



**Geoplast Consulting**  
for sustainable construction

English



# GEOPLAST CONSULTING

SPECIALIZED CONSULTING SERVICES

- ✓ **ENGINEERING**
- ✓ **PRE AND AFTER SALES SERVICE**
- ✓ **TRAINING AND ASSISTANCE**

[GeoplastConsulting.com](http://GeoplastConsulting.com)



# BACKGROUND

Since its founding in the early 1970s, Geoplast has been designing and manufacturing innovative recycled plastic products.

We create sustainable solutions with high engineering value and performances in compliance with construction industry standards.

Over the years we have improved our expertise in key sectors in which we operate, such as

construction, stormwater management, urban green areas and landscaping, always making us a reliable and efficient partner.

Geoplast products are present all over the world thanks to a wide network of distributors, also including subsidiaries in South Africa and the USA.



# CONSULTING

Geoplast offers a full range of services to support the design community to integrate innovative solutions with high technical value into their projects. An important focus is given to environmental sustainability, including through the design of customized solutions aimed at meeting specific needs. In this way we go on to support designers and contractors at all stages of the project: from defining requirements to

preparing technical documents, going through structural calculations to verifying standards compliance. We offer technical and functional support during the execution of works, carry out laboratory and “in situ” tests to verify the performance and durability of products. Our production facility, equipped with modern and automated machinery, enables us to produce high-quality products in a short period of time.





# PRODUCTION

3 

PRODUCTION FACILITIES  
ON A TOTAL AREA OF 40.000 M<sup>2</sup>

26 

HIGH TONNAGE  
INJECTION MOULDING

2 

PLASTIC WASTE  
REGENERATION LINES

over 25.000 

TONS PER YEAR OF  
PROCESSED MATERIAL





# SUSTAINABILITY

We are convinced that Environment and Industry can coexist and support each other: this has been our main motivation since the company was founded.

All our products are made of recycled plastic from post-consumer and industrial waste. What elsewhere would be considered waste material is transformed into a valuable resource and new smart applications.



# INNOVATION

The search for intelligent, sustainable and cost-effective solutions has always been our goal.

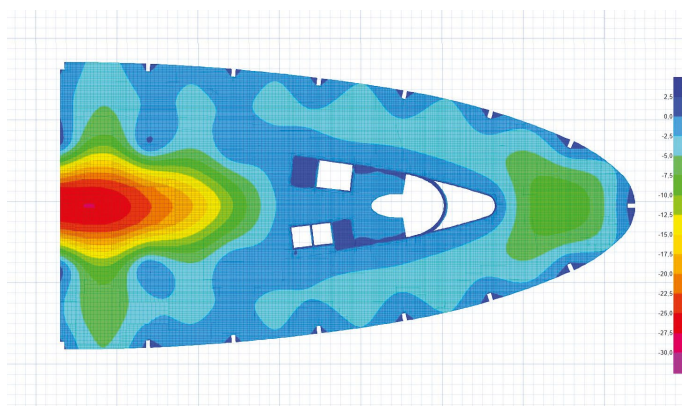
Up to today, our R&D team has registered over 40 patents and 50 trademarks worldwide.

Our philosophy is that there are always smart, sustainable and cost-effective solutions just around the corner which should be discovered.

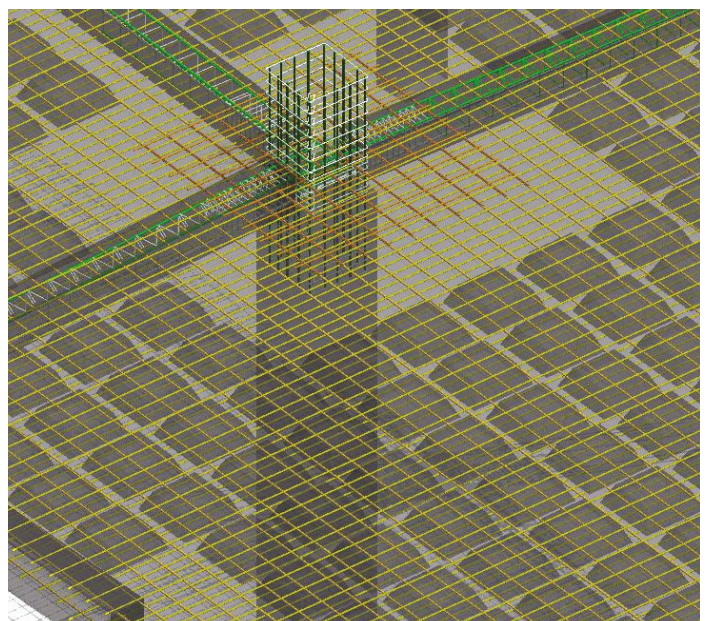
# SERVICES & CONSULTING

A team of engineers and architects is ready to provide consulting to clients, designers and contractors.

The Technical Department, in addition to incorporating Geoplast solutions into preliminary and executive projects, takes care of the innovation and Research & Development part of new products.



<b>ASSISTANCE WITH DESIGN</b> 	<b>A MULTI-DISCIPLINARY PARTNER IN THE CONSTRUCTION INDUSTRY</b> 	<b>PRODUCTS OF CERTIFIED QUALITY</b> 
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# ENGINEERING SERVICES

If you are looking for an engineering solution for your project, Geoplast is the right partner. We offer high quality engineering services in various fields, such as construction, energy, industry and environment. With our experience, knowledge and state-of-the-art equipment, we can provide innovative and customized solutions.

Our engineering services include:

## Design and consulting:

- We carry out feasibility studies preliminary and executive designs;
- we optimize costs for your projects.

