

FIRMA
Z SYSTEMEM JAKOŚCI
CERTYFIKOWANYM PRZEZ DNV GL
= ISO 9001 =

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TECHNICAL DATA SHEET

OUTDOOR SPORTS SURFACE *TETRAPUR ENZ II TYPE*

Polyurethane two-layer structural spray coating, flexible, seamless, water permeable (impermeable Type N), machine installed "in situ" (directly at the construction site). Sports shoes with spikes are allowed.

Total thickness of the surface: 13 mm
The colour of surface at customer's request.

Application:

- athletic tracks
- multi-purpose sports fields
- outdoor sports venues and recreation centers

The surface meets:

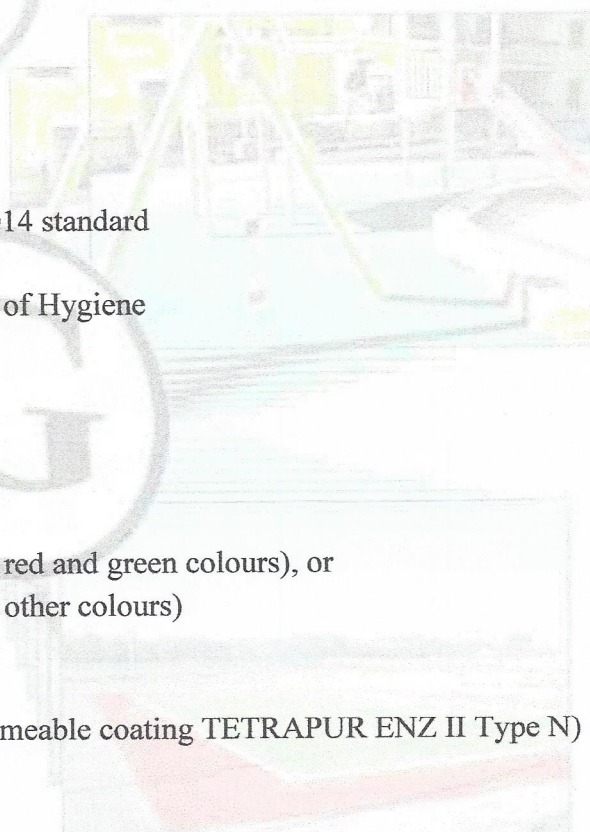
- technical parameters according to PN-EN 14877:2014 standard
- IAAF certificate number S-06-0066
- hygienic attestation issued by the National Institute of Hygiene
- tests on contents of trace elements of heavy metals

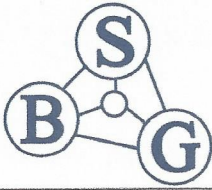
Components needed for casting the surface:

- TETRAPUR 25 or TETRAPUR 25/A – the primer
- TETRAPUR 154 – 1 component bonding agent
- TETRAPUR 134 – 1 component spray coating (for red and green colours), or
- TETRAPUR 135 – 2 component spray coating (for other colours)
- SBR Rubber granules 1-4 mm
- EPDM granules 0.5-1.5 mm
- TETRAPUR 110 – pore sealer (for the water impermeable coating TETRAPUR ENZ II Type N)
- Rubber powder

Recommended substructures:

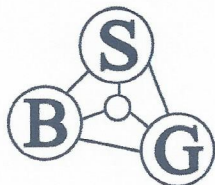
- concrete
- asphaltic concrete
- mineral aggregate layer





Application Method:

