

CFJ Sustainability Article - “Mad Men Green Claims.” November 2012

I have worked in the field of environmental consultancy for many years now and, through my work for a global leading flooring manufacturer looking after issues such as international environmental certification and performance testing, I think that I have developed a fair picture of the current sustainability scene. That is I have a fair picture of a somewhat baffling maze. There is clearly an increasing demand by key government and corporate clients for products with verifiable green credentials. This demand probably accounts for around half of new build and refurbishment projects so it is now a key market driver. How then is the industry responding to meet this demand and what changes are taking place?

In this series of articles I will attempt to offer an aerial view of this hypothetical maze and perhaps point out the more obvious dead ends and some of most promising of the paths forward. I will focus on three areas that will hopefully be of interest and which I feel are likely to change what you do in the relatively near future years. These are

- Product Design for the Environment
- Environmental Certification and EPD's
- The identification and substitution of hazardous chemicals in carpets

The topic is complex and covers a huge and varied range of challenges for the flooring industry. I will concentrate on the field of commercial carpet tiles which is where I have most experience and where the specification requirements are increasingly demanding.

Firstly it may be helpful to summarise where I see things at the moment.

Green Marketing Claims

Green claims about flooring product are easy to make and difficult to substantiate without transparent and credible measures. The first of the commercial dead ends in my hypothetical maze is the plethora of green-washing claims that abound in some current promotional materials. By this I mean statements that have no basis in environmental science. A recent good example I have come across is this phrase..... *all of our carpet tiles are now “100% Ecological.”* What on earth does this mean? Is this a product with zero negative environmental impacts? Let me list some of the things that this claim should cover in order to meet the key sustainability agenda.

Are we, for example, to believe that such a product uses no virgin raw materials that are won from mines or oil wells? Has it completely eliminated the use of hazardous chemicals? Is it manufactured using only renewable energy sources such as solar power or wind? Is there no impact on climate change? Does the water used in manufacture come from a completely closed loop recycled source? Does the manufacturing process create zero emissions into the air or land? Is the product 100% recyclable and designed and engineered so that post

consumer waste is minimised and diverted from landfill to be continuously re-used to make new carpet tiles?

I believe the market is years away from seeing such a product. However it is important to note that significant strides are being made to reduce some, if not all, of these most important environmental impacts by a number of manufacturers and I will mention some of these in this series.

In my view phrases such as **“100% Ecological”** offer no useful information and serve only to confuse an already cynical market. The continuing use of these “Mad Men” style catch phrases demonstrates only a poor grasp of the huge topic of sustainability by the marketing people. This is a highly sophisticated industry which has traditionally invested and competed on design innovation and cost reduction. We know where we are when selling design, price and performance, and promotional materials and displays are generally superb. There is certainly no lack of creative images in the promotion of sustainability. Forests, waterfalls and wildlife abound. The problem is with the words and language and measures and the lack of clarity in the message. This is not in my view a commercially sustainable marketing strategy.

Recycling and Recyclability

Another hopeful but potentially misleading path in the maze is the rush to claim “Recycled Content.” For many years now the key to claiming green credentials has been to include some recycled material in your product. Upon closer examination our product claiming to be **“100% Ecological”** was in fact simply describing its impressive recycled content and potential for recycling at the end of its life. It is worth noting that high recycled content is a key criterion towards achieving accreditation under important schemes such as the RICS SKA ratings system for refurbishment projects. Recycling clearly helps the environment in many ways and is obviously worthwhile.

However recycling is only a small part of the sustainability story and all recycled content claims are not alike. As with most things connected with sustainable manufacture, it is complicated by the need to define terms if we are to compare like with like. It is important that recycling claims are checked and verified against internationally agreed definitions if they are to be credible. There are two essential types of recycled content:

Pre-Consumer Material:

Genuine claims here meet ISO 14021 criteria for the re-use of post-industrial material diverted from the waste stream during a manufacturing process. Such claims must exclude materials such as rework, regrind, broken or scrap generated in a process as this is reclaimed primarily to improve production cost and efficiencies.

Post-Consumer Material:

Post consumer recycled content is defined under ISO 14021 as end of life or distribution and installation waste that is no longer fit for purpose.

This is hardest to achieve given that most carpet products are difficult to separate into recyclable parts and thus go to landfill even if some of the component materials are

recyclable. Some re-use schemes are in place to find new homes for high quality post consumer waste carpet diverted from landfill. Most recycling of post consumer waste is however achieved by “down cycling” to produce other products such as equestrian centre flooring and underlay. Significant strides are being made through “down cycling” initiatives to divert some of the huge carpet volumes sent to landfill and reduce the consequent negative environmental impacts. Carpet Recycling UK has led the way and here and “down cycling” now diverts around 16% of the annual 400,000 tonnes of carpet which goes to landfill. They are targeting 25% by 2015. While making a significant contribution to the sustainability agenda it should be noted that the down cycled products will eventually find their way to landfill or incineration.

Other initiatives include using carpet waste as an energy source. However some backing materials such as pvc do not lend themselves to this disposal route due to the need to avoid toxic products of combustion. There is potential for use of waste carpet for insulation and wool pile has the potential for use as a soil nutrient.

The ultimate goal is however to continuously recover and “up cycle” this waste to produce new carpet products through design for recycling and the use of production processes such as waste nylon depolymerisation to produce new polymer and carpet fibre. This is being achieved to varying degrees by some manufacturers. This closed loop approach has the most potential for environmental improvements in manufacturing as well as eliminating the need for landfill and thus reducing the demands of new carpet for finite raw materials, energy and water.

In the next article I will look specifically at the demands of Design for the Environment and at some of the important strides that are being made.

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