SUEZ CEMENT



Cement building history



i.nova Performance, not only cement









o i.sound











Table of contents

Company Overview and Key Statistics	4
Strategic Commitment to Sustainability	
Safety	
Social Initiatives	
Environment	
Research and Innovation	
Products and Quality	
i.nova	
- i.work OASIS CEMENT CEM II / B-L 32.5 N	
- i.pro SUEZ CEM I / 42.5 N	
- i.pro TOURAH CEM I / 42.5 R	
- i.pro HELWAN CEM I / 42.5 R	
- i.tech TECHNO CEM II / A-S 32.5 R	
- i.idro SULPHATE RESISTANT CEM I / SR3 42.5 N	
- i.idro DRAIN	
- i.design HELWAN WHITE CEM I / 52.5 N	
- i.design WHITE OASIS CEM II / B-L 42.5 N	
- i.design EFFIX	
- i.active COAT	
- i.active BIODYNAMIC	
- i.light	



Company Overview and Key Statistics

Suez Cement Group of Companies (SCGC) is one of Egypt's largest cement producers. With a longstanding history in the Egyptian market, SCGC is proud that its cement has helped build some of Egypt's best-known landmarks. The company's main aim is to serve market needs with its innovative products and brands. SCGC is a subsidiary of Italcementi Group – the world's fifth largest cement producer boasting cement plants, grinding centers and concrete batching units in 22 countries across four continents.

In 2005, **Italcementi Group** increased investment in Egypt, becoming a market leader through the acquisition of SCGC. The Egyptian cement producer has an industrial network of five production facilities located in Suez, Kattameya, Tourah, Helwan and El Minya. Together the plants are responsible for producing the country's largest portfolio of products to domestic and international export markets.

SCGC plans to continue to invest and develop its activities across the country by respecting its Egyptian identity and increasing operational efficiency. It plans to transform its business model to become a comprehensive service supplier for the building and construction industry.

The firm has an active safety and environmental policy, as well a Corporate Social Responsibility (CSR) program, all of which are imperative when it comes to the sustainable development of employees and communities where SCGC does business. Moreover, SCGC adheres to the **UN Global Compact**, a strategic initiative promoted by the United Nations to align private sector activities with universally accepted principles in the areas of human rights, labor, environmental protection and ethics.







Suez Cement Company (SCC)

Established in 1977, SCC is one of the largest grey cement producers in Egypt. The company has plants in Suez and Kattameya worth LE 1.7 billion. Both plants produce the highest-quality cement using the "dry method" which incorporates whitewash and primary heating. The company serves the domestic market and also exports some of its products to Arab, African and European countries.

Tourah Portland Cement Company (TPCC)

TPCC, Egypt's first cement company, was established in 1927. Besides licensing the oldest clay quarry in Egypt, TPCC was also the first to use the dry cement production method and modernize its lines by using wet kilns to reduce bypass dust.



Helwan Cement Company (HCC)

Established in 1929, HCC was the second cement producer to enter the Egyptian market. HCC manufactures grey and white cement at its Helwan and El Minya plants.

Suez Bags Company (SBC)

SBC was established in 1988 as an Egyptian joint-stock company. SBC operates five lines, four of which produce bags for cement, gypsum and other building materials, while the fifth caters to specialty items such as chemicals, seeds and animal feed. Made with imported semi-Copake (semi-extensible) kraft-layer paper from Austria, Sweden, Russia and Canada, the company's bags meet the highest quality standards. Because of its imported ink and specialized technology, SBC is the only Egyptian supplier able to print up to four colors on all bag types.













5

Strategic Commitment to Sustainability

The Company's corporate strategy is based on Sustainable Development values as well as universal human rights. These guidelines have been adopted enthusiastically by all employees and foster a respectful camaraderie among staff members.

SCGC sees **Sustainable Development** as a means of increasing economic prosperity, environmental protection efforts and social responsibility initiatives. In 2011, Italcementi Group's sustainability principles were re-imagined to present a clearer Company vision with seven areas of focus, including Safety, Human Rights, Environmental Protection, Energy, Social Initiatives, Health and Quality. These policies act as the foundation for all operations and management processes that govern SCGC's everyday activities. They are also consistent with Italcementi Group's overarching policies.

Furthermore, to reinforce its commitment to Sustainable Development goals, SCGC signed the **UN Global Compact** in 2013. The compact is a **United Nations** initiative set up to promote social, environmental and economic growth. It is based on 10 universal guidelines that cover human rights, labor, environmental protection and transparency.





Safety

SCGC considers safety and security fundamental values that are part of all its activities. That's why Italcementi Group launched the **Zero Accidents** project in 2000. It was eventually revamped in 2006 with the implementation of SGCG's 10 Golden Rules of Safety. Later, that scheme evolved into a more comprehensive safety program in 2011 that showcased safe conduct as a way of living, whether at work or in the home. The Company's goal is to create a safer and healthier working environment by preventing accidents and injuries, in addition to developing communication initiatives that promote a healthy and safety-conscious work culture.

