

A photograph of a soccer player's legs and a Molten soccer ball on a green field. The player is wearing black shorts and white socks with black stripes. The ball is white with red and green patterns and the Molten logo. The background is a blurred green field.

PRO STADIUM

by ECO GARDEN CONSTRUCT

**Performance at
stadium level.**

**Professionalism at
team level.**

www.prostadium.com

Performance at stadium level.

Professionalism at team level.

About us

PRO STADIUM is a specialized brand of the Eco Garden Construct Group, exclusively dedicated to complete solutions for sports arenas and multisport fields, regardless of surface or level of competition.

With an expertise consolidated over time and sustained by state-of-the-art technology, **PRO STADIUM** offers comprehensive services from design, to execution and professional maintenance of sports fields.

From stadiums, sports arenas, training grounds or recreational facilities, **PRO STADIUM** delivers the quality standards of major European arenas right here in Romania.

We are more than a supplier - we are the trusted partner for clubs, federations, authorities and developers looking to invest in sport, sustainability and performance.



Vision

PRO STADIUM by ECO GARDEN CONSTRUCT brings the vision of sports surfaces that meet the highest European standards - from design to maintenance. We build performance, not just turf.

Mission

PRO STADIUM by ECO GARDEN CONSTRUCT's mission is to provide complete and sustainable solutions for sports arenas, combining technical expertise, innovation and passion for sport to create surfaces that support performance, safety and sustainability at the highest level.



Customized solutions for



Stadiums and sport venues



Sport centers



Multisport grounds



Multisport halls



Recreational centers

Partners



UNIVERSITATEA BABES-BOLYAI
BABES-BOLYAI TUDOMÁNYEGYETEM
BABES-BOLYAI UNIVERSITÄT
BABES-BOLYAI UNIVERSITY
TRADITIO ET EXCELLENTIA



School sport grounds



Golf courses



Tennis courts



Horse riding centers



Sport fields and multisport fields planning and design

Sport grounds and multisport fields design at national and international standards



Designing sports fields is a complex, multidisciplinary process that involves technical, athletic, and environmental expertise to create durable, high-performance playing surfaces that meet national and international standards (FIFA, UEFA, ITF, World Rugby, etc.).

01

Preliminary Study and Site Analysis

- Topographical, geotechnical, and climatic studies.
- Identifying client needs.

02

Selection of Turf Type

- Natural turf: ideal for professional level sports.
- Hybrid turf: combines natural and synthetic for high durability.
- Artificial turf: suitable for heavy use and low maintenance.

03

Technical Infrastructure Design

- Base layers, drainage, irrigation, underground heating, maintenance access.

04

Playing Surface and Equipment Design

- Official dimensions, lighting, goals, nets, benches, scoreboards.

05

3D Modeling and Architectural Rendering

- Visual and technical simulations, integration with site context.

06

Delivery of Complete Documentation

- Execution plans, cost estimates, authorization support.

End result:
a high-performance, safe, and durable sports field ready for installation and maintenance.



Sports Fields Construction

Expertise in sports field construction since 2011

Designing and building sports fields is a complex process, tailored to the type of turf—natural, hybrid, or synthetic—always aimed at athletic performance, user safety, and long-term durability.

All turf types must comply with standards such as FIFA Quality Programme, UEFA, FIH (for hockey), ITF (for tennis), World Rugby, etc. These standards cover:

- Flatness and shock absorption
- Drainage capacity
- Ball behavior and athlete traction
- Durability against wear and weather conditions



Natural Turf

01 Preliminary study and site preparation

- Soil analysis (texture, pH, chemical composition).
- Clearing and levelling of the site.
- Shaping the base layer for natural drainage.

02 Underground installations

- Professional drainage system with perforated pipes and geotextile.
- Automated irrigation with retractable sprinklers.
- Optional sub-surface heating system.

03 Vegetation layer

- Laying the growth medium (sand, compost, fertile soil)
- Seeding with professional seed mixes.
- Installation of turf rolls (optional for rapid installation).

04 Initial maintenance

- Watering, fertilizing, regular mowing.
- Aeration, topdressing, weed control.

Hybrid Turf (Natural + Synthetic)

01 Base layer preparation

- Soil analysis (texture, pH, chemical composition).
- Clearing and levelling of the site.
- Shaping the base layer for natural drainage.

