Who Put the P in Policy? The reality of guidelines and legislation in the design of the accessible toilet.

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Abstract

This paper will report on the findings of The Inclusive Design of Away from Home Toilets in City Centres research that ran from September 2003 until August 2006. The project was one of seven work packages that formed the VivaCity 2020 research consortium, funded by the Engineering and Physical Sciences Research Council (EPSRC). The research's central aim was to consult directly with users concerning the current designs of toilets used when away from home. As a project promoting an inclusive approach to toilet design the consultations involved older people, families with babies and young children, teenagers, people of faith affiliations and people with physical, sensory and cognitive impairments. The paper will begin with a review of current policy standards and guidelines and will then go onto to summarise current design recommendations. It will then move on to identify distinct user groups who are currently not adequately provided for. Finally, the reality of current accessible toilet provision will be discussed through analysis of the research's Toilet Audit Tool, and its findings. The paper concludes by suggesting that there is a need for a fully inclusive approach to the design of toilet facilities that cater to the needs of everyone.

The 'Disabled' Toilet

In 1979 The British Standards Institute (BSI) issued BS5810 (HMSO, 1979) as a code of practice for access for disabled people to buildings. Coinciding with this standard, the Royal Association for Disability and Rehabilitation (RADAR) instituted a key scheme to allow disabled people access to purpose designed unisex public toilets. The RADAR key scheme operated locked toilets to prevent them becoming targets for vandalism and therefore guaranteed that an operational facility would be available for people with disabilities. However, the scheme was controversial from the start, as it could not be guaranteed that every disabled person arriving at the facility would have access to the appropriate key. Meanwhile, providing a BS5810 unisex disabled toilet within town centres meant that ordinary toilet facilities need not be accessible. This approach epitomised the UK attitude to access and social inclusion of the period, which was to

assume that ‘normal’ provision for the able bodied should be supplemented by provision to serve the ‘special needs’ of ‘the disabled’.

Until recently, it has not been considered necessary to target provision for ‘special’ user groups other then through the RADAR scheme. However, it is now increasingly recognised that everyone is affected by the current dearth of public toilet facilities in major urban centres. Among those who find current provision (where it does exist) difficult to access are women, people with learning, sensory or physical impairments, adults with babies and young children, older people (who form an increasing proportion of the population), people who need the assistance of a caregiver, and those who are coping with a relevant medical condition. For example, a study carried out by the Royal College of Physicians in 1995 estimated that nearly 4 million people throughout the UK may experience incontinence at some point in their life and may therefore benefit from improved provision of and access to public toilets. In addition, many people may be excluded from current provision because of their ethnicity or faith affiliations.

British Standards 1979-2001

The recommendations for the BS5810 unisex accessible toilet were largely taken from the work of Selwyn Goldsmith whose groundbreaking book, ‘Designing for the Disabled’, was first published in 1963. Initially, Goldsmith’s research and recommendations focused on housing design for people with restricted mobility such as wheelchair users and people requiring walking aids. By 1976, ‘Designing for the Disabled’ was in its third edition and now included disabled people’s requirements with respect to public buildings. This specifically identified access to toilet facilities, and included some of the first user-centred research to be undertaken on disabled peoples experiences of access to the built environment.

In 2001 the thirty year standard for toilet provision for disabled people was replaced by BS8300:2001, ‘Design of Buildings and their approach to meet the needs of disabled people – a code of practice’. BS8300 has become the benchmark for what is understood to be the ‘disabled toilet’ and was informed by user research commissioned by the Department of Environment Transport and the Regions (DETR) that took place from 1996-2000 (Feeney, 2003). Complying with BS8300 meant that toilet designs should follow a prescribed and detailed set of design recommendations that represent the minimum design standards that ensure accessibility. The size of the accessible cubicle should be no less then 2200mm deep by 1500mm wide, as these dimensions are considered suitable for a majority of wheelchair users, (excluding those who use large power assisted wheelchairs). BS8300 is also considered a suitable cubicle for ambulant disabled people, yet as Greed (2003) has noted, it is always ‘signed’ by the wheelchair icon, and has subsequently resulted in tensions between disabled user groups with ‘visible’ and ‘hidden’ impairments (Bichard et al 2006). Other recommendations made by BS8300 include:

- The top surface of the WC pan should be set at 480mm above floor level, which is the same height as a majority of wheelchairs.
- The flushing mechanism should be of the spatula design and on the open transfer side of the WC pan.

