

Carpet Tile vs. Broadloom in Healthcare

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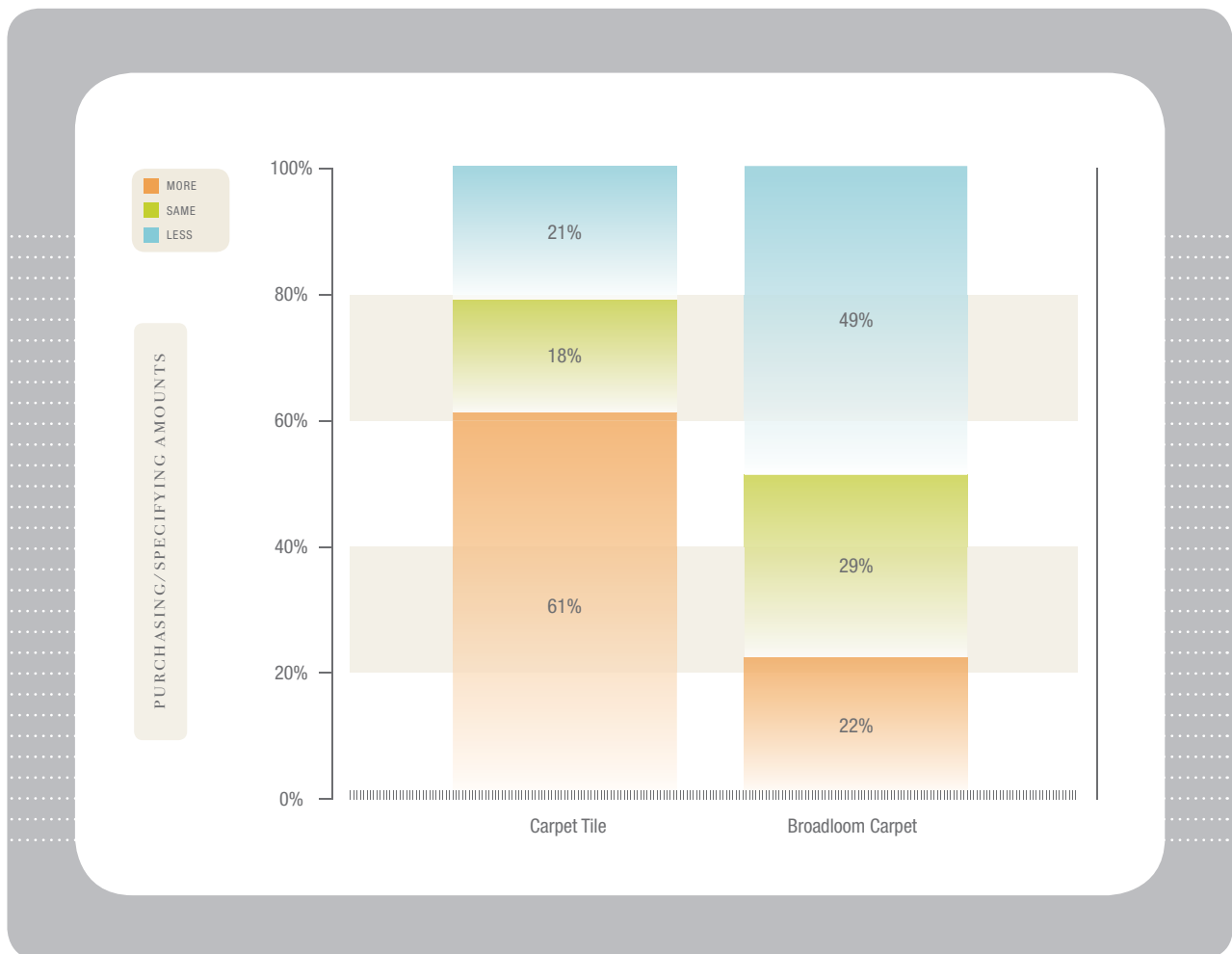
Carpet Tile vs. Broadloom in Healthcare

In response to the call for warmer, quieter and more humanizing healthcare environments, carpet has moved steadily from administrative spaces into patient care areas such as nursing stations, corridors and patient rooms.

According to a commercial flooring market survey conducted in April 2008 for the Carpet and Rug Institute (CRI) by Charleton Research Group, a majority of the 200 participating healthcare specifiers responded that they would increase their purchases of carpet products over the coming year.

