





## contents

0 1

inspiration

empathy 02

03

04



passion

creativity





02

/ zero project / A Rosa Gres mind /



## Thinking and doing to transform reality

"Those of us who work at Rosa Gres are auided by a culture of utter transparency. Dialogue, interaction, mutual support, communication and trust are our watchwords. We are very clear that we are in this project together: we are collaborators and collaborate is what we do. This concept, collaboration, is what sets us apart and underpins our human resource management. How do we do it? With our deeds, with tenacity, rigour and systems, without let up. Because while this does not yield immediate results, it does provide permanent ones. For example, I get together every month with my entire team to set out company developments, results, our biggest initiatives and the general state of the company. As Managing Director, it is my job to give my collaborators detailed explanations about what we're doing and achieving. Above all, we generate between us an awareness of reality, of responsibility, of knowing

exactly where you are, what you're doing and why you're doing it.

At **Rosa Gres**, everyone counts and every role is essential. We want our collaborators to be proud of their participation in this shared project and be capable of transmitting this pride to their families, acquaintances and friends. We sit down every week to look at current projects and review processes and new ideas. Our knowledge management system acts as an aid to submitting and supplying ideas from the entire team.

And it's this collaborative spirit that allows us to be sustainable now and in the future. In short, it's a question of teamwork, of mutual respect and going the extra mile so that the final product is perceived by society at large as exemplifying a company that knows how to transform reality in order to improve it."



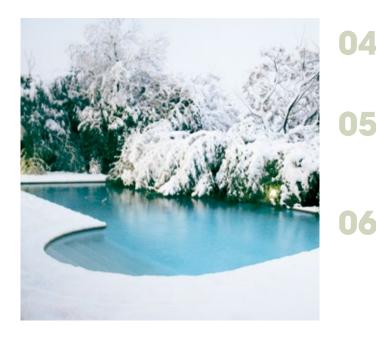
The Hostal Empúries Spa, the first European tourism establishment to receive the LEED TM Gold Level certification, selected our Proyecta series for their spa. / Onyx-coloured, bush-hammered tiles from the certified C5 Proyecta collection



## Nature's wisdom is our inspiration

"I come from the fourth generation of a family dedicated to ceramics. The way it has evolved to date has been both dizzying and positive. With each passing day there are more colours, more formats, more textures, more solutions. Yes, nature inspires us in the design and manufacture of all our products. The secret? Discovering the natural cycle and following it. It's a cycle that takes each and every detail into account. Our designs bear in mind transport, the work of the fitter, the architect, the safety and wellbeing of the end user, and society at large. Hence we manufacture a product that is sustainable, beautiful and very functional. The future of ceramics lies in thinking about the whole cycle: from the initial idea to the end-product, recycling to begin afresh. Inspirational, transformational and thrilling."

Did you know that ceramics are naturally sustainable? Find out how.



## Due to the longevity of their life-cycle

Ceramics are long-lasting products that require minimal resources for their maintenance and therefore help to reduce the negative impact on the environment.

## 2 Because they're inert and highly resistant

They're unaffected by solar radiation, contact with water, the climate or fire. They are one of the most resistant materials used in construction.

### Energy efficiency

Ceramics adapt to the technical requirements of a building, helping to improve its energy efficiency.

### They're non-toxic

They do not contain POPs (persistent organic pollutants), something that earns them LEED points.

### Low maintenance

They require little maintenance, either in terms of preservation or cleaning. The latter is carried out using low cost materials and processes with low environmental impact.

### They are fire-resistant, aseptic, natural and inert

They reduce the risk of fire and therefore the release of smoke and toxic substances. Ceramics are inert: they do not emit pollutants. The air in ceramic environments remains clean and healthy.



