Deutsche Akkreditierungsstelle

Annex to the Partial Accreditation Certificate D-PL-20181-01-01 according to DIN EN ISO/IEC 17025:2018

Valid from: **30.10.2023**

Date of issue: 30.10.2023

This annex is a part of the accreditation certificate D-PL-20181-01-00.

Holder of partial accreditation certificate:

ISP GmbH
Amelunxenstraße 65, 48167 Münster

with the location

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Amelunxenstraße 65, 48167 Münster

The testing laboratory meets the requirements of DIN EN ISO/IEC 17025:2018 to carry out the conformity assessment activities listed in this annex. The testing laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed below.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and they conform to the general with the principles of DIN EN ISO 9001.

Strength tests, mechanical, analytical, physical and climatic/chemical investigations and tests on and of sports halls, sports hall floors, synthetic surfaces, synthetic turf surfaces and playground surfaces;

Tests on playground equipment and aggregates

This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at https://www.dakks.de.

This document is a translation. The definitive version is the original German annex to the accreditation certificate.

The testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, to use standards or equivalent testing methods (except FIFA, IAAF and ÖISS specifications) listed here with different issue dates.

The testing laboratory maintains a current list of all testing methods within the flexible scope of accreditation.

Content

1 Strength tests as well as mechanical, analytical and climatic/chemical investigations on surfaces for sports areas

DIN EN 1516 2000-09	Surfaces for sports areas - Determination of resistance to indentation
DIN EN 1517 2020-07	Surfaces for sports areas - Determination of resistance to impact
DIN EN 1569 2020-07	Surfaces for sports areas - Determination of the behaviour under a rolling load
DIN EN 1969 2000-08	Surfaces for sports areas - Determination of thickness of synthetic sports surfaces
DIN EN 12228 2013-12	Surfaces for sports areas - Determination of joint strength of synthetic surfaces
DIN EN 12230 2003-07	Surfaces for sports areas - Determination of tensile properties of synthetic sports surfaces
DIN EN 12234 2013-12	Surfaces for sports areas - Determination of ball roll behaviour
DIN EN 12235 2013-12	Surfaces for sports areas - Determination of vertical ball behaviour
DIN EN 12616 2013-12	Surfaces for sports areas - Determination of water infiltration rate
DIN EN 13672 2004-10	Surfaces for sports areas – Determination of resistance to abrasion of non-filled synthetic turf
DIN EN 13744 2005-01	Surfaces for sports areas - Procedure for accelerated ageing by immersion in hot water
DIN EN 13817 2005-01	Surfaces for sports areas - Procedure for accelerated ageing by exposure to hot air
DIN EN 14808 2006-03	Surfaces for sports areas - Determination of shock absorption
DIN EN 14810 2006-06	Surfaces for sports areas – Determination of spike resistance

DIN EN 14955 2006-01	Surfaces for sports areas - Determination of composition and particle shape of unbound mineral surfaces for outdoor sports areas; here: *only determination of grain shape according to chapter 6*
DIN EN 15301-1 2007-06	Surfaces for sports areas - Part 1: Determination of rotational resistance
DIN EN 15306 2014-07	Surfaces for outdoor sports areas - Exposure of synthetic turf to simulated wear
DIN EN 16837 2018-06	Surfaces for sports areas – Determination of linear shoe/surface friction
DIN EN 17467 2022-05	Surfaces for sports areas – Test method for the determination of the residual deformation of synthetic or organic infill granules after static load
DIN 18035-7 2020-09	Sports grounds - Part 7: Synthetic turf areas here: *7.2 Bending resistance* *7.3 Rotational resistance* *7.5 Compressive strain test* *7.7 Weathering by hot water and heat* *7.9 Determination of lateral tensile strength*
DIN CEN/TS 16717 2015-05 DIN SPEC 18110 2015-05	Surface for sports areas – Method of test for the determination of shock absorption, vertical deformation and energy restitution using the advanced artificial athlete
ASTM F 2117 2010	Test Method for Vertical Rebound Characteristics of Sports Surface/Ball Systems; Acoustical Measurement
ASTM F 2157 2009	Standard Specification for Synthetic Surfaced Running Tracks here: *6.2 Evenness* *6.3 Thickness* *6.4 Force Reduction* *6.5 Vertical Deformation* *6.6 Texture Influence* *6.7 Tensile Properties* *6.8 Color* *6.9 Drainage*