Improving a workplace's safety practices, training and awareness does not lead to "temporary" impacts. Instead, promoting a holistic safety program helps employees immediately spot unsafe behaviors or risks, and thereby take action right away to fix the issue or bring it to a manager's attention.

SCGC is not stopping there. It has set ambitious future targets to enhance the **"Safety, as a way of living"** program in addition to developing and implementing a safety inspection program at each plant.









Social Initiatives

Driven by its ongoing commitment to CSR, SCGC promotes initiatives that focus on key needs of local community members, with education and health a priority. The Company also supports projects to eradicate poverty and improve living conditions according to sustainable principles. These initiatives aim to improve stakeholder relations through dialogue and co-operation as well. Only projects that contribute to the quality of life for community members and comply with local government policies in addition to the UN Millennium Development Goals and the Universal Declaration of Human Rights are chosen. SCGC hopes to build a better future for generations to come in cooperation with local NGOs, United Nations agencies, schools, hospitals and universities. It is therefore no surprise that the Company's CSR program was recognized as one of the Top 10 in Egypt by the Federation of Egyptian Industries (FEI).

In terms poverty alleviation, SCGC implemented a number of development programs with the goal of improving living conditions and the general health of impoverished communities in Helwan, Suez and El Minya governorates in partnership with the **National Council for Childhood and Motherhood.** These initiatives also created new job opportunities.

Another successful initiative is SCGC's partnership with the Don Bosco Technical Institute, which started in 2006. The objective of the sponsorship program is to promote technical and vocational education, upgrade Don Bosco's infrastructure and develop new programs. Graduates of Don Bosco are well known and in demand throughout the industrial sector for their excellent training and professional skills. Similarly, SCGC partnered with numerous other education-focused NGOs like Injaz Egypt, the Takatof Association, ADEW (Association for the Development and Enhancement of Women) and **CARE** Egypt to create better learning environments for children and teachers in schools near SCGC plants, transforming facilities into healthy places where students can develop and flourish. The success of the projects is due to the dedicated cooperation between the Ministry of Education, governorates, NGOs and SCGC employees.







In partnership with organizations including **57375 Children's Cancer** Hospital and Misr El Kheir Foundation, SCGC promotes healthcare and sanitation projects throughout the country. Every year SCGC raises funds for 57357 Children's Cancer Hospital, one of the best cancer hospitals in the region. The donations, which include cash and cement products, enable the hospital to continue to engage in advanced cancer treatment and research. In related news, the Company partnered with **Misr El Kheir** to upgrade Helwan Public Hospital by revamping its infrastructure as well as addressing the need for better medical equipment and maintenance. The project also looked at hospital employee morale and staffing issues. SCGC supports older students too via the Suez Cement Company Endowed Fellowship Fund at the **American University in Cairo** (AUC). The Fellowship provides promising Egyptian engineering students with Bachelor Degrees with an opportunity to attend one of the Middle East's preeminent higher education facilities. Moreover, SGCG sponsored the annual nationwide **ENACTUS** Competition involving universities in Helwan, Suez and El Minya. Additionally SCGC, in association with AFS Intercultura and AFS Egypt for Intercultural Educational Programs, created the "Intercultural Exchange and Leadership Skills Development Scholarship" offered every year to one high-school aged child of an SCGC employee to study at an Italian school.



Finally, SCGC launched the inaugural **"arcVision Prize Egypt – Women and Architecture Award"** in 2013 which recognizes the talent and creativity of female Egyptian architects. Winners go on to compete in an international competition hosted by Italcementi Group. All nominees display outstanding design excellence and attention to key issues in architecture: technology, sustainability and social and cultural implications.



Environment

The global cement industry, including SCGC, is aware of its responsibilities to fight pollution and climate change. Cement production is both energy and carbon intensive. That being said, the sector has also been integral in inventing energy efficient and environmentally sound solutions for housing construction, public and private mega projects, energy initiatives and waste-derived fuels and recycling.

So far, SCGC has invested more than LE 500 million in environmental protection, operational efficiency, alternative energy, recycling/waste re-purposing and quarry rehabilitation measures. Investment was also made in the areas of plant modernization and environmental standards compliance.

The Company is working to protecting Egypt's delicate ecosystem by dedicating a substantial part of its industrial investments to environmental protection. For example, SCGC installed new electrostatic precipitators and gas conditioning towers at its five plants to decrease dust emissions as part of the firm's **Environmental Pollution Abatement Projects** (EPAP I and EPAP II).

A refuse-derived fuel scheme was also completed at the Kattameya plant that promises to further diversify SCGC's energy mix, and thereby decrease the Company's dependence on fossil fuels.