Private terrace / paviment colour tao beige outfloor from tao collection

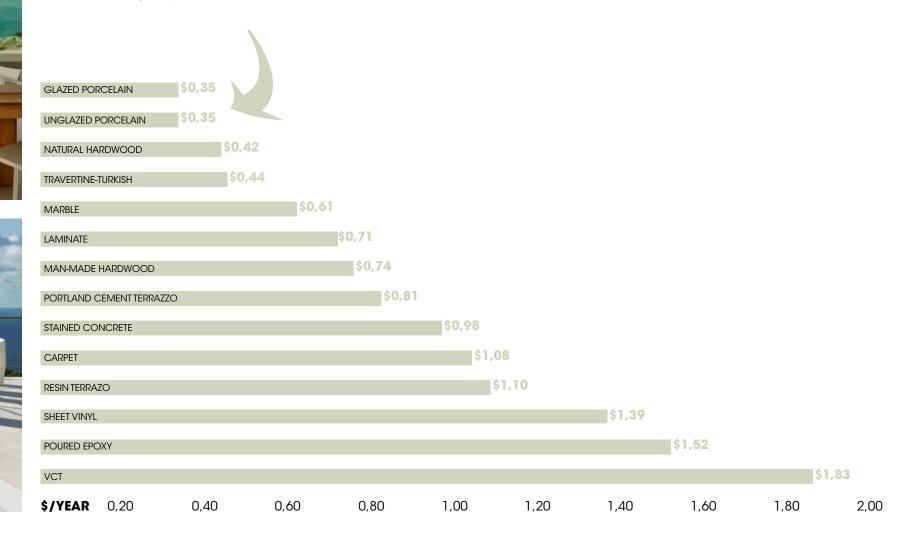


Private terrace / paviment colour mistery white anti-slip from mistery collection

### Floor coverings comparison

## Life cycle cost per square foot per year

Reference: Floor coverings comparison / Tile Council of North America, 2006





Rosa Gres plant in Vallmoll, Tarragona.



## A walk round the factory. Working smarter in order to live smarter

"We think, believe and are convinced that sustainability, energy efficiency and the working environment always deliver a higher-quality product and increased productivity. And the key to achieving this is people."



# 01

## Natural temperature control

Thanks to the system of mobile panels installed in the sides of the walls, ventilation in the warehouse is regulated naturally. We manage to keep a pleasant temperature throughout the year.



### Sunlight for working

The roof of our factory was designed with a system of skylights to let sunlight pass through. We thus save energy and have a comfortable environment to work in.



## Reducing dust in the atmosphere

We have achieved this by increasing the suction power of the dust collector, fitting a hood to absorb the dust produced by the paste mixing process, installing anti-dust filters in the press and increasing the capacity of the press for gathering and collecting clay.







Automating processes to reduce physical effort The solution resides in automating the glaze-mixer and the the handling of large-piece rejects in the glaze line.

### Getting about by bicycle

Our plant has an area of 32,000 m<sup>2</sup>. We get around using comfortable bicycles. And we have set aside a parking area for <u>electric</u> <u>vehicles</u>.



## Motivation, involvement, participation

The spirit of collaboration is the spirit of **Rosa Gres**. Communication and the transfer of knowledge from one area to another underpin our working culture. And the idea of contributing something positive to society drives us, motivates us, is the aspiration that inspires us every day.



Drying ceramic residue in the sun. **Rosa Gres** Vallmoll, Tarragona.



Zero consumption + zero waste + total respect = thinking about the future

"In 2009 we embarked on the project of building a new plant from scratch, bringing with us our more than 50 years of experience at Cerdanyola and incorporating all the new technology available. And from this arose what we dubbed the zero project: aiming for zero discharges, zero waste and maximum respect for natural resources."

Head of Environmental Management / Rosa Gres

### target: <u>ZERO CON-</u> <u>SUMPTION</u>

We harness techniques and new technologies to minimize the use of natural resources



WITH THE INSTALLATION OF THE NEW PURI-FICATION SYSTEM, WE RECYCLE 100 % OF THE WATER USED IN THE PRODUC-TION PROCESS.

Using a physical-chemical process, we separate water from the slurry. This is recycled and reintroduced into the ceramic paste. The clean, purified water goes back into the production process, creating a totally sustainable closed circuit.



-11.000 m<sup>3</sup> WATER / YEAR, WHICH IS EQUI-VALENT TO FILLING 730 PRIVATE SWIMMING POOLS PER YEAR



Rosa Gres water purification plant in Vallmoll. Installed in 2010





EFFECTIVE CONTROL OF ENER-GY CONSUMPTION AND EMIS-SIONS OF CO<sub>2</sub>

 $\ensuremath{\textit{//}}$  We minimize energy consumption and  $\ensuremath{\mathrm{CO}_2}$  emissions.

