

DIN 18035-6:2021-08 (E)

Sports ground - Part 6: Synthetic surfaces

Contents		Page
Foreword		4
1 Scope		5
2 Normative references		5
3 Terms and definitions.....		7
4 Requirements		10
4.1 General		10
4.2 Subgrade (native soil and sub-base).....		11
4.2.1 General		11
4.2.2 Preliminary examinations.....		12
4.2.3 Verification tests		13
4.3 Filter stability		13
4.4 Unbound supporting layer		14
4.5 Asphalt layer		17
4.6 Synthetic surfacing		21
4.7 Markings		21
4.8 Environmental impact of the synthetic surfacing.....		21
5 Material characteristics and descriptive features.....		21
6 Testing		23
6.1 Suitability testing		23
6.2 Quality monitoring		23
6.3 Verification testing		23
7 Test methods		23
7.1 Effects of the synthetic surfacing on soil and groundwater.....		23
7.1.1 Sample preparation.....		23
7.1.2 Elution with water (24-h-elution).....		24
7.1.3 Elution with water (48-h-elution, optional)		24
7.1.4 Extraction with hexane to permit subsequent determination of organic halogen compounds (EOX).....		24
7.1.5 Determination of dissolved organic compounds (dissolved organic carbon — DOC)		24
7.1.6 Determination of heavy metal contents.....		25
7.1.7 Determination of chlorinated paraffin.....		25
7.1.8 Determination of phthalate content		25
8 Use, care and maintenance.....		26
8.1 Use.....		26
8.2 Care and maintenance		26
Annex A (informative) Environmental protection recommendations		27
Bibliography		29
 Figures		
Figure 1 — Structure of a synthetic surface		8

Tables

Table 1 — Requirements and testing of the subgrade and formation level	12
Table 2 — Requirements and laboratory testing of the lower layer of the unbound supporting layer	14
Table 3 — Requirements for the lower layer of an installed unbound supporting layer.....	14
Table 4 — Requirements and laboratory testing of the upper layer of the unbound supporting layer	15
Table 5 — Requirements for the upper layer of an installed unbound supporting layer	16
Table 6 — Requirements and laboratory tests on asphalt layers	18
Table 7 — Requirements on installed asphalt layers.....	20
Table 8 — Requirements on installed synthetic surfacing.....	21
Table 9 — Determining material characteristics of synthetic surfacing	21
Table 10 — Descriptive features of synthetic surfacing.....	22
Table A.1 — Environmental protection recommendations (test values for the soil and groundwater complex) and tests on synthetic surfacing.....	27