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# 1 INTRODUCTION

## 1.1 Introduction

This Housing Design Guide for neurodivergent people and those with learning disabilities in Newham contributes to creating more inclusive and supportive living environments. It suggests design strategies that can address key issues of concern for these residents including location and connectivity; enhanced safety and security; space and layout; sensory processing, and enhanced durability. It highlights the factors to consider when designing homes that can enhance the quality of life and make it easier to provide care and support for these residents.

The guidance set out in this document is the outcome of a project by The OT Service<sup>1</sup> commissioned by the London Borough of Newham in the context of their current planning aspirations that aim to build between 53,194 and 54,976 <sup>2</sup> new homes between 2023 and 2038. It responds to the findings from the Report on the housing design needs of neurodivergent residents and residents with learning disabilities (referred to herein as the Housing Design Needs Report), which was commissioned by Newham Council's Planning Policy team in 2024 to inform this design guide.

This evidence base has highlighted the growing need for general-needs housing that caters to neurodivergent

residents and those with learning disabilities. This guide addresses this need by providing design guidance for creating living environments that enhance these residents' safety, independence, and overall well-being. Based on existing evidence, resident consultations, and best practices, the recommendations in this guide provide practical solutions to challenges faced by neurodivergent people and those with learning disabilities in their home environments.

To support the implementation of this design guide, Policy H11.4 of Newham's Submission Local Plan (2025) includes a requirement for development referable to the Mayor of London to design a proportion of social rent rooms in accordance with the recommendations of this 'Housing design needs study' guidance. As Newham progresses with its housing development plans, implementing these design principles at the outset in the design of housing can contribute to a more inclusive approach to housing design.

The design features that will benefit the diverse and evolving needs of neurodivergent people and those with learning disabilities, will have equal benefit for those living with dementia and other conditions that cause mobility and visual impairments in older people that can support people to age in place.

This guide should be viewed as a living document open to future updates. By considering these design recommendations, Newham is working towards creating a community where all residents, including those who are neurodivergent or have learning disabilities, can thrive in their homes.

<sup>1</sup> [theotservice.co.uk](http://theotservice.co.uk)

<sup>2</sup> As per the proposed modification to Newham's Submission Local Plan (July 2025), for the Inspector's consideration.

## 12 Purpose and scope

The purpose of this guide is to provide information on the factors to consider in the design of housing to address the issues that impact on independence, function, health and wellbeing of neurodivergent people and people with learning disabilities in their own homes.

It identifies and provides guidance on housing design that can contribute to reducing risks and enhancing quality of life and wellbeing for these residents and their families. It has been informed by evidence gathered by The OT Service that has involved a review of research and practice, stakeholder consultations, and workshops with neurodivergent residents, residents with learning disabilities, and their families and caregivers. This evidence is summarised in the Housing Design Needs Report.

The principal intended audience of this document are architects and developers looking to deliver housing developments in Newham, in particular those of a scale that are referable to the Mayor of London<sup>3</sup>. It will also be used by Newham Planning Officers to assess referable developments delivering housing in the borough against the requirements of Newham's Submission Local Plan (2025) Policy H11 (Housing design quality).

The guide aims to:

- Provide a framework for designing general-needs housing for neurodivergent residents and those with learning disabilities.
- Offer practical, implementable solutions for architects, planners, and developers.
- Align housing design with the broader inclusivity and accessibility goals set out in the Newham's Submission Local Plan (2025).

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<sup>3</sup> A referable application is defined as "an application for planning permission of potential strategic importance (PSI)" by the Mayor of London Order 2008.

## 13 Building on existing planning policy and regulations

The guide brings together existing regulatory frameworks related to national, and local planning policies, building regulations and good practice guidance and signposts to key regulations of relevance to meeting these needs. It identifies additional factors not covered by existing regulations but recommended from the findings of the accompanying Housing Design Needs Report, which gathered, through public consultations, information about the housing needs of neurodivergent residents and residents with learning disabilities living in Newham. It also identifies recommendations from research and good practice guidance listed in the Bibliography section.

