

Information Paper

Reducing the embodied impacts of shopfitting equipment

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Major retailers have for some time been reporting, managing and reducing their operational environmental impacts. However, little is known about the embodied environmental impacts of the shopfitting equipment which furnishes retail stores.

To address this, in 2011 BRE in partnership with Marks & Spencer, DisplayPlan and FITCH launched an online tool, LIST, which models the life-cycle impact of actual or proposed equipment designs, based on a cradle-to-grave life-cycle and taking into account packaging and transport impacts. Information about the development of LIST can be found in BRE Information Paper 1/11^[1].

BRE has since collaborated with the National Association of Shopfitters (NAS) to model a range of shopfitting equipment using the LIST tool to benchmark embodied impacts, estimate equipment impacts based on store layouts, examine case studies for reducing embodied impact through changes to equipment design and specification, and develop guidance for the industry (both clients and supply chain).

This Information Paper gives the results of this latest collaborative study and sets out some key considerations for cost-effective impact reduction. It provides guidance for designers and manufacturers on producing greener shopfitting display equipment and for retailers seeking to improve their environmental profile.

Introduction

The incentives for retailers to report, manage and reduce operational environmental impacts (especially greenhouse gas emissions due to energy use) are well known. However, less is known about the embodied environmental impacts of the retail buildings themselves and of the shopfitting equipment which furnishes these stores. Some carbon footprinting studies of new



Figure 1: Shopfitting equipment at Marks & Spencer's Pantheon store, Oxford Street, London (image courtesy of Marks & Spencer plc)

store construction have been undertaken but the impacts of shopfitting equipment have largely been overlooked.

Key functions of shopfitting equipment, which is the retail-specific furniture required for a retail operation, include:

- *presenting product*: front-of-house ambient/chilled food and non-food storage and display, fresh food servery counters, specialist categories (eg wine, books)
- *customer service*: information desks, till points, self-service checkouts, café furniture
- *communication*: product promotion, store signage, customer information, branding.

The environmental impact of shopfitting equipment is likely to be substantial for these reasons: