

# CONIPUR CE eco

## Combined Elastic Indoor Sports Surfacing System

### Fields of application

multipurpose sports halls

### System data

		Product	Consumption	Application	Remarks
Spreading plate	or	<b>Wooden matrix system</b> Glue	25 - 50 mm  approx. 40 g/m <sup>2</sup>	Tongue and groove gluing	The wooden sub base construction as well as the glue must be approved by CONICA. Moisture content of the wood < 7 %. Humidity during the installation must be between 35 - 65 %. Before the application process the surface must be grinded and cleaned thoroughly.
		<b>CONIPUR WBI</b> wooden matrix, 15 + 15 mm	<i>System build-up and information on the installation please see separate system data sheet</i>		
		<i>grinding of the wooden surface is necessary in any case</i>			
Elastic Layer		<b>CONIPUR 111</b>  Prefabricated elastic layer	0.8 kg/m <sup>2</sup>	Notched squeegee	The elastic layer must be approved by CONICA. Normally the elastic layer is 4 - 6mm thick.
Pore sealer	Intermediate layer	<b>CONIPUR 220</b>	0.6 kg/m <sup>2</sup>	Straight edged trowel	Recommended thickness of elastic mats 4 – 6 mm.  This step is necessary in order to cover the reinforcing fabric, however primarily to avoid <b>open pores</b> in the elastic layer which could give rise to bubbles in the final coating layer.
		<b>CONIPUR 220</b>	0.3 – 0.4 kg/m <sup>2</sup>	Straight edged trowel	
Coating	Top layer	<b>CONIPUR 3330</b> (CONIPUR 227)	2.2 kg/m <sup>2</sup> = <b>2 mm</b> 3.3 kg/m <sup>2</sup> = <b>3 mm</b> thickness (2.8 kg/m <sup>2</sup> resp. 4.2 kg/m <sup>2</sup> )	notched squeegee	Recommended thickness of elastic layer 4-6mm - The <b>flatness</b> of the subbase may not exceed a tolerance of <b>2 mm</b> measured with a straight edge of <b>4m</b> in order to prevent the run-off of the coating. To avoid <b>running-off</b> of the coating a self-gluing foam band is fixed along the edges.
Sealing lacquer		<b>CONIPUR 67</b>	0.15 kg/m <sup>2</sup>	Paint roller	Critical colours regarding coverage must repeatedly be applied until opacity is achieved. Critical colours with respect to staining must be fixed with a transparent sealing lacquer.
Line Paint		<b>CONIPUR 3100</b>	15 g/m	Paint roller (paint-brush)	Critical colours regarding coverage must be applied twice.

### Total thickness of the system

x + 2mm, x = thickness of the wooden matrix system and the point elastic component (recommended 4-6mm)

## Selected technical properties

		Thickness in mm (sub base+ coating)	Result	Requirement	Remarks
<b>EN 14904</b>	Shock absorption	Approx. 35 mm	58 %	Type 3: ≥45 <55 % Type 4: ≥55 <75 %	Data taken from EN test reports.  Elastic layer as specified in test report. For use of other elastic layers and/or distribution plates please consult our Technical Service
	Standard deformation	Approx. 35 mm	4.0 mm	Type 3: ≥1.8 <5,0 (mm) Type 4: ≥2.3 <5.0 (mm)	
	Rolling load	Approx. 35 mm	1500 Nm	1500 Nm	
	Residual impression	Approx. 35 mm	0.18 mm	≤ 0.5 mm	
	Ball rebound	Approx. 35 mm	97 %	≥ 90 %	
	Friction	Approx. 35 mm	81	80-110	

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

All technical details have been taken from test certificates and refer to the main products only. Depending on the substrate, conditions of application and usage of alternative products the values may change.

### 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 **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**.

The **tolerance** for the evenness of the subbase must not exceed **2mm measured** with a straight edge of **4m**. Otherwise the coating CONIPUR 3330 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.

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

### Application

#### Elastic layer

Underneath the wooden sub-base an **elastic layer** of approx. **15 mm** (e.g. foam mat) must be installed. The foam mat must be fixed pointwise to prevent it from moving.

On top of the foam mat a foil made of polyethylene is laid over the complete floor. The foil serves as additional moisture barrier and facilitates the working with the wooden plates.

#### Distribution plate

Beginning with the first line of the load distribution plate the groove-side has to be orientated to the wall.

The distance to the wall should be ensured by installing **spacer blocks** with 15 mm thickness. After laying the surface, the spacer blocks have to be removed, the edge distance must be maintained to the ground to provide a possibility for the floor to expand. The **expansion joints** must be guaranteed for long term.

The second line of the load distribution plate begins with the remaining piece of the first line. The offset amount should be minimum 400 to maximum 500 mm (if not possible cut a new element). The other rows of the load distribution plates are carried out analogously.

The **position of the sleeves** has to be marked clearly on the distribution plate and cut out afterwards.

The load distribution plates are **glued** together in the tongue and groove connection.

After the application, the load distribution plates are pressed thoroughly together. The **curing time** of the glue is approximately 24 hours.

During that time, there is no traffic allowed on the area.

The surface must be checked carefully before laying the floor covering.

**Point elastic layer**

After curing apply adhesive CONIPUR 111 with a notched trowel onto the primed surface and embed the pre-cut elastic layer 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 with CONIPUR 220 by using a straight edged trowel or a squeegee.

In order to ensure a 100 % seal of the elastic layer apply approx. 0.3 kg/m<sup>2</sup> CONIPUR 220 onto the surface, using a straight edged trowel or a squeegee.

In case CONIPUR 3330 is used, a foam band is fixed along the edges to avoid that the coating is running off



The application of CONIPUR 3330 (CONIPUR 227) is done with a notched squeegee. The consumption is approximately 2.2 kg/m<sup>2</sup> (2.8 kg/m<sup>2</sup>) to obtain a 2 mm layer.

Seal the surface with CONIPUR 67 using micro fibre roller, 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 layers** with a thickness of more than **10 mm**, or in multi-purpose use plan of the sports hall flooring, an additional **reinforcing fabric** must be used. Details can be found in the Technical Manual as "**Processing Guidelines**" or contact our technical service.

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 system data sheet**

**CONIPUR CE eco**



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**SY/CE/E1/2013**

EN 14904:2006

combined-elastic indoor sports flooring surface  
**CONIPUR CE eco**

EN 14904: E<sub>fl</sub> - 19mg – 81 – 58% - 1500N – E1

Essential characteristics	Performance	Harmonised technical specification
Reaction to fire	E <sub>fl</sub>	EN 14904:2006
Resistance to wear	19 mg	EN 14904:2006
Friction	81	EN 14904:2006
Force reduction	58 %	EN 14904:2006
Rolling load without damage	1500N	EN 14904:2006
Release of dangerous substances	class E1	EN 14904:2006