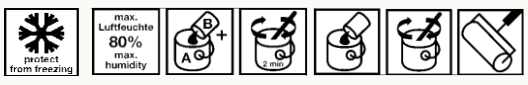
CONIPUR CE *protect+*

Flame retardant, Low Emission Combined-Elastic Indoor Sports Surfacing System

Fields of application multipurpose sports halls

System data

		Product	consumption	application	remarks
Spreading plate	or	**Wooden matrix system** Glue **CONIPUR WBI** wooden matrix, 15 + 15 mm	25 - 50 mm approx. 40 g/m²	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.
		System build-up and information on the installation please see separate system data sheet *grinding of the wooden surface is necessary in any case*			
Elastic Layer		**CONIPUR 111** Prefabricated elastic layer	0.8 kg/m²	notched squeegee	The elastic layer (e.g. foam mat) must be approved by CONICA.
Pore sealer	Intermediate layer	**CONIPUR 220 FL**	0.6 kg/m²	straight edged trowel	Recommended thickness of elastic mats 4-6mm
		CONIPUR 220 FL	0.3 – 0.4 kg/m²	straight edged trowel	This step is necessary to avoid open pores in the elastic layer which could give rise to bubbles in the final coating layer.
Coating	Top layer	**CONIPUR 224 FL** 	2.7 kg/m² = **2mm** 4.0 kg/m² = **3mm** thickness	Notched aluminium squeegee	For a higher thickness of the coating layer the consumption can be adjusted accordingly This coating is only available in **grey** – for details regarding coverage of the following top coat please contact our Technical Service. The use of an aluminium squeegee is strongly recommended to avoid an uneven surface
Sealing lacquer		**CONIPUR 3202 W** 	0.13 – 0.15 kg/m²	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		**CONIPUR 3100**	15 g/m	paint roller (paint-brush)	Critical colours regarding coverage must be applied twice.

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

Selected technical properties

		Thickness in mm (sub base + coating)	result	requirement	remarks
EN 14904	Shock absorption	ca. 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	ca. 35 mm	4.0 mm	type 3: ≥1.8 <5,0 (mm) type 4: ≥2.3 <5.0 (mm)	
	Rolling load	ca. 35 mm	1500 Nm	1500 Nm	
	Residual impression	ca. 35 mm	0.16 mm	≤ 0.5 mm	
	Friction	ca. 35 mm	102	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 may vary.

test reports / certificates available

fire behaviour | **emission / VOC / M1** | **Declaration of Performance**

*Please see our web-page or contact our Technical Service to obtain country specific test reports / test certificates.

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.

With regard to the flatness of the subfloor, we refer to the DIN 18202, 2005-10 Table 3, line 4.

Application

Elastic layer

Underneath the wooden sub-base an elastic layer of approx. 15mm (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 on the area allowed.

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 FL 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/m² CONIPUR 220 FL onto the surface using a notched straight edged trowel or a squeegee.

After overnight cure CONIPUR 224 FL is applied using a notched aluminium squeegee.

Important

Due to the comparatively high viscosity of the flame retardant coating the application must be done with a notched **aluminium squeegee.**

The use of a pen-shaped or a rubber squeegee is not recommended, as the coating can not be distributed evenly with these tools. This in turn will result in an uneven surface ("waves", traces of the squeegees) which will not be levelled by the application of the following coating / top coat.

Seal the surface with CONIPUR 3202 W using r micro fibre roller (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 layers with a layer thickness of 10 mm or higher, 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"* 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 protect+

CE

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EN 14904:2006

combined-elastic, low emission, flame retardant indoor sports flooring surface
CONIPUR CE protect+

EN 14904: C_{fl}-s1 - 19mg – 102 – 58% - 1500N – E1

Essential characteristics	Performance	Harmonised technical specification
Reaction to fire	C_{fl}-s1	EN 14904:2006
Resistance to wear	19 mg	EN 14904:2006
Friction	102	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

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