

Housing for people with sight loss: A Thomas Pocklington Trust design guide

A new design guide provides state-of-the-art advice and guidance for architects, designers, builders and others involved in building and developing inclusive domestic environments paying particular attention to the needs of people with sight loss.

Housing for people with sight loss: A Thomas Pocklington Trust design guide was produced by Thomas Pocklington Trust and Habinteg Housing Association and published by IHS BRE Press on behalf of Pocklington.

This document gives a brief overview of the design guide. Major points are:

- Following the recommendations in the design guide will improve the visual environment in the home for everyone, but will be of special benefit to people with sight loss.
- It is estimated that around two million people in the UK have sight loss that affects their everyday lives.
- Sight loss is a normal part of ageing and the proportion of older people in the population is increasing.
- Inclusive design principles are fully incorporated throughout the design guide.

The design guide is based largely on findings from research projects commissioned by Pocklington relating to the needs, experiences, expectations and choices for people with sight loss within their home environment.

These research projects included work by University College London, principally on:

- the housing and support needs of people of working age with sight loss, and
- the housing, care and support needs of older people with sight loss.

The design guide's specific guidance on lighting – one of the most crucial issues for people with sight loss – was drawn from studies and trials by the Research Group for Inclusive Environments (RGIE) at the University of Reading. The RGIE surveyed lighting conditions and user experience in a range of homes of blind and partially sighted people, and carried out trial modifications in these homes.

The findings from these projects were combined with Habinteg Housing Association's practical experience as both a direct developer of inclusive housing environments and a producer of guides for architects and developers. The result is an intensely practical and usable guide that is firmly based on sound evidence and good practice. The design guide has been endorsed by the Chartered Institute of Housing, the College of Occupational Therapists, the Society of Light and Lighting and the Housing Corporation.

Background on sight loss

Prevalence

The design guide gives a brief outline of the prevalence of vision impairment in the UK; highlighting the very important fact that it increases with age. A Medical Research Council study has estimated that serious sight loss (which would be registerable) affects:

- 1 in 8 people aged over 75; and
- 1 in 3 people aged over 90.

On the basis of 2005 population data, this means that around 600,000 people over 75 in the UK are affected by serious sight loss. However, less serious sight loss can have a significant effect on the activities of daily living. It has been estimated that some 2 million people in the UK have sight loss that affects their everyday life.

In view of the ageing profile of the UK population as a whole, this is an important reason to promote good design in all housing – whether designed specifically for people with sight loss or not. This point is particularly relevant when it comes to lighting provision in the home. The design guide points out that few people with sight loss are totally blind. Most have some residual vision and appropriate design can help to maximise their functional vision.

Eye conditions and sight loss

The design guide gives a brief overview of the five most common eye conditions and their symptoms, particularly with regard to how they affect activities of daily living. These conditions are: macular degeneration (MD); cataract; glaucoma; retinitis pigmentosa; and diabetic retinopathy.

A basic knowledge of these eye conditions is necessary for anyone involved in designing living spaces, or in fact providing any services at all, for people with sight loss, because different medical conditions have different effects on sight. In addition, any given eye condition may affect someone's eyesight in a different way according to the stage it has reached. This means there should be flexibility in the living arrangements of people with sight loss, particularly with regard to the provision of lighting.

To demonstrate the complexity of living with sight loss and to emphasise that it is impossible to adopt a 'one size fits all' approach to providing accommodation suitable for people with sight loss, the design guide includes several case studies. These feature a number of adults with sight loss, male and female, of various ages and with differing eye conditions and personal circumstances that give rise to different needs when it comes to their living arrangements.

The information in the design guide is intended to be applicable and helpful in drawing up relevant design and specification details for a building, regardless of its type, scale, form, construction and general specification. The guide does not, however, discuss or inform housing need in relation to accommodation size, form, support, extra care or tenure.

General design principles for people with sight loss

The overall emphasis when designing environments for people with sight loss is on maximising functional vision and on minimising barriers and risk.

The design guide outlines a series of general principles applicable to design including:

- **Inclusivity**

While giving due regard to the prevalence and symptoms of vision impairments, the design guide promotes inclusive design based on the social model of disability – which focuses on the design of the built environment rather than on an individual's impairment.

An inclusive environment should be easy for everyone to use: regardless of age, gender or disability. It does not attempt to meet every single need, but by considering people's diversity it aims to break down unnecessary barriers and exclusion.

- **Site location**

Site location is a consideration that is probably even more important for people with sight loss than for members of the general population. Independence, security, social inclusion and a sense of belonging (which have a significant effect on the quality of life for people with sight loss) are all affected by site location. Proximity to important amenities and good transport links, and the safe and relative ease of access to these facilities, is key to enabling independence and social inclusion.

- **Site layout**

Site layouts should be simple and logical. Homes should, as far as possible, be sited to allow in the maximum amount of natural daylight without making them too hot.

Gardens and areas with external seating should have some direct sunlight for at least part of the year. The pedestrian routes within the site should be simple, logical, clear and accessible.

- **Mix and form of dwellings**

As a general principle, funding organisations and developers should seek to provide a broad range of homes to accommodate different household types and sizes.

