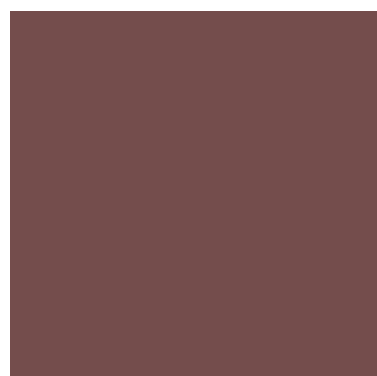




danfloor
An Ulster Group Company

BENEFITS OF CARPET IN EDUCATION



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Creating the optimum learning environment

Creating an environment that is stimulating, inspiring and welcoming is essential for an educational setting and flooring is an important element to consider.

Good design within schools and universities can positively effect student learning and teacher satisfaction and there are many ways in which carpet can benefit an educational environment.

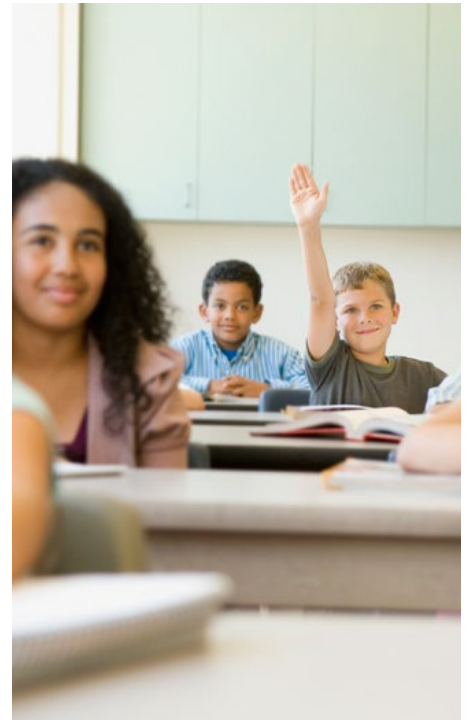
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Indoor air quality

The quality of the air we breathe can have a profound effect on a person's health, especially if they have respiratory problems such as asthma, which is the most common chronic disease in children. 1.1 million children in the UK are currently receiving treatment for asthma and on average there are three children with asthma in every classroom¹ so the quality of air within a classroom or boarding facility is important for the health and wellbeing of its students.

According to The World Health Organisation (WHO) one of the biggest risk factors for an asthma attack is the inhalation of substances and particles that may provoke the airways². There are many studies which conclude that carpet can improve indoor air quality by capturing the allergens in its fibres, therefore preventing them from circulating back into the air. The allergens should then be removed through regular vacuuming³. There are other studies which suggest that walking on hard surfaces disturbs more particles causing them to become airborne into the breathing zone. In comparison on carpet more of these particles remain in the carpet fibres, resulting in less dust in the breathing zone⁴.



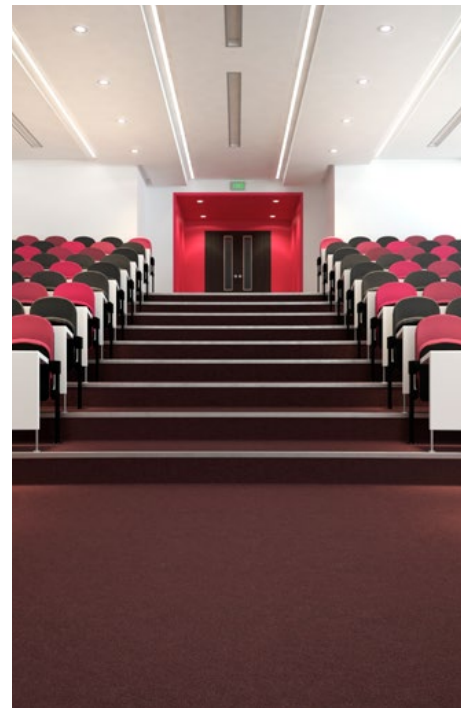
Reducing Noise

Carpet has a unique ability to reduce sound impact levels and research suggests that it is 10 times more efficient in reducing noise compared to other flooring options⁵. Background noise from inside and outside the classroom negatively affects learning, especially for young children who require optimal conditions for hearing and comprehension.

One study found that the daily exposure to sounds for a child at school averaged 72 decibels⁶, while WHO guidelines suggest the maximum exposure should be 35 decibels in the classroom and 55 in the playground. Therefore, it is essential to find ways in which to reduce sound impact and reverberation within the classroom.

A study carried out by Siebein 1998⁷ suggests that if a child is sat in the fourth row back from the front of the average classroom, speech intelligibility is just 50%; and when children have issues with impaired hearing, or have to engage in a secondary language this problem is worsened.

A joint study by the University's Institute of Education and the South Bank University into 2000 school children, aged 7-10, found that noise levels influence children's performance and can adversely affect national test results; in fact, exam results were cut by as much as a third if they were taught in noisy classrooms. Therefore, classroom acoustics have a direct impact on academic achievement and carpets can assist with creating an optimum learning environment.



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Comfort

Carpets can be a useful way of creating flexible learning spaces, making it comfortable for students and teachers to sit, stand and lie down on the floor. With many teachers standing for a large proportion of their time carpet also increases underfoot comfort and reduces muscle fatigue.

In a survey carried out in 2001 the majority of public school teachers surveyed said that they actually preferred carpet for its comfort, noise reduction and safety benefits⁸.