02 Hybrid system installation

- Injection of synthetic fibers into the growth medium.
- Integration with natural turf via seeding or rolls.

03 Advantages

- Enhanced durability under heavy traffic.
- Excellent drainage and regeneration capacity.

04 Specific maintenance

- Combining natural turf care with synthetic material upkeep (brushing, decompaction).



Artificial Turf

01 Foundation layer preparation

- Excavation and compaction.
- Layer of crushed stone and/or asphalt as required.
- Drainage system beneath the artificial surface.

02 Artificial turf installation

- Laying and bonding synthetic turf rolls.
- Infill with silica sand and rubber granules.

03 Finishes and equipment

- Sport field markings – paint or inlays.
- Installation of goals, benches, and boards.

04 Maintenance

- Removal of debris.
- Top-up of infill.

Sport fields maintenance

Excellence in sports grounds maintenance.
The first step to performance.

Proper maintenance of sports fields is essential to ensure performance, safety, and durability. Each turf type – natural, hybrid, or artificial – requires specific maintenance procedures adapted to its unique characteristics.



Natural Grass

01 Regular mowing

- Frequency: 2-3 times per week during the growing season.
- Cutting height adapted to the sport (football, rugby, etc.).

02 Irrigation

- Automated systems adjusted based on rainfall and temperature.
- Avoiding overwatering to prevent fungal diseases.

03 Fertilization

- Scheduled throughout the year with macro and micronutrient.
- Granular and liquid fertilizers applied with precision.

04 Aeration and decompaction

- Use of Verti-Drain or similar machines.
- Improves soil drainage and oxygenation.

05 Topdressing

- Application of sand or sand-based mixes for leveling.
- Promotes regeneration and reduces compaction.

06 Pest and disease control

- Monitoring for pests and pathogens.
- Application of biological or chemical treatments.

07 Overseeding and regeneration

- Repairing damaged areas with overseeding or localized replacement.

General Recommendations

- Develop an annual maintenance plan for each field.
- Use professional equipment and trained personnel.
- Adjust operations based on season and field usage.
- Follow standards set by FIFA, UEFA, World Rugby, etc. for certification and safety.



Hybrid Turf

Hybrid turf maintenance combines practices for natural grass with additional care for synthetic components:

01 Mowing, irrigation, fertilization – same as for natural turf

02 Aeration and brushing

- Mechanical brushing to maintain the upright position of synthetic fibers.
- Periodic decompaction of the rootzone.

03 Wear control

- Monitoring wear of the synthetic injection layer.
- Localized repairs of worn-out areas.

04 Debris and leaf removal

- Prevents mold growth and maintains cleanliness.

Artificial Turf

01 Mechanical brushing

- Restores fiber verticality.
- Redistributes infill materials (rubber, sand) evenly.

02 Cleaning

- Removal of leaves, litter, organic debris.
- Occasional cleaning with specialized solutions.

03 Infill management

- Top-up of rubber granules and sand as needed.
- Prevents compaction and enhances performance.

04 Line and joint repairs

- Re-gluing or replacing worn-out line markings.

05 Sanitization

- Periodic disinfection, especially in high-use zones.

Covermaster

Complete outdoor and indoor protection solutions

Covermaster® is a global leader in the development and supply of specialized protection systems for sports surfaces. Its products are widely used in top stadiums, multi-purpose arenas, and training facilities, offering effective protection for natural, artificial, and hybrid turf against heavy traffic, harsh weather conditions, and non-sporting events.



Benefits of Using Covermaster® Systems:

- Extends the life of turf.
- Reduces repair and recovery costs.
- Flexibility in scheduling events without damaging the playing surface.
- Fast, easy installation and reusable systems.
- Compatible with all types of turf.



Available Technical Solutions



StadCover™

StadCover™ – Protection System for Natural Grass

Made from high-compression and heavy-traffic-resistant materials (equipment, stage setup, crowds). Allows air and water circulation, reducing the risk of turf suffocation. Non-slip surface and modular, easy-to-install panels. Ideal for sports and cultural events held on natural turf.

Raincover™

Waterproof Cover for Turf

Flexible and highly durable PVC membrane, available in multiple thicknesses. Protects against water accumulation, mud, and topsoil damage. Ensures matches or training can proceed safely even during heavy rain.