All SCGC plants are ISO 9001 and ISO 14001 certified. They are also subject to comprehensive audits by the Egyptian Environmental Affairs Agency (EEAA) to ensure full compliance with local and international standards.

In addition, SCGC has invested heavily in renewable energy efforts through its subsidiary Italgen. In 2007, **Italgen** began developing the framework for a wind power farm in Gulf El Zeit, just north of Hurghada. It is expected that Phase I of construction will be completed in 2016. The initiative falls under SCGC's and Italcementi Group's efforts to boost the percentage of renewable, clean energy in their operations. Initially, the project is slated to produce 120 MW of power, enough to cover 40% of SCGC's power needs as well as significantly reduce CO_2 emissions.











Research and Innovation

SCGC's commitment to research and innovation is of strategic importance to guarantee growth, global competitiveness and the quality of life in nearby communities. It is also a way of achieving standards set by the Sustainable Development Program.

In this context, SCGC's goal is to become a cuttingedge cement manufacturing company capable of transforming a commodity into a technologically advanced product to meet the evolving needs of the construction industry. The Company invests in new processes and products, but above all it focuses on innovative ideas.

i.lab, Italcementi's new Research and Innovation Center designed by American architect Richard Meier, is tangible proof of the Company's dedication to creativity. Built in line with the Group's vision of promoting innovation, sustainability and architectural excellence, i.lab is the synthesis of trail blazing technology in terms of materials and green construction technologies.





Products and Quality

One of the Company's main objectives is to continuously improve the quality of its products, processes and services in order to satisfy customers. Recently, SCGC embodied its reputation for innovation through the introduction of several new products designed with customers in mind.

To guarantee impeccable quality control, SCGC signed an agreement with the Housing and Building Research Center whereby the center tests SCGC products via accredited laboratories.

In addition, all five plants adopted the company-wide Quality Management System and were subjected to regular audits and periodic upgrades. Each are also EN 197-1 certified for composition, specification and conformity criteria as well as EN 197-2 certified for evaluation of conformity. All SCGC white cement bears the CE mark, while every SCGC product has received the Egyptian Quality Mark (EQM) as well.









SUEZ CEMENT

PERFORMANCE OT ONLY CEMENT





CLASSIC PRODUCTS



PRODUCTS FOR PROFESSIONAL USAGE



HIGHLY TECHNOLOGICAL PRODUCTS





QUICK-SETTING PRODUCTS



SELF-COMPACTING AND SELF-LEVELING PRODUCTS



ACOUSTIC INSULATING PRODUCTS



THERMAL INSULATING **PRODUCTS**



WATER-RELATED PERFORMANCE **PRODUCTS**



PRODUCTS FOR HIGHLY AESTHETIC PURPOSES





.active រហ៍ស្រាលវ

0

PHOTOCATALYTIC PRODUCTS



TRASPARENCY EFFECT PRODUCTS

OUR OFFER IS ORGAN AROUND YOUR F



السويس للأسمنت **Suez Cement** Italcementi Group

www.i-nova.net WORLD CLASS PERFORMANCE FOR LOCAL NEEDS

i.nova is the innovative market approach through which Italcementi Group aims to offer its leadership in innovation to the building community.

i.nova groups all products - the various types of cement, concrete, mortar and lime - into 11 Performance Families in order to simplify the purchasing process and guarantee the same readily understandable approach, organized in a common language, to all customers from all world markets.

i.nova is designed as an explanatory guide using a straightforward and intuitive visual language to provide customers with clearer and easier guidance on the Group's product ranges so that the right solution is immediately identified.

Through **i.nova**, Italcementi Group confirms attention placed on customers by putting them at the centre of a strategy focused on delivering solutions (performance) according to their needs instead of simply selling a product (best price - best product approach).



i.work OASIS CEMENT CEM II / B-L 32.5 N





Description

i.work OASIS CEMENT is a composite Portland cement part of the CEM II family, which consists of 19 types of cement. All meet ES 4756/1-2013 and EN 197/1-2011 standards.

Main Application

i.work OASIS CEMENT should be used for masonry mortars, plastering, rendering, pavement and cement products like tiles, bricks, and hollow blocks. As per EOS restrictions, it should not be used in the construction of foundations or reinforced concrete projects.

Standard Specification

Portland Limestone Cement meets Egyptian standard ES 4756/1-2013 and complies with European specification EN 197/1-2011.

Physical and Mechanical Properties

CEMENT STANDARD SPECIFICATIONS LIMITS

Property	CEM II / B-L 32.5 N
Setting TIme (Initial) min	≥ 75
Expansion mm	≤ 10
Compressive Strength 7D MPa	≥ 16
Compressive Strength 28D MPa	≥ 32.5

Chemical Properties

CEMENT STANDARD SPECIFICATIONS LIMITS

Analysis	CEM II / B-L 32.5 N
Sulphate (SO ₃) %	≤ 3.5
Chloride (CL) %	≤ 0.10





The Egyptian Museum

Storage

- > Cement bags should be stored in a dry place and kept away from a humid environments.
- > Bags must be stacked on wooden pallets.
- > Cement bags should have protection from humid and wet weather.