## Construction management and testing:

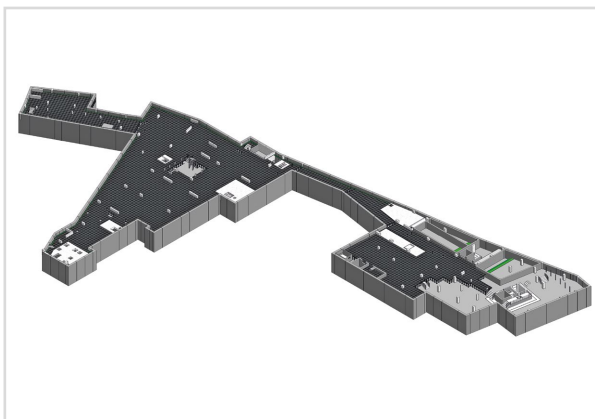
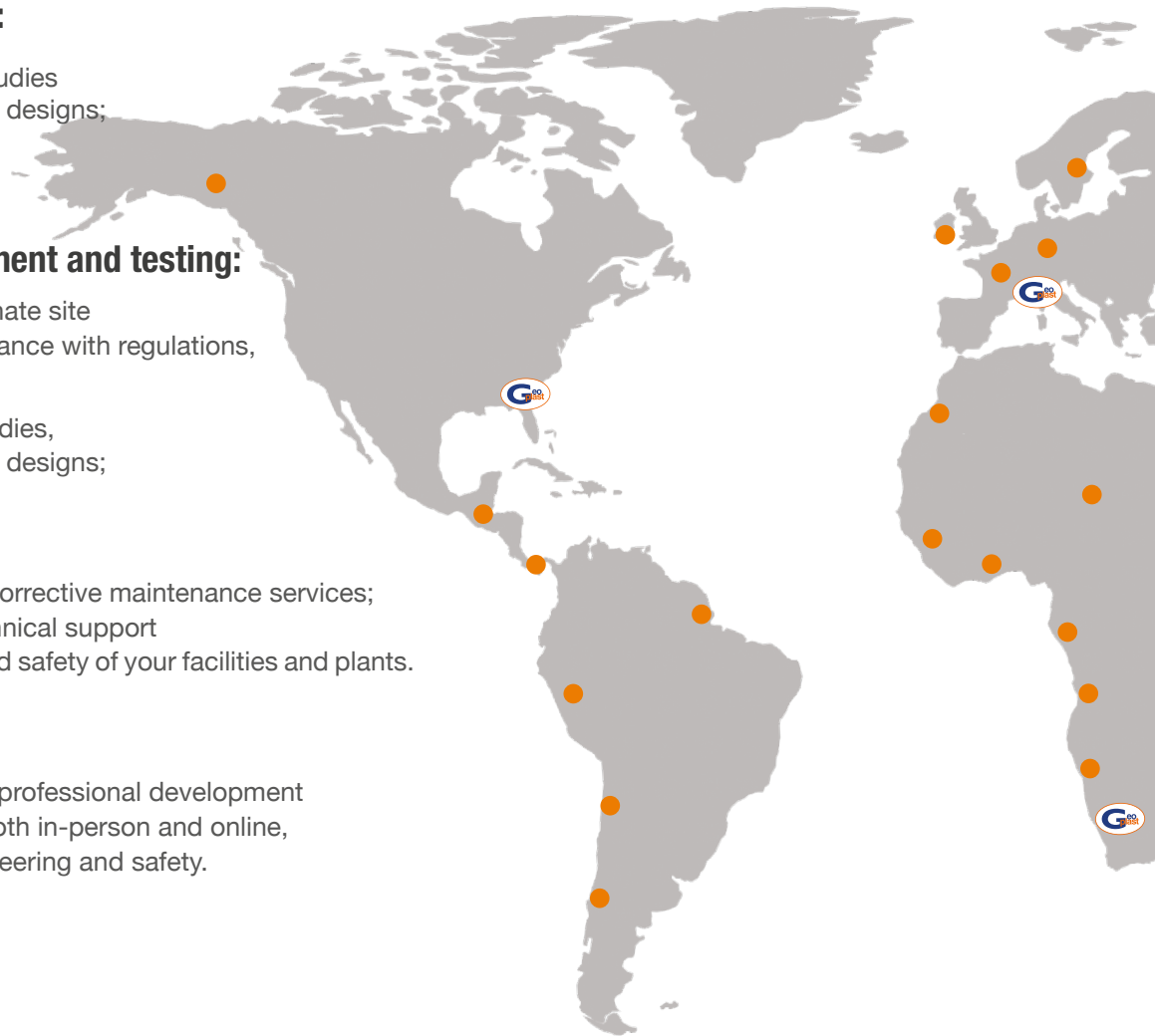
- We supervise and coordinate site activities ensuring compliance with regulations, timelines and quality;
- we carry out easibility studies, preliminary and executive designs;

## Assistance:

- We offer preventive and corrective maintenance services; as well as after-sales technical support to ensure the operation and safety of your facilities and plants.

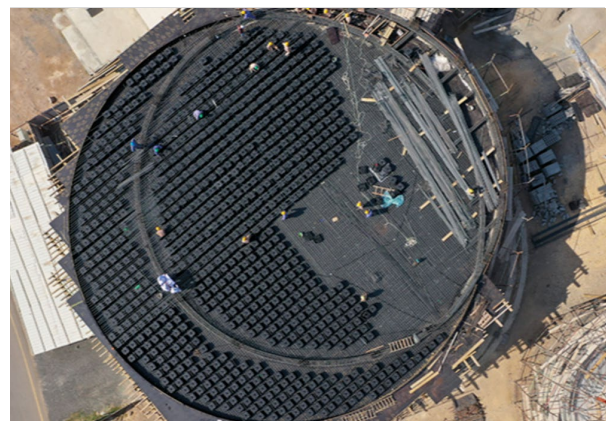
## Training and updating:

- We organize training and professional development seminars for your staff, both in-person and online, on topics related to engineering and safety.



**FOUR SEASON HOTEL,  
Cartagena, COLOMBIA**

*BIM modeling and construction drawings  
of foundations and MEP system.*



**MOSQUE MAHBOOB BIN AL RUHAL,  
Mabela, OMAN**

*Design of the slab and FEM model.*



# GEOPLAST NETWORK

With our network of distributors, we are present in more than 60 countries and we are ready to assist you in any design stage and in any field such as residential, commercial and industrial buildings, bridges, viaducts and special ad hoc products for different needs.



**EXTENSION OUEST - AIRPORT DE LA REUNION**  
**La Reunion, ÎLE DE LA REUNION**  
*Design of the slab and FEM model.*



**PACIFIC CENTER PANAMA, PANAMA**  
*Design of the foundation slab and details.*



**COMMERCIAL-RESIDENTIAL BUILDING**  
**St. Cross Square - Tivoli, ITALY**  
*Complete building and slab design.*



**KERISPER BRIDGE,**  
**La Trinité-Sur-Mer, FRANCE**  
*Detailed design for columns renovation.*



An aerial perspective of a modern, multi-story building with a complex, angular design. The building features large sections of green roofs, including a flat roof on the main wing and a sloped roof on a central section. A central courtyard is also green. The building has large windows and a prominent entrance area with a ramp. A parking lot with several cars is visible in the foreground, and a road with trees runs along the bottom right. The background shows more greenery and trees.

