

Beware of the Pitfalls

Correct Product Specification

Before obtaining quotations or going out to tender for LIAS, it is extremely important that the specification of the product required is accurately written, in an easily understood, concise and quantifiable way.

It is not sufficient to ask for "x cubic metres of play grade bark", although we often see this vague type of specification. Such wording is open to wide interpretation and is unquantifiable.

The recommended specification wording is clearly set out on all Melcourt Technical Information Sheets.

Products from different suppliers will have different critical fall height test results. If you intend to allow 'similar or approved products', it is crucial that the critical fall height test results are equal to or better than the specified product.

Product compliance to BS EN 1176

The table shown in table A.1 of the Standard, sets out "examples" of LIAS specifications.

These are only "examples" and other product specifications could be suitable.

Melcourt Playbark® 10/50, for instance, has a nominal particle size of 10-50mm and has been successfully used as an impact absorbing surface for many years.

Although the table gives an "example" of bark having a particle size of 20-80mm, Melcourt Playbark® 10/50 would still be totally acceptable.

Unfortunately, no mention is made of the maximum wood content in bark LIAS. The old BS 5696 part 3 item 4.2.5.3 stated that LIAS should not contain additives, this important aspect has been omitted from the new standard.

Over time, the new Standard will be updated and hopefully the product specifications be more specific and quantifiable.

Bogus Claims About British Standard Testing

BS EN 1176 describes the methods of testing impact absorbing surfaces. It is not possible therefore for a particular surface to 'comply' with BS EN 1176.

Many products are claimed to have been tested in accordance with BS EN 1176, before you place your order :-

- Obtain a genuine copy of a certificate of test from your proposed supplier.
- Carefully analyse the test depths and the resulting fall heights achieved.
- If the product testing has only been carried out at 300mm test depth, the LIAS will need to be installed to a depth of 400mm, i.e. 300mm + 100mm, irrespective of the fall height results, in order to comply with BS EN 1176.
- If you have any doubts, contact the Association of Play Industries, the National Playing Fields Association or your local Trading Standards department.

Unauthorised Product Substitution

Customers have frequently specified certain manufacturer's products e.g. Melcourt Playbark® LIAS, but have been supplied by the contractor with another product from another supplier, which usually is inferior to that originally nominated.

If you are not certain that you have received the specified material, simply contact the manufacturer direct and ask for copies of the relevant delivery notes. These should normally be supplied free of charge, by return.

Beware of the Pitfalls (Continued)

Species Substitution

Some customers will specifically ask for a bark of LIAS to be of a particular species, because of its superior performance characteristics.

Pine species, although more expensive than spruce, or mixed conifer species, have a higher critical fall height rating and will tend to last longer.

If you order pine, but suspect that you have been supplied with spruce or mixed conifer, contact the supplier promptly, in the first instance.

You might be told that the unusual appearance of the pine bark is because it is derived from juvenile trees. This is most likely to be untrue. If you have any doubts, contact your nearest Trading Standards Office immediately.

Typical Product Samples

Typical product samples, together with clear written quotations will be readily available from all reputable suppliers.

When evaluating product samples it is critical that the original product specification is quantifiable, e.g. particle dimensions, dust and fines content, wood content, species type and freedom from methyl bromide and other contamination.

LIAS samples only represent a minute quantity of the total volume of material required, but should still be typical and representative of the material to be supplied.

Bark and wood samples need to be approximately half a litre to be representative. A tenth of a litre of sand is sufficient.

Volume Shortfall

There are a number of ways in which product volumes can be under-supplied:

- Short delivery on vehicles. Melcourt guarantees the delivered volume to be minus 0% to plus 5%.
- When the client is operating a "Supply and installation" contract, the product volume can be short supplied, with the installed depth being less than required. To overcome this, take a number of sample measurement depths across the area to be surfaced, prior to filling. Measure the eventual depth, allowing for the appropriate settlement, after the LIAS has been installed.

Comparison of Quotations

Although some specifiers will nominate a supplier, others will ask for quotations from several suppliers and simply compare prices. It is vital when evaluating quotations to compare like with like. Key points for careful consideration include:

- Correct product specification (see above).
- Comprehensive written quotations.
- Full technical literature.
- Typical product samples.
- Product compliance with BS EN 1176.
- Written evidence of testing to British Standard 7188:1998, including the critical height rating at depths of 300, 200 and 100mm.
- Product specification being offered is quantifiable e.g. particle size range, dust and fines, wood content and origin.
- Availability.
- Method used to measure volume.
- Guarantee of volume supplied.

