

CEN/TC 217/TG ENV

ISSS

16-17 October '08

Rome



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1. Scope and workprogramm
2. Members
3. Current situation
4. Progress



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General agreement on the scope and work program

- Environmental aspects and toxicity of synthetic surfaces
- Product in use (not recycling) for outdoor surfaces.
- Indoor surfaces are taken into consideration
by the EN 14904 for indoor sports surfaces
- EN 12920* to be circulated (TC 350 and 351 works)

* Characterization of waste — Methodology for the Determination of the Leaching Behaviour of Waste under Specified Conditions



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CEN/TC 350

Responsible for the development of voluntary horizontal standardized methods for the assessment of the sustainability aspects of new and existing construction works and for standards for the environmental product declaration of construction products



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CEN/TC 351

Development of horizontal standardised assessment methods for harmonised approaches relating to the release (and/or the content when this is the only practicable or legally required solution) of regulated dangerous substances under the Construction Products Directive (CPD) taking into account the intended conditions of use of the product.

It addresses emission to indoor air, and release to soil, surface water and ground water



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1 : Artificial turf

2 : Synthetic surfaces

Outdoor

Indoor



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To develop

Tests to determine :

Environmental : Leaching

Health : Dust

VOC

Skin contact

Smell



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The work must include :

- Sampling
- Test protocol
- Test method
- Requirements



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Products to be considered in f.i. Artificial turf :

- carpet itself
- Infill
- Elastic layer
- Carpet
- Glue



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2. Position

Task group in CEN/TC 217 Outdoor sport area's

Looking at environmental aspects of sportsurfaces

Trigger:

SBR and its noise a.o.:

- Italy
- Norway
- ISSS seminar at Dresden



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Members

- Delegates of National standard
- Test institute
- University
- Industry
 - Experts of Rubberindustry
 - SBR
 - EPDM
 - TPE
 - Sub base
 - Artificial Turf
 - Yarn
 - Carpet



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- Start in Berlin October 2006
- Meetings in Paris, London, Leiden en Wetteren
- Next meeting in Berlin 5th November 2008



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- Start in Berlin October 2006
- Inventory
 - What is available
 - What is necessary



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Environmental : Leaching 1st to address

Second stage

Health

: Dust
VOC
Skin contact
Smell

if done

if done



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Leaching

Starting points

- define a laboratory test designed to assess the impact on soil and ground water of a complete Artificial Turf construction
 - based on the principle of large-scale in-situ tests (lysimeters)
 - to determine:
 - What belongs to the total construction
 - esp. re the sub base

- Individual components
 - when replacing a single component no total leaching test

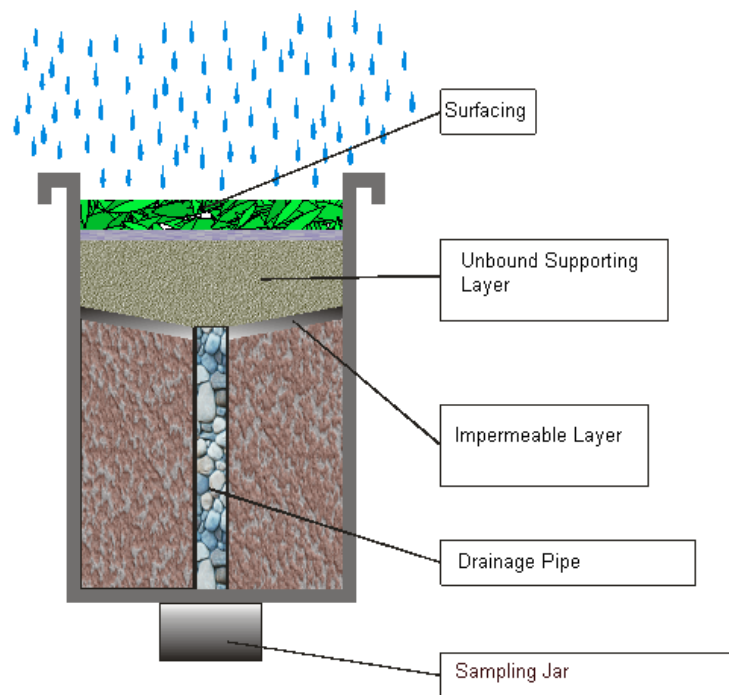


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Lysimeter



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Basis EN 12457-4

Characterization of waste.