ArmorDeck™ and Terratrak™

Modular Flooring Systems

High-density polyethylene (HDPE) panels with fast interlocking system. Distributes weight evenly, preventing soil compaction. Suitable for stages, tents, chairs, access platforms. Available for pedestrian or heavy-duty traffic use.

EverGreen™ Turf Blankets

Thermal Covers for Regeneration

Translucent geotextile material that retains solar heat and promotes photosynthesis. Protects against frost and accelerates turf recovery during colder seasons. Recommended for stadiums, golf courses, and training fields.



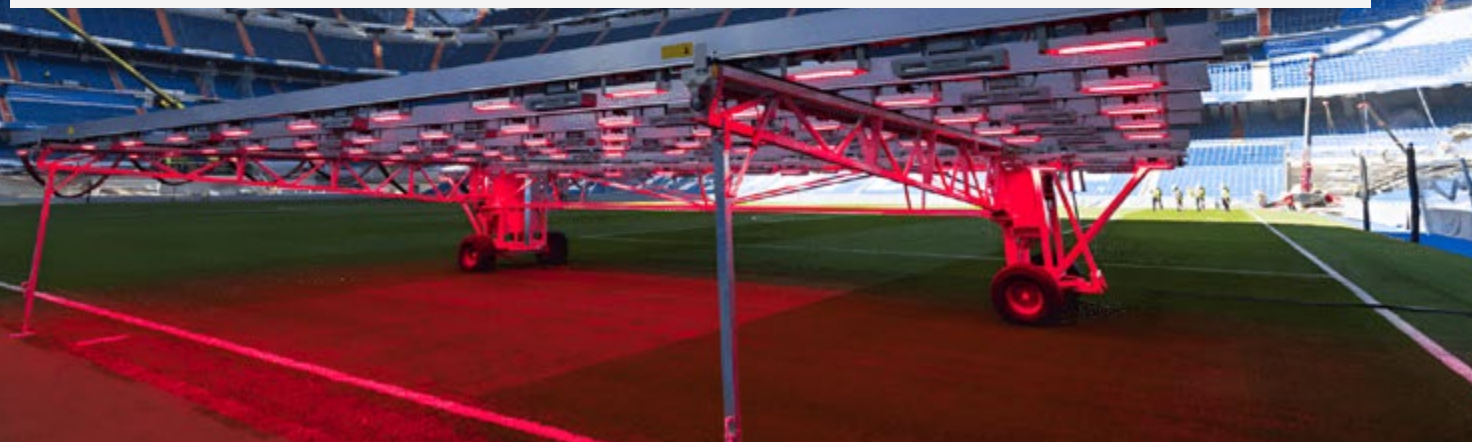
Rhenac Sports LED

Innovative lighting and maintenance solutions.

Rhenac GreenTec AG, through its Rhenac LED Systems brand, delivers advanced



technology platforms for maintaining natural turf on stadiums and sports fields, utilizing energy-efficient **LED systems** engineered to stimulate plant growth under precisely controlled conditions.



LED-Based Photobiology Technology

Rhenac's LED fixtures are built on photobiological research, providing the **optimal light spectrum** required for photosynthesis and turf regeneration. Unlike traditional HPS lamps, Rhenac LEDs allow dynamic adjustment of **color spectrum** (including red, blue and UV), light intensity and exposure duration to match each growth phase of the grass.



Product Range

Rhenac Stadium Grass Grow Lighting Systems

- Models SGL LED-S (Small), M (Medium) and L (Large).
- Modular LED arrays for uniform light distribution.
- Central controllers with built-in environmental sensors.

Rhenac UV-C Turf Care System

- Surface-mounted UV-C modules for efficient fungal pathogen reduction.
- Minimizes chemical fungicide usage.

R-BLIZZARD - Intensive Mobile Rehabilitation Unit

- Combined LED + IR + UV-C + ventilation + misting systems.
- Compact and maneuverable for spot treatments.



Integrated Turf-Regeneration Platforms

Rhenac offers **mobile, multifunctional units** combining:

- Photosynthetic LED lighting.
- Infrared modules for accelerated surface drying.
- Forced-air ventilation for on-site aeration.
- Fine-mist humidification.
- UV-C disinfection to control fungal pathogens.

Ideal for **natural or hybrid** pitches, especially:

- Indoor or covered stadiums.
- Shaded zones with poor sunlight.
- Post-event surface rehabilitation.
- Off-season (winter) maintenance.