Carpet is not only perceived as being warmer and providing more comfort, it also offers a glare-free surface which helps to reduce reflection and eye strain.



Safety

Slips and falls are the leading cause of injury within schools, therefore the type of flooring installed could have a direct impact on the extent of any injuries incurred by a trip or fall.

Hard surfaces can become wet and slippery, whereas carpet offers significantly more traction and reduces the likelihood of trips and falls occurring as a result of a wet floor.

Furthermore, research by professor Alan Hedge of Cornell University shows that 46% of people who slip and fall on hard, shiny surfaces suffer injuries requiring medical attention, compared to 17% of people who fall on carpet⁹.

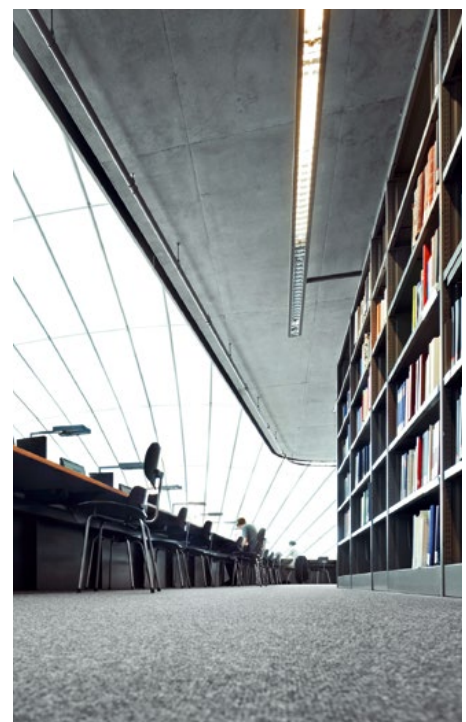


Cost

All of the above provides compelling evidence that carpet is a good choice for an educational setting. However, with budgets always under close scrutiny you need to ensure that carpet will be a cost-effective investment.

A specially selected carpet which is installed and maintained properly lasts up to 10 years, if not longer. However, a proper life cycle analysis is key to proving that carpet is more cost effective than other hard flooring solutions on the market.

A 2002 report, "Life cycle cost analysis for floor coverings in school facilities" prepared by the Institute of Inspection, Cleaning and Restoration Certification found that carpet could be 65% less expensive to maintain than a hard surface flooring.



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In the study, buying and installing the hard surface flooring was less expensive than carpet, but when labour, supplies and equipment costs were calculated over the 22-year life cycle, carpet proved to be more cost effective. 22 Years was the life expectancy of the hard surface flooring so the cost of replacing carpet after 11 years was factored in to the analysis.

The study also found that hard surface floors require two and one half times more cleaning than carpet and that hard surface cleaning supplies are about seven times more expensive than supplies for carpeted floors¹⁰.

Finally, carpet acts a thermal insulator, improves energy consumption and has low heat conduction. It is estimated that energy savings of between 8-13% can be achieved with the installation of carpet and as a consequent a reduction in energy cost can be experienced¹¹. In fact, a study by Rees reported the case of a school in the USA, where carpeting reduced heating fuel consumption by 5-13% compared to a very similar uncarpeted school¹².



The benefits of a danfloor carpet

danfloor recommends the installation of ECONOMIX for use within schools and universities. This high performing nylon range helps to achieve all the above benefits and also provides the following features:

- Class 33 heavy-use certification, the highest wear rating a carpet can receive
- Up to 15 years' wear warranty
- Contemporary colour palette based on the latest colour trend forecasts
- 100% Sustainable Yarn
- A and A+ Environmental BRE certification
- Impervious membrane preventing spilt liquids reaching the sub floor
- Anti-microbial treatment, killing 99.99% of harmful bacteria
- Easy to clean and soil and stain resistant yarn

For more information about the ECONOMIX Collection and to order samples visit <http://www.danfloor.co.uk/ranges/economix/>



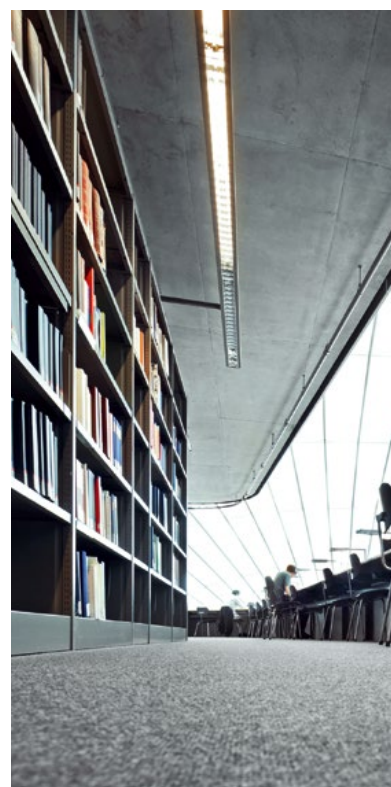
BENEFITS OF CARPET IN EDUCATION

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Innovative Carpet Solutions



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An Ulster Group Company

UK Head Office

danfloor UK Ltd, 106 Longmead Road, Emerald Park
Emersons Green, Bristol BS16 7FG
T: 0333 014 3132, F: 0333 014 3134
E: info@danfloor.co.uk

Danish Head Office

danfloor a/s, Østerbro 9, DK-6933 Kibæk
T: +45 9699 1900, F: +45 9699 1999

www.danfloor.co.uk