

Enfield Supported Housing Guidance



Designing homes for people with learning disabilities and challenging behaviour

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In partnership with



Enfield Community Services





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Introduction and Purpose of Guide

The purpose of this guide is to provide developers with guidance on how to make homes safe and accessible for people with challenging behaviours.

This guide incorporates good design principles but should be used flexibly and in partnership with people who know the user group best.

A section is also included for carers and support staff which consist of tips for effective and safe support.

Our aim is to create accessible living environments that increase opportunities for independence, choice and control.

We are moving away from traditional residential care models towards designing homes that are not institutionalized, which enables people to exercise their rights as tenants.

General Principals of Designing Homes for People with Learning Disabilities

The following design principles consider the effect that buildings have on people and their behavioural response to their living environment. Buildings that avoid complex design help people who experience stress to feel more peaceful and comfortable in their own home. People with autism can find it difficult to discriminate between separate noises and shapes therefore design which has a sense of calm, clarity and order is easier to use. If good design principles are followed this can lead to a reduction in challenging behaviours, which in turns reduces building maintenance and support staff costs.

Minimal design also requires any equipment to be simple and plain for people with a learning disability to understand. Taps with colours for hot and cold rather than the words 'Hot and cold' allow people with poor literacy to know which tap is which. Dials with numbers are easier to work and understand compared to LCD displays, which increasingly electrical items are using. Electrical equipment including shower units, washing machines, microwave ovens, are easier to use if they only have one or two dials for programme settings rather than dials and buttons for many different settings.

Support Staff

Consideration should be given as to whether there is a need for accommodation for support staff. People with challenging behaviour often require high levels of supervision and may require overnight sleeping or waking staff. Accommodation for staff will include sleeping area, bathroom facilities and desk space.

Understanding Challenging Behaviour

a. What do we mean by ‘Challenging Behaviour?’

Some adults with severe learning disabilities display behaviour which may put themselves or others at risk. These behaviours may have a significant impact on the person’s or other people’s quality of life. They are often not under the control of the individual concerned and are largely due to an individual’s lack of ability to communicate and understand the world around them.

Some behaviour may often have triggers, which will vary from one person to another. Every effort should be made to identify these triggers and the living environment and its surroundings should attempt to minimise these.

Such behaviours include aggression, (e.g. slamming doors, hitting out), destruction (e.g. ripping clothes, breaking windows, picking at details on furniture), self-injury (e.g. scratching, biting, punching, slapping, head banging), and many other behaviours, (e.g. running away and leaving front doors open, posting items into gaps such as behind radiators or into plug sockets, eating inedible objects, switching on dials and switches repeatedly).

b. What is autism and how is this linked with Challenging Behaviour?

Some people with Challenging behaviours also have Autism. Autism is a lifelong disability that affects the way a person communicates and relates to people and the world around them. People with autism can have difficulties with everyday social interaction and communication and what is called social imagination. Social imagination can present itself as having difficulty with understanding the concept of danger, for example that running on to a busy road poses a threat to them or putting their hand onto a hot cooker hob will burn them.

People with Autism may also experience sensory sensitivity. This can occur in one or more of the five senses – sight, sound, smell, touch and taste where the person's senses are either intensified (hypersensitive) or under-sensitive (hypo-sensitive). For example, a person with autism may find certain background sounds, which other people ignore or block out, unbearably loud or distracting. This can cause anxiety or even physical pain. People who are hyposensitive may not feel pain or extremes of temperature.

People with sensory sensitivity may also find it harder to use their body awareness system. This system tells us where our bodies are, so for those with reduced body awareness, it can be harder to navigate rooms and avoid obstructions so adequate space in buildings to move around is important.

Design Principles

Structural Layout and Circulation space

The design of corridors and circulation space can facilitate movement into and around a building for people who have difficulties with visual impairment. Often people will place their hands on the walls, following the contours round the corridors to help them walk from room to room. Walls without sharp corners but curved further help facilitate this.

Space for movement around a building should be as large as possible to reduce people invading a person's own personal space. A person with autism can be more guarded about their own personal space and any invasion can be seen as a potential threat and create a sense of unrest. Room sizes should consider that people will not always want to sit on a sofa next to others so adequate space for individual armchairs and other furniture should be planned for.

Simple internal layout where each room/space has a clear function. Multi-purpose or open plan spaces are discouraged in order for rooms/spaces to be used consistently for the same purpose.

All spaces and rooms to have storage dedicated for their particular functions – all of which promote routine and order to mitigate stress for the person.