1. **Substructure condition** – the base course has to be stable, firm, dry, clean and load bearing, free of loose and brittle particles and substances which impair adhesion, such as oil or grease etc. If the substructure does not meet the above mentioned requirements, it has to be blast cleaned, planed or grinded. The moisture of concrete substructure should not be higher than 4% (to be checked by CM equipment). The substructure temperature has to be at least 3°C above the current dew point.
2. **Priming layer** – the substructure has to be primed to improve its mechanical properties and adhesion with the mat.
 - Apply the primer TETRAPUR 25 on the concrete substructure by means of paint roller or spray device and leave it for 4 -8 hours for solvent evaporation before casting the rubber mat, or
 - Apply the primer TETRAPUR 25A on the asphaltic concrete substructure by means of paint roller or spray device and leave it for 4 -24 hours for solvent evaporation before casting the rubber mat, or
 - Apply the system TETRAPUR WS on the mineral aggregate substructure. This system is a mix of rubber granulate SBR, mineral aggregate and the binder TETRAPUR 154 (for details see Technical Data Sheet of TETRAPUR WS).
3. **Base mat** – mix thoroughly SBR rubber granules with polyurethane binder TETRAPUR 154 in the special mixer so that each granule is covered with the binder. Cast the prepared mixture on the primed substructure by means of mechanical spreader and leave until it hardens. The curing time depends on the temperature and humidity of the air and the base.
4. **Top layer** – Mix the spray system TETRAPUR 134 or components A and B of spray system TETRAPUR 135 in the spray aggregate. Then add EPDM rubber crumbs and rubber powder to obtain an appropriate consistence. Mix the whole thoroughly. Next, spray the mix on the hardened rubber mat. Spray twice in order to obtain required thickness and structure of top wearing layer. The system should be left until it hardens.
5. **Line marking** – After hardening the system make line marking using a suitable paint according to the design.
6. To obtain the best parameters it is recommended to install the surface in the temperature range of 10 - 30°C. In good weather conditions it is allowed to install the surface over 7°C.



Structure of the surface 13mm thick

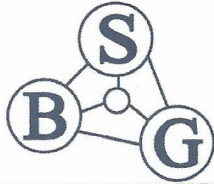
SURFACE		Components	Theoretical consumption	Layer thickness
PRIMING LAYER	Primer	TETRAPUR 25 (concrete)	0,2 – 0,25 kg/m ²	film
		TETRAPUR 25 A (asphaltic concrete)	0,15 – 0,2 kg/m ²	
BASE LAYER	SBR Rubber mat	TETRAPUR 154	1,65 kg/m ²	11 mm
		Granules SBR 1-4 mm	8 kg/m ²	
SEALING LAYER (for impermeable version only)	Pore sealer	TETRAPUR 110 comp. A 4 parts	1,5 kg/m ²	film
		TETRAPUR 110 comp. B 1 part		
TOP WEARING LAYER	Spray system	TETRAPUR 135 (2 component) Or TETRAPUR 134 (1 comp.)	1,2 kg/m ²	2 mm
		Granules EPDM 0,5-1,5 mm	0,8 kg/m ²	
		Rubber dust	Depends on the system viscosity	
CLOSING LAYER	Closing lacquer*	TETRAPUR 90	0,25-0,3 kg/m ²	film
	Line paint	TETRAPUR 91	20-30 g/rm	

* as an option, to prevent the surface from abrasion and UV radiation, it is recommended to spray it twice with the PU lacquer

NOTE: for installing the surfaces in UV sensitive colours like grey, blue, beige, violet etc. it is recommended to apply the UV stable binders at the top layer to avoid the change of colour tint.

Disclaimer:

The above-mentioned data base on our experience and believes and are in every respect without obligation; Also the data concerning the suitability of products and systems by their application in production. Due to the diversity of materials, substrates and different work conditions no guarantees of work results can be substantiated on the strength of any legal relation as well as the resulting from their advices or verbal consulting. This technical instruction can and should give advice noncommittally, therefore, no claims can be laid. Our data do not release the buyer / manufacturer from checking or proving the suitability of products or systems in order to apply them in production on their own account and scope e.g. by bedding the trial surfaces. Our verbal advice or in writing or by way of trials is tentative. In other matters our conditions of sale, payment and delivery are in force. This issue of instruction replaces its all previous versions.



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Selected technical properties of the surface:

PROPERTIES	TESTS RESULTS	STANDARD
Tensile strength, N/mm ² (MPa)	1,083	≥ 0.4
Elongation at break, %	85	≥40
Vertical deformation on concrete substrate, mm	1,73	≤ 3
Abrasion resistance by Taber, g	0,65	≤ 4
Resistance to aging evaluated by change of colour (grade in the grey scale)	4	≥ 3
Skid resistance, pendulum test, CEN-slide, C-scale,		
PTV-units - dry surface	85	80 - 110
- wet surface	59	55 - 110
Shock absorption, force reduction on the concrete substrate, %	38	35 - 50

The results presented above were obtained with the laboratory samples made with use of the granules of Geyer&Hosaja made.

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