Technical Benefits

- **Dynamically tunable spectrum** for seeding, growth and recovery phases.
- **Fully digital control** of light, humidity and temperature parameters.
- **40-60% lower energy consumption** compared to conventional HPS solutions.
- **Zero unwanted heat emissions**, preventing thermal stress on the turf.
- **IoT-ready monitoring & automation** via integrated software platform.



Reference Projects:

- Allianz Arena - Munich
- Signal Iduna Park - Dortmund
- Volksparkstadion - Hamburg
- RheinEnergieStadion - Cologne

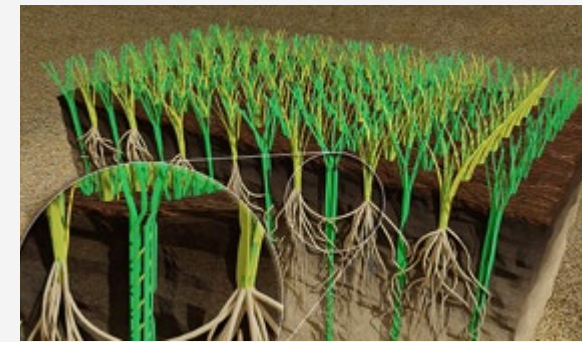
Rhenac LED is an approved technical partner of the German Football League (DFL) and a preferred supplier for top-tier clubs in the Bundesliga, Premier League and MLS.

GrassMax Systems

Professional solutions for hybrid turf pitches

GrassMax Systems is a global leader in hybrid turf technology, specializing in the design, construction, and maintenance of high-performance sports fields. Their innovative solutions combine natural

grass with synthetic fibers to enhance durability, playability, and sustainability. PRO STADIUM is the authorized partner of GrassMax Systems in Romania.



GrassMax Systems offers end-to-end solutions for sports field construction.

Notable Projects

GrassMax Systems has an impressive portfolio of projects worldwide, including:

- **Lusail Stadium, Qatar** – Host of the 2022 FIFA World Cup Final.
- **Parc des Princes, Paris** – Home stadium of Paris Saint-Germain.
- **Maracanã, Brazil** – Iconic venue in Rio de Janeiro.
- **Allianz Riviera, France** – multifunctional stadium with GrassMax hybrid system.



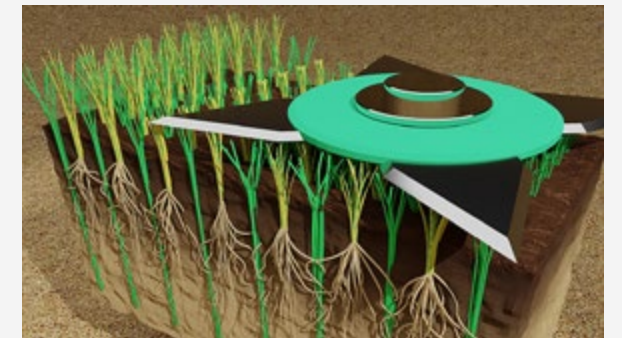
Advantages of GrassMax systems

- Intensive use without loss of surface quality.
- Exceptional resistance to mechanical wear.
- Compatibility with all types of sports (football, rugby, golf, etc.).
- Adaptability to various soil and climate types.
- Possibility of accelerated regeneration of natural turf.

Technical solutions available

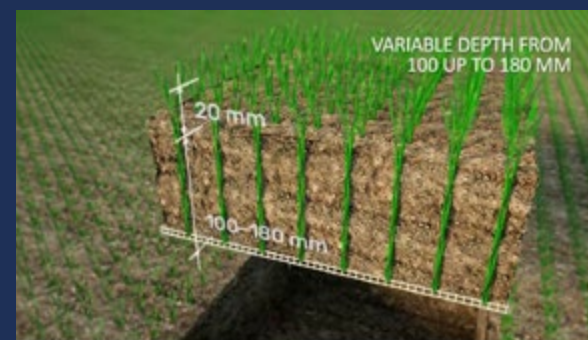
Field Construction Services:

- 01 Design and Planning** – field designs that meet specific client requirements.
- 02 Subbase Preparation** – drainage, irrigation, heating, and aeration systems.
- 03 Surface Installation** – natural grass, hybrid systems, or synthetic turf.
- 04 Maintenance** – support and maintenance services to preserve field quality and performance.



