Wheelchair housing design guide

Second edition

Stephen Thorpe and Habinteg Housing Association



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Foreword

Wheelchair housing can seem such a strange term – housing for wheelchairs?

Well, I'm a full-time wheelchair user and yes I and my wheelchair have a home! Of course, all of us have our own housing stories: first homes, renting, buying, sharing with others and moving to other areas; but for wheelchair users options are often very limited and the stories of the difficulties of ever finding anything suitable distressingly familiar.

My own housing story starts in this way, trying to find any home in London that could meet the needs of a young man moving to the Capital to start his career. In the 1970s this proved extremely difficult but I was lucky, I found a specialist housing association, Habinteg, the commissioner of this guide.

By now I would have hoped things have improved and that a young disabled person today would have greater opportunity to find a suitable home. Unfortunately, though some progress has been made, as Chairman of the Disability Rights Commission I still routinely hear stories very similar to my own experience of thirty years ago.

This guide contains the wisdom of many years of developing housing for wheelchair users. It forms part of the ambition to develop truly accessible environments that routinely include and meet the needs of individuals rather than creating barriers that exclude.

Much of the work in developing this guide comes from the feedback of wheelchair users living in such homes, mainly built by housing associations and local authorities.

More homes like these are needed not just to house those who are currently living in unsuitable housing but also to ensure that disabled people have the same sort of choice as non-disabled people. It means ensuring that the principles within the guide are adopted by all developers of new housing, in both the public and the private sector.

Bert Massie
Chairman, Disability Rights Commission
January 2006



Foreword

Preface

I welcome the publication of the second edition of the Wheelchair housing design guide. Housing associations have a long history of ensuring that housing opportunities are available for a wide range of groups. The Housing Corporation recognises this and ensures that part of our programme of investment is geared to meeting the needs of wheelchair users. This guide helps to ensure that the investment we provide delivers quality homes.

Since the publication of the first edition in 1997 we have seen the creation of the Disability Rights Commission, the revision to Part M of the Building Regulations and the adoption of 'lifetime homes' within many strategic planning strategies. This technical guide forms part of this movement to create housing opportunities for all with a clear focus on promoting disability equality. The Housing Corporation is fully committed to this task and will endeavour to ensure that our public investment supports the creation of homes and communities that are accessible to all.

Jon Rouse

Chief Executive, Housing Corporation
January 2006



Preface

Background

The first edition of this guide was commissioned by NATWHAG, the National Wheelchair Housing Association Group, and Home Housing Trust, with a steering group on which both were represented together with the Housing Corporation.

Research was undertaken amongst a cross-section of wheelchair users, and their original profiles are reproduced in this second edition.

Research was also undertaken amongst housing association practitioners, and some testing at a late stage in the guide's production was undertaken by architects and other professionals working in this field.

This second edition was revised by the original author and Chris Goodman, Design and Development Manager at Habinteg Housing Association. Feedback from users of the first edition was obtained by the publishers, and key issues raised in the preparation of the early draft of this edition were aired and discussed at a symposium with participants representing the Housing Corporation, OPDM (Office of the Deputy Prime Minister), BRE, Joseph Rowntree Foundation, Centre for Accessible Environments, architects, access officers, occupational therapists and housing associations.

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viii Background

Introduction

Since the first edition of this guide was published in 1997 there have been significant developments within the housing field, or affecting it, which have made necessary a revised edition that reflects more accurately the current context.

The purpose of the guide remains unaltered – to explain how to design and detail a home that is fully manageable by wheelchair users and maximises their independence.

It remains activity based, informed by the original research and by the experience of the individual wheelchair users, whose profiles are retained. It takes account also of feedback from practitioners who have used the original guide.







The most significant development has been the increasing acceptance of the 'lifetime home' concept from which housing designed specifically for wheelchair users as promoted by this guide should be clearly distinguished.