- The toilet seat should be securely fitted to the WC and should not include a lid as it impedes transfer.
- The colour of sanitary fittings and aids should contrast with the wall and floor finishes to aid people with impaired vision.
- Grab rails should be 600mm above finished floor level.
- The drop down rail on the open side of the WC pan should be fixed 320mm from the centre line of the WC pan.

Building Regulations

Though the British Standard provides detailed recommendations for designers and service providers of accessible toilets, it is not legally enforceable. Such legislative requirements come from the Building Regulations to ensure the health and safety of all building users. Part M of the Building Regulations addresses access to buildings for all users and was originally introduced in 1987, extended in 1992 and 1998 and extensively revised in 2004 alongside the introduction of Part III of the Disability Discrimination Act which covered Access to Goods, Facilities and Services. The 2004 edition of Part M has been noted by Hanson (2004) as being more inclusive in it's approach, as it no longer refers to disabled people at all, and is intended to 'foster a more inclusive approach to design to accommodate the needs of all people'.

Yet, Part M is not without it's critics. Imrie and Hall (2001) in extensive analysis of the Building Regulations have argued that the legislation 'couches regulations in a vague and ambiguous manner, which does little to define clearly what is possible'. In addition, Barnes (1991) argued that requirements of 'reasonable provision' permits too much latitude as to how this should be interpreted in practice. In addition, the regulations only apply to new buildings and extensions constructed after 1987. All earlier constructions are exempt unless they are substantially altered.

Although Part M focuses on all aspects of access to residential and non-residential buildings, the section most relevant to this research is Section 5 which deals specifically with sanitary accommodation in buildings other then dwellings. For all public buildings Part M asserts that sanitary accommodation should be made available to everyone. Guidance is offered on the design of toilet facilities that not only considers access for those who use wheelchairs, ambulant disabled people and parents with babies and young children, but also takes account of the needs of people with limited strength, sensation and dexterity, as it incorporates recommendations on grab rails, taps and door weight. It also recommends that toilets installed on multi-floored buildings should be placed in a similar position to aid people with cognitive disabilities in way finding. However, the bulk of the recommendations in Part M are mostly aimed at those with restricted mobility which, in practice may lead to the needs of people with sensory and cognitive impairments being overlooked.

For wheelchair users, a separate enlarged unisex cubicle is always recommended. The unisex cubicle should be provided in addition to any larger cubicles within standard gendered facilities to accommodate users who may need assistance from a caregiver of the opposite gender. Part M 2004 clearly states that baby changing fixtures should not

be included within the unisex accessible cubicle. If there is room for only one toilet in a building then it should be of the wheelchair unisex type but should include a basin that can be accessed from a standing position in addition to a basin accessible to those in a wheelchair. In buildings where two or more unisex facilities are available, provision for left and right hand transfer should be distributed between them and the design should support independent or assisted transfer and use.

