F-1000 USA

Two Layer, Water Impermeable, Full Pour Surfacing System

Surface: embedded or encapsulated EPDM granules

Use for high performance sports, athletics tracks for top events

System data

		Product	Consumption	Application	Remarks
Adhesion Promoter / Primer	for asphalt	no primer necessary	-	-	
	for concrete	**CONIPUR 3780 USA**	0,6-1,0 kg/m²	rubber squeegee / roller	Applied in two layers – for the first layer 0,3-0,5 kg/m², for the second layer 0,3-0,5 kg/m² sprinkled with oven dried quartz sand
Coating	1st layer	**CONIPUR 2350 USA**	4,0 kg/m²	propeller rake	SBR net consumption. The consumption varies depending on the substrate porosity. Including the excess granules, at least 11 kg/m² granules must be calculated for large surfaces. For smaller surfaces that are installed within one day, the excess amount must be increased as needed.
		Depending on the porosity of the substrate, consumption may increase			
		Black recycled rubber granules, (SBR) 1,0-4,0 mm	5,25 kg/m² (net consumption)	broadcast	
		Important: to achieve the necessary layer thickness, it is absolutely necessary to broadcast at least 11,0 kg/m² of granules			
	top layer	**CONIPUR 2375 USA**	3,0 kg/m²	notched squeegee	EPDM net consumption. For large surfaces, a total amount of approx. 4,2 kg/m² granules must be calculated incl. the excess quantity. For smaller surfaces that are installed within one day, the excess amount must be increased as needed.
		CONIPUR EPDM granules, 1,0-3,5 mm	2,8 kg/m² (net consumption)	broadcast	
Sealing lacquer	optional	**CONIPUR 2200 USA** (CONIPUR 2210 USA)	0,30 kg/m²	spray (two coats)	
Line paint		**CONIPUR 8150 USA**	20 - 30 g/m	spray	

Installation height approximately 14 mm

Preparation

The bound base course must fulfil the relevant standards with special reference to: flatness, gradients, thickness, load bearing capacity and water permeability.

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

The tear strength of the base course must be at least 1,0 N/mm^2. If this is not the case, the substrate has to be prepared by grit or shot blasting, high pressure water jetting, grinding or scabbing (incl. the post treatment).

The residual moisture must not exceed 4 % (check with CM equipment), which corresponds to maximum 75 % relative humidity according to ASTM F 2170. If using the calcium chloride test, the maximum allowable vapour emissions is 4,0 lbs. as per ASTM F 1869.

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.

Consumption of granules

For a track surface, it is generally assumed that the daily installation capacity is 1,000 m^2. Therefore, it is calculated as follows:

A total of 11,000 kg of SBR granules are needed for the first layer and the first 1,000 m^2. After curing, approximately 5,700 kg of granules are removed and reused.

Accordingly, 5,300 kg of new granules and the 5,700 kg of removed granules are used for the next 1,000 m^2.

For 5' 000 m^2 a total of approximately 32'200 kg SBR granules are required, for 10'000 m^2 approximately 58'700 kg.

A total of 4,200 kg of EPDM granules are used for the second layer and the first 1,000 m^2. After curing, 1,200 kg of granules are removed and reused.

Accordingly, 3,000 kg of new granules and the 1,200 kg of removed granules are used for the next 1,000 m^2.

For 5' 000 m^2 a total of approximately 16'200 kg EPDM granules are required for the second layer, for 10'000 m^2 approximately 31'100 kg.

If the second layer is to be built with fewer daily joints and the daily installation capacity is accordingly increased to approximately 2,000 m^2, more excess granulate must be calculated.

Application

CONIPUR 3780 USA must be used for concrete surfaces with a residual moisture of no more than 4 %.

CONIPUR 3780 USA is applied by rolling, or better with a rubber squeegee and by uniform re-rolling or brushing on the previously prepared substrate. Puddling or thick layers are to be avoided.

For the first layer the consumption must be at least 0,3 kg/m^2 - do not sand.

The second layer of CONIPUR 3780 USA must be applied after at least 8 hours, but no more than 48 hours. If this is not possible, the substrate must be pre-treated again (sanding or shot blasting).

To ensure the adhesion of the following polyurethane-based layer, the 2nd layer of CONIPUR 3780 USA (consumption min. 0,3 kg/m^2) must be sprinkled with oven-dried quartz sand (grain size 0,3-0,8 mm).

Unbound quartz sand must be removed after curing (see product data sheet for further information).

For impermeable asphalt substrate no adhesion primer is needed.

Water permeable asphalt must be sealed so that not too much coating material runs off. Sealing is done either with CONIPUR 2400 USA (approx. 2,0 – 2,5 kg/m^2 depending on the porosity) or a mixture of CONIPUR 210 USA and EPDM powder.

Otherwise, the required total thickness of the track surface is not achieved. This also deteriorates the mechanical / sports functional properties.

Attention: the application of a pore sealer does **not** protect against rising humidity!

Apply CONIPUR 2350 USA with a propellor rake and broadcast with dry black rubber granules (grain size 1-4 mm) in excess before curing takes place.

After curing, remove the unbound granulate carefully (re-use for broadcasted surfaces possible).

As second layer, apply CONIPUR 2375 USA with a notched squeegee and broadcast with coloured, dry CONIPUR EPDM granules (grain size 1-3,5 mm) in excess before curing takes place.

Remove the excess granules (re-use for broadcasted surfaces possible) when the coating has cured.

Optionally, the surface can be sealed with pigmented CONIPUR 2200 USA or CONIPUR 2210 USA (slip-resistant).

Sealing improves UV resistance, extends the life time and simplifies maintenance (easier and, in the long term, more cost-effective cleaning).

The topcoat is sprayed in two coats from opposite directions with an approximate consumption of total 0,30 kg/m^2.

The track reaches its final hardness after 14 days under normal climatic conditions. It must not be used with spikes or subjected to mechanical loads before this time.

Remarks

Special discontinuous mixers such as MixMatic from SMG, Vöhringen / Germany are used for the on-site installation.

Further information on the application of the individual products can be found in the corresponding product data sheets.

For application, conditions please see our “General Application Guidelines for Sports Systems Indoor and Outdoor”

CONICA AG
Industriestr. 26
8207 Schaffhausen
Switzerland

Tel.: +41 52 644 3600
Fax: +41 52 644 3699
info@conica.com
www.conica.com