

ENREGIS/X-Box® *field* ENREGIS/X-Box® *field plus*

Certified and cost-effective system with a high load-bearing capacity for modern sports fields gives the structural stability just below the surface.

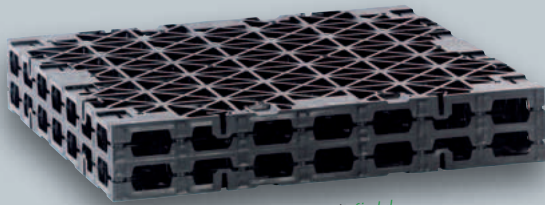


Fig. ENREGIS X-Box® 36 *field*

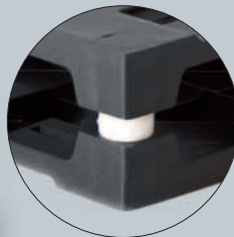
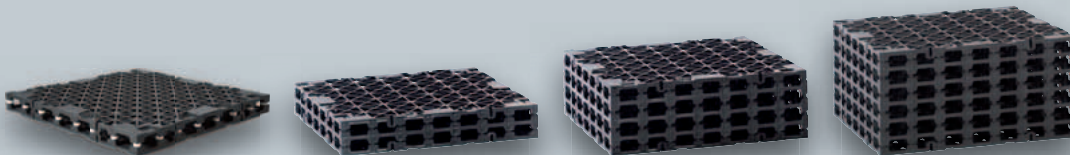


Fig. Version *field plus* (optional)



DIBt

ENREGIS/X-Box® / ENREGIS/Controlbox® System
Technically tested and proved Z-42.1-509

- › 5 advantages in 1 solution: cost-effective base course, efficient drainage system with acoustic and vibration isolation.
- › High efficiency, reduced excavation of soil, no need for extra pitch drainage or soil excavation
- › Environmentally sound and recyclable

**Water
Innovation**
MADE
IN GERMANY®





ENREGIS/X-Box® *field* ENREGIS/X-Box® *field plus*

A certified system for the use in modern construction of sport facilities and riding rings

ENREGIS/X-Box® *field* system is based on the globally successful and modern ENREGIS storm water control system.

Unlike other standardized systems, this modular system is flexible in height and provides additional strength. It was specially developed for worldwide use in building sports facilities. The lattice-structure modules are manufactured from special polypropylene (PP) according to the specification. Thus this modular system can be installed near the surface and partly replace the base course. In sports facilities, it allows high stability and flexibility at minimum soil coverage.

ENREGIS/X-Box® *field* structural element allows for a sophisticated and certified system for decentralized drainage, infiltration and retention of storm and drainage water extremely close to the surface.

Its application range includes soccer, rugby or hockey fields with natural or artificial grass, tennis courts, horse race tracks and other competition and training venues.

Especially for these applications the system is equipped with a high performance shock absorption system. Besides bearing of point loads, i.e. from horse hooves, ENREGIS/X-Box® *field plus* system also absorbs vibrations, which provides long-term relief for the joints of horses.

Installed directly under the playing surface, this ENREGIS system contributes to a higher playing comfort and fulfils its overall function even more cost-effectively.

Additional characteristics of the ENREGIS/X-Box® Series: certified statics tested by continuous exposure to 200 kN/sq.m load for 10,000 hours*; 165 columns per 1 m² ground /contact area for defined vertical load transfer and system security. The high performance plastic has excellent point load resistance and creep characteristics. Bursting strength up to 750 kN/sq.m* is certified by SGS INTRON Institute. The value depends on the construction height. It is traffic-accessible for heavy goods vehicles up to class

SLW 60 at suitable earth coverage and system structure of the sport facility. The long-term stress resilience is more than 50 years. Available heights: 150 or 250 mm, for *plus* version, 60 mm Gross volumes: 36 litre (also 54 or 90 litre, for *plus* version, 21 litre) storage coefficient about 95%.

ENREGIS systems allow three dimensional flow in all directions.

The overall system height is adaptable to the project specific requirements by 5 cm steps.

Flexible in usage: The system can be installed in the ground in individual modules or in groups (single or multiple-layers) by means of connection accessories. The likewise certified connecting accessories prevent individual system elements from vertical and horizontal displacement both during the installation and during the system use.

Water Innovation Made in Germany: The system is produced in Germany and certified by TÜV Nord Cert GmbH, Germany acc. to ISO 9001: 2008 and BS OHSAS 18001:2007.

Based on the structural design of the ENREGIS/X-Box & ENREGIS/Controlbox systems, the latter were approved by the DIBt and by the German RAL Test*. Moreover, it successfully passed the long-term stress test by Material Testing Institute (MIPA) in Leipzig*, Germany.

The system is certified for installation in sports facility construction by SGS INTRON B.V., an independent Dutch institute.

Reference projects: i.e. sports facility in Nijmegen (NL), erected in 2011 (see the photo).

German Engineering/German Production

ENREGIS/X-Box® *field* - Sizes/Volume

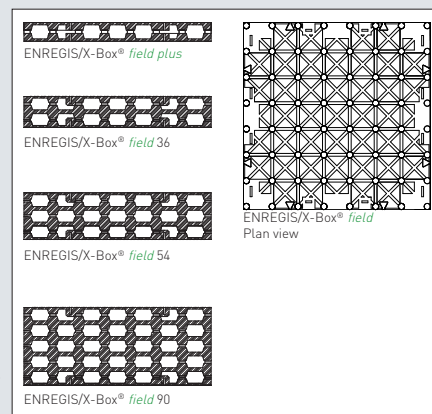
	Type 21 plus	Type 36	Type 54	Type 90
Examples				
Length	600 mm	600 mm	600 mm	600 mm
Height	60 mm	100 mm	150 mm	250 mm
Width	600 mm	600 mm	600 mm	600 mm
Weight	2.4 kg	2.8 kg	3.7 kg	5.5 kg
Weight	114 kg/m³	78 kg/m³	68 kg/m³	61 kg/m³
Volume	21 L gross	36 L gross	54 L gross	90 L gross

[Other heights are available upon request]

Facts & Figures:

Product name ENREGIS/X-Box® <i>field</i> and ENREGIS/X-Box® <i>field plus</i>	
Technical Data	
Dimensions (l x h x w, mm)	see the Table
Gross volume (litre)	see the Table
Weight (kg)	about 95
Storage coefficient (%)	Polypropylene (PP)
Material	Bursting strength from 650 to 750 (depending on the design)
Pressure load (kN/sq.m)	3.00, a larger coverage requires technical agreement
Max. earth coverage* (m)	depending on the version, max. overall height of the installed system is 4.00m*
Number of layers* (pieces)	4.50 m, *Larger depths are available upon request
Maximum installation depth*	optionally 110, 160, 200
Connections (DN)	
Certificates and passed tests*	
DIBt Approval number: Z-42.1-509, RAL-GZ 994/11 quality control mark for storm water systems, 10.000 h longterm pressure test MIPA Leipzig	
ENREGIS/X-Box® <i>field</i> passed a qualification examination by SGS INTRON B.V., as well as compression and stability test, optionally with verifiable project statics	

View



Advantages at a glance

- Highest drainage and infiltration performance
- High storage capacity (about 95%)
- Continuous playability of fields, even in case of heavy precipitation
- International sport approval by SGS INTRON B.V.
- Extreme load-bearing capacity
- German Engineering & Production