

CONIPUR HG eco

Point Elastic Indoor Sports Surfacing System

Approved by IHF, BWF, FIBA and FIVB

Fields of application

multipurpose sports halls, school sports

System data

		Product	Consumption	Application	Remarks
Primer	For asphalt	No primer necessary	-	-	In case of concrete moisture higher than 4 % (e.g. early age concrete), CONIPUR 3785 must be used as a primer. A surface preparation by light blasting or grinding surface removal (incl. the necessary post-treatment) is usually required. For details please refer to our appropriate technical data sheet or consult our Technical Service.
	For concrete	CONIPUR 73 (CONIPUR 3710)	0.20 kg/m ² (0.50 kg/m ²)	rubber squeegee, paint roller	
Elastic Layer		CONIPUR 111 prefabricated elastic layer	0.80 kg/m ²	notched squeegee	The mat type must be approved by CONICA.
Pore sealer	first layer	CONIPUR 220 When using elastic mats ≥ 10 mm , or in multi-purpose use plan of the sports hall flooring, an additional reinforcement fabric must be used (embedded with CONIPUR 220 FL , approximate consumption 0.7 kg/m ² for the 1 st layer and for the intermediate layer approximately 0.3 kg/m ²)	0.5-0.6 kg/m ²	straight edged trowel	Further details about the reinforcing mesh can be found in the Technical Manual " <i>Installation of a Reinforcing Fabric</i> " or contact our Technical Service. When installing an elastic layer > 9 mm CONIPUR 224 (N) must be used.
	second layer	CONIPUR 220	0.3-0.4 kg/m ²	straight edged trowel	This step is necessary to avoid open pores in the elastic layer which could lead to bubbles in the final coating layer.
Coating	wear layer	CONIPUR 3330 (CONIPUR 227)	2.2 kg/m ² = 2mm 3.3 kg/m ² = 3mm (2.8 kg/m ² resp. 4.2 kg/m ²) thickness	notched squeegee	Thickness of the elastic layer limited to ≤ 9mm . For elastic layers > 9mm CONIPUR 224 (N) must be used - The flatness of the subbase when using CONIPUR 3330 may not exceed a tolerance of 2 mm measured with a straight edge of 4m in order to prevent the run-off of the coating. Furthermore we recommend to fix a self-adhesive foam band is along the edges.
Top Coat		CONIPUR 67	0.15 kg/m ²	paint roller	Critical colours regarding coverage must be applied repeatedly until opacity is achieved - Critical colours regarding staining must be fixed with a transparent sealing lacquer.

Line Paint		CONIPUR 3100	15 g/m	paint roller (paint-brush)	Critical colours regarding coverage must be applied twice.
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Total thickness of the system $x + 2$ mm, x = thickness of the elastic layer, limited to ≤ 9 mm, else the coating CONIPUR 224 (N) must be used

Selected technical properties

		Thickness in mm (elastic layer + coating)	Result	Requirement	Remarks
EN 14904	Shock absorption	4+2 6+2 8+2	21 % 28 % (P1) 35 % (P2)	25 - 75 %	
	Standard deformation	4+2 6+2 8+2	0.6 mm 0.9 mm 1.1 mm	≤ 5 mm	
	Rolling load	All thicknesses	1500	1500	Data taken from EN test reports. Elastic layer as specified in test report.
	Impact resistance	4+2 6+2 8+2	13 Nm 12 Nm 11 Nm	≥ 8 Nm	For use of other elastic layers please consult our Technical Service.*
	Residual impression	4+2 6+2 8+2	0.18 mm 0.29 mm 0.38 mm	≤ 0.5 mm	
	Ball rebound	All thicknesses	99 %	≥ 90 %	
	Sliding properties	All thicknesses	81	80-110	

* Test certificates can be downloaded from our webpage or requested from the Technical Service.

All technical figures given above are taken from test reports and refer to the main products. Depending on the substrate and application conditions or in case of using alternative products, results vary.

Preparation

Substrates to be coated have to be firm, dry and load bearing, free of loose and brittle particles and substances which impair adhesion such as oil, grease, rubber skid marks, paint or other contaminants.

A concrete sub-base must contain a moisture barrier (damp proof membrane D.P.M.). The residual moisture of the subbase must not exceed 4 %. The bond strength of the substrate must be at least 1.0 N/mm².