Global Presence and Partnerships

With over 30 years of combined experience, GrassMax Systems has completed more than 750 installations across the globe. They collaborate with leading sports organizations, including FIFA, UEFA, and the NFL, to deliver top-tier playing surface.



Hybrid Stitching Technology

At the core of GrassMax's offerings is their hybrid stitching technique, which involves injecting synthetic fibers into natural grass surfaces to reinforce the root zone and stabilize the playing field. This method significantly increases the field's resistance to wear and tear, allowing for up to four times more usage compared to traditional natural grass fields.

Key Features:

- **Fiber Composition:** GrassMax Duo fibers are specially developed block-copolymers combining polypropylene (PP) and polyethylene (PE), featuring both straight and texturized filaments for optimal performance.
- **Stitching Depth:** Fibers are stitched up to 18 cm deep into the subbase, aligning with the natural root growth of grass, ensuring stability and resilience.
- **Density:** Approximately 2,500 stitches per square meter, providing uniform reinforcement across the field.
- **Durability:** The hybrid system is designed to last a minimum of 10 years with proper maintenance.

MaxAmaze

Smart technical solutions for sport

Maxamaze provides cutting-edge software and integrated technology solutions for managing sports venues, event



infrastructure, and complex facilities. With a modular approach, Maxamaze empowers operators to control, optimize, and enhance every operational aspect of modern stadiums, arenas, and public spaces through a centralized digital platform



Available technical solutions



Professional LED lighting for sports arenas

- **High energy efficiency:** MaxAmaze systems deliver superior lumens-per-watt compared to traditional HPS

fixtures, saving up to 40% on energy consumption.

- **Optimized color spectrum:** LEDs are calibrated to render team colors faithfully and ensure perfect visibility for both spectators and TV broadcasts.
- **IP65+ protection rating:** dust- and water-resistant, suitable for outdoor use in all weather conditions.
- **DMX control & IoT-ready:** allows dynamic intensity adjustments and automated show scenarios synchronized with match schedules or halftime shows.

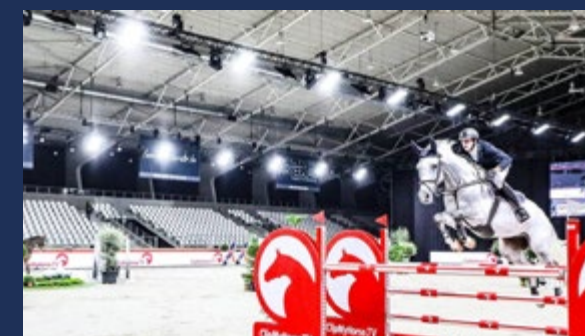


Dynamic LED boarding

- **Variable pitch panels (P4-P6):** ultra-clear visuals at medium and long distances, ideal for advertisements and informational displays.
- **Refresh rate $\geq 3,840$ Hz:** eliminates flicker in TV broadcasts, ensuring smooth images.
- **Auto-adjusted brightness:** built-in sensors adapt brightness to ambient light levels.
- **Modular & quick installation:** lightweight frames and plug-&-play couplings reduce installation and maintenance time.

Complete fan engagement

- **Synchronized light shows:** uses fixtures and LED tunnels for intros, goal celebrations, and key match moments.
- **Audio & special effects:** high-fidelity audio systems integrated with fireworks, smoke, and confetti to amplify event excitement.
- **Centralized management platform:** dedicated dashboard for operators to coordinate lighting, video boarding, and audio through a unified interface.



Competitive advantages

- **24/7 reliability:** tested in dozens of international stadiums.
- **Scalability:** easily adapts from small arenas to stadiums over 60,000 seats.
- **360° support:** consultancy, design, installation, and maintenance provided by the MaxAmaze team.

MaxAmaze stands out as a future-proof solution for smart stadiums, municipalities, and infrastructure operators aiming to digitally transform their operations while maximizing resource efficiency, fan experience, and operational control.

Palmki

Advanced solutions for real-time authentication and access

Palmki by Perfect ID is a leading provider of innovative solutions in the fields of identification, security, and access



management, offering products and services tailored to the specific needs of clients across various industries. With a strong focus on **cutting-edge technology** and **automation**, Palmki ensures efficient access control, visitor management, and seamless integration into physical or digital environments.