// We generate hot water via solar energy.

*II* We control electricity and water consumption and emissions into the atmosphere on-line.

11 100% of our electricity comes from renewable sources.

### INVESTMENT IN TECHNOLOGY THAT AIDS MANAGEMENT

With the new digital printing system we save:

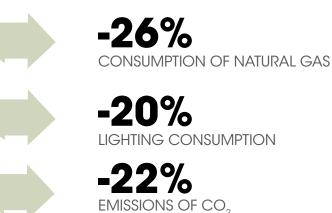
// 40 Kw / energy / hour

// 10 I<sup>3</sup> water / day

// transport and CO<sub>2</sub> emissions

Reduction of electricity and gas consumption

Reduction in emissions



<image>

Digital printing system. Rosa Gres Vallmoll, Tarragona.

### target <u>ZERO WASTE</u>

We use raw materials that are recyclable and recycled in all senses



WE RECYCLE 100% OF THE RUBBLE FROM THE PRODUC-TION PROCESS

After grinding the rubble in a mill (Gruber) designed for this task, all the waste is eliminated, obviating transport and thereby reducing emissions of  $CO_2$ .



**22%** PRE-CONSUMER RECYCLED MATERIAL IN SPECIAL PIECES



Grinding mill for ceramic residues / Rosa Gres Vallmoll, Tarragona.



Recycling containers outside the plant classified by type of residue / Rosa Gres Vallmoll, Tarragona.

**30** PERFECTLY IDENTIFIED WASTE COLLECTION POINTS

ZERO

WASTE Programme



**24** DISTINCT CLASSIFICATIONS TO FACILITATE THE DIFFEREN-TIATED SORTING OF EACH MATERIAL

### INTEGRATED ENVIRONMENTAL AUTHORISATION N° TA 2009 0037

**Rosa Gres** installations in Vallmoll are regarded as **Low-emission** installations

\*\*

1 - 11

### target: TOTAL RESPECT

Wood, storage management and responsible packaging.

SAVE A TREE Programme

MANAGEMENT AND CONTROL OF WOOD USAGE

**//** We use **Euro-pallets**, with a minimum reutilization coefficient of 6.

- // We take part in the **Ecoembes** programme.
- **// FSC** certification of our wood.





Example of various labelled recycling containers. Factory interior. Rosa Gres Vallmoll, Tarragona.



In the Rosa Gres laboratory, Vallmoll.



# Committed to the DAPc<sup>®</sup> (Environmental Product Declaration) project

In partnership with the Environment Management Research Group (Spanish acronym: Giga) of the Escuela Superior de Comercio Internacional (Pompeu Fabra University, Barcelona), led by Pere Fullana and the Institute of Ceramic Technology (ITC), we take part in the design and development programme for type-III European eco-labelling, DAPc<sup>®</sup>. The four phases of the ceramic life-cycle are analysed. "With our new factory in production and the zero project defined, we wanted to show that as well as manufacturing an extraordinary product it was also sustainable. And we became part of the design committee of the DAP system for ceramics. It was a unique and pioneering experience in which we actively involved ourselves, contributing information and suggesting ideas, in the end enabling our products to earn DAPc<sup>®</sup> eco-labelling"

> Àngel Martínez Head of Environment Management / Rosa Gres

### Our products are based on the management of eco-design

We carry out exhaustive checks to comply with ISO 14440. As far as the product design is concerned, we work with procedures based on the concept of Eco-design. This means that when we plan a product, we study the environmental impact it may have throughout all the phases of its life-cycle, to reduce it to a minimum. At **Rosa Gres** we analyse and act upon all the phases of the product life-cycle: design, provenance of raw materials, glazes and dyes, manufacturing, final packaging avoiding white paper, transport, use, maintenance and disposal. " In the **Rosa Gres R&D lab** we're very strict about choosing raw materials. We ensure that they do not contain heavy metals to avoid the potential contaminating effects on the environment and humans. When selecting suppliers we conduct in-depth studies of their quality control and environmentalmanagement processes."

" (...) Another variable on which we place a great deal of emphasis is how far away the product we are going to buy is located. We start from the idea of zero kilometres. The nearer the better, because we cut the need for transport and emissions into the atmosphere..."