## SLABS

Lightening the building structure improves seismic response and reduces the consumption of concrete and steel. Geoplast slab systems are very quick to install both one-way and two-way slabs.

## FONDATION

Structural infill systems for projects of any size that can provide maximum versatility of use in multiple applications, from foundations, to access ramps, to steps.

## FORMWORK

Modular elements allow countless combinations to shape any type of structure. Reusable again and again, they replace wood and steel, drastically reducing construction time due to their ease of use and light weight.



An aerial perspective of a sustainable urban development. In the upper left, a large, dark, rectangular water storage basin is integrated into a parking lot, with a blue stream of water flowing from it. To the left of the basin is a modern building with a flat green roof. In the center, a large parking lot with several cars is visible. To the right of the parking lot is a large, dense cluster of trees with bright yellow foliage. In the lower left, another building with a green roof is shown, surrounded by more trees and a paved area. The overall scene depicts a blend of urban infrastructure and nature.

## WATER

Systems to make storage and drainage basins suitable for any kind of terrain and capable of withstanding vehicular traffic up to very high load classes.

## GREEN

High-strength solutions for creating parking and transit areas for motor vehicles and heavy vehicles, systems for vertical hanging green and for protecting the root system of trees in urban settings.

## RESEARCH AND DEVELOPMENT

Customized solutions for specific needs: for slabs, formwork, foundations, water and green. The development process from feasibility study to executive feasibility with field testing is followed.



# TECHNICAL ADVICE

## OUR EXPERIENCE FOR YOUR PROJECT

Geoplast's Technical Staff is constantly available to develop optimized solutions for any project, from the simplest to the most ambitious. Based on the study of the project's requirements and performance parameters, feasibility analyses are carried out to identify the most suitable solution. We can elaborate a technical-economic analysis and follow the design from the preliminary to the executive phase, up to on-site assistance.

**START**

INVOLVE US AT ANY STAGE OF YOUR PROJECT



**DESIGN REQUIREMENTS**

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**FEASIBILITY STUDIES**

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**SOLUTION IDENTIFICATION**

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**ANALYSIS**

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**PRELIMINARY DESIGN**

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**FINAL DESIGN**

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**ON-SITE ASSISTANCE**

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**RESULT**

MORE SUSTAINABLE AND PROFITABLE PROJECT

# RESEARCH DEVELOPMENT

## OUR KNOW HOW FOR YOUR INNOVATION

Our Technical Staff can design customized solutions for your needs. The new product development process involves feasibility analysis based on your requirements. We study a prototype on which the necessary analysis and tests are performed to realized the new product.

### DATA COLLECTION

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### FEASIBILITY STUDY

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### DESIGN

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### FEM ANALYSIS

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### STANDARDS DEFINITION AND TESTING

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### MOLD MAKING

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### PROTOTYPING

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### TEST

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### PRODUCT VALIDATION

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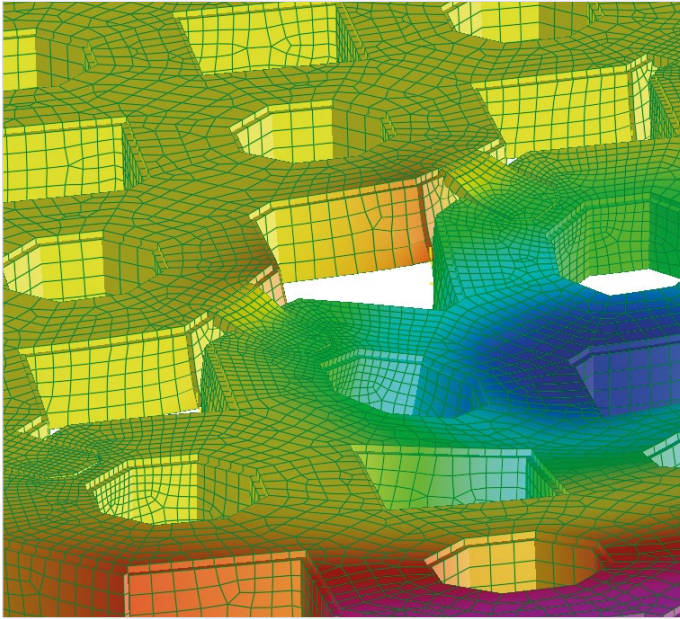


## DOCUMENTATION RELEASE

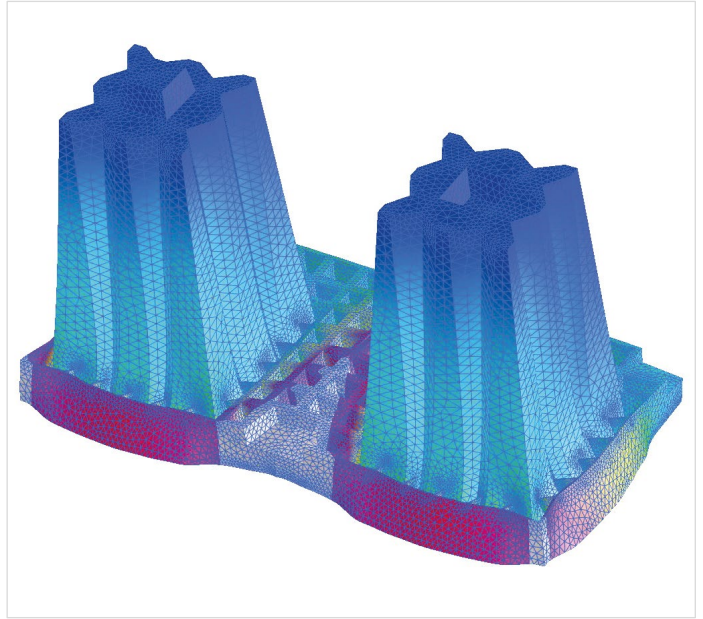


# ENGINEERING

We offer a service for the development of innovative products, designed and manufactured ad hoc for particular requirements. The product development process starts from a specific design idea suitable to meet the requirements thorough feasibility study, FEM analysis and calculations, to verify the response in terms of performance. The feasibility analysis also goes into aspects related to the industrialization of the product through the use of injection molding. A key part of this development is the execution of field testing to validate what is predicted by the calculation model.

