

Widening access

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Steve Warner asks whether more could be done to make buildings more accessible

Recent changes to cater for an ageing population have been made to the Building Regulations, requiring the construction of accessible or adaptable homes. These bode well for the future, as currently, any new dwelling has to be accessible. But could more still be done?

The majority of surveyors, architects and developers have a reasonable understanding of designing for the UK's 1.2m wheelchair users, yet there are other groups that could benefit from increased awareness and design improvements, for example, people with hearing loss, visual impairment and learning difficulties.

Approved Document M (access to and use of buildings) [Volume 1](#) and [Volume 2](#) both mention people with visual impairment, and the latter goes into greater depth about people with hearing and speaking difficulties.

However, there still remains the mandatory get-out clause from the [Equality Act 2010](#), which says:

'It remains for the persons undertaking building works to consider if further provision, beyond that described in Approved Document M, is appropriate.'

Nosings

I am sure that we are familiar with contrasting nosings, or edgings, on staircases. But to someone with sight problems these can look like ramps, so the ideal solution is to use a contrasting colour on the top and bottom step of any flight of stairs. By the same token, handrails should be continuous and of low reflectance, and neither hot nor cold to the touch. However, there is presently a trend for glass balustrades and polished stainless steel handrails, which fails to fulfil these criteria.

This could present a significant problem because, by 2020, the number of people with some form of sight loss in the UK is predicted to have risen from 2m to 4m. One in five people over the age of 75 will suffer loss of sight of one kind or another, because our eyesight deteriorates as we age, and a typical 70-year-old needs 3 times more light than a 20-year-old for the same visual performance.

The latest [Approved Document M](#) therefore requires suitable tread nosings to external steps in housing categories M4 (2) and (3) together with di?used lighting on a dawn-to-dusk sensor to the entrance door ? something that would benefit all homes.

Builders and architects try their hardest to ensure that the building does not seem institutionalised. They incorporate these features in modern design, seemingly to blend in with their surroundings, but still being functional. I am confident that in time such facilities will be accepted as the norm, just as ramped access to new dwellings is today.

Colour contrast

Our guide refers to the heights of switches and sockets, but should it ask for a colour contrast or require large switches as well? In some ways, though, manufacturers are already addressing these issues today by producing different coloured switches.

Likewise, surveyors familiar with the need to install a toilet suitable for wheelchair users will be familiar with contrasting colours for the grab rails and other features; yet we often forget to differentiate between the pan and toilet seat.

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On the subject of colour, we have known for some time that it plays a major role in how we feel, so it comes as no surprise that internal decor is used to make people feel more comfortable and relaxed in hospital waiting rooms, doctors' surgeries and so on. Colour can also be used to provide visual wayfinding and contrast skin tone, to highlight sign language.

A person may choose to wear dark or light clothing depending on their own skin tone to accentuate any signs used, as this tends to take place at chest height. Equally, with the right choice of background colour we can help make communication easier for signers.

Audio and autism

As well as those experiencing visual impairment, there are currently 11m people in the UK with some form of hearing loss, and this is predicted to rise to 15.6m by 2035. More than 70% of 70-year-olds and 40% of 50-year-olds have some form of hearing loss.

Another design consideration, then, should be reverberation of sound waves off hard surfaces such as glass or tiles, which can make it difficult for individuals using hearing devices. In the ideal world, a building should be designed to reduce background noise.

Meanwhile, it is estimated that over 700,000 people in the UK are on the autistic spectrum; but like those with sight loss and hearing difficulties, there may be no outward sign that they are experiencing any difficulty at all.

Buildings with large glass panels can cause problems for those with this condition, so particular design considerations include avoiding geometric and repeating patterns and excessively bright colours on floors and walls. This can help those on the spectrum and would equally benefit those who are partially sighted. As a profession, there is much we can do to help those experiencing these conditions today ? and in the light of our ever-ageing

population, we will also be preparing for those who will experience them in future.

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Further information

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