We form part of the development committee for the **DAPc®** norms, the new **type III** European eco-labelling system enabling the assessment of environmental impact over the life-cycle of the product and its manufacturing process.



Using **Rosa Gres** ceramic products, construction systems and fitting systems earns buildings **LEED** points.

cradietocradie

Our **Proyecta** collection obtained **C2C certification in the Silver category**. From that moment we made all our products in accordance with **C2C** criteria.



We have been members of the **GBCe** since June 2010. Marcel·lí Sugrañes, president of Rosa Gres, is the spokesperson of the **GBCe** group of companies in Spain.



We maintain our firm commitment to the **United Nations Global Compact** and uphold our responsibility in complying with the values that the Compact fosters, periodically updating our methodology and results.



We ensure that the wood we use to manufacture the grilles of swimming pools come from managed sources where it is harvested sustainably and in a way that aids forest regeneration.

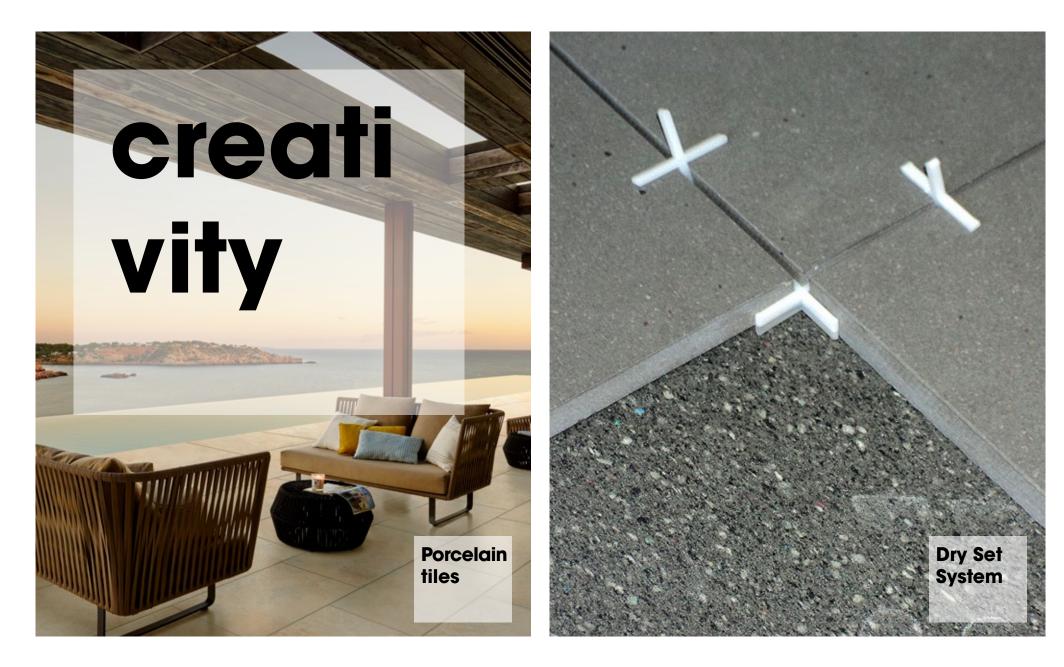
## **Thinking ahead**

"Working towards a more sustainable world is the responsibility of all, including Rosa Gres.

A key part of our corporate values therefore entails running our installations with strict environmental controls and developing products and manufacturing processes that are progressively more sustainable.

This is a process of continuous improvement that involves us all and helps us to be a better company"

> Marcel·lí Sugrañes President / Rosa Gres







# **Rosa Gres collections:** beauty, resistance and sustainability

All Rosa Gres ceramic products carry DAPc<sup>®</sup> environmental eco-labelling and are eco-designed to this end. This enables us to guarantee that all our processes are managed in such a way as to minimize their environmental impact.

We work with designers in mind, and as a specialist company we offer finished products that provide a complete ceramic solution to every project. These range from a house with stairs, to an industrial kitchen with half-rounded edging to facilitate cleaning, or an Olympic infinity pool with all the trimmings.

We believe that the future will be built on the basis of sustainable construction. This is why we collaborate closely with architectural practices and construction companies on-site, analysing needs jointly to create new solutions.