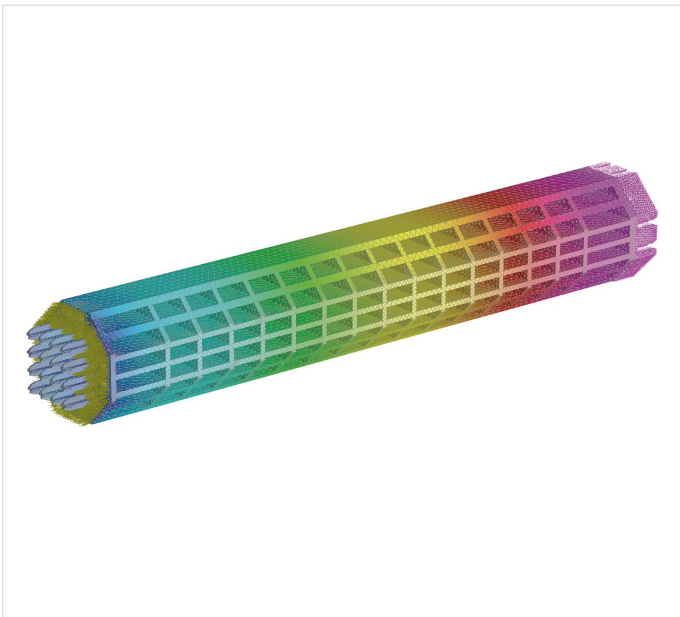


*Deformation analysis of the Geocross FEM model*



*Deformation analysis of the Aquabox FEM model*

Our company keeps pace with technological innovation and new market needs. The aim is to increase the flexibility and efficiency of processes to meet every customer need in terms of innovation and competitiveness. New products are designed to best meet every need while improving and containing costs.



*Deformation analysis of new product FEM model*



*Matrix feasibility model*



# GEOPLAST TESTROOM

We have a laboratory to carry out verification tests on the manufactured product. For selected products, the tests required for certifications are also carried out by following the necessary procedures.

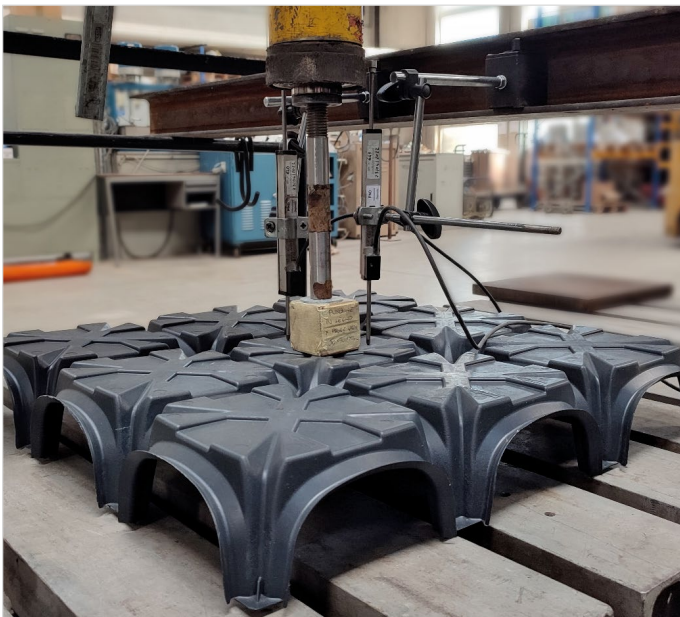


*Testing laboratory*

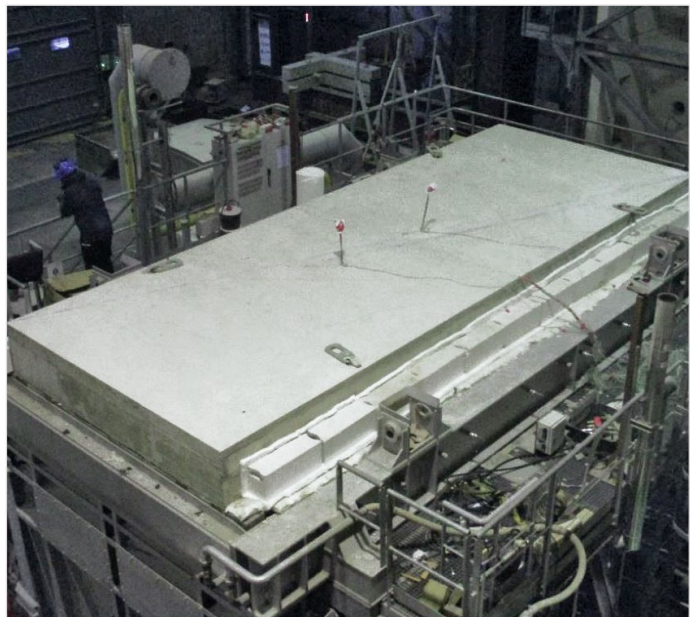


*Aquabox load test concrete specimens*

Geoplast products undergo various tests to test different characteristics: from compressive strength to fire resistance. The tests comply with prescribed regulatory protocols.



