

12th November 2009

Briefing NSF 140 US standard for sustainable carpet

A tough new standard for sustainable carpets has been introduced in the US.

NSF140:2007 helps those who specify, approve, and purchase the billions of yards of carpet used annually in the US, by identifying carpets that meet performance and environmental requirements.

Developing the Sustainable Carpet Standard and having it approved by the American National Standards Institute (ANSI) has been a 5 year process. The standard was designed by a consensus group of experts from federal and state governments, NGOs, end users (such as architects and designers) and industry.

Products are assessed to silver, gold or platinum standards, and have to meet prerequisite conditions across 5 sustainability categories: public health and environment, energy, materials, manufacturing, end-of-life and innovation.

Reclamation and End-of-Life Management (EOL) is weighted as the second most important category after public health and environment. Prerequisites for the EOL category are that the manufacturer must describe where operational reclamation opportunities exist. As a prerequisite to achieving the platinum level in 2007, manufacturers had to demonstrate that 10 percent of the product was reclaimed and recycled. This particular goal is linked to the overall goals that the government and CARE have set for the industry, and will increase year on year. Beyond the prerequisites, additional points are awarded for various levels of product reclamation. Manufacturers who show an 80 percent reclamation rate, calculated according to a prescribed formula, receive the full number of available points.

A manufacturer can also earn points for repurposing or reuse, and by documenting that the materials management system takes materials that start as carpet and reclaims them into secondary non-carpet materials.

NSF140 has driven innovation in reclaiming carpet materials for use in the carpet manufacturing process. For example, American company Polar Materials has developed C2C fillers (carpet to carpet), a new filler range containing up to 50% post-consumer carpet content. Presenting the C2C solution at the 2009 CARE Conference, Joseph Keating said that Polar's technology allows for large scale re-use of 35% of carpet weight that is not sent to landfill. The process involves sterilization of the recycled carpet portion followed by integration with new filler to overcome stickiness. C2C fillers run through existing silos and mix system so no additional capital investment is required. Primary production of C2C fillers is from a new joint venture plant with Franklin Industrial Minerals in Dalton, GA and two plants in Tennessee and South Carolina. An addition plant is due to come on stream by autumn 09 in California.

Efforts to increase post-consumer recycled content are also underway in the UK. Two companies, Monckton with fine rubber powder and granulates, and Mid-UK with gypsum (calcium sulphate) offer recyclates as fillers that may be suitable for carpet manufacturing. To order samples see contact information below.

With UK carpet manufacturers who compete internationally already having to contend with NSF140, and the standard's relevance expected to continue growing in the non-US market, the market prospects look good for increased recycled content.

Further information

Polar Materials: Jerry Turner, Sales and Marketing Manager on turnerjd@bellsouth.net

Monckton: For samples please contact Gareth Vicary 07985 859185

MID UK: www.midukrecycling.co.uk For samples please contact Chris Mountain 01400 275712