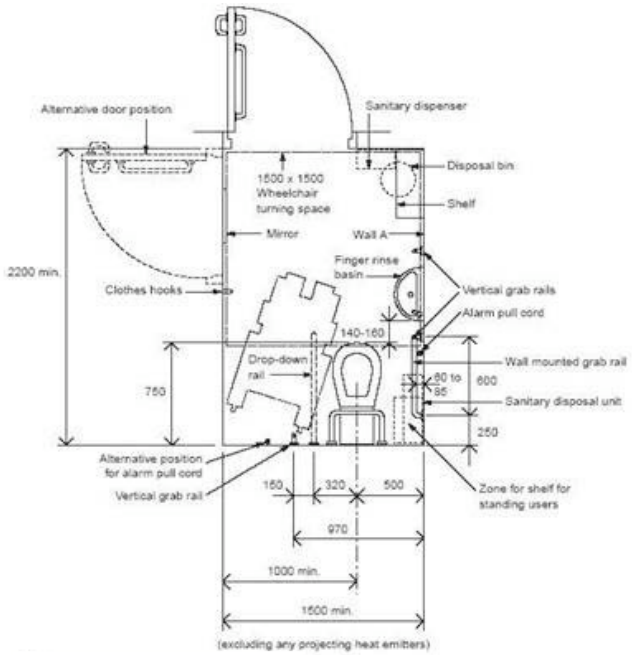


Figure 1: ADM (2004) Unisex accessible toilet

The unisex accessible toilet illustrated in Part M may be considered adequate for independent disabled people. However, those who use large powered wheelchairs and need assistance from a caregiver may not be able to use current provision. Part M does recommend that an adult changing bench is desirable in large building developments. Yet, the guidance does not offer dimensions, recommendations or illustrations of how facilities incorporating adult changing provision should be laid out.

The ITAAL Survey

The charity and awareness raising group ITAAL (Is There An Accessible Loo) was set up to represent the toileting needs of people with disabilities and their caregivers, and was supported by the Centre For Accessible Environments (CAE). In 2005, ITAAL conducted a detailed survey of its membership (comprising predominately of wheelchair users and their caregivers), to assess the provision of toilets and their suitability for use. With members' permission, ITAAL passed on 70% of the returned surveys for analysis and use within the VivaCity research. The results of this survey offers a snap shot on how current provision is failing to meet peoples needs, specifically those who require the assistance of one or more care givers.

When asked which aspect of the design of accessible toilet facilities prevented respondents from using away from home toilets nearly a quarter (24%) reported 'lack of space' whilst 27% responded that the lack of a hoist or adult changing table prevented them from using current provision. Further analysis of these figures by age revealed worrying gaps in the form of provision offered to people who require assistance of one or more caregivers when toileting. The lack of adequate space within the BS8300 unisex

accessible toilet was reported to prevent use by 89% of respondents under 35, whilst 96% of respondents under 35 could not use facilities that did not include an adult changing table or hoist.

The provision for access to facilities, goods and services under the DDA (2004), has resulted in many providers building or modernising accessible toilets. However, the spirit of the legislation in providing 'reasonable' access for all disabled people is not necessarily reflected in the design guidance of the BS8300 and the Building Regulations, especially concerning disabled people who require assistance when toileting. Of the ITAAL respondents under 35 who require adult-changing facilities 92% responded that the lack of adequate toilet facilities prevented them from going out 'very much'. Only 9% of all respondents to the survey knew of facilities that incorporated adult changing space, fixtures and fittings.

Figure 2: Adult changing bench – MK Centre

Figure 3: Hoist – MK Centre

The MK Centre, a shopping centre in Milton Keynes, was the first in the UK to offer adult changing facilities as part of its standard customer toilet provision (photos VivaCity 2020; 2006).