Having given due consideration to the above points, the prices can then be fairly compared. Refer to the ['Checklist for LIAS Quotation Comparison'](#), which sets out this subject, in greater detail.

Volume Measurement

There are a number of different ways of calculating the volume of LIAS.

- It is vital for the customers to know which volume measurement method the supplier is using, so that they can accurately calculate how much material should be ordered and so that they can reliably compare various quotations.
- All the Melcourt LIAS products which are sold by volume are calculated using the Bulk Density Method, as set out in BS EN 12579:2000 and BS EN 12580:2000.
- Volume Measurement

As part of our 'Customer Service Statement', our volumes are guaranteed to be within a tolerance of -0/+5%.

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Beware of the Pitfalls (Continued)

Product Mixing

It has been known for installers to lay a cheaper product at the bottom of the pit and top up with the specified product, without the client's approval.

Although it would not be a recommended procedure, if two quite different product specifications are to be installed in the same pit, it is advisable to carefully rake level the product at the bottom of the pit; lay a geotextile membrane over that product, before filling the pit with the second product.

A reasonable calculation of the resultant critical fall height given by this surface would be extremely difficult to calculate.

We suggest that the critical fall height be assumed to be that of the lowest performance of the two products.

The Importance of Aftercare

One of the most common problems experienced is that of the client who delighted with the initial installation, who then totally overlooked the crucial importance of correct, regular aftercare.

Full details of proper aftercare are set out in the section 'Successful Aftercare'.

It is a requirement of BS EN 1176 that the L.I.A.S product supplier provides correct installation and maintenance instructions, together with inspection procedures.

Is all Bark Sold for Play Areas the Same as Melcourt Playbark® LIAS?

No!

For over a decade, Melcourt has built up a substantial reputation for consistent quality with products designed for a specific purpose. Melcourt Playbark® LIAS is a granular, long-lasting bark with impact absorbing characteristics far in excess of any other product.

As other manufacturers are not able to offer the Melcourt Playbark® LIAS unless they buy it from Melcourt for selling on, they are unlikely to be offering similar quality.

Is all Bark Used for Play Surfaces the Same?

No!

Barks from different tree species have quite different textural and durability characteristics, which markedly affect both their performance and the maintenance required to keep them in peak condition.

Pine bark is the predominant granular, durable bark grown in Europe. Melcourt's process converts it into Europe's highest rated impact absorbing surface.

Spruce bark, the main alternative to pine, is a thin, soft, stringier bark, of lower durability than pine, originating primarily from Ireland, Scotland and Wales. It has lower impact absorption potential than the granular barks, the flat form eventually consolidating and matting closely together, reducing impact absorption and drainage capability.

Are all LIAS Independently Tested in Accordance with the Requirement of BS EN 1176 ?

No!

Some are not tested at all, but false claims are made to say that they are. Some are only tested at depths of 300mm.

Without proper and full independent testing, it will not be possible to determine the installation depth, in accordance with BS EN 1176.

All products in the Melcourt range of LIAS have been independently tested by British Standard Testing and The Centre for Sports Technology at depths of 300, 200 and 100mm.

Copies of current test certificates are provided upon request, following delivery of customers order.

They have also been lodged with the API secretariat, for customer inspection.

Critical Fall Height Testing is Carried Out in Laboratory Conditions. Is the Critical Fall Height Affected in Playground Conditions?

RoSPA has recently evaluated new mobile equipment which can be used to test critical fall heights "on-site". The on-site tests have shown that with most newly laid, correctly installed and maintained LIAS surfaces, the critical fall height tests measured on site, are virtually the same as that achieved in the laboratory.

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Beware of the Pitfalls (Continued)

Do all LIAS Surfaces Achieve the Same Critical Height Rating, When Independently Tested According to BS EN 1176 ?

No!

The test results only relate to the specific product being tested.

On each valid test certificate is printed:-

- The product name.
- The test results for each test depth.



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
Web Site: www.melcourt.co.uk