Expiration Date

- > 6 weeks from packaging date, provided that it's properly stored.
- > All cement should be re-tested before use after this period.

Packaging

50 kg 2 Ply Craft Paper Bags.



i.pro SUEZ i.pro TOURAH i.pro HELWAN CEM I / 42.5 N & 42.5 R



Description

i.pro SUEZ, i.pro TOURAH and i.pro HELWAN are categorized as general purpose cement. They are suitable for any project that does not require specialty cement designed to withstand harsh exposure to sulphates in soil or water.

Main Application

i.pro SUEZ, i.pro TOURAH and i.pro HELWAN can be used to construct reinforced concrete structures, bridges, railway infrastructure, tanks & reservoirs, culverts, pipes, floors, pavement, sidewalks and masonry units.

Standard Specification

It is produced according to Egyptian standard ES 4756/1-2013 and complies with the European specification EN 197/1-2011. The product can also be bought with ASTM C150 certification.

Physical and Mechanical Properties

CEMENT STANDARD SPECIFICATIONS LIMITS

Property	CEM I / 42.5 N Type	CEM I / 42.5 R Type
Setting TIme (Initial) min	≥ 60	≥ 60
Soundness (Expansion) mm	≤ 10	≤ 10
Compressive Strength 2D MPa	≥ 10	≥ 20
Compressive Strength 7D MPa	-	-
Compressive Strength 28D MPa	≥ 42.5	≥ 42.5

Chemical Properties

CEMENT STANDARD SPECIFICATIONS LIMITS

Property	CEM I / 42.5 N Type	CEM I / 42.5 R Type
Loss on Ignition %	≤ 5.0	≤ 5.0
Insoluble Residue %	≤ 5.0	≤ 5.0
Sulphate (SO ₃) %	≤ 3.5	≤ 4.0
Chloride Content (CL) %	≤ 0.10	≤ 0.10















Cairo International Stadium

Storage

- > Cement bags should be stored in a dry place and kept away from humid environments.
- > Bags must be stacked on wooden pallets.
- > Cement bags should be protected from humid and wet weather.
- > Do not stack more than 8 bags on top of each other.

Expiration Date

- > 6 weeks from packaging date, provided that it's properly stored.
- > All cement should be re-tested before use after this period.

Packaging

50 kg 2 Ply Craft Paper Bags or Bulk Orders.





i.tech TECHNO CEM II / A-S 32.5 R



Description

i.tech TECHNO is a composite grey cement, which can be used in many construction activities.

Main Application

i.tech TECHNO is suitable for general concrete work, foundations, tanks, sinks, reinforced concrete and pre-stressed concrete, mortar cement, mass concrete pouring, tile manufacturing, pavement and roads.

Standard Specification

The cement is produced according Egyptian Standard Specification ES 4756/1-2013 and complies with European Norm EN 197 / 1-2011.

Benefits

- > Suitable for all construction purposes
- > Decreased permeability
- > Improved heat of hydration for mass concrete pouring and warm weather work
- > Improved sulphate resistance
- > Improved chloride penetration resistance
- > Improved breakage resistance and durability
- > Resistant to alkalis with silica

Physical and Mechanical Properties

CEMENT STANDARD SPECIFICATIONS LIMITS

Property	CEM II / A-S 32.5 R
Setting TIme (Initial) min	≥ 75
Expansion mm	≤ 10
Compressive Strength 7D MPa	≥ 16
Compressive Strength 28D MPa	≥ 32.5





Grand Egyptian Museum

Chemical Properties

CEMENT STANDARD SPECIFICATIONS LIMITS	
Analysis	CEM II / A-S 32.5 R
Sulphate Trioxide (SO ₃) %	≤ 3.5
Chloride (CL) %	≤ 0.10

Storage

- > Cement bags should be stored in a dry place and kept away from humid environments.
- > Bags must be stacked on wooden pallets.
- > Cement bags should be protected from humid and wet weather.
- > Do not stack more than 8 bags on top of each other.

Expiration Date

- > 6 weeks from packaging date, provided that it's properly stored.
- > All cement should be re-tested before use after this period.

Packaging 50 kg 2 Ply Craft Paper Bags or Bulk Orders.













i.idro SULPHATE RESISTANT CEM I / SR3 42.5 N





Description

i.idro SULPHATE RESISTANT is recommended for use in projects exposed to intense levels of sulphate such as soil or ground water that has high sulphate content. It is also suitable for foundation work. The cement's sulphate resistance is due to its low tri-calcium aluminate (C3A) content.