*Load test Module*

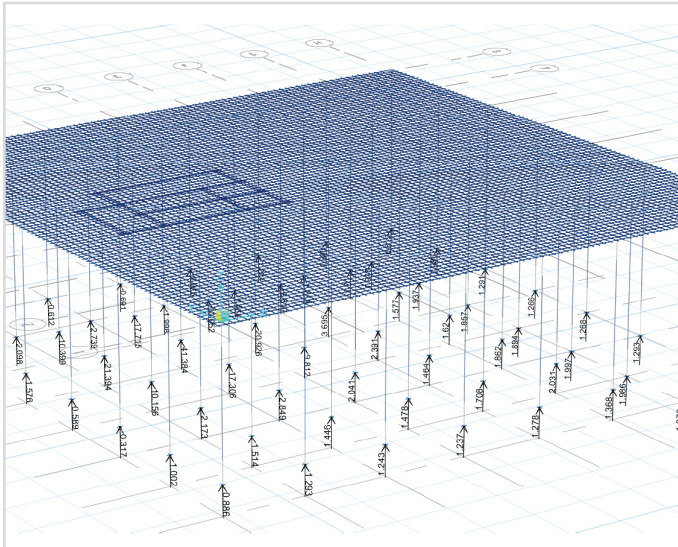


*Fire test*

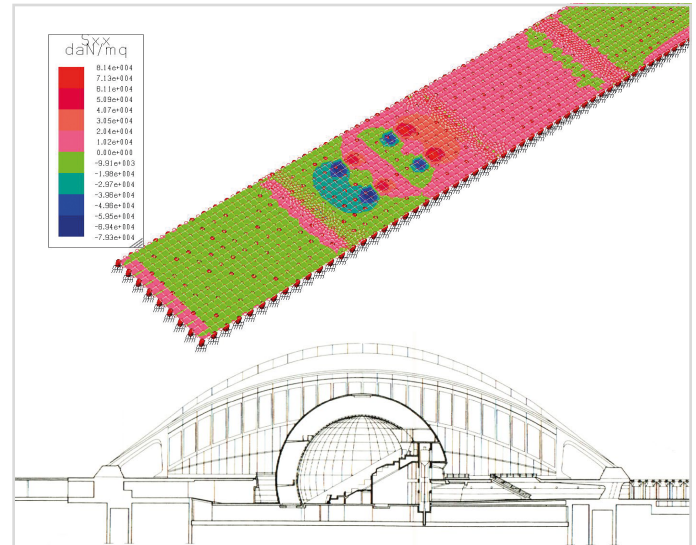


# SUPPORT SERVICES: FOUNDATIONS

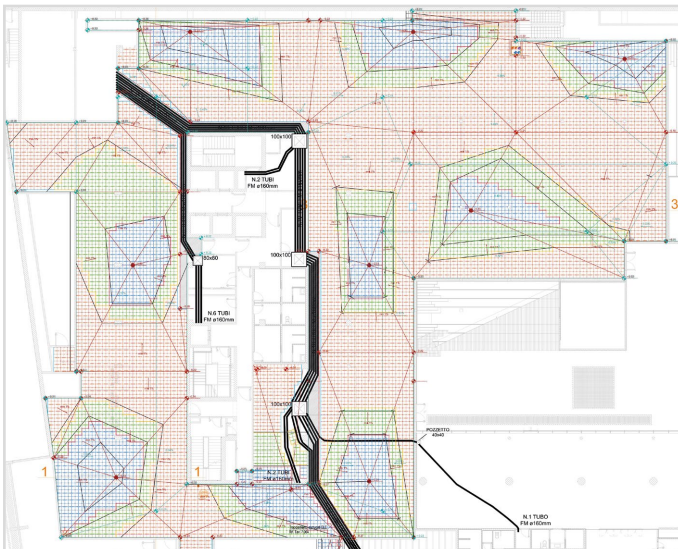
The Modulo, Multimodulo and New Elevator product range offers a wide spectrum of technical-application solutions: crawl space, ventilated floors, technical floors for plant passage.



Computational model, Pacific Center, Panama



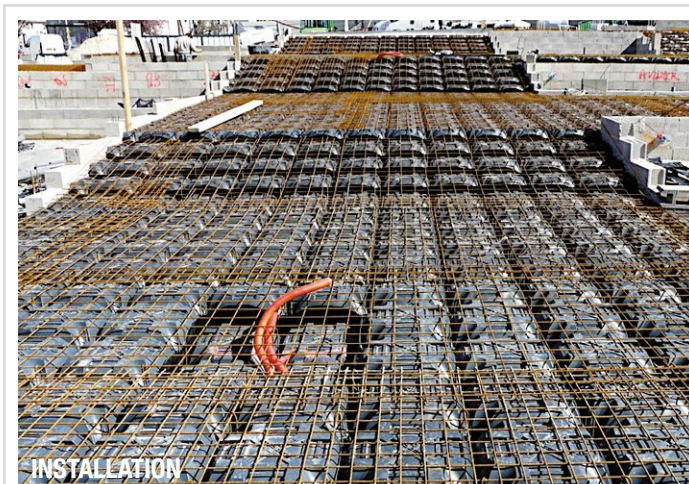
FEM analysis, Elevator for Expo 2020, Dubai



Modulo installation plan for a building in Milan, Italy



Modulo on-site installation



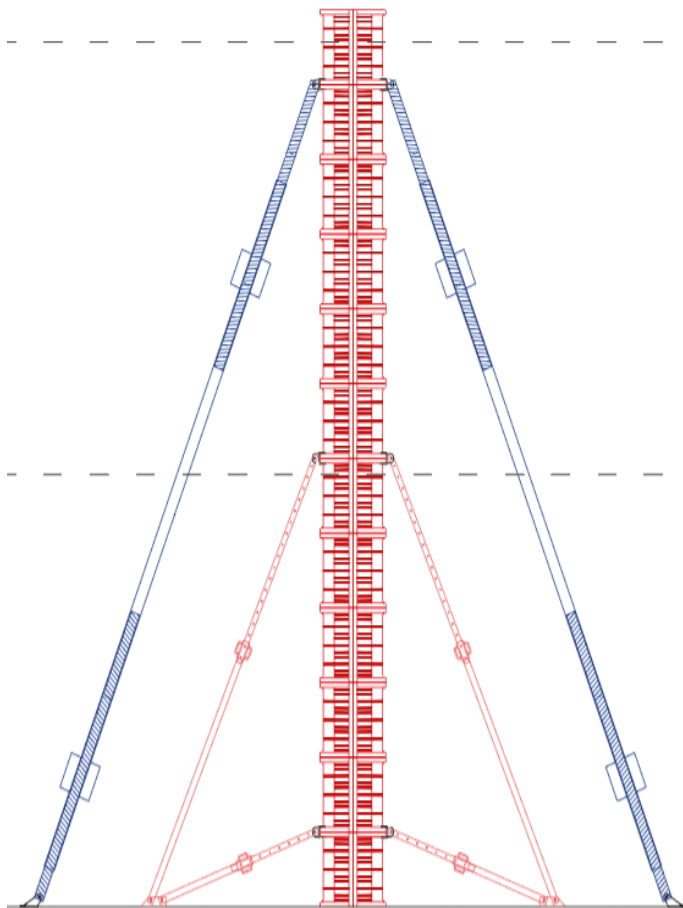
Elevetor jobsite for Gare de Sarchelle, France



# FORMWORKS

We are globally known for our technopolymer formwork.