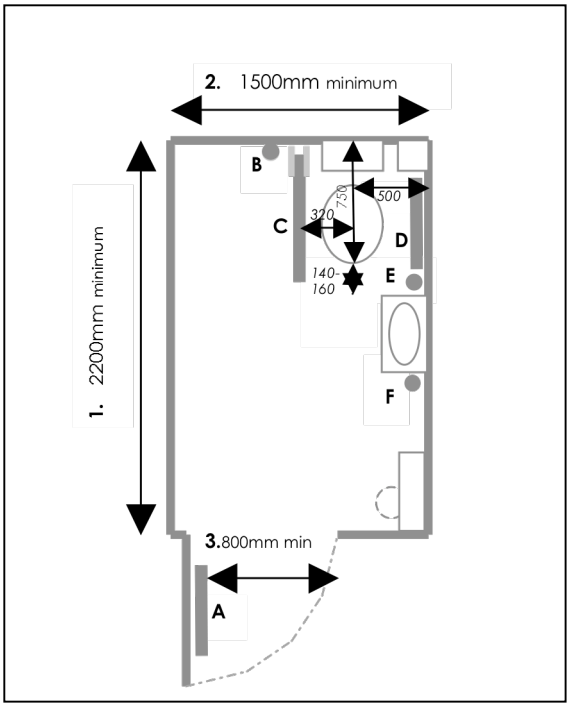
The Excluding Designs of Away From Home (Public) Toilets in City Centres

It can be argued that current design guidelines do not incorporate suitable provision for all possible users with disabilities, namely those who use large powered wheelchairs and need the assistance of one or more caregivers when toileting, and so they fail to meet the needs of a small but important section of society, young people with multiple and profound disabilities. However, the reality of how current design guidelines, policy and legislation are implemented within the built environment can also be shown to be woefully inadequate and that, as a result, a far greater proportion of disabled people that had previously been imagined are in practice unable to use the very facilities that are ostensibly provided for their convenience.

Based on interviews with disabled user groups the research became aware of a number of design discrepancies between what should be provided and what is actually installed in accessible toilets. It therefore became necessary to capture and quantify the failings of current design and provision. Based on the requirements for accessible toilet design

laid out in the BS8300 (2001) and the ADM (2004), the research constructed a Toilet Audit Tool. This tool listed fifty design specifications including cubicle dimensions, the placement of fixtures and fittings and management considerations such as the provision and placement of bins.

A total of 204 premises that provided standard toilet facilities were audited in major urban centres around England. Of these, 71 (35%) did not provide toilets that were accessible to people with disabilities. Audits were carried out on 101 accessible toilets. Both local authority public conveniences and those operated by businesses were surveyed, and facilities were awarded points based on each design recommendation that had been implemented (each accessible toilet could be awarded a maximum of 50 points). Of all the toilets audited, not one was found to have followed all of the recommendations of the British Standard BS8300 or Part M. Two facilities had incorporated just over 30 design features in current guidance. However, one of these was currently being used for storage and therefore could not be considered accessible. The remainder of the audited toilets (99) had less then 30 (60%) of the design recommendations. The lowest was found to have incorporated only 9 (18%) design features.



Cubicle dimensions

Of the 101 accessible toilets audited, 91 had the correct door dimensions of 800mm clear opening width. The correct minimum cubicle width of 1500mm was identified in 71 toilets. Yet only 36 were the recommended minimum depth of 2200mm. Therefore, 36% of the facilities audited had not followed guidelines concerning these minimum dimensions and cubicle sizes and could therefore be considered too small for users to access, especially those who use wheelchairs and need assistance.