### Eco-design: Sustainable R&D

We conduct research into the creation of pre-fabricated construction systems and products that minimize the use of energy resources. **Dry Set System, 9 and 10 system**. We design pieces and finishes that make the work easier to carry out and respond to the construction requirements of buildings.

### Unique anti-slip finish

We ensure user-safety by offering different finishes for a range of slip-resistance needs, avoiding the use of abrasive products.

### Water management

We ensure efficient and rigorous water management based on four key principles: that water is a precious, finite, renewable and shared resource. We purify all the water we use in the production process. 04

05

### Our ceramics are recycled

R&D

40% of the raw materials used in the manufacture of the products come from recycled sources, significantly reducing environmental impact.

Our ceramics are recyclable Using our new Dry Set System, Rosa Gres ceramics can be reused at the end of their life-cycle.

**At the heart of the product: C2C** All our products are designed and manufactured in accordance with Cradle to Cradle principles.

> **Commitment and transparency** We are committed to sustainable projects such as the creation of DAPc<sup>®</sup> labelling and the Global Compact. The entire company is run on the basis of a policy of transparency.

### How is the Rosa Gres anti-slip finish unique?

Our slip resistant finishes are unique because they are **specific**. This means that we design tailor-made solutions taking into account the types of space and their end-use. Our aim is to provide maximum safety and convenience in each instance.

Thanks to this high degree of specialisation, our slip resistant surfaces are **highly efficient** in industrial buildings, hotels and spas, swimming pools, changing rooms, sports centres, exteriors and terraces.

All **Rosa Gres** slip resistant products are agreeable to the touch, clean, extremely easy to maintain and do not require the use of aggressive products. **Unique = specific + sustainable**.



## New **Biostop:** the ceramic that eliminates bacteria



industry, **areas with water**, such as public swimming pools and spas, and **health centres**, hospitals, surgeries and old people's homes.

## We design specialised solutions and products

Every Rosa Gres collection and construction system is designed for a specific use and in accordance with rigorous Ecodesign processes.

This highly-focused approach makes the work easier to install, reduces costs and minimizes subsequent maintenance resources.



Shop belonging to the Mango brand / argenta colour flooring from the imagina collection







Ca l'Enric Restaurant / argenta colour flooring from the imagina collection



14th WORLD CHAMPIONSHIPS / 5 Competition pools / Shangai Oriental Sports Center, China



La Mola Hotel, Terrassa / swimming pool built using system 9





Private residence / swimming pool, terrace and stairs using mistery grey colour from the mistery collection

Cacaolat factory / indugres flooring

# **Dry Set System:** "mobile"

# and reusable ceramics

In the course of researching placement processes we have discovered new and surprising possibilities: with the Dry Set System we can recover and reuse paving once it has been set in place.

The **Dry Set System** is the new **Rosa Gres** dry placement system that avoids the use of cement-based adhesive. The system consists of placing pieces of Rosa Gres porcelain tile on a phono-acoustic mat. Subsequently a waterproof seal is applied – impermeable, flexible and adhesive – which has been especially-designed for the system.

The **Dry Set System** can be fitted in interiors, both for commercial and residential use. It enables multiple formats and colours to be combined. It is completely waterproof.

The Dry Set System is currently available in the imagina and proyecta series.

It is reusable

02

The ceramics can be removed and used again in another project.

- It is faster than the traditional system and saves time
- It is easier to apply Any professional can use it.

It does not create waste and is clean at the time of installation

It is practical It can be placed on top of existing level paving.

Soundproofing It creates an attractive environment.

- It can be changed easily Simply, without noise or dust.
- It is easy to maintain and replace



Any ceramic pieces removed are free of cement and can therefore be easily reused, recycled or reintroduced into the production process.



**Dry Set System** faithfully follows the Cradle-to-Cradle principles: it creates an open cycle, without waste and in which everything is turned into something new.



The **Dry Set System** earns LEED points, both for the product and for the installation system.



During both installation and removal of paving with the **Dry Set System**, water usage is significantly reduced.



We start from a level base.



**02** We roll out a phono-acoustic mat, 3 mm thick.



**03** The mat sticks to the base only at the edges.



04 The ceramic tiles are placed on top of the phono-acoustic mat.

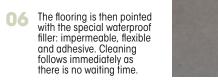




05 We use non-recoverable 2 mm cross-shaped spacers. The spacers serve to homogenize both the width of the assembly and as fastening for the tiles. They remain permanently in place.



assembly and as fastening for the tiles. They remain permanently in place.