Main Application

i.idro SULPHATE RESISTANT is the best to be used for projects that will be exposed to soil or ground water with high sulphate content. Due to properties in Egyptian soil, it is ideal for building foundations here.

Standard Specification

It is produced according to Egyptian standard ES 4756 / 1-2013 and complies with European Norm EN 197 / 1-2011. The product can also be produced with ASTM C150 certification.

Physical and Mechanical Properties

CEMENT STANDARD SPECIFICATIONS LIMITS

Property	CEM I - SR3 42,5 N
Setting TIme (Initial) min	≥ 60
Soundness (Expansion) mm	≤ 10
Compressive Strength 2D MPa	≥ 10
Compressive Strength 28D MPa	≥ 42.5

Chemical Properties

CEMENT STANDARD SPECIFICATIONS LIMITS

Property	CEM I - SR3 42,5 N
Loss on Ignition %	≤ 5.0
Insoluble Residue %	≤ 5.0
Sulphate Trioxide (SO ₃) %	≤ 3
Chloride Content (CL) %	≤ 0.10





El Salam Bridge connecting Africa and Asia

Storage

- > Cement bags should be stored in a dry place and kept away from humid environments.
- > Bags must be stacked on wooden pallets.
- > Cement bags should be protected from humid and wet weather.
- > Do not stack more than 8 bags on top of each other.

Expiration Date

- > 6 weeks from packaging date, provided that it's properly stored.
- > All cement should be re-tested before use after this period.

Packaging

50 kg 2 Ply Craft Paper Bags or Bulk Orders.





i.idro DRAIN





Description

i.idro DRAIN is a dry ready-mixed product for continuous paving applications. The products features an excellent draining capacity ensured through an accurate selection of the aggregates and the specific action of the cementitious binder used in the mix. The drainage capacity of i.idro DRAIN can be 100 times as high as that of native soils.

Application

i.idro DRAIN is used for continuous paving systems requiring high drainage performance. The careful selection of top-quality aggregates - which may be naturally grey or white or pigmented by the user - offers a valuable aesthetic plus. i.idro DRAIN can be used for sidewalks, trails, parking lots, cycle lanes, low-volume roadways, walkways and alleys, environmentally protected roads and areas subject to fire hazards. As demonstrated through comparative tests performed by the DIIAR laboratory with Milan's Politecnico, the very high drainage capacity of i.idro DRAIN exceeds that of naturally-available loose materials like sand, clay and silt, and, according to the maximum size of aggregates used, it equals or even exceeds that of traditional water-draining asphalt pavements.

i.idro DRAIN's drainage capacity varies as a function of the particle size distribution adopted for its formulation. The presence of voids, which may vary from 15% to 25%, ensures flow rates from 200 l/m²/min to over 1000 l/m²/min. Thanks to its sustainability characteristics, i.idro DRAIN can contribute to earning LEED points.



Traditional pavement

i.idro DRAIN pavement 1.000 litres/smq./minute





Benefits

More nature, less pollution

i.idro DRAIN returns rain and stormwater to the ground thus replenishing aquifers and allowing water conveyance through special sub-service drain pipes.

Unlike draining asphalt concrete pavements, i.idro DRAIN contains neither oils nor other polluting agents that might flow into nearby streams, lakes, rivers, or seas.

Better micro-climate, greater comfort

Exploiting albedo, i.e. the reflecting power of a light-coloured surface, combined with greater air circulation, i.idro DRAIN can help reduce the surface temperature by up to 30°C compared to asphalt pavements, thus ensuring greater urban comfort (heat island effects).

Less risk, more safety

As compared to an asphalt pavement, i.idro DRAIN can resist fire and is specially suited for areas subject to fire hazards. i.idro DRAIN makes circulation for both pedestrians and vehicles safer as it lowers hydroplaning and ice-skidding risks by promoting stormwater flow and reducing runoff.

Less cost, longer life

i.idro DRAIN allows reducing cost of stormwater treatment as well as sewage system and pavement surface maintenance. In addition to keeping its aesthetic as well as physical and chemical properties unchanged over time, i.idro DRAIN can also prevent such commonly recurring surface deterioration phenomena as channels or ruts, corrugations and shoving.

Pigmentable

Any pavement made with i.idro DRAIN can be custom-made by adding natural pigments that give the mix a smooth homogeneous colour.



i.design HELWAN WHITE CEM I / 52.5 N





Description

i.design HELWAN WHITE differs from grey cement mainly in color. It is made of selected raw materials containing negligible levels of iron and manganese oxides.

Main Application

i.design HELWAN WHITE is primary used for architectural and structural purposes such as pre-cast curtain walls and facing panels, terrazzo surfaces, stucco, cement paint, tile grout and decorative concrete. It is recommended wherever white or coloured concrete or mortar if desired. In case of application in concrete, the selection of the aggregates has to be carefully done and the curing time strictly controlled to secure the whiteness of the final product.

