EN 14 877

Synthetic Surfaces for Outdoor Sports Areas

Specification

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Kunststoff-Flächen auf Sportanlagen im Freien

Anforderungen

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Annex A
(informative)
Examples of surfacing and fields of application

See Table A.1.

Table A.1 — Examples of surfacing and fields of application

	Permeable construction			Non-permeable construction			
	A	B	C	D	E	F	G
Design	 Figure 1	 Figure 2	 Figure 3	 Figure 4	 Figure 5	 Figure 6	 Figure 7
Designation	texture coated surfacing	porous coated surfacing	porous surfacing one-layer	cast coated surfacing	cast surfacing multi-layer (solid synthetic surfacing)	cast surfacing (solid synthetic surfacing)	calendared vulcanized, prefabricated sheets
Surface	granular texture[a]	granules flat		strewn-in granules with visible tips			embossed texture
Top layer (coloured)	rubber granules and elastomer, sprayed	rubber granules and elastomer, trowelled in-situ or prefabricated		elastomer cast and rubber granules strewn-in			calendared co-vulcanized, differentiated layers of rubber compound
Base layer	rubber granules/fibres and elastomer, poured out in-situ or prefabricated		–	rubber granules/fibres and elastomer, poured-out in-situ or prefabricated	rubber granules and elastomer, cast		a top layer
Typical areas of application	Athletics tracks and run up tracks, multi sports	Multi-use areas, tennis courts and running/run-up tracks (school sports and combined facilities)	Multi-sports	athletics tracks, run-up tracks			athletics tracks, run-up tracks, tennis courts

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4. Requirements for safety in use

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5. Material characteristics

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5.2 Water permeability

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5.4 Resistance to UV-light

5.5 Tensile properties

5.6 Spike resistance

Test Procedures 1

Friction	EN 13036-4	TRRL Pendulum
Shock Absorption	EN 14808	AA Berlin
Vertical Deformation	EN 14809	AA Stuttgart
Vert. Ball Behaviour	EN 12235	
Angled Ball Behav.	EN 13865	

Test Procedures 2

Thickness	EN 1969
Water permeability	EN 12616
Resistance to wear	EN ISO 5470-1
Resistance to UV-light	EN 14836
Tensile properties	EN 12330
Spike resistance	EN 14810

Friction Test

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Shock Absorption

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Shock Absorption

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Shock Absorption

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Vertical Deformation

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Ball Rebound

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Angled Ball Behaviour

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Thickness

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Water Permeability

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Resistance to Wear

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Resistance to UV-Light

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Resistance to UV-Light

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Tensile Properties

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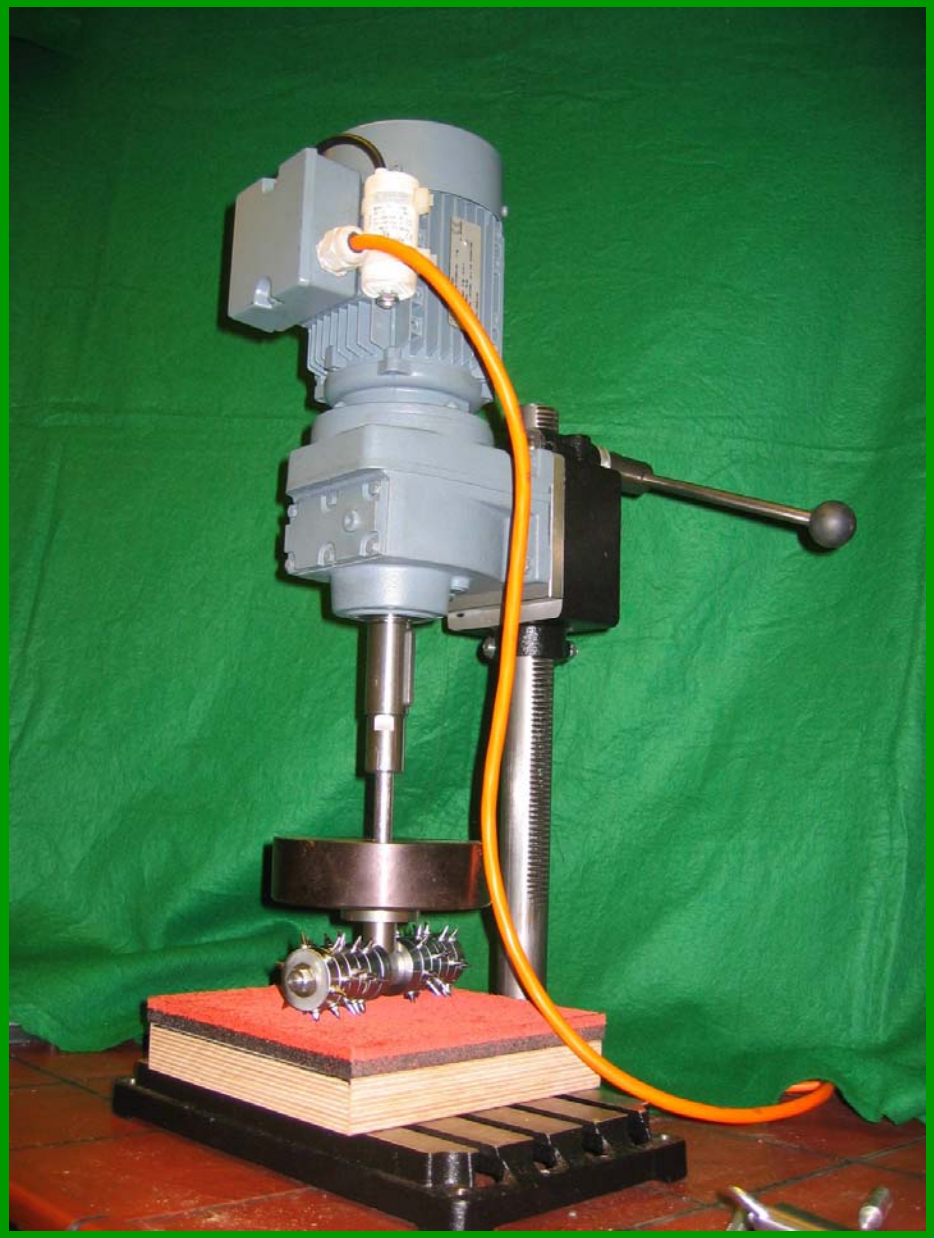

Spike Resistance

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Spikes Resistance

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Requirements 1

Friction	55 -110 dry + wet
Shock Absorption	25 – 34 + 35 – 50 %
Vertical Deformation	$\leq$ 3 mm
Vertical Ball Behaviour	$\geq$ 80 %
Angled Ball Behaviour	slow ... fast (rating)

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Requirements 2

Thickness	≥ 10 mm (20 + 30)
Water Permeability	≥ 150 mm/h (0.004 cm/s)
Resistance to Wear	≤ 4 g after 1000 cycles (wheel H18, 1000g load ?)
Resistance to UV-Light	repetition of performance tests requirements = same as before
Tensile Properties	≥ 0.4 N/mm² [MPa] ≥ 40 %
Spike Resistance	tensile properties ≥ 80 % of original values

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Dipl. Ing. Hans J. Kolitzus

Institut für Sportbodentechnik
IST Consulting GmbH

Accreditation ISO 17025;
Recognition by IAAF, FIFA, DIN Certco

Hauptstr. 34, CH 8264 Eschenz, Switzerland

www.isss.de/ist-ch ; hjkolitzus@bluewin.ch

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