**17** After 24 hours, we have flooring that can be walked on

#### S-9 Systems, from Rosa Gres

## 9 System Sustainable, flexible and prefabricated

A prefabricated crown consisting of a set of blocks made from water-repellent concrete, designed so that a single piece can function as both a channel and a base for ceramics. Created to perfect the construction of infinity pools, both public and private.

Designed in its entirety by the professionals at Rosa Gres, the great construction innovation of 9 system lies in the fact that it guarantees a perfect finish for the crown and the overflow. One of the driving forces of the project was to design prefabricated systems that would facilitate installation works and reduce energy usage. Building an infinity pool with 9 system, becomes a very simple, smooth and efficient process. We manufacture S-9 blocks to work with six distinct swimming pool construction systems.

# S9 Ergo System S9 Horyzon System















S9 Wiesbaden System

S9 Spa System

### Excellent finish to the overflow

Once the works have been completed, the water overflow is perfect. The result is a greater level of hygiene, less water-loss and reduced usage of purification products.

### Aesthetic improvements

The perimeter of the pool is straight and homogenous. Improvement of wellbeing.

### **Special pieces**

Offers tailor-made solutions for every building project.

### Sustainable facing

9 System is ready to receive Rosa Gres ceramic facings, thereby bringing all the advantages arising from the life-cycle of the product and its sustainable manufacturing system.



More efficient finish

Improves the exterior finish of the sprayedconcrete wall, lengthening the life of the structure.

Designed to save time, money

reduced as well as the energy resources

It speeds up the installation process, saving

Makes the placing of pieces easier becau-

se they were designed for optimal fitting.

The costs of building the overflow are

time, labour and energy resources.

and resources

needed to install it.

Less difficulty

Waste is reduced.

**Construction speed** 

### **Greater precision**

Eliminates defects caused by the formwork.



Detail of the 9 System installation process and a view of the finished result. Aquaworld, Concorezzo, Italy

# **10 System:** For 100% sustainable construction

An innovative building system that enables the realisation of a dream: to build infinity pools from concrete using prefabricated blocks in record time and with all the guarantees.

**10 System** represents a firm commitment from **Rosa Gres** to sustainable architecture. It consists of a series of prefabricated concrete plates that are assembled by crane on a concrete load-bearing and levelling base. The prefabricated plates ensure proper fastening and levelling. The way the plates are joined ensures perfect water-proofing.

### Perfect finish

The prefabricated plates are easily assembled, ensuring an optimal finish for the structure.

### Speed

The reduction in installation time brings a significant saving of energy resources.

### Temperature stability

The concrete panels help to keep the temperature stable, reducing energy costs.

### It succeeds in creating registered swimming pools

Making outside maintenance easier, thereby obviating major repairs and reducing potential waste.

## 5 It makes construction in extreme climates possible



### It reduces water consumption

R&D

Correct installation of 10 system prevents water leakage.