Standard Specification

The cement is produced according to Egyptian standard ES 4756/1-2013 and complies with European specification EN 197/1-2011.

Physical and Mechanical Properties

CEMENT STANDARD SPECIFICATIONS LIMITS	
Property	CEM I / 52.5 N
Setting TIme (Initial) min	≥ 45
Soundness (Expansion) mm	≤ 10
Compressive Strength 2D MPa	≥ 20
Compressive Strength 28D MPa	≥ 52.5

Chemical Properties

CEMENT STANDARD SPECIFICATIONS LIMITS

Property	CEM 1 / 52 5 N
Loss on Ignition %	≤ 5.0
Insoluble Residue %	≤ 5.0
Sulphate Trioxide (SO $_3$) %	≤ 4.0
Chloride Content (CL) %	≤ 0.10





Bibliotheca Alexandrina

Storage

- > Cement bags should be stored in a dry place and kept away from humid environments.
- > Bags must be stacked on wooden pallets.
- > Cement bags should be protected from humid and wet weather.
- > Do not stack more than 8 bags on top of each other.

Expiration Date

- > 6 weeks from packaging date, provided that it's properly stored.
- > All cement should be re-tested before use after this period.

Packaging

50 kg 2 Ply Craft Paper Bags or Bulk Orders.





i.design WHITE OASIS CEM II / B-L 42.5 N





Description

i.design WHITE OASIS is a type of CEMI Portland cement that differs from grey cement mainly in color. It is made of selected raw materials containing low levels of iron and manganese oxides.

Main Application

i.design WHITE OASIS is used for decorative and architectural applications such as color facades and textured works, terrazzo surfaces, stucco, cement paint and tile grout. It is especially appropriate wherever white or color mortar is desired. Ensure the strict curing instructions are followed to achieve the desired level of whiteness. it should not be used in the foundations or reinforced concrete works as per the EOS restrictions.

Standard Specification

The cement is produced according to Egyptian standard ES 4756/1-2013 and complies with European specification EN 197/1-2011.

Physical and Mechanical Properties

CEMENT STANDARD SPECIFICATIONS LIMITS	
Property	CEM II B-L 42.5 N
Setting Tlme (Initial) min	≥ 60
Soundness (Expansion) mm	≤ 10
Compressive Strength 2D MPa	≥ 10
Compressive Strength 28D MPa	≥ 42.5

Chemical Properties

CEMENT STANDARD SPECIFICATIONS LIMITS

Property	CEM II B-L 42.5 N
Sulphate Trioxide (SO ₃) %	≤ 3.5
Chloride Content (CL) %	≤ 0.10





Madinaty

Storage

- > Cement bags should be stored in a dry place and kept away from humid environments.
- > Bags must be stacked on wooden pallets.
- > Cement bags should be protected from humid and wet weather.
- > Do not stack more than 8 bags on top of each other.

Expiration Date

- > 6 weeks from packaging date, provided that it's properly stored.
- > All cement should be re-tested before use after this period.

Packaging

50 kg 2 Ply Craft Paper Bags or Bulk Orders.





i.design EFFIX





Description

i.design EFFIX is a mortar with very high mechanical and aesthetic performance that combines the durability typical of a cementitious material and the workability of a plastic material. Developed for non-structural concrete elements of refined aesthetic value, i.design EFFIX is a real source of inspiration for architects and designers.

i.design EFFIX CREA is a ultra high performance mortar designed to cast thin elements characterized by fine details. The high-quality surface finish, available also with shiny texture, can turn cement into highly aesthetic and superior quality products, expression of contemporary design.

i.design EFFIX ARCA is a ultra high performance fibre-reinforced mortar featuring high compressive and flexural strength, especially developed for the production of precast cladding panels for external façades and non-structural architectural elements.

Main Application

i.design EFFIX CREA is designed to manufacture non-structural elements with high aesthetic value for interior design, indoor and urban furniture such as kitchen & bathroom counter-tops, bathware and tiles. It is also ideal to create artworks and jewels

i.design EFFIX ARCA is perfect for manufacturing precast elements for outdoor installations where resistance, lightness as well as aesthetic and architectural value are a requisite. It is ideal for façade cladding, with or without thermal insulation, destined to New Buildings & Renovation



The photocatalytic effect

i.design EFFIX can be formulated by adding the innovative TX Active[®] that makes the final work self-cleaning and smog-eating.