ASTM F 2569 2011	Test Method For Evaluating The Force Reduction Properties Of Surfaces For Athletic Use
ASTM F 2772 2011	Specification For Athletic Performance Properties Of Indoor Sports Floor Systems
ASTM F 3189 2020	Standard Test Method for Measuring Force Reduction, Vertical Deformation, and Energy Restitution of Synthetic Turf Systems Using the Advanced Artificial Athlete
FIFA Quality Programme for Football Turf - Handbook of Test Methods 2015-10	Method 01 - Determination of ball rebound Method 03 - Determination of ball roll Method 04a - Determination of shock absorption Method 05a - Determination of vertical deformation Method 13 - Determination of energy restitution Method 06 - Determination of rotational resistance Method 12 - Procedure for the assessment of surface planarity Method 18 - Procedure for measuring free pile height Method 20 - Procedure to determine the particle size distribution of granulated infill materials Method 21 - Procedure for the measurement of infill depth
IAAF 2016-06	IAAF Track and Runway Synthetic Surface Testing Specifications here: *2.2 Evenness* *2.3 Thickness* *2.4 Shock Absorption* *2.5 Vertical Deformation* *2.6 Friction* *2.7 Tensile Properties*
ÖISS-Guideline Sports hall floors 2005-08	Requirements for sports hall floors here: *7.2.7 Load capacity, behaviour under static load* *7.3.2 Compressive strain test (DVM)*
ISP-H/V-001 2022-08	Determination of the bending properties of test bars by means of a three-point bending test

2 Strength and mechanical testing in sports halls

DIN V 18032-2 2001-04	Sport halls - Halls for gymnastics, games and multi-purpose use - Part 2: Floors for sporting activities; Requirements, testing here: *6.2 Determination of shock absorption* *6.3 Determination of vertical deformation* *6.4 Determination of areal deflection* *6.5 Determination of the behavior under a rolling load* *6.6 Determination of resistance to impact* *6.7 Determination of resistance to indentation* *6.8 Determination of vertical ball behaviour*
DIN 18032-3 2018-11	Sport halls - Halls for gymnastics, games and multi-purpose use - Part 3: Testing of safety against ball throwing
DIN 18032-7 2020-09	Sport halls – Halls and rooms for sports and multi-purpose use – Part 7: Impact protection surface systems for walls; Requirements, testing
DIN EN 13964 2014-08	Suspended ceilings - Requirements and test methods here: Appendix D: shock resistance
ÖISS-Guideline Protective wall 2011-06	Protective wall - Requirements for shock absorbing wall-coverings in sport halls *here:* *4.3 Resilience (deformation) of the system at the load point during the testing with the "Wall Artificial Athlete"* *4.7 Resistance to impact*

3 Determination of the shock absorption of playground floors by impact testing

DIN EN 1177 2018-03	Impact attenuating playground surfacing - Determination of critical fall height
DIN EN 17435 2022-08	Surfaces for sports areas – Test method for the determination of Head Injury Criterion (HIC) and Critical Fall Height (CFH)
ASTM F 1292 2022	Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment

4 Tests on textile floor coverings

ISO 1763 2020-07	Textile floor coverings – Determination of number of tufts and/or loops per unit length and per unit area
ISO 4919 2012-08	Carpets - Determination of tuft withdrawal force
ISO 8543 2020-06	Textile floor coverings - Methods for determination of mass
ISO 2549 1972-08 Technical Corrigendum 1 1990-12	Hand-knotted carpets – Determination of tuft leg length above the woven ground
DIN EN ISO 13934-1 2013-08	Textiles – Tensile properties of fabrics – Part 1: Determination of maximum force and elongation at maximum force using the strip method

5 Tests on aggregates

DIN EN 933-1 2012-03	Tests for geometrical properties of aggregates – Part 1: Determination of particle size distribution – Sieving method
DIN EN 1097-3 1998-06	Test for mechanical and physical properties of aggregates – Part 3: Determination of loose bulk density and voids

6 Determination of surface properties of roads and airfields

DIN EN 13036-4 2011-12	Road and airfield surface characteristics - Test methods - Part 4: Method for measurement of slip/skid resistance of a surface - The pendulum test
DIN EN 13036-7 2003-12	Road and airfield surface characteristics - Test methods - Part 7: Irregularity measurement of pavement courses: The straightedge test
ASTM E 303 2022	Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester
BS 7976-2+A1 2002-08	Pendulum testers - Part 2: Method of operation

Abbreviations used:

ASTM	American Society for Testing and Materials
BS	British Standard
CEN/TS	technical specification of the European committee for standardization
DIN	Deutsches Institut für Normung e.V.
EN	European Standard
IAAF	International Association of Athletics Federations
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
ÖISS	Österreichisches Institut für Schul- und Sportstättenbau
SPEC	Standard Performance Evaluation Corporation
V	Vornorm