Materials

People with challenging behaviour can be extremely demanding on fixtures, fittings and the materials used in a building. For example all doors should be solid and not paneled with robust hinges and preferably not painted to avoid paint chip marks, glass in windows etc. should be toughened/safety glass and walls painted and not wallpapered.

Lighting

A building with high even levels of natural light can uplift peoples mood and also assist in orientation of their home.

All light fittings should be flush to the wall or recessed into the ceiling (i.e. spot lights) as pendant lighting can be pulled off easily.

Light fittings must be non-fluorescent and provide a soft non-flickering light. These should be used throughout the building as people can experience a range of sensory problems including an aversion to very bright fluorescent lighting, which affects their visual field.

Acoustics

The building should be built to include sound damping materials. The layout and room proportions will assist with good acoustics. People with sensitivity to sound are unable to discriminate different noises. Noise from neighbours and local environment can cause unrest and heightened stress. People who bang on surfaces to achieve sensory stimulation will do so less if the acoustics are dampened and will also be less of a nuisance to their neighbours. Noise reduction fabrics in the ceilings with sound-absorbent backings can be used to prevent reverberated sound. Specific floor coverings that absorb sound in the building can also provide warmth and comfort to the space as well as being durable and hygienic.

Considering Location

When developing purpose built accommodation for people with Challenging Behaviour, the location of accommodation – both within the community and within a building itself – should be thought about. Developers should consider:

Community Facilities

Access to shops and transport links should be close by to facilitate full use of local community. Access to green space is another consideration, especially if the property has no garden.

Roads

Ideally location of property should be away from busy roads and junctions. If someone has no road safety awareness it is safer for them to live for an example in a cul-de-sac.

Neighbours

Consideration should be given to the location of the property in relation to being overlooked and noise to and from the property (see Acoustics section). Buildings in close proximity e.g. terraced houses may not be best suited to accommodating people with more challenging needs.

Location within the Building

When developing flats, consideration should be given to the location of the unit within the premises e.g. not having living accommodation directly below to minimise disturbance to neighbours.

Direct access to an enclosed garden can be valuable to help calm people.

Compatibility

When allocations take place, consideration should be given to people who will live in close proximity who may also have challenging behaviour that can be a trigger for others.



Front Entrance

Parking

- Wherever possible, and with secure by design considerations in mind.
- A covered area or carport should be provided a minimum of 5400mm long x 3600mm wide and at least 2200mm high.
- Otherwise parking near to the property with suitable transfer space and dropped kerbs to give level access from car to property.
- Drop-off areas should also have a dropped kerb.
- Consider a lighting area.

Front door to property

- Lever type door handles to be fitted.
- If door closers are provided they must be adjusted to minimise the effort required to open the door, and they must have a delayed closing mechanism.
- Two spy holes to be provided. One positioned between 1100mm and 1250mm for the wheelchair user, and another at 1500mm for the ambulant user respectively.
- Letter boxes to have cage fitted, ensure this does not impede door opening.

Access

- Level access from car park area to property should be provided, if this is not possible, a path of gentle gradient should be provided, not to exceed 1:20 gradient.
- Where a path is on a gradient, a level platform outside the front door of 1500mm x 1500mm minimum should be provided.
- Access from street to property should be level and a clear path of 1200mm.



Paths

- All paths should be level, if this is not possible gradient should not exceed 1:20 gradient.
- Any unprotected drops to the side should have a 100mm up stand and all drops must be guarded but, design which eliminates significant drops would be preferable.
- Width of paths should be 1200mm minimum.

Thresholds

- Thresholds should be flush with internal and external surfaces, with no lip or up stand.

Lobbies

- At least 1200mm clear width for straight passage.
- Clear width means between finished wall surfaces or any projections (apart from skirting) such as low temperature radiators or parked wheelchairs.



Windows, Doors (including Ironmongery) and Glass

Windows

- All windows to have restrictors and locks so that no one would be able to climb out.
- Ground floor windows near to roads to have film which allows tenants to look out but prevent others looking in.
- The above needs to be balanced with current fire regulations.

Doors (including Ironmongery)

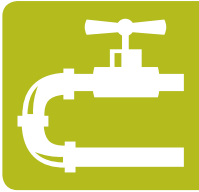
- All doors capable of being locked with a key.
- Simple door opening system which is not too complicated to work (typical 'secure by design' locks can be confusing and result in doors being left open).
- Door handles to be lever design.
- Doors should have soft-closing mechanisms to prevent door slamming.
- Doors should have a clear opening of 900mm minimum.
- The weight of the doors should be kept as low as possible, without risk to security.
- Consider outward opening doors generally and always to bathroom.