With the possible exception of supported housing, all dwellings should have two bedrooms or more. Even if there is just one person in the household, one-bedroom homes or bedsits do not cater for guests or the need for occasional overnight care and support and can therefore increase isolation and dependency on alternative accommodation. One-bedroom properties may be feasible in supported housing if temporary guest accommodation is available nearby.

Depending on the intended range of occupancy, developers and builders need to determine whether the dwellings are to be:

- completely self-contained and independent
- independent and self-contained, but also having some communal areas and facilities, or
- independent but linked to wider communal and support facilities.

A larger development may contain a mix of these three options.

- **Space standards**

While the design guide does not state minimum space standards, the guidelines given in each chapter give a good idea of spatial requirements. As a basic rule, however, designers should ensure that there is adequate space to enable simple and direct circulation routes within all rooms.

- **Simplicity**

Simple, logical design of all external and internal layouts will assist orientation.

- **Consistency**

The design should aim to achieve consistency of form and placing of key items (e.g. switches and sockets should be at the same height and locations in rooms, door and window handles consistently located, hot and cold taps in the same form on the same sides, etc.).

- **Preventing barriers and trip hazards**

Designers should locate everything out of the main line of pedestrian travel. All ground surfaces on pedestrian routes should be even and remain so (i.e. not prone to differential movement, thus creating trip hazards).

- **Providing contrasts**

Providing bigger, bolder and brighter contrasts between adjacent surfaces, potential obstacles/hazards and their background, and controls on appliances and their background is a general principle to be applied. An appendix to the design guide gives detailed information on providing contrasts, either by creating differences in brightness/luminance or differences in colour/hue, or both. However, care should be taken to avoid a garish appearance.

- **Textures and finishes**

Large areas of highly polished/mirror-like reflective surfaces and finishes should be avoided whenever possible as they may become a source of glare. Finishes should generally be comfortable to the touch for people 'feeling' their way.

- **Wayfinding assistance**

In the external environment or within communal internal settings, the use of colour (e.g. different front door/gate colours, different brick shades for different blocks of housing, colour themes for different storeys in communal corridors) can assist in wayfinding or determining location.

- **Lighting**

Lighting is discussed in detail in Chapter 14 and throughout the technical chapters in the design guide. There are also two appendices listing recommended task lighting illuminances and recommended illuminances at the floor of each room. These recommendations are drawn from Pocklington research projects on home lighting for people with sight loss.

- **Security**

Security is particularly important for people with sight loss, who may be perceived as vulnerable.

Technical guidance

The technical chapters of the design guide are intensely practical and well illustrated with diagrams and floor plans. The sections covering each individual area of the home and the wider environment begin with a statement of the primary objective to be met in that particular area, followed by

- a list of design considerations to be borne in mind when working towards a design solution; and
- a list of requirements that the final design and specification solution should achieve.

The technical guidance covers:

- **External areas**
- **Public and communal areas outside plot boundaries/ private areas within plot boundaries for houses**
- **Functional spaces**

These include:

- Entrances to individual homes or blocks of flats
- Hallways and circulation areas
- Living areas
- Kitchens
- Bathrooms and WCs
- Bedrooms

- **General services and components**

Separate sections deal with:

- Windows
- Heating systems and general plumbing
- Electrical (excluding lighting)
- Internal lighting
- Surface finishes and their contrasts

- **Communal areas**

These include car parking areas, gardens, waste and refuse disposal areas, stairs, lifts and any communal areas such as lounges and laundries.

The design guide is primarily a practical reference tool. Parts of the guide may therefore be consulted individually by practitioners in housing development and so important points are at times repeated to make the document easier to use.

How to obtain further information

Housing for people with sight loss: a Thomas Pocklington Trust design guide is published by IHS BRE Press and copies may be obtained from:

www.ihsbrepress.com

or

IHS BRE Press

Willoughby Road

Bracknell RG12 8FB

Tel: 01344 328038

Fax: 01344 328005

Email: brepress@ihs.com

Copies of this research findings report in large print, audio tape or CD, Braille and electronic format are available from Thomas Pocklington Trust.

Background on Pocklington

Thomas Pocklington Trust is the leading provider of housing, care and support services for people with sight loss in the UK. Each year we also commit around £700,000 to fund social and public health research and development projects.

Pocklington's operations offer a range of sheltered and supported housing, residential care, respite care, day services, home care services, resource centres and community based support services.

A Positive about Disability and an Investor in People organisation, we are adopting quality assurance systems for all our services to ensure we not only maintain our quality standards, but also seek continuous improvement in line with the changing needs and expectations of our current and future service users.

We are working in partnership with local authorities, registered social landlords and other voluntary organisations to expand our range of services.

Our research and development programme aims to identify practical ways to improve the lives of people with sight loss, by improving social inclusion, independence and quality of life, improving and developing service outcomes as well as focusing on public health issues.

We are also applying our research findings by way of pilot service developments to test new service models and develop best practice.

In this publication, the terms 'visually impaired people', 'blind and partially sighted people' and 'people with sight loss' all refer to people who are blind or who have partial sight.

Notes



5 Castle Row
Horticultural Place
Chiswick
London W4 4JQ

Tel: 020 8995 0880
Email: info@pocklington-trust.org.uk
Web: www.pocklington-trust.org.uk

Published by Thomas Pocklington Trust
Registered Charity No. 1113729
Company Registered No. 5359336

ISBN 978-1-906464-02-8