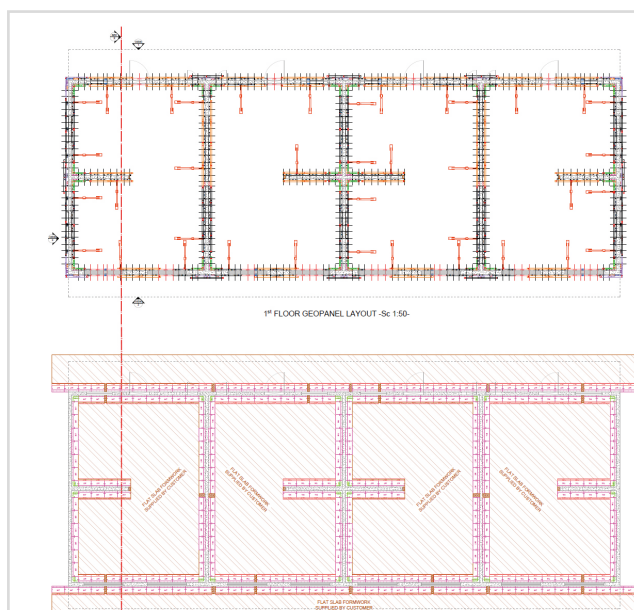
To appreciate its full potential and maximize all the application and economic benefits it can give, we provide comprehensive technical support.



Formwork system diagram

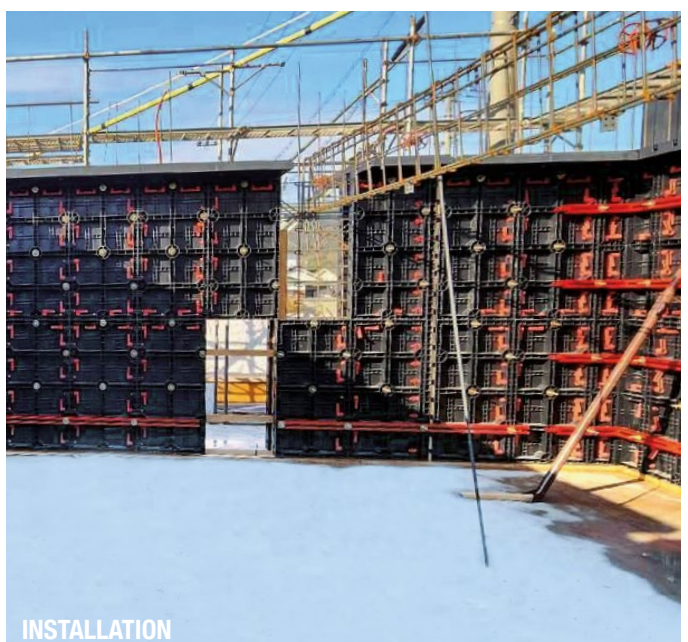


Geotub construction site for railway footbridge  
Aarsleff, Denmark



PROJECT

Residential building, Japan

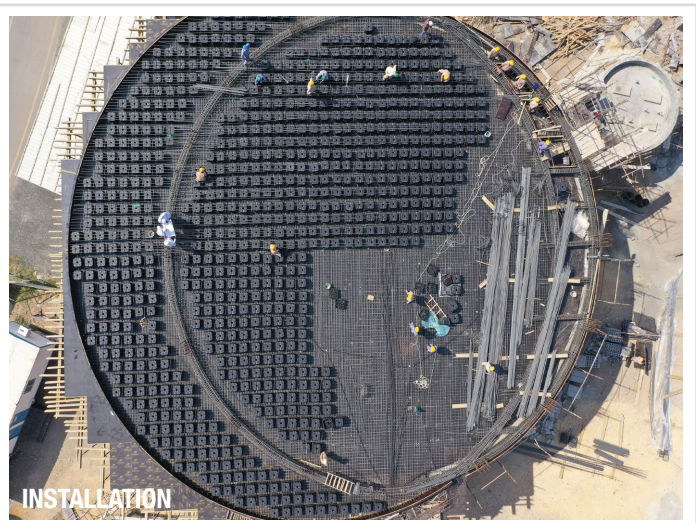
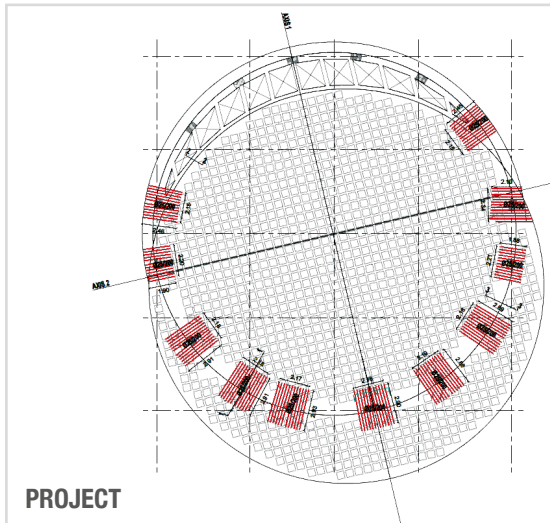