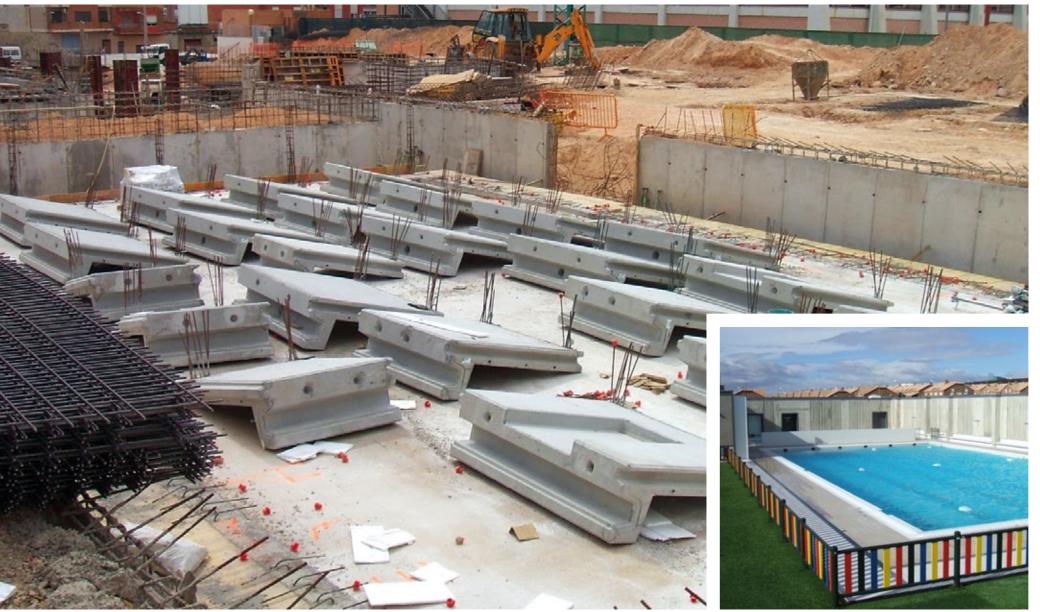


#### Sustainable facings

10 System is ready to receive Rosa Gres ceramic facings, thereby bringing all the advantages arising from the life-cycle of the product and its sustainable manufacturing system.



10 System : NAN architecture prize, 2009



Detail of the 10 System installation process and a view of the finished result. Public pool of Quer, Guadalajara, Spain





## A Rosa Gres mind

"What sets Rosa Gres apart from other companies is that we think of ceramics not only as products; when we design ceramics we focus on how they are going to end up being used. And this involves having the future very much in mind, anticipating what will happen in many ways. If you ask yourself what kind of world our children are going to find in the future, you're bound to start feeling responsible and you'll set out to find answers. At Rosa Gres we believe in building in a sustainable way, helping to enhance today's reality for tomorrow. And that is genuinely motivating."

Marcel·lí Sugrañes President / Rosa Gres

# With the future in mind: **driving ideas at Rosa Gres**

Non-stop Ceramics: revolutionising the world of ceramics Can you imagine a system based on returning and recycling used ceramics? This is one of our future projects, based on the development and implementation of the **Dry Set System**.

## Dry joining: without breaking the water cycle

We are developing a technology capable of creating a method of joining that avoids breaking the water cycle. This is an innovative product suitable for outside areas and gardens, both for public and private use.

Methods for minimizing the consumption of gas, electricity, water and raw materials and the release of emissions.





### Is being sustainable profitable?

Yes, of course it is. Being sustainable is profitable. I would say that industry in general discovered this years ago, because if you consume a significant amount of energy, any saving in this field has a positive financial consequence. And I think that other sectors, not only industry, should take this on board (...)

### Change

The engineering in this new Vallmoll plant bears no relation to the one we had in Cerdanyola. We have achieved a very significant degree of energy saving. Water savings have been spectacular, as have the reductions in CO<sub>2</sub> emissions. The products we manufacture here are much more sustainable, and have of course a much longer lifespan, than those we made in Cerdanyola.

### A question of teamwork

Producing in a sustainable manner is creating a significant return for our business, but the most important thing is that it is all happening with enthusiasm. Because the involvement of the team in this type of challenge is very easy: they are inspiring aims that generate motivation.

### **Continuous improvement**

All the products at **Rosa Gres** are sustainable. Because they are all manufactured in accordance with the same principles. What we can certainly say is that at **Rosa Gres** we are becoming more and more sustainable. Because it's a case of thinking, testing, measuring, comparing, investigating... and never ceasing to advance (...)

### Future

I would say that, rather than views of the future based upon sustainable construction... the construction industry of the future will have to be this way, whether it likes it or not.

Marcel·lí Sugrañes President / Rosa Gres



A Rosa Gres mind



#### Rosa Gres, S.L.U

Oficina Central - Headquarters - Siège Social Ctra. Sant Cugat km. 3 08290 Cerdanyola, Barcelona, SPAIN Tel. +34 93 586 30 60 Fax +34 93 586 30 61

Fábrica - Factory - Usine Pol. Ind. Mas Vell Ramón Sugrañes, 1 43144 Vallmoll, Tarragona, SPAIN

Ventas: +34 93 586 37 68 / +34 93 586 37 69 Export Sales: +34 93 586 37 02

info@rosagres.com www.rosagres.com



ons

October 2014