Glasses

- All glass (windows, doors, shower screens, mirrors) to be safety glass or Perspex.
- A cheaper alternative to safety glass is safety glass film.



Switches, Sockets, Pipe work and Valves



Switches and Sockets

A telephone socket with two electric double sockets available nearby to allow for telecare equipment.

Electrical switches especially cooker switches, timer switches and consumer units to be boxed in and lockable or placed inside lockable cupboards.

Good quality dimmer light switches to be used in living room and bedroom so light can be adjusted. Switches that have on-off press button as well as touch-control dimmers would be preferable.

- No pull cords on bathroom lighting including mirror lighting if applicable.
- Thermostat controls should be located in a cupboard.



Pipe work and Valves

- Easily accessible mains water/gas turn off to be located within the building but within a cupboard. This is so support staff can easily turn off mains water/gas if required. All pipe work to be boxed in or recessed.



Heating

Ideally under floor heating should be used to create a warm environment without the need for radiators. This addresses the problems of people posting objects behind radiators, climbing onto them, or pulling radiators off the walls.

If radiators are used they should have guards (box guards or soft guards) on them to stop people gripping or falling onto a hot radiator. A more expensive option is to fit low surface temperature radiators but they may still need to be boxed in.

- Covering hot pipes with lagging prevents injury if they are gripped or fell against.
- Boilers to be boxed in within a lockable cupboard.
- A sensitive heating controller is required.
- If the temperature controls are located on individual radiators, they should be covered over, with no space for people to post objects into.



Bathrooms



Whether an individual requires a bath or shower will vary. Developers should consult with the borough as to requirements for any purpose built accommodation, and thereafter, the following recommendations are made.

Showers

- 'Wet Room' walk-in showers are preferable to prevent flooding and will not require a shower curtain that can easily be pulled down. If a fixed screen or shower door is required this should be robust and not made of glass.
- Showers should be thermostatically controlled and units should be recessed. In most cases the shower should have a fixed head (No flexible hose).
- Simple controls with straightforward on/off button controls and colours to indicate hot and cold.

Bath

- Mixer taps with thermostatically controlled mixing valves to control the temperature of the water.
- Lever taps with obvious hot and cold colours to indicate hot and cold.

Toilet

- Cistern to be recessed or set into the wall or boxed in.
- Robust toilet bowl with soft closing toilet seat.
- Push button not a lever to flush the toilet.





Hand basin

- Hand basin to be securely fastened over vanity unit with lockable cupboard, so that cleaning materials and toiletries can be stored safely.
- Mixer with lever handles.
- Taps with obvious colours to indicate hot and cold.

Soap Trays/Toilet Roll Holders

- To be set into the wall and recessed.

Mirror

- Mirrors should be firmly fixed to the wall.

Bathroom/Toilet Doors

To open outwards to stop the door being blocked if someone falls behind it. An alternative idea is a sliding door that slides sideways.

The use of door locks that can be unlocked from the outside allows for privacy but means that someone else can open the door if the person needs help.

Flooring

- Non-slip tiles made of rubber or other soft material.

Bedrooms

The layout of the bedroom should enable the person to have a view from their window without being overlooked.

Fitted wardrobes that can be locked are preferable. The doors should not be glass or mirrored. Incorporating drawers within the fitted wardrobe allows for more space in the room, personal items to be locked away and prevents drawers being used as a climbing frame.

Consideration of having light switches by the person's bed will prevent having to use bedside lamps.





Kitchens

Avoid Open Plan design

- Ideally the kitchen will be separable from living area, or have the means to separate and lock should this be required.

Hob and cooker

- No gas hob or cooker – electric required.
- A built in cooker hob such as halogen or ideally induction which gives a clear indication to users that the hob is hot (even if turned off).
- Individual simple dials for the hob with front controls where the heat can be turned off quickly, no LCD displays.
- Ovens to be fitted into housing at work surface level with side hung doors.
- Clear work surface should be available to the non-hinge side of the oven to allow for transfer of hot items.
- Mains electric switch for cooker and hob to be located within a locked cupboard.

Work surfaces

- Heat-resistant work surface; allow heavy pans to be slid across rather than lifting them and taken straight from the oven.
- Round edges and corners.

Sinks

- Taps to be lever mixer taps.
- Taps with obvious colours to indicate hot and cold.

Storage

- Availability of a lockable cupboards and drawers to allow storage of kitchen equipment including toasters, kettles.
- Soft closure mechanism on all cupboard doors and drawers.