Parabola Collection by Max Stopa

Wall made by Naullet

Benefits

- > High strength and great durability typical of a cementitious material ensuring:
- greater resistance to weathering agents (rain, wind, sun, ice) and to mechanical impacts - good thermal insulation
- good thermal insula - fire resistance
- Great workability and flexibility similar to those of a plastic material. Its high fluidity allows the ability to copy each minor and tiny detail of the formwork.
- > Outstanding texture of a mineral material that can be smoothed, polished, pigmented and waxed to achieve an exceptional aesthetic surface finish
- > Minimum thickness thanks to its impressive mechanical properties
- > Ease of customization: being white, a wide variety of colours is possible by adding inorganic pigments
- > High quality production: the precast technology guarantees regular panel production featuring enhanced replicability



<u>ix www</u>i

i.active COAT





Description

i.active COAT is a new generation of cement-based coatings for both indoor and outdoor use featuring surprising performance thanks to TX Active[®], the innovative photocatalytic technology patented by Italcementi.

Photocatalysis is a natural phenomenon in which a substance, known as a photocatalyst, uses either natural or artificial light to activate a strong oxidizing reaction that turns noxious organic and inorganic substances into harmless compounds.

In a nutshell, photocatalysis works as an accelerator of an oxidation process that already exists in nature. It promotes faster decomposition of pollutants and prevents them from accumulating on surfaces., it ensures such properties as: depolluting and self-cleaning properties.

Main Application

Finishing indoor and outdoor vertical surface (residential building, commercial building, industrial building, concrete structure, masonry, walls and ceiling, tunnel, multy -storey car park).

* in case of indoor application, the activation of photocatalytic process needs the presence of sufficient sunlight and/or dedicated artificial light.







Magnet by Libeskind

Benefits

Enhanced aesthetics

The i.active COAT range of cement-based coatings products comes in different particle sizes for hand and spray application. Whatever the chosen solution, i.active COAT guarantees smooth surface finishing and great aesthetic quality.

Forever white and Original colour maintained over time

By combining the action of light with the TX Active[®] photocatalytic technology, surfaces treated with i.active COAT can decompose the organic substances and microorganisms that soil surfaces, thus ensuring aesthetic quality over time combined with greater cleanliness and brilliancy.

Smog-eating, depolluting performance and Better air quality

i.active COAT decomposes pollutants produced by human activity (e.g. industrial facilities, motor vehicles, house heating systems) making buildings cleaner and improving air quality. i.active COAT proves, therefore, to be particularly helpful at sites where air ventilation is quite difficult, e.g. inside tunnels.

For example, measurements made on the Umberto I Tunnel in Rome - fully treated with photocatalytic coat - showed an average NOx reduction of 25%.

Always active

Evenly distributed across the cementitious matrix, the TX Active[®] catalyst is neither consumed nor used up, and ensures a continuous and enduring photocatalytic process.

Pigmentable

Any coating made with i.active COAT can be custom-made by adding natural pigments that give the mix a smooth homogeneous colour.

Easy to apply

i.active COAT is applied like traditional coatings and requires no special application tools.



i.active BIODYNAMIC





Description

i.active BIODYNAMIC is a high performance, highly flowable cement mortar for manufacturing non-structural architectural precast elements featuring thin sections and complex shapes.

Main Application

- > Aesthetically prestigious elements
- > Precast elements with a high-quality texture
- > Non-structural architectural elements
- > Panels for composite façades with very complex shapes
- > Panels for curtain walling systems

Benefits

Bio and active

i.active BIODYNAMIC is a self-cleaning and pollution-reducing cement mortar based on Italcementi's patented TX Active[®] technology. It is made of 80% recycled aggregates, including Carrara marble scrap. It is fully recyclable after use as an inert material.

Dynamic and injectable

Its high flowability (injectability) allows for the creation of complex shapes like those of the panels devised for Palazzo Italia at EXPO 2015.

Its peculiar workability makes i.active BIODYNAMIC particularly suitable for injection moulding, a manufacturing process enabling the biodynamic cement mortar to flow smoothly into the moulds with significant energy saving and consequent cost reduction.

The initial fluidity of i.active BIODYNAMIC is three times greater than that of ordinary cement mortars.

So beautiful and smooth

The cement mortar's compact matrix and minimal porosity ensure very low surface roughness. Surfaces made with i.active BIODYNAMIC are very smooth, resembling marble or even reflective glass, and extremely pleasing to look at and touch. With the addition of coloured inorganic pigments and/or fine aggregates, elements can be produced in a variety of colours.

Strong and durable

Compared with ordinary cement mortar, i.active BIODYNAMIC offers twice the compressive and flexural strength. Thanks to the compact matrix and the low porosity, precast elements made with i.active BIODYNAMIC have very low water absorption, greater durability and enhanced resistance to weathering.





Palazzo Italia at EXPO 2015

i.active BIODYNAMIC was developed at i.lab, the Italcementi Innovation Centre sited at the Kilometro Rosso Science and Technology Park, where researchers and engineers devoted 12,500-plus hours to creating this unique product. It is this cement's outstanding workability that made it possible to build the inventive structures of Palazzo Italia at EXPO 2015.

