BCO Guide on the selection of construction materials:  
Green is the new black...

Introduction


Why was there a need for such a Guide?

In the 1980s, to prevent the use of materials considered to be high risk, lists of forbidden materials (“blacklists”) became common in UK construction contracts. The blacklists tended to be inconsistent, poorly drafted, outdated and most importantly, included materials which often, if properly used, would cause no risk to arise. The situation was extremely unsatisfactory; clients were uncertain as to whether their aims were being achieved, contractors struggled to comply with poorly worded blacklists and suppliers were concerned that the blacklists unfairly restricted use of their materials.

Finally, after much research and debate, the British Council for Offices and the British Property Federation commissioned Ove Arup & Partners to produce outline guidance for clients and specifiers of materials and so the 1997 Guide was created.

The 1997 Guide moved away from blacklists and advocated the selection of materials in accordance with good practice. This involved considering the use of materials in the light of legislation and relevant industry documents (such as national and international standards, codes of practice and agreement certificates, and product literature), consulting manufacturers and seeking independent advice where necessary. Material selection was to be on a case by case basis as opposed to a blanket approach.

The pre-1997 blacklists became a thing of the past, being gradually replaced in construction contracts by reference to the 1997 Guide.

What has changed in the 2011 Guide?

The following key changes have been made to the 1997 Guide:

- **Different structure**: The structures of the 1997 Guide and the 2011 Guide differ slightly. The 1997 Guide had two sections: section 1 sets out general considerations to be applied when selecting materials and section 2 sets out guidance notes summarising good practice in the selection of twelve materials. The guidance notes include a material description, appropriate application, points of caution, good practice and suggested further reading. The 2011 Guide is longer; it boasts 3 sections. Section 1 is similar to the 1997 Guide. It sets out general considerations now with a particular emphasis on environmental considerations. Section 2 sets out a series of guidance notes summarising good practice in the selection of twelve materials. A new section 3 lists reference sources.

- **New materials included**: The 1997 Guide focussed on the twelve example materials which appeared most frequently in the Construction Industry Research and Information Association (CIRIA) (CIRIA RP491 Excluded Materials: An industry survey). The 2011 Guide provides information on twelve of the construction industry’s most commonly used materials and material groups today. As one would expect after 14 years, some of the 1997 information has been updated to reflect changing standards, while other materials have been included in a wider group (for example, “metals”).

- **Environmental considerations highlighted**: The most notable difference between the 1997 Guide and the 2011 Guide is the heavy emphasis in the 2011 Guide on the environment. The 2011 Section 1 contains environmental considerations listing green construction statistics, citing key government and industry publications on sustainability and including diagrams showing the energy lifecycle of an office building and a table listing maximum transport distances for common reclaimed materials. Each guidance note in Section 2 includes a section on environmental considerations for that particular type of material and Section 3 emphasises reference sources for environmental selection of materials. The message is clear: sustainability should be considered at all stages of material selection.
Surprising and new?

The 2011 Guide is the natural step forward from the 1997 Guide. It is new but little is surprising in its evolution.

As one would expect, the underlying philosophy of careful consideration of all sources and judgement on a case by case basis remains the same. The materials referred to in section 2 have altered to a small extent but again this is hardly a surprise as much time has passed since the previous editions were issued.

The most major change, namely the emphasis on the environment and the lifecycle of the building, is significant when compared with the 1997 Guide. However, if this change is considered in the context of what has happened in the construction industry and product technological advancement and knowledge since 1997 (the explosion in green regulation and growth of the sustainable building industry), it would be of greater note if no reference to the environment had been included.

Cynics may argue that this 2011 Guide will prove unpopular due to the emphasis on costly green specification. However, we think it unlikely that this will be the case. Green materials are not necessarily more expensive than normal materials; increased cost will depend on a variety of factors including project type, size and location. Even if use of sustainable materials is more costly in the short term, there may be long term cost savings as the resulting improvements in building performance may reduce costs in use, for example, of energy and water.

In any event, specification of green materials is arguably no longer an option to any great extent. The UK’s zero carbon commitments coupled with heavy Government support for sustainable building in the form of green regulation (such as the CRC Energy Efficiency Scheme, the new Building Regulations and Feed in Tariffs) have pushed the construction industry firmly towards green specification.

Landlords are increasingly requiring tenants to sign up to green leases and memorandums of understanding and to participate in green building management initiatives. Developments are being designed to meet high environmental standards and their attainment is evidenced by increased focus on green benchmarks such as BREEAM and LEED. Green benchmarks are frequently included in Employer’s Requirements and enhance not only reputational impact but CRC league table standing. The Government has emphasised its commitment to green projects through the CRC Levy and the medium of the soon to be launched Green Investment Bank, which will enable long-term investment in economic infrastructure in the low-carbon sector and also investment for new energy and transport projects. Gone are the blacklists. Environmental awareness is key for future materials specification.

Green is indeed the new black.

What do I need to do?

So, do you need to do anything in relation to the new 2011 edition?

- For new projects, ensure any new development documents and construction contracts that you enter into refer to the 2011 Guide. For existing projects, the similarity of the 2011 Guide to the 1997 Guide is such that for construction contracts in operation which refer to the 1997 Guide, no immediate and blanket change is likely to be necessary. However, it is prudent to consider on a case by case basis the need to change to refer to the 2011 Guide. This may be necessary or desirable for some projects, particularly those at an early stage.

- Review development agreements and other real estate documents where the code may impact. For example, where any obligations have been entered into in relation to the use of certain materials or a particular specification.

- If you are involved in the selection of construction materials, familiarise yourself with the new 2011 Guide.

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