

DAP Deutsches Akkreditierungssystem Prüfwesen GmbH

Signatory to the Multilateral Agreement of EA for Mutual Recognition
and to the Mutual Recognition Arrangement of ILAC

represented in the

Deutscher Akkreditierungsrat



Accreditation

The DAP Deutsches Akkreditierungssystem Prüfwesen GmbH herewith confirms that the

IST Institut für Sportbodentechnik Leipzig

Freiburger Allee 28
04416 Markkleeberg

with the laboratory located at

Equipagenweg 25
04416 Markkleeberg

is competent under the terms of DIN EN ISO/IEC 17025:2005 to carry out tests in the fields of

**testing of sport halls, floors for sporting activities,
synthetic surfaces and synthetic turf areas**

in accordance with the test methods listed in the annex. The annex forms part of the certificate and comprises 4 pages.

The accreditation is valid from 2009-06-04 to 2014-06-03.

DAR registration number: **DAP-PL-4324.00**

Berlin, 2009-06-04

Univ.-Prof. Dr.-Ing. habil. K. Ziegler
Managing Director
DAP Deutsches Akkreditierungssystem
Prüfwesen GmbH



DAP Deutsches Akkreditierungssystem Prüfwesen GmbH

Annex to the Accreditation Certificate DAP-PL-4324.00 Accreditation based on DIN EN ISO/IEC 17025:2005

Period of validity: 2009-06-04 bis 2014-06-03

Holder of the certificate: **IST Institut für Sportbodentechnik Leipzig**

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Testing in the fields: **testing of sport halls, floors for sporting activities,
synthetic surfaces and synthetic turf areas**

abbreviations used: see last page

1 Sport halls

1.1 Testing of floors for sporting activities

DIN V 18032-2
2001-04

Sport halls - Halls for gymnastics, games and multi-purpose use - Part 2: Floors for sporting activities; Requirements, testing for the following methods according to part 6:
6.2 Determination of shock absorption
6.3 Determination of standard deformation
6.4 Determination of deformation spread
6.5 Determination of the behaviour under a rolling load
6.6 Determination of resistance to impact
6.8 Determination of ball behaviour

DIN EN 14904
2006-06

Surfaces for sports areas - Indoor surfaces for multi-sports use - Specification

for the following methods:

DIN EN 14808
2006-03

Surfaces for sports areas - Determination of shock absorption

DIN EN 14809
2006-03

Surfaces for sports areas - Determination of vertical deformation



DIN EN 12235 2004-09	Surfaces for sports areas - Determination of vertical ball behaviour
DIN EN 1569 2000-09	Surfaces for sports areas - Determination of the behaviour under a rolling load
DIN EN 1517 2001-05	Surfaces for sports areas - Determination of resistance to impact
DIN EN 13036-4 2003-12	Road and airfield surface characteristics - Test methods - Part 4: Method for measurement of slip/skid resistance of a surface: The pendulum test

1.2 Testing of sport halls

DIN 18032-3 1997-04	Sport halls - Halls for gymnastics, games and multi-purpose use - Part 3: Testing of safety against ball throwing
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1.3 Testing of padded walls

DIN EN 1517 2001-05	Surfaces for sports areas - Determination of resistance to impact
DIN V 18032-2 2001-04	Sport halls - Halls for gymnastics, games and multi-purpose use - Part 2: Floors for sporting activities; Requirements, testing; 6.2 Determination of shock absorption
DIN 18032-3 1997-04	Sport halls - Halls for gymnastics, games and multi-purpose use - Part 3: Testing of safety against ball throwing
IST-HV1-KSPW 2007-05	Determination of shock absorption and deformation; in-house method 'artificial athlete padded wall'

2 Synthetic surfaces

2.1 Testing of synthetic surfaces for sports areas

DIN V 18035-6 2004-10	Sporting grounds - Part 6: Synthetic surfaces
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for the following methods according part 6.3:

- 6.3.2.: Determination of shock absorption
- 6.3.3.: Determination of standard deformation
- 6.3.4.: Determination of thickness
- 6.3.7.: Determination of water infiltration rate

2.2 Testing of synthetic surfaces for outdoor sports areas

DIN EN 14877
2006-07 Synthetic surfaces for outdoor sports areas - Specification

for the following methods:

DIN EN 14808
2006-03 Surfaces for sports areas - Determination of shock absorption

DIN EN 14809
2006-03 Surfaces for sports areas - Determination of vertical deformation

DIN EN 12235
2004-09 Surfaces for sports areas - Determination of vertical ball behaviour

DIN EN 13036-4
2003-12 Road and airfield surface characteristics - Test methods - Part 4: Method for measurement of slip/skid resistance of a surface: The pendulum test

DIN EN 1969
2000-08 Surfaces for sports areas - Determination of thickness of synthetic sports surfaces

DIN EN 12616
2003-07 Surfaces for sports areas - Determination of water infiltration rate

3 Synthetic surfaces

3.1 Testing of synthetic turf areas

DIN V 18035-7
2002-06 Sports grounds - Part 7: Synthetic turf areas

for the following methods according to part 6:

6.2.: Determination of shock absorption

6.5.: Determination of ball behaviour with foot ball, hockey ball and tennis ball

6.6.: Determination of ball rolling behavior - hockey ball

3.2 Testing of synthetic turf for outdoor use

DIN EN 15330-1
2008-01 Surfaces for sports areas - Synthetic turf and needle-punched surfaces primarily designed for outdoor use - Part 1: Specification for synthetic turf

for the following methods:

DIN EN 12616
2003-07 Surfaces for sports areas - Determination of water infiltration rate

DIN EN 12235 2004-09	Surfaces for sports areas - Determination of vertical ball behaviour
DIN EN 12234 2002-12	Surfaces for sports areas - Determination of ball roll behaviour
DIN EN 14808 2006-03	Surfaces for sports areas - Determination of shock absorption
DIN EN 14809 2006-03	Surfaces for sports areas - Determination of vertical deformation
DIN EN 15301-1 2007-06	Surfaces for sports areas - Part 1: Determination of rotational resistance
DIN EN 13036-4 2003-12	Road and airfield surface characteristics - Test methods - Part 4: Method for measurement of slip/skid resistance of a surface: The pendulum test

3.3 Testing of synthetic turf according to FIFA Quality Concept for Football Turf - Handbook of Test Methods - January 2008 Edition

for the following methods according to parts:

- 8 Determination of ball rebound
- 9 Determination of angle ball rebound
- 10 Determination of ball roll
- 11 Determination of shock absorption
- 12 Determination of standard vertical deformation
- 13 Determination of rotational resistance
- 14 Determination of linear friction stude slide value & stude deceleration value

abbreviations used:

FIFA	Fédération Internationale de Football Association
HV	In-house method of IST
V	Preliminary Norm of Institut für Normung e.V.