Designed by Nemesi & Partners, the 35-m-tall Palazzo Italia is the iconic place of EXPO 2015 and one of the few structures that will remain on the site after the event is over. Its sculp-tural forms are enhanced by the building envelope recalling the branches of a thick forest: more than 750 individual biodynamic cement panels installed one by one on the external wall to create a uniquely spectacular effect.

	ORDINARY CEMENT MORTAR*	BIODYNAMIC
Initial fluidity	100 mm	> 300 mm
Compressive strenght	30 Mpa	> 60 Mpa
Flexural strenght	5 Mpa	> 10 Mpa

* Mortar for traditional applications, i.e. a mix of hydraulic binder, aggregates, water and - possibly - admixtures, with a water/cement ratio greater than 0.5



38888888

i.light





Description

i.light is a precast concrete panel that can transmit light. Formed by bonding special resins in an innovative cementitious matrix, i.light not only lets natural and artificial light in, but it also allows the human eye to reconstruct images of objects placed behind the panel, with no change in colour and creating an amazing transparent effect.

Main Application

i.light is a most versatile material that can be designed in custom size and colors vis-à-vis the cement-based component and the transparent polymer-based inserts.⁽¹⁾

i.light can be used for non-load bearing elements such as roof coverings, decorative elements, walls, partitions on balconies & terraces, stairways and interior design items. i.light panels are installed by fastening them to adequate supporting substructures.

i.light is a precast panel that combines the strength of cementitious materials and the transparency effect typical of glassy materials. i.light revolutionizes the concept of cement wall experience, turning it from a "darkening/dimming" element into an innovative light vector.



The special plastic or vitreous matrix inserts - depending on the type of i.light panel chosen – allow light to flow homogeneously through the whole cementitious element. This is possible thanks to the panel's enhanced ability to capture both indirect and reflected light and bring it to the interior, which gives resulting walls an ever changing appearance with light playing an amazing show.

(1) Variations may require technical assessment by the parties involved.



36







37



Italian Pavilion at Shanghai Expo 2010

Benefits

Luminous and sustainable

During daytime, exterior light filters through the i.light walls generating valuable energy savings, while changing levels of sunlight create an ever new and striking visual experience. At night, internal light filters towards the outside offering a spectacular play of light and shadow.

Durable and recyclable

Experimental tests have shown that the durability of i.light panels is comparable to that of traditional precast panels, having as a long life cycle as that of the building. Moreover, once dismantled, i.light panels do not require any special treatment and can be wholly recycled.

Versatile

i.light is a highly versatile architectural element. It can be used for both internal and external lighting solutions. Panels are available in different shapes, sizes and colours, letting designers' imagination run wild.

Transparent, forever

i.light panels can resist the aging effect of UV rays, guaranteeing that original transparency is maintained over time. No particular maintenance is required.



PALAZZO ITALIA

Each creation is the result of a mediation between the freedom of an idea and the constraint of matter. However, there are materials that create their own shapes. The **biodynamic cement** developed by **Italcementi** and used for building **Palazzo Italia at Expo 2015** springs from the innovation capacity of the cement industry. Such a complex and aesthetically exceptional structure has only been possible thanks to the outstanding plasticity of **i.active BIODYNAMIC**. What Pier Luigi Nervi called **"The most beautiful material that humanity has ever invented"** has demonstrated that matter has its own aesthetics when the designer and the producer accept the ongoing challenge of research and innovation.



i.nova Italcementi

www.i-nova.net





i.active BIODYNAMIC is a high performance, extremely flowable cement mortar, ensuring a striking aesthetic value. Its outstanding workability made it possible to create the complex structures of Palazzo Italia at EXPO 2015.

80%	recycled material aggregates made of Carrara marble scrap for enhanced brightness
3 times	more fluid than an ordinary cement mortar
2 times	stronger than an ordinary cement mortar

Discover the range of **i.active photocatalytic products** based on the TX Active[®] technology patented by Italcementi and featuring depolluting, self-cleaning, bacteriostatic and odour-eliminating properties.



ULTRA HIGH PERFORMANCE MORTAR FOR FAÇADE CLADDING PANELS

ITALIA

EXPO MILANO 2015



ULTRA HIGH PERFORMANCE MORTAR FOR INTERIOR DESIGN AND URBAN FURNITURE i.active

PHOTOCATALYTIC COATING FOR VERTICAL USE



VERY HIGH STRENGTH CLASS CEMENT IDEAL FOR PRECASTERS



HIGH STRENGTH CLASS CEMENT IDEAL FOR MORTAR AND CONCRETE



www.i-nova.net





السويس للأسمنت Suez Cement Italcementi Group

Suez Cement Company

KM 30- Maadi/Ein Soukhna Road P.O. Box 2691- Cairo, Egypt Phone 002 02 25222000 Fax 002 02 25222067 www.suezcement.com.eg

www.i-nova.net

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 pricebest product approach).