INSTALLATION

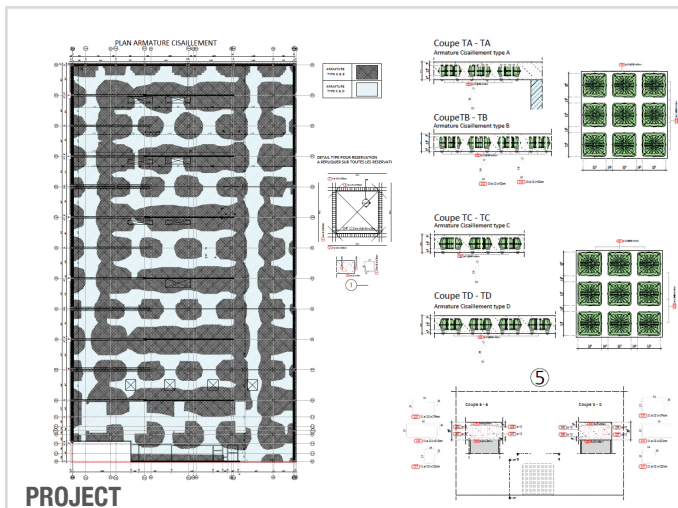


# SLABS

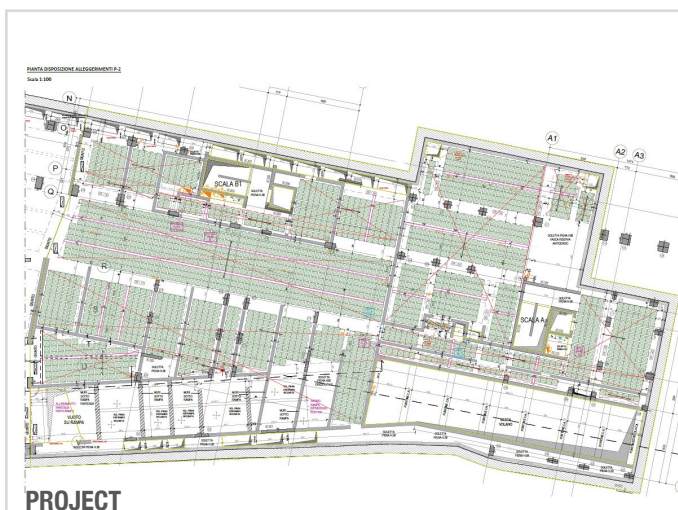
Each of these solutions provides maximum performance and savings based on careful design. Our skilled technicians put their many years of experience at the customer's disposal.



*Mahboob Mahboob Bin Al Ruhal, Oman*



*Airport de la Réunion, Île de la Réunion*

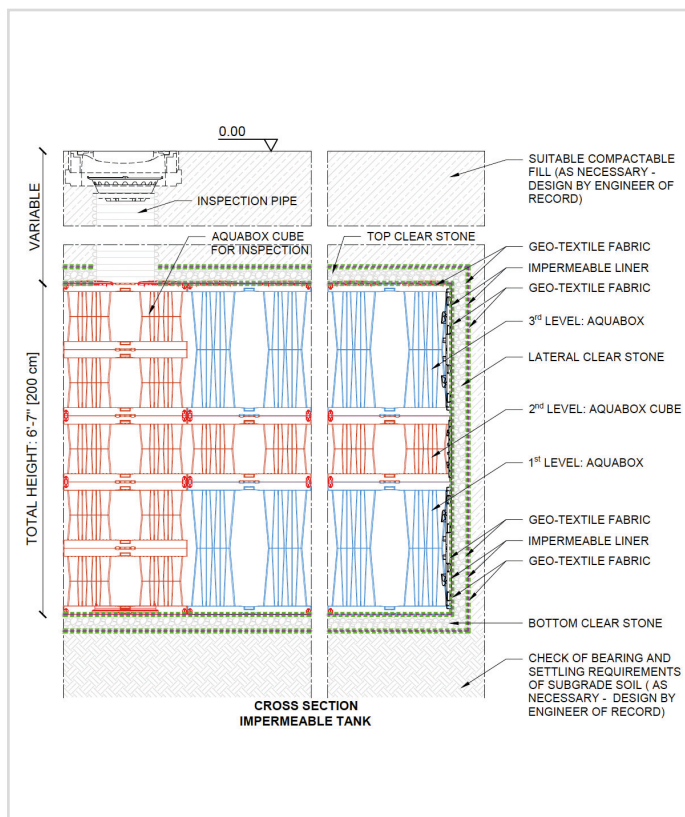


*Multi-story building in Milan, Italy*



# STORMWATER MANAGEMENT

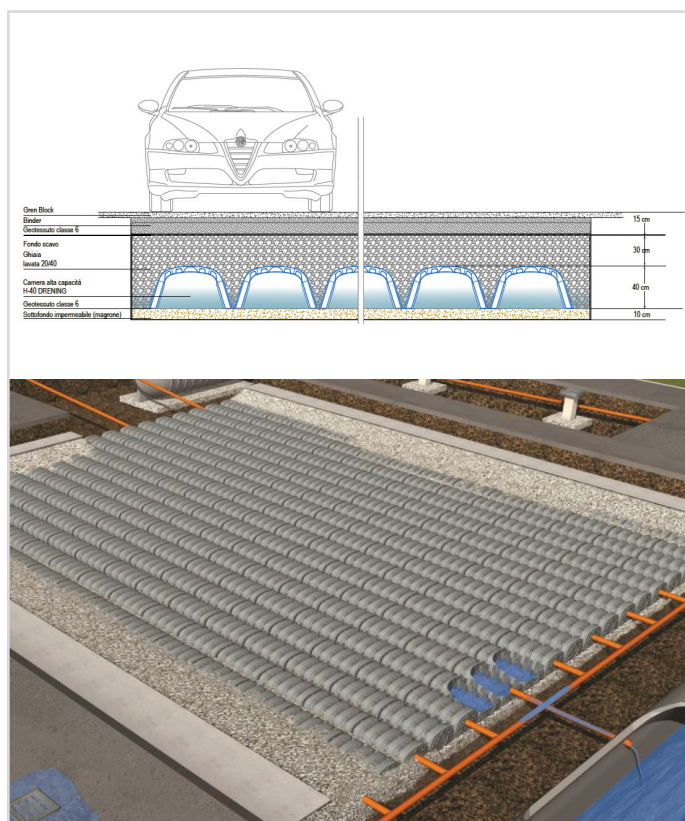
Our technical staff provides assistance in the design of dispersion or storage basins based on the performance requirements of the work, soil characteristics, rainfall in the area, and current regulations.