And as carpet of all types is being specified more often in healthcare facilities, those who have to purchase or specify carpet are now more often confronted with a choice; to buy carpet tile or broadloom carpet.

The CRI survey data presented below shows that in healthcare, the majority would specify carpet tile over broadloom, with 61% saying they would purchase more carpet tile compared to 22% who would purchase more broadloom carpet. In fact fully 79% would purchase more or the same amount of carpet tile, compared to 49% for broadloom carpet.



So, what is causing the rising interest in modular carpet in healthcare? The most important reasons cited by the healthcare survey respondents as key purchasing factors are given below. These say that compared to other healthcare flooring options modular carpet is:

1. Most stylish or attractive
2. Easiest to install
3. Easiest to recycle

Carpet tile appearance has come a long way, particularly in the past 10 years as designers have successfully introduced beautiful new designs that celebrate the concept of tile rather than pretending to be broadloom. These new and organic designs are not only visually appealing, but help to conceal wear-and-tear, especially the increasingly popular “random” patterns, which also require less attic stock. And new research also shows that many of the designs and installation patterns available only from carpet tile; actually enhance the quality of the healing environment.

Both carpet tile and broadloom require technical skill to install. But installation professionals generally agree that carpet tile installs more quickly, and creates less space disruption, furniture removal and waste; up to 50% less waste depending on the repeat dimensions of the broadloom used in comparison.

Post-consumer commercial carpet recycling is a complex process. Both tile and broadloom must be removed, shipped to the recycling center, sorted (generally by face fiber and backing type) classified, and broken down into recyclable components.

In either case it's a technical challenge. But I believe that carpet tile has two advantages that promote recycling.

First, tile can be shipped more efficiently than broadloom because the modular format allows for much higher density loading. It's not difficult to 'max out' a trailer loaded with modular carpet by weight, whereas trucks are often completely filled with odd-sized rolls and pieces of post-consumer broadloom carpet before reaching maximum weight capacity.

Secondly, the companies that manufacture commercial carpet tile simply appear to have the best-developed logistics networks and processes for recycling their products at the end of their service life.

Additionally, my research shows that carpet tile has other advantages, which stem from its unique construction.

Carpet tile is more than carpet cut into squares. Manufacturers accurately claim that modular carpet is a hybrid composite of key components of both carpet and resilient flooring: the textile decorative surface of carpet and the dimensionally stable backing system of resilient flooring. The combination of the two results in some very distinct performance features.

Sophisticated cushioning profile studies have shown that most carpet tiles, even those without built-in cushioning layers, have better inherent anti-fatigue properties than broadloom carpet, specifically that which has a non-performance or unitary-type of backing.

It is hypothesized that the performance backings used on carpet tiles acts as a moderating layer, which absorbs and disperses the energy of foot impact more efficiently than many commercial broadloom carpets.

This construction can also have better acoustic performance in terms of reducing structure-borne noise through ceilings into spaces below by up to 25% more than broadloom with a unitary backing.

But no discussion of carpet in healthcare is complete without bringing up infection control. It has been widely believed that carpet in healthcare, tile or broadloom, harbored infectious microbes of all types. And it was further believed that the seams inherent to carpet tiles were certain to have high concentrations of microbes, and be susceptible to leak-through by bio-contaminated spills.

But recent research proves otherwise. It has been conclusively shown that of all the surfaces found in healthcare, walls, floors, furniture, doors etc. flooring is the least likely surface to cause infections, and recent findings show that smooth hard flooring surfaces much are more likely to transmit infections than carpet surfaces. More relevant to this discussion, one university study in a clinical setting found that there was no higher concentration of microbes at carpet tile seams (on top of the tile, at the seam edges, and below the seam) than at any other point on any other type of flooring.

Finally, the US Centers for Disease Control has actually recommended the use of carpet tiles in those areas where carpet is used and where contaminated spills are a concern, citing ease of removal, replacement and decontamination or disposal as the key reasons for this. Indeed, in some facilities, removal and replacement of contaminated carpet tiles has become a housekeeping task, avoiding the time and expense associated with using carpet mechanics to replace sections of broadloom carpet too contaminated to clean.

Considering all of the above, style and appearance, installation advantages and recyclability, cushioning and acoustic performance and simplifying infection control, it is clear why carpet tile is seeing growing use in progressive healthcare facilities.