The temperature of the substrate must be at least 3 °C above the current dew point temperature. The optimal temperature of the material before and during application is between 15 and 25 °C.

Regarding the evenness, the tolerance must not exceed 2 mm measured with a straight edge of 4 m when using CONIPUR 3330. Otherwise the coating will – due its viscosity – likely not / not sufficiently cover the high spots

of the subbase. This will have a negative impact on the mechanical properties.

For the application of CONIPUR 227, we refer to the DIN 18202, 2005-10 Table 3, line 4 regarding the flatness of the subfloor.

Application

Apply primer CONIPUR 3710 or CONIPUR 73 on the pre-treated concrete substrate (in case of asphalt no bonding primer is needed) using a paint roller or elastic squeegee. After waiting for at least 10 minutes finish with a roller. For porous substrates, the primer has to be applied in two coats.

Apply adhesive CONIPUR 111 with a notched trowel onto the primed surface and embed the pre-cut rubber mat in the fresh CONIPUR 111.

The lengths of the mat are held in place by using weights, paying particular attention to the joints. It is very important that there are no open joints.

Roll over the surface after 30 - 60 minutes (depending on the temperature) using a 50 kg roller. The weights are left on the mat until the adhesive has fully cured (normally overnight).

Seal the pores of the elastic layer by applying CONIPUR 220, using a straight edged trowel or a squeegee.

In order to ensure a 100 % seal of the elastic layer apply approx. 0.3 kg/m² CONIPUR 220 onto the sealed surface, using a notched trowel or straight edge trowel or squeegee.

After overnight curing, a foam band is fixed along the edges to avoid that the coating CONIPUR 3330 is running off. CONIPUR 3330 (CONIPUR 227) is applied with a notched squeegee.



Seal the surface with CONIPUR 67 using micro fibre rollers (tuft size 10 – 12 mm), rolling out well to eliminate roller marks.

Keep the overlap areas to a minimum. It is necessary to re-roll freshly applied material with a second clean paint roller in order to obtain a uniform surface with a minimum of overlap marks.

Remarks

When using elastic mats with a layer thickness of more than 10 mm, or in multi-purpose use plan of the sports hall flooring, an additional reinforcement fabric must be used. Details can be found in the Technical Manual as "Processing Guidelines".

The sports floor reaches its final hardness after 7 days and must not be mechanically stressed beforehand.

For application conditions please see our "General Application Guidelines for Sports Systems Indoor and Outdoor".

For further information, please refer to the technical data sheets of the products or contact our Technical Service.

CE marking only when installed according to one of the following systems

CONIPUR HG eco



0672

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13

SY/HG/E1/2013

EN 14904:2006

point-elastic indoor sports flooring surface
CONIPUR HG eco

EN 14904: E_{fl} - 19/21/9/11/26/12mg – 81/107 – 21/28/17/34/35/27% - 1500N – E1

Essential characteristics	Performance	Harmonised technical specification
Reaction to fire	E _{fl} ¹⁻⁶	EN 14904
Resistance to wear	19 mg ¹ 21 mg ² 9 mg ³ 11 mg ⁴ 26 mg ⁵ 12 mg ⁶	EN 14904
Friction	81 ^{1,2,4} 107 ^{3,4,6}	EN 14904
Force reduction	21 % ¹ 28 % ² 17 % ³ 34 % ⁴ 35 % ⁵ 27 % ⁶	EN 14904
Rolling load without damage	1500N ¹⁻⁶	EN 14904
Release of dangerous substances	class E1 ¹⁻⁶	EN 14904

Tested in the system with

- ¹ ca. 4mm elastic layer (Kraiburg Premium) + ca. 2mm PU coating
- ² ca. 6mm elastic layer (Kraiburg Premium) + ca. 2mm PU coating
- ³ ca. 7mm elastic layer (BSW Regupol 6015) + ca. 2mm PU coating
- ⁴ ca. 7mm elastic layer (Greiner PKR 310) + ca. 2mm PU coating
- ⁵ ca. 8mm elastic layer (Kraiburg Premium) + ca. 2mm PU coating
- ⁶ ca. 9mm elastic layer (Formtech 066.0700) + ca. 2mm PU coating