*Aquabox type tank stratigraphy*



*Aquabox assembly*



*Draining tank project*



*General Draining Shipyard of Marchesini Group, France*

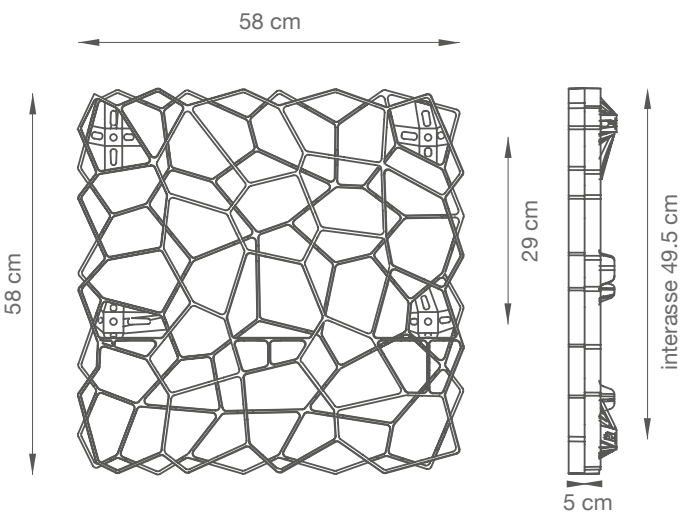


# URBAN GREEN

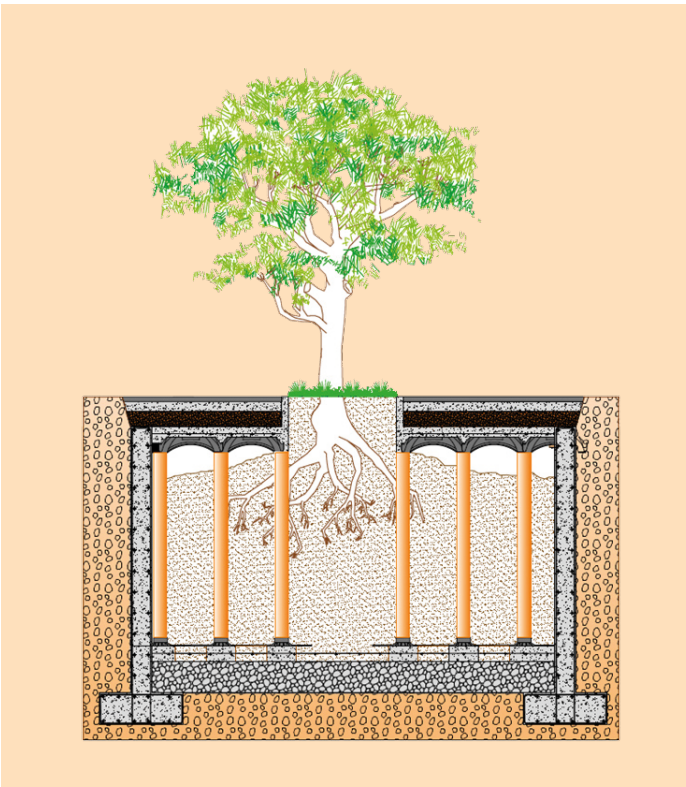
The successful outcome of each implementation is based on a multidisciplinary approach, capable of properly integrating technical-architectural design choices with agronomic aspects for the maintenance and development of greenery in urban settings. Our technical staff, thanks to a well-established experience in the field, has developed the necessary knowledge to successfully manage these kinds of issues.



Green roof stratigraphy



Wall-Y vertical wall grid



Elevator Root Section

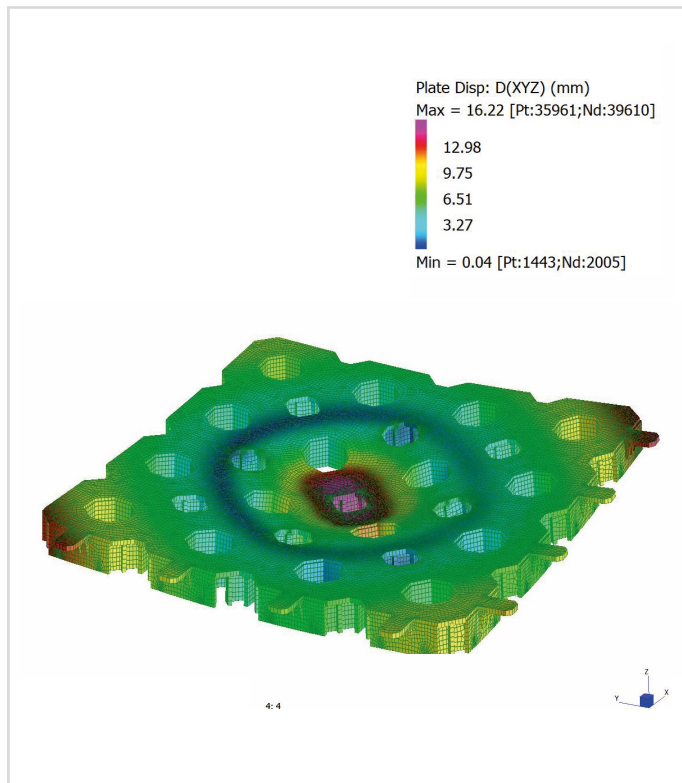


Laying system Complete



# CUSTOMER SERVICE RESEARCH AND DEVELOPMENT

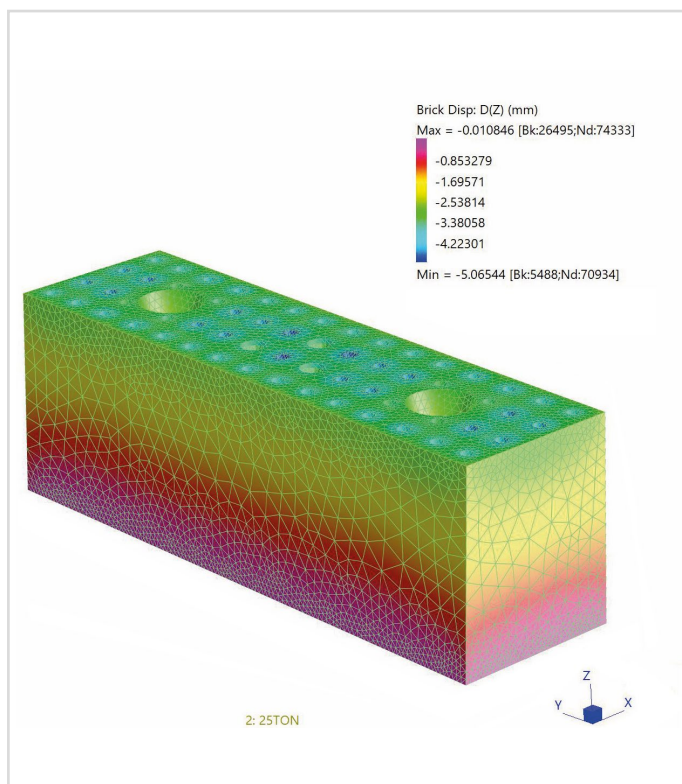
Geoplast can provide complete documentation for each of its catalog products:



*Development of a new terrain grid*



*In situ testing of a new soil grid*



*Development of a high-strength polypropylene element*



*Strength test of the new polypropylene element*





# Geoplast Consulting

for sustainable construction

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