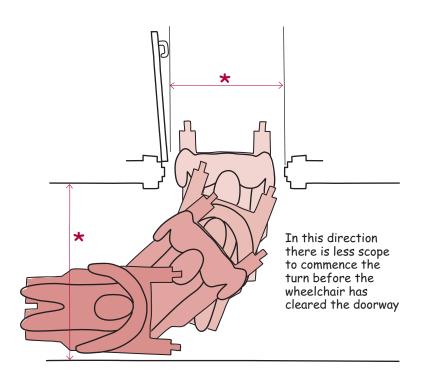
The principle underlying the lifetime home and the standards which define it is that such a home should be basically accessible but should incorporate built-in or designed provision for a range of adaptations that would respond to the needs of any member of the household who has or develops a disability or impairment which could include the need to use a wheelchair within the home. These potential adaptations range from enabling access between floors by means of a stairlift or throughfloor lift, to hoist installations and provision of a floor-level shower. The lifetime home standards extend the guidance included in those sections of *The Building Regulations 2000 Approved Document M* (2004 edition) which deal with housing.

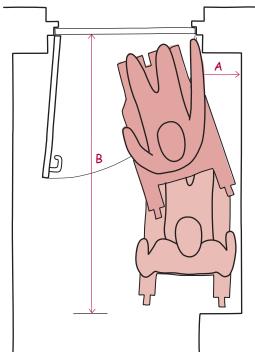
These two approaches to housing are increasingly being brought together in local plans which establish the lifetime home as the basic requirement for general needs housing with the inclusion of a percentage of fully wheelchair accessible homes.

This development widens both the provision of accessible housing – by private developers as well as social housing organisations – and the

Introduction 1

It is obviously not possible for designers to place themselves in the position of the regular and individual wheelchair user. Nevertheless, some basic hands-on experience of using a manual or electric wheelchair to supplement close observation would be invaluable. Local access groups may run awareness courses or make chairs available.





Space at A beside the door enables the wheelchair user to approach and release the door, then to reverse while holding the door, until the wheelchair is clear of the door swing, then to move forwards and pass through the doorway

An increase at A beyond the required 300 min will reduce the space needed to clear the door swing and thus reduce dimension B

4 Negotiating the entrance door

Principle

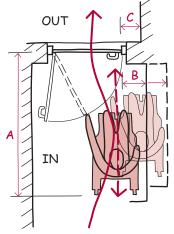
Ensure that any entrance door can be operated and negotiated independently whether the user is entering or leaving. Balance this with optimum security of dwelling whether occupants are out or at home.

Ensure that callers who are wheelchair users can reach and use bell, entry phone and postal plate.

4.1 Design considerations

- **4.1.1** Main entrance doors include:
 - individual external entrances
 - common external entrances
 - individual internal entrances
- **4.1.2** An effective clear door width of at least 800 mm will be adequate provided that the passage through in either direction is on line.
- 4.1.3 Where the door opens towards the direction of approach, the wheelchair user will need to approach the door head-on, release it and reverse while opening the door. This manoeuvre is facilitated by providing a space beside the lock edge of at least 300 mm, preferably up to 550 mm. There should be unobstructed space to reverse the wheelchair clear of the door swing. See Using a wheelchair on page 10.

Figure 4.1.3



- A: space to manoeuvre clear of door swing
- B,C: from door edge to wall or landing edge
- A reduces as B increases

About this guide

The purpose of the Wheelchair housing design guide is to explain how to design and detail a home that is fully manageable by wheelchair users and that maximises their independence. It is activity based and discusses design considerations, requirements and recommendations for each of fifteen activities carried out within and around the home, rather than presenting plans or preferred solutions. Checklists are provided. This second edition takes account of the experience of individual wheelchair users and of practitioners who have used the original guide, and reflects the new level of statutory advancements and societal perceptions of wheelchair standard design in the built environment.

This guide:

- provides design details and good practice examples which take account of current guidance and regulations,
- reflects and promotes the values and principles of existing strategies for social inclusion, and
- promotes the long-term cost benefits and other benefits of designing to wheelchair accessibility standards.

About the authors

Stephen Thorpe is an architect who specialises in inclusive design. He was architect to Scope (the Spastics Society) from 1966 to 1982, later setting up Threshold Architects, based in Sudbury, Suffolk. He has produced books and other materials on access and has lectured in the UK and Europe.

Habinteg Housing Association was established in 1970 and specialises in disability; all of the homes are accessible and a quarter of them are designed specifically for wheelchair users. The Association has always had dual aims: the provision of high-quality, thoughtfully designed housing and services; and the mainstreaming of accessible and inclusive homes and neighbourhoods. Habinteg is recognised as the UK's leading expert in accessible housing and disability, and applies its expertise to challenge negative social attitudes, promote the rights of disabled people and improve accessibility standards within housing.



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