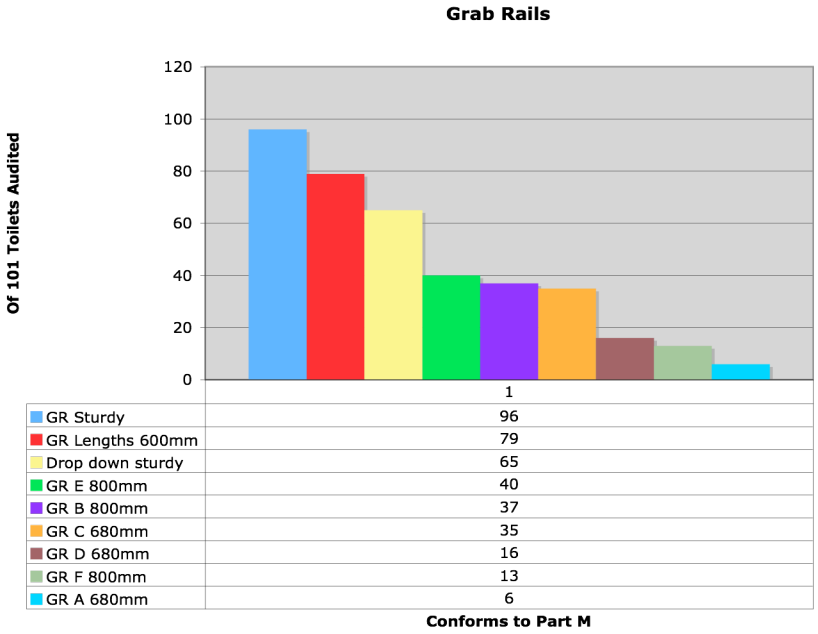
Figure 4: Toilet Audit Tool Diagram (Vivacity 2020, 2004)

Grab rails

Grab rails are essential for support when transferring from a wheelchair to the WC pan and back to the wheelchair. They are also helpful for people who may have hip or knee conditions and who may experience difficulty sitting and standing when using the toilet. The configuration of grab rails is carefully laid out in design guidance. When translating this guidance into a checklist, the Toilet Audit Tool identified six grab rails (see figure 4; points A-F). The most common feature concerning grab rails, found in 96

of the 101 facilities audited, was that they were found to be sturdy. Whilst all audited cubicles had at least one grab rail installed, none of the toilets had all of the correct rails in the correct configuration. Less then half had grab rails fixed at the correct height of 600mm (see table 1). This could be a major obstacle for many users of the accessible toilet as the setting of the grab rails too high or too low could prevent their being used correctly.

Table 1: The distribution of grab rails within the audited toilets



The WC Pan & Wash Basin

Only 34 facilities had installed the recommended 480mm height WC pan. A lower WC pan may make transfer from and back to a wheelchair awkward and even potentially dangerous. Under half of the toilets (48) had the WC pan installed at the correct distance of 500mm from the side wall. Placing the WC pan too far from the wall can prevent some users reaching the horizontal grab rail for support when transferring and toileting. Users of accessible toilet facilities should be able to reach the washbasin whilst seated on the WC pan. Yet the audit found that the placing of the washbasin in relation to the WC pan had not followed guidelines in 84 facilities.

Figure 4: Washbasin fixed to opposite wall, drop down rail fixed on the wrong side of WC pan.

Figure 5: WC pan placed too far from the wall. Photo; VivaCity 2020: 2005

Flush handles

Many users commented that after using the toilet they have difficulty reaching and operating the flush. One research participant explained that in one facility she had to weigh up her feelings of guilt concerned with leaving the toilet ‘in a mess’, against the embarrassment of asking at customer services for help to flush. The research participant chose the latter in the hope that it might highlight the problem of the flush handle being ‘on the wrong side’. As previously mentioned, current guidance on toilet design recommends that the flush lever should be placed on the open transfer side of the WC pan, to allow ease of access by a wheelchair user. The toilet audit found that the flush handle had been installed on the incorrect side in nearly half (44) of the cubicles.

Figure 6: Flush handle fitted on wrong side of WC pan Photo; VivaCity 2020: 2005

Figure 7: Flush handle fitted on wrong side of WC pan, also too high for some users. Photo; VivaCity 2020: 2005

Colour Contrast

Research carried out by the Centre for Accessible Environments for The Good Loo Design Guide (2004), found that many people with visual impairments find the size of the unisex accessible cubicle daunting and prefer to use a smaller ‘ambulant’ cubicle of 800mm width by 1500mm depth, with and outward opening door and colour contrast between floor and walls as well as fixtures and fittings. The BS8300 and Part M also recommend that unisex accessible cubicles incorporate colour contrast within the cubicles, as many people with disabilities do not have discreet single conditions but multiple impairments, such as a need to use a wheelchair and a visual impairment. These recommendations were not reflected in the reality of unisex accessible cubicles with half (50) failing to provide adequate colour contrast between fixtures and fittings within the cubicle.