Palmki by Perfect ID is a trusted partner for companies looking to improve security, optimize access flows, and create fast and secure experiences for customers and employees.

Whether it's **access control in buildings, visitor management, or large events**, Palmki's solutions are versatile, efficient, and scalable, adapting to any type of organization or security need.

Biometric Access Control Systems

Palmki by Perfect ID provides advanced **biometric identification** solutions that enable secure and fast access control. The technologies used include:

- **Fingerprint Recognition:** solutions that allow the registration and validation of fingerprints for fast and personalized access.
- **Facial Recognition:** systems that use facial recognition technology to validate a person's identity, offering a non-invasive authentication method.
- **Iris Recognition:** for highly secure environments, Palmki offers iris scanning solutions, providing an additional level of security.

Card-Based Access Control Systems

Palmki offers complete solutions for **card-based access control**

- **RFID Cards and electronic tickets:** solutions for managing quick access in high-traffic areas such as **amusement parks, metro stations, or large events**.
- **Chip Cards** for **fast identification** and **enhanced security**, compatible with existing infrastructure.

Security Systems for Businesses and Institutions

Palmki provides advanced **security solutions** for protecting sensitive facilities and organizational infrastructure:

- **Integrated security alarms** with **access control systems** to prevent unauthorized access to buildings or restricted areas.
- **Video surveillance systems** (CCTV) integrated with **biometric technologies**, offering complete control over access and security.

Visitor Management Systems

Palmki solutions enable efficient **visitor management** systems, helping organizations manage the flow of people quickly and accurately

- **Custom software for pre-registering visitors:** users can input information in advance, and visitors will be identified quickly upon entry.
- **Rapid badge generation** for visitors, using **QR codes** or **RFID** technology for fast access.

Event and Conference Solutions

For event organizers, Palmki offers integrated solutions that facilitate:

- **Fast registration of participants** at events, exhibitions, or conferences, with **customized badges** and **RFID access systems**.
- **Participation control** and **monitoring of people flows** during large events.

Access Management Software and Reporting

Palmki offers **access management platforms** that allow real-time monitoring of users, generating detailed reports, and analyzing data:

- **Real-time monitoring** of people flows accessing a location.
- **Detailed reports** and analytics on visitor behavior and user activity, useful for **resource management** and **operational efficiency analysis**.

Customization and Technical Support

Palmki offers **fully customizable solutions** to meet the specific needs and requirements of each client, as well as **ongoing technical support**:

- **Professional installation** of equipment and associated software.
- **Post-sales support** and **maintenance** to ensure long-term functionality.

Goodless

Sustainable packaging solutions for public and sporting events

Goodless is a Belgian company specializing in sustainable, reusable packaging solutions for events, offices, and public spaces. Their

mission is to reduce single-use packaging waste through an integrated system that includes reusable cups, smart return bins, and automated deposit refund technology.

goodless

Available technical solutions



What does Goodless offer?

- **SmartCups:** Reusable cups with unique IDs that enable automatic deposit refunds upon return.
- **SmartBins & MaxiBins:** Intelligent bins that recognize returned cups and instantly process deposit refunds, eliminating manual handling.
- **SmartMat:** A POS-integrated system linking cup deposits to payment methods in real time, simplifying sales and returns.
- **CupDispenser:** An automatic dispenser for reusable cups, reducing reliance on single-use options.
- **Data management tools:** Real-time monitoring of sales, stock, and cup lifecycle via a centralized dashboard.

Sustainability Impact

By adopting Goodless solutions, organizations can significantly reduce plastic waste and CO₂ emissions. For example, switching to reusable materials can save up to 4 tonnes of plastic and 10 tonnes of CO₂ emissions.



About the Company

Founded in 2019, Goodless Smart Group BV is based in Sint-Niklaas, Belgium. The company partners with organizations, including Borealis, to promote reusable packaging and support a circular economy.

Portfolio

Natural turf sports field Cluj Arena



Complete replacement of Cluj Arena sports turf



**Sustainable landscaping
solutions from Vectra
Horse Club Bucharest**



Multisport field development

**Winners Sports Club &
Restaurant Design**

**Transylvania Open 2023
Partnership**



See details!



office@pro-stadium.com

+40 745 666 762

**No. 2 Aleea Stadionului,
Cluj-Napoca, Cluj county, Romania**

www.pro-stadium.com