Interior Decoration and Furnishings



General interior design principles

The design of the building and furnishings should be 'minimal' with no complex visual details to reduce sensory stimulation. People with Autism can exhibit obsessive behaviours such as 'picking' at details e.g. unpicking stitching on a sofa, sealant around a bath. These can be reduced by careful selection of a limited pallet of colours, patterns and materials. It is important that the specification of materials reflect this without resorting to an institutionalised feel.

Research has found that pink and purple have been found to be the most positive colours to contribute to calmness.

Flooring

- Vinyl flooring or similar may be suitable as is easy to keep clean.
- Cushioned floor coverings can help to lower the risk of injuries and minimise noise.
- Durable carpet is recommended for bedrooms and avoiding coarse fabrics can reduce the risk of friction burns.
- All flooring to be plain with no pattern.

Wall coverings

- Washable paints are recommended for all walls; which will be easy to keep clean.
- No wallpaper – As this can be easily picked and torn.

Curtains and Blinds

- Curtains with Velcro tab tops are preferable as these will release easily if someone is heavy handed with them, leaving the pole and wall intact.
- Curtains and blinds should be durable made of flame retardant fabric, with black-out linings.
- Curtains should not have pull cords and should be opened and closed manually.



- When blinds are necessary developers should consult to understand the specific requirements of the individual.
- Alternatively shutters can be used to avoid people pulling off curtain rails etc.

Furniture

- Furniture should be practical, durable and robust.
- It needs to be able to stand up to some abuse whilst still being attractive in appearance.
- If furniture is able to be pulled over/jumped or climbed on especially book cases then brackets to fix them to the walls or floors should be considered to minimise risk.

Bedrooms

- Beds and mattresses need to be hard-wearing.
- Bed frames which can be fixed to the floor may be required.
- Low level beds may be necessary if there is a risk of falling out of bed during a seizure.
- Waterproof mattresses may be required.

Living Rooms and Dining Rooms

- Sofas and seating need to be hard wearing and may need to be strengthened using ply board.
- Seating which is waterproof with removable washable covers are preferable.
- Surfaces of tables should be scratch resistant and heat resistant.
- Picture frames should be firmly attached to the walls and non-breakable; polycarbonate may be used in place of glass.

Garden and External Space



Level access.

Garden to have secure boundaries with a minimum of 5 ft fence with plant borders to discourage exit over the fence, and help increase privacy.

Create a sense of space with simple layout and minimal obstructions, so that people do not feel restricted or contained. This also creates a sense of calm and relaxation. Consider a simple, circular pathway, clearly delineated with textured, hard landscaping, with no odd corners.

Lawn for majority of the garden would minimise injury compared to hard standing and allows for sensory equipment, for example a swing. Planting should be non-poisonous and not liable to cause injury due to thorns, spikes, etc. Consideration should be made to grow edible and sensory plants. Putting in an outside tap that can be hidden would give opportunity for water play.



Security

It is necessary to ensure that people are safe and secure in their environment.

The property must have secure boundaries especially in the garden and security locks on all windows and doors leading outside. Security that is subtle will allow the person to wander at ease and also allow staff and carers to be more relaxed in their support. It is useful to be able to observe the movements of people without them feeling constantly under surveillance. Therefore a design should be such that observation is possible without it being obvious. Good observation will put the carer at rest, which will help their wellbeing and this can only benefit the person with autism.

Exit from the front door of a person's home should never be straight to any outside space but via a porch/lobby so that two doors have to be used before they are outside. To reduce risk of wandering, if doors open directly outside then door sensors with alarms and locks should be fitted.

Security Peep hole to be fitted in external doors.

Outside door lighting on sensor will increase external security.

Recessed visual entry phone system without handset for intercom which is not placed near light switches or in the persons bedroom. The ability to disable the system is required to prevent vulnerable tenants allowing access directly from their home.

Tips for effective and safe support

Create a Low Arousal Environment

People with autism will behave differently in an environment where there is not too much sensory stimulation and order and structure in the person's environment can reduce frustration levels. Sensory stimulation can occur in one or more of the five senses – sight, sound, smell, touch and taste.

Rooms/spaces to be used consistently for the same purpose so that people can pre-empt what they are going to do to reduce anxiety of not knowing what is happening next.

Sight

Rooms decorated in gentle, pastel colours – but not yellow or white without the use of lots of different colours and patterns are more restful for people.

Rooms should be kept tidy and uncluttered and to help the person be calmer only one activity focused on at any one time. This will minimise over stimulation.

Sound

Ensure the person has opportunity for some quiet/down time and only have one noise happening at a time (e.g. turn television off if people are talking).