Figure 7: Unisex Cubicle with good colour contrast between grab rails & walls Photo; VivaCity 2020: 2005

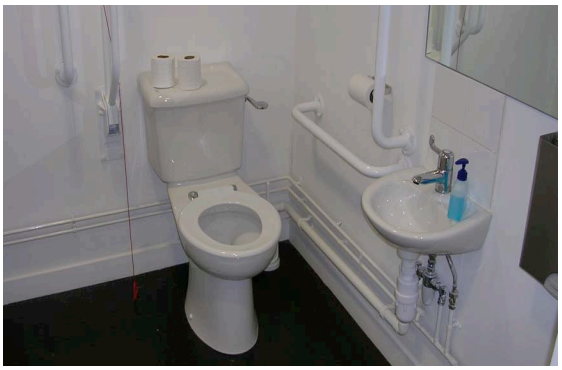


Figure 8: Unisex Cubicle with poor colour contrast between fixtures & fittings. Photo; VivaCity 2020: 2005

Conclusion

Currently, the instruments to ensure that access to buildings and public spaces is provided for people with disabilities are Part M of Building Regulations (2004), BS8300 (2001), and Part 3 of the Disability Discrimination Act (2004). These recommended and legislative guidelines provide architects and designers with the necessary information on access to and within buildings. Guidance on the design of toilets is often recommended as a 'minimum'. Yet few facilities actually incorporate all these recommendations as standard. Improving on the 'minimum' recommendations in designs, local access groups such as Manchester Disabled People's Access Group and Neath Port Talbot Access Group have produced their own guidance. Consequently, whereas once architects and designers struggled to find advice on accessible facilities, there is now, some may say, a confusing number of design recommendations to choose from.

Many users who spoke to us during the course of this research commented that the lack of standardisation in the design of accessible toilets was one of the biggest obstacles they faced when going out and about. The commonly recognised symbol of the wheelchair icon on the accessible toilet door does not guarantee that beyond that door the facilities will actually be accessible to all potential users. Yet, it can be argued that when considering access to the built environment, the one space that may need to be accessed by 'everyone' will be the toilet facilities.

Most notably, access to many unisex accessible toilets is denied to those who use a larger then a standard sized wheelchair such as a powered model and / or may need the assistance of one or more caregiver. Currently, it is estimated that nearly 100,000 people may be affected by the lack of adequate toilet facilities that do not provide sufficient space or incorporate adult changing fixtures. This number includes those with profound and multiple learning disabilities, some forms of spinal injuries, muscular dystrophy, multiple sclerosis and acquired brain injury. In addition, it is recognised that the number of people with complex or multiple disabilities is growing as improved medical knowledge extends life spans, resulting in a likely need for more fully accessible facilities in the future (Changing Places, 2006).

By their very nature, toilet facilities train us to think in discreet social categories, such as male, female and disabled. Yet, social inclusion urges wider participation and as such wider categories need to be catered for, including older people, children and people whose faith affiliations may conflict with the current design of lavatory facilities. Hanson (2004) argues that it is within the urban design process that 'inclusive design has the potential to be a radical force, that could lead to more sustainable communities'.

There remains the crucial issue that despite the wealth of guidance available, major discrepancies exist between recommendations, legislation and implementation. As we have shown through the access audits of 101 unisex accessible toilet facilities, when the 'minimum' is recommended, it is often less then minimum that is implemented. What is more, continuing to separate toilet provision into 'normal' and 'accessible' facilities can be interpreted as a perpetuation of the 'special needs' agenda as opposed to one that is fully inclusive, and in this sense, despite the good intensions that gave rise to the concept of the accessible toilet, it can be seen as socially divisive.

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