low environmental impact.

CO₂ emissions (kg CO₂ eq/ton)



Recycled material used (kg/ton)



Compared to Portland clinker:

- > the **limestone** (calcium carbonate) contained in the mix of raw materials is **lower, which allows reducing CO₂ emissions** in the production cycle (decarbonation process);
- > the production of calcium sulfoaluminate clinker (CSA), and therefore of **i.tech ALI PRE GREEN** and **i.tech ALI CEM GREEN**, requires **lower temperature of the kiln** (approx. < 200°C); and consequently **less** (primary) **energy** for the production cycle, which generates **lower greenhouse gas emissions**;
- > the **high content of recycled raw material** reduces the consumption of natural resources.

In addition, **all raw materials** used in the production process **are local**, thus reducing social impacts and pollution associated with transportation.



i.tech ALI PRE GREEN Ground Calcium Sulfoaluminate clinker Available in bulk, big bags and 25Kg bags
i.tech ALI CEM GREEN Sulfoaluminate hydraulic binder Available in bulk, big bags and 25Kg bags



Thanks to **i.tech ALI CEM GREEN** a damaged portion of the runway of the international airport of Zurich could be repaired in the short time period between the landing of the last flight in the night (11:00 p.m.) and the first flight of the next morning (06:00 a.m.).



Watch the video of the work carried out at Zurich airport.

Setting time adjustment

i.tech ALI PRE GREEN and **i.tech ALI CEM GREEN** allow setting time adjustments in a very large time interval; this provides strong formulations optimizing the number and amount of admixtures used.

Rapid-setting and strength

The products of the ALI line offer a quicker early strength development: only a few hours are enough to obtain the values that Portland cements reach after at least one week. Strength increases progressively over time up to exceed the values of the most performing Portland cements.

Reduced shrinkage

i.tech ALI PRE GREEN and **i.tech ALI CEM GREEN** allow shrinkage adjustment both during the plastic phase and after hardening. By changing the mix ratio with Portland cements it is possible to reduce progressively the shrinkage and to obtain balanced formulations free of unreacted sulfates.

Stability over time

i.tech ALI PRE GREEN and **i.tech ALI CEM GREEN** perform excellent stability over time, with the dual advantage of facilitating the management of the production process by our customers and providing the finished products with a longer shelf life.

Constant quality

The cement plant dedicated to sulfoaluminate clinker production is provided with modern and sophisticated quality control systems. **i.tech ALI CEM GREEN** is produced using micronized calcium sulfate from a special plant and then mixed with clinker in a modern mixing system. This allows the product to ensure the highest levels of quality consistency.

Sustainability

For the first time environmental performance combines perfectly with product performance positioning among the top building binders both in absolute and consistency terms.

Product Environmental Certification

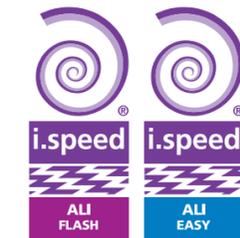


The products have obtained the EPD (Environmental Product Declaration). The EPD is the declaration of the environmental impacts associated to the product life cycle defined as impact categories and quantified according to the guidelines of the ISO 14040 - Life Cycle Assessment.

The Life Cycle Assessment (LCA) is a tool used to evaluate the potential environmental impact of a certain product, process or activity during its entire life cycle, from raw materials extraction, to production and use, until the end of its life, once it becomes no longer usable or a waste.



Discover other products of the **i.tech** performance family, able to ensure very high performance in terms of strength and safety.



ALI is Italcementi range of sulfoaluminate products, including also **i.speed ALI FLASH** and **i.speed ALI EASY**, a cementitious binder and a quick setting premix respectively.



The ALI range is an example of high technology combined with a production cycle with low environmental impact and is the result of the continuous commitment of Italcementi to the development of innovation solutions for the building industry. For further information visit www.i-nova.net, and read the technical data sheets.

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