Leaching.

Compliance test for leaching of granular waste materials and sludge's.

One stage batch test at a liquid to solid ratio of 10 l/kg for materials with particle size below 10 mm (without or with size reduction)



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The basic principle

simulate the phenomena observed on outdoor artificial turf systems.

It ensures, in particular, a short contact time between the sports systems and water, corresponding to the draining character of this surfaces.

The spraying system is conventionally adjusted to alternate particularly dry and wet periods.

The sample is of the same type as the one used for mechanical test and ensures having significant quantities of tested materials.

F.i. discussions items

dry and wet periods: how long and how frequent

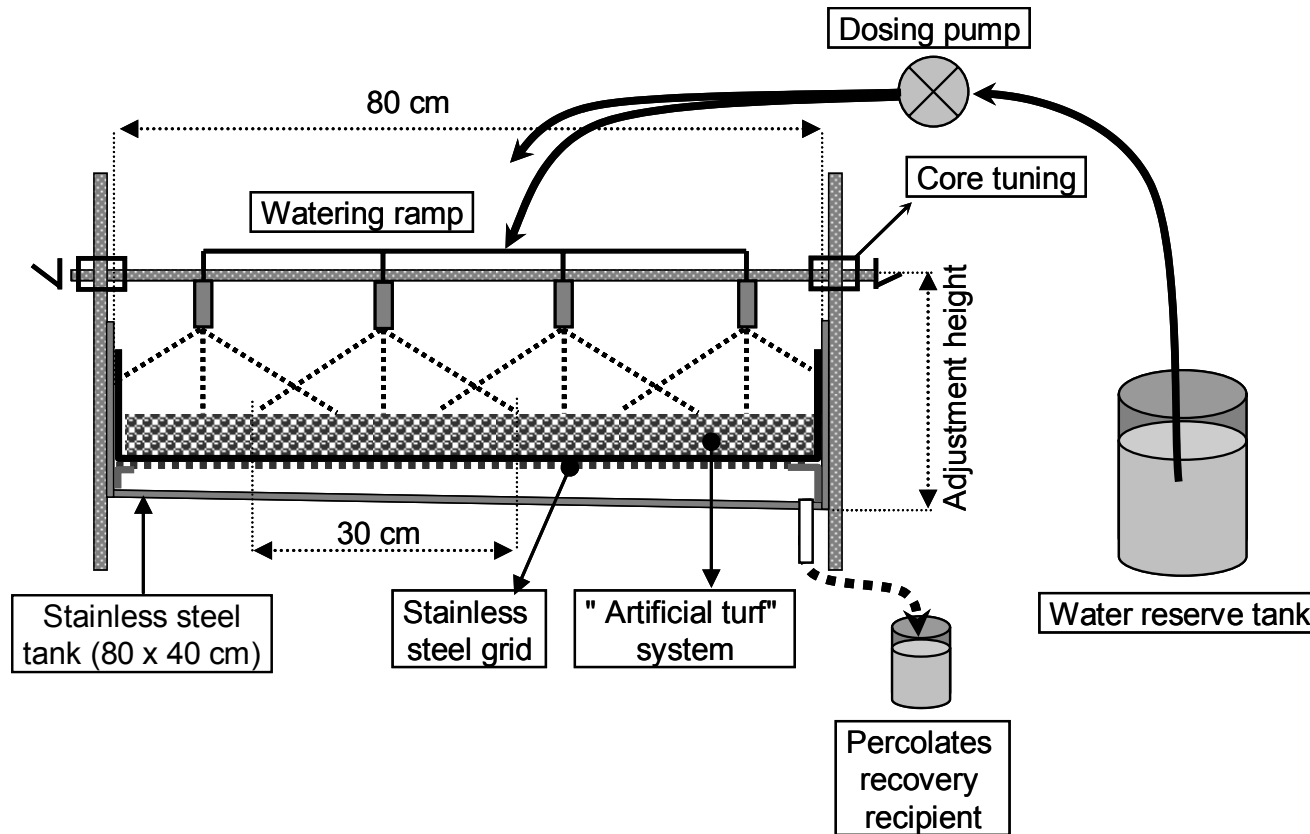
Is aging necessary and how to achieve



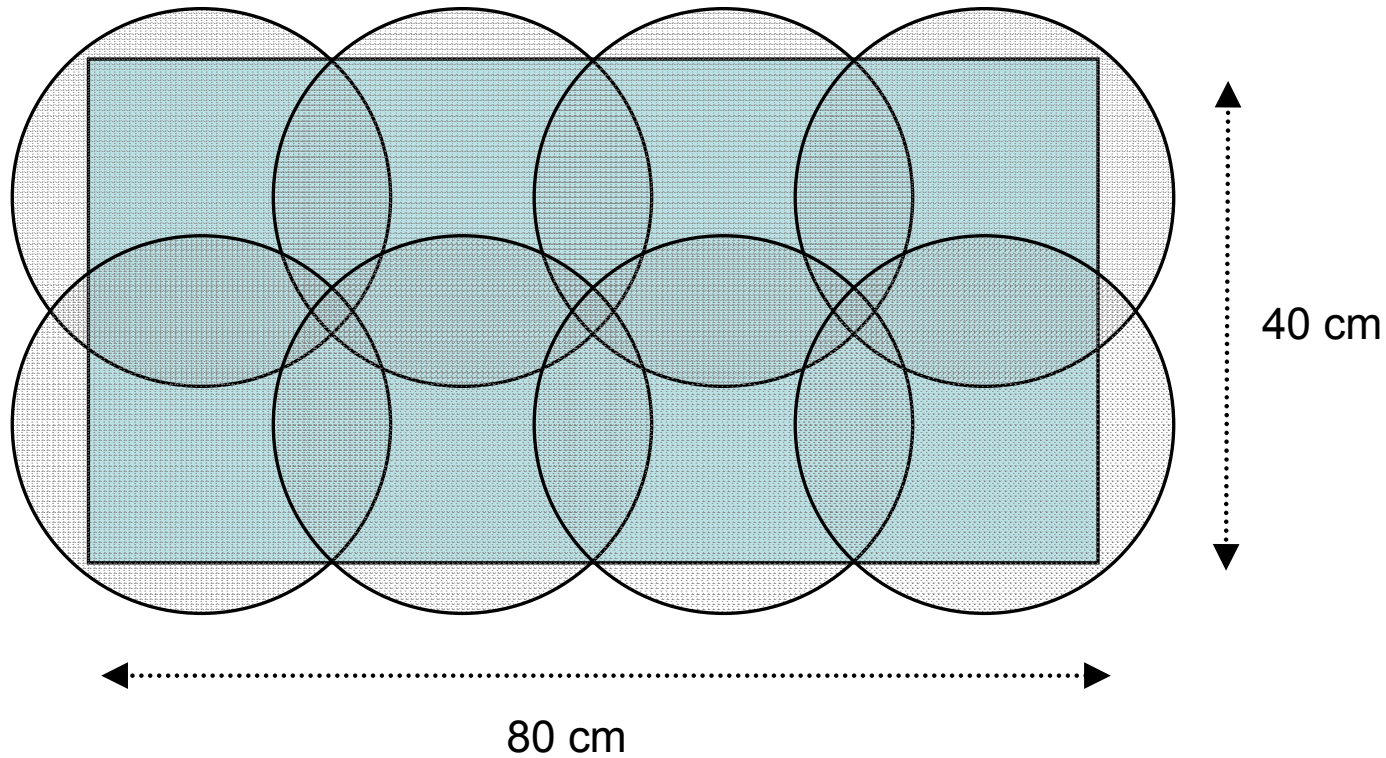
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Parameters: *all to be defined*

- Experiment duration:
- Frequency/duration of the spraying/non-spraying periods and the flow rate
- Kind of spray water fi. Ph value
- Taking and sampling of collected percolates



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Elements to be analysed

- Dissolved Organic Carbon (DOC)
- Lead (Pb), Cadmium (Cd)
- Total Chromium (Cr)
- Chromium VI (Cr VI) Mercury (Hg)
- Tin (Sn), Zinc (Zn)
- And possible others

cf. DIN 18035-7 and XP 90-112 to defined



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Other issues to attend:

- Limits
- Sampling
 - Turf with or without seam(and thus glue and tape)
 - sand
 - Performance material
 - (sportsfunctional)base



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Next:

Establish procedure

- all details of machine

- timing in procedure

- fix parameters e.g. ph of water

Test of separate components e.g granulate

Harmonization with esp. TC 351



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Thank you!



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