Smell

Consider the smells created in the person's home by cleaning materials, toiletries as well as your own personal use of perfume. Smells, such as some air fresheners and strong household chemicals disturb some people and can also cause headaches and asthma.

Touch

Choose fabrics that the person likes the feel of. These can then be used in furnishings e.g. cushions which can also act as soothers.

Security and safety with everyday items

People with autism may be very curious and interested in how things work and will explore and investigate items that could lead to breakages and or harm. During periods of challenging behaviour items can be thrown and used as weapons and the safety of themselves and others is paramount. To minimise breakages and injury child locks can be placed on cabinet doors to lock things away. This also helps with creating a low arousal environment. Consideration to what is left out on display is based on the individual and must always be guided by them. As a general rule start by locking up household chemicals, lighters, matches, sharp knives and small items that might be swallowed including any medication and never leave toiletries where they can be reached. Gradually introduce items and be guided by the person if they are safe and happy to leave things out.

If the kitchen is not in a separate room and open plan, locks may need to be considered on the cooker, fridge, microwave, etc.

TV's and DVD players, radio and music systems should be placed within lockable cupboards when not in use or placed behind perspex screens to prevent screens getting damaged.

All wiring for appliances and electronics should be hidden. To prevent posting items into electrical sockets, plastic child proof socket covers may be used.

If the person engages in any self-injurious actions, padding hard objects with foam will minimise harm.

Location of waste bins should be considered to prevent contents being explored.

In the kitchen

Consider the location and set up of your kitchen storage, appliances and work surfaces. Reducing the amount of movement around to carry things and search for items will reduce risk and can create easy routines and steps which people can remember and follow thus increasing independence.

Back rings or burners should be used in preference to the front to help to avoid injuries.

Saucepan handles should be turned to the side to avoid pans being knocked off the cooker.

Trolleys to transfer food from oven to table will help avoid carrying hot and/or heavy pans across the kitchen.

Cordless kettles with an automatic switch off can help prevent injuries; safety cradles allow the kettle to be tipped gently so that boiling water may be poured without the need to lift the kettle.

Irons that automatically switch off after a set time can help to reduce the risk of burns; tumble dryers will reduce the need for ironing.

Cups with plastic lids can protect the person if a hot drink is spilled.

Robust plastic cutlery and crockery will prevent breakages if dropped or thrown.

In the bathroom

Run a shallow bath and put cold water in before the hot water. This helps prevent scalds if the person jumps into the bath before it is ready or has a seizure and falls into the water.

Plastic containers for toiletries will reduce the chances of injury if knocked over and removal of soap and shampoo after washing will prevent the person emptying or drinking them.

Keep sink plugs hidden so a person cannot plug a sink and fill it to overflowing. If this remains a concern water taps may have to be kept turned off under the sink to be safe.

In the bedroom

Ensure the bedroom has a low arousal environment (see above), as it is the one place that people will be left unsupervised for many hours.

If there is a risk of falling out of bed if a person has seizures, then low-level beds or futons means there is less distance to fall and so may lower the chance of injuries.

If possible, sleeping in the middle of a large bed can reduce the risk of falling out of bed if you have seizures in your sleep.

The use of cotton bedding is recommended as they can be washed regularly at hot temperatures in case of regular soiling and are cooler to sleep in.

Some people who suffer from seizures use safety or 'anti-suffocation' pillows; these have small holes to ensure that the person can still breathe if sleeping facedown.

Furnishing with removable cotton covers allows for them to withstand high temperature washes.

Fire alarm and exit

Consider how the person would get out in the event of a fire and if the person understands and recognises the fire alarms fitted in the building. Plan an easily explainable route to exit the building in the case of a fire and make sure that this is run through with the person regularly to remind them.

Assistive technology and Telecare

There are many devices that facilitate the effective delivery of care and support in the home which can be linked to Community Alarm, e.g. bed sensors, bathroom flood detectors.

Please speak to your Care Manager about an assessment.

Documents and websites consulted

- **Autism and Architecture**
An article by Simon Humphreys RIBA, FRSA
- **The Challenging Behaviour Foundation**
Information sheet on specialist equipment and safety adaptations
www.challengingbehaviour.org.uk
- **Colourways**
www.colourwaysltd.com
- **Evaluation of Feature specific to an ASD living accommodation**
Teresa Whitehurst. Research and development officer – sinfield research Institute – 2007
- **The National Autistic Society**
www.nas.org.uk
- **HCA Non Mainstream Design Guidance**
Literature Review (2013)

