

## Questions and Answers relating to the British and European Play Standards

### What is 'Critical Fall Height'

- Critical Fall Height or free height of fall is the calculated height from which it is assumed that a surface will absorb the impact of a child's fall, without the child suffering severe head injuries.
- To carry out the test, a steel sphere, referred to as a 'headform' is dropped from progressively increasing heights onto the surface under test in laboratory conditions. The severity of the impact is recorded. The greater the impact absorption of the surface under test, the higher the critical fall height will be. Testing is carried out in accordance with the requirements of BS EN 1177

### What is Head Injury Criteria ?

- Head injury criteria is the calculated value to assess the maximum height of a head-first fall, that an average child's head could sustain onto a surface without suffering serious injury.

### Who are British Standard Institute Testing ?

- British Standard Institute Testing is an independent product testing facility, which regularly tests manufacturers products to evaluate and confirm their performance to a wide range of criteria, Other centres such as The Centre for Sports Technology also carry out British Standard tests on LIAS.

### Does the Product Test House issue a Test Certificate and Test Report ?

- Yes. The test certificate states:-
  - Which product was tested
  - Which tests took place
  - What were the results for each test

A separate report is also issued which sets out far more detail.

The test certificate and test report is not an endorsement that the product is suitable for use, only that it has been tested in a certain way. It is for the potential purchaser to evaluate and interpret the test results, to determine which of the products tested will meet their requirements.

### Do I always need an Impact Absorbing Surface ?

- Even though there is no legal requirement for impact absorbing surfacing to be installed, its use is recommended by all the safety organisations such as RoSPA, BSI, NPFA and government bodies such as the Department of the Environment, the Department of Education and Science, Department of National Heritage and the Health and Safety Executive.
- A joint statement issued in January 2009 by the Association of Play Industries (API) and the Register of Play Inspectors International Ltd (RPII), states that:

“The revised version of BS EN 1176 (2009) requires that for equipment with a fall height of less than 600mm, an impact attenuating surface, tested to EN1177, is only needed where the equipment causes a forced movement on the body of the user”

### What if I decide to use a product which has not been tested in accordance with BS EN 1176 ?

- You would have no way of being able to calculate the LIAS depth to give the correct critical fall height.
- If you have any doubt whether a product has or has not been tested in accordance with the requirements of BS EN 1176, insist that the supplier provides you with a valid copy of the relevant test certificate.

### Do I have to use LIAS that conforms to the requirements of BS EN 1176 ?

- No. These standards are not mandatory. However, British Standards provide clear information for playground equipment manufacturers and purchasers on desirable safety levels, and proof of compliance with a relevant standard can help in provision of a defence if court action is taken. For example, in court cases alleging negligence brought against playground providers, compliance with the relevant standards has been taken as evidence of a provider's positive approach to the safety of the playground.

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# Questions and Answers relating to the British and European Play Standards (Continued)

**Do LIAS products have to be within the specification set out in BS EN 1176 Table A.1 ?**

- No. These are only 'examples of LIAS specifications' and other products could be suitable. For example, the particle size for bark is described as 20 - 80 mm, but Melcourt Playbark® 10/50 has a nominal particle size of 10 - 50 mm. Unfortunately there is no reference to the wood content in bark LIAS. Melcourt Playbark® 10/50 has less than 2.5 %
- See also:

[British and European Standards for Play](#)



## Contact

Melcourt Industries Limited, Boldridge Brake, Long Newnton, Tetbury, Gloucestershire. GL8 8RT  
Tel: +44 (0)1666 502711 Fax: +44 (0)1666 504398 Email: [mail@melcourt.co.uk](mailto:mail@melcourt.co.uk)  
Web Site: [www.melcourt.co.uk](http://www.melcourt.co.uk)