## 14 How the guide was developed

The content of this guide is based on the outcomes of the Housing Design Needs project commissioned by Newham. The project's methodology included:

- . A comprehensive review of academic and grey literature, encompassing existing research, design guidelines, and best practices related to the housing design needs of neurodivergent people and those with learning disabilities.
- . Workshops with various stakeholders, including neurodivergent residents and those with learning disabilities, their family members and caregivers, health and social care professionals, and architects. These discussions provided valuable insights from multiple perspectives, contributing to the comprehensive nature of the guide.
- . Site visit assessments of existing housing developments in Newham, aimed at identifying successful design elements and areas for improvement.

For more details about the findings and the project's methodology refer to the accompanying Housing Design Needs Report.

15 How to use this guide

This guide is designed to be a practical resource for architects, planners, developers, and policymakers involved in housing design and development in Newham. Its goal is to help them better understand and address the design needs of neurodivergent residents and those with learning disabilities.

**Section 1:** Understanding how the design of housing impacts on neurodivergent residents and those with learning disabilities: Clarifies key concepts and terminology used throughout the guide to ensure common understanding.

**Section 2:** Key Issues and Design Strategies: This section identifies core challenges and presents evidence-based strategies for addressing them in housing design.

**Section 3:** Design Guidance: This section provides specific, practical recommendations for various aspects of housing design.

This guide is a living document and should be used in conjunction with developments in building regulations and local planning policies, and good practice guidance.

16 Glossary

**Absconding:** to go away suddenly and secretly in order to escape from somewhere.

**Behaviours of concern:** behaviours that an individual may exhibit to communicate unmet needs which may place the individual or others at risk of harm. Behaviours may include destructive behaviours, self-injury, physical aggression, eating inedible objects, removing clothes, spitting, and running off.

**Executive functioning:** set of cognitive processes that support people to plan, focus and manage behaviour to achieve goals.

**Gross motor behaviours:** large sweeping movements, i.e. jumping, bouncing, hopping, skipping, climbing.

**Hypersensitive:** experiencing overstimulation of sensory stimuli.

**Hyposensitive:** little or no response to sensory stimuli.

**Perceptual functioning:** the ability to process and make sense of information received through the senses.

**PICA:** habitual eating or craving of items that are not food.

**Proprioception:** perception or awareness of the position and movement of the body in the context of the environment.

**Vestibular:** a sense of balance and spatial orientation relating to the coordination movement sense of balance and spatial orientation relating to the coordination of movement.

21 Understanding how the design of housing impacts on neurodivergent residents and those with learning disability

This guide seeks to address issues relating to the housing design needs of both children and adults who are neurodivergent and those with learning disabilities. To avoid misunderstandings and assumptions it is important to clarify that, as set out in Fig. 1, this encompasses a broad and diverse range of abilities and degrees of severity that sometimes overlap. Both the design of the home, and the amount of care and support provided to a person, will have a significant impact on their independence, health and wellbeing.

Neurodiversity is an umbrella term that encompasses a broad range of conditions and abilities, which includes Autistic Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), and dementia. Some of these conditions may affect cognitive processing and/or how sensory information is processed. Whilst many people who are neurodivergent will have no learning difficulties, those with learning disabilities characteristically have issues with sensory processing that cause them anxiety and distress that may trigger adaptive behaviours. These adaptive behaviours vary in severity and can include repetitive behaviours: picking at walls, switches, and sockets, pacing, jumping, rocking, banging (including self-injurious behaviour), shouting, and restlessness.

It is also not uncommon for children and adults with learning disabilities or dual diagnoses to have little or no insight about danger, which might involve running out into oncoming traffic or burning themselves on hot stoves and hobs. Those with a learning disabilities may also have physical impairments that mean they are reliant on being assisted to use a wheelchair. All these issues can be exacerbated or ameliorated by attention to how the home environment is designed. However, each person’s situation will vary depending on the type and severity of their sensory processing issues; to what extent they provoke adaptive behaviours that can be disruptive; and whether they have developed coping strategies.

More detail regarding behaviours and their impacts are available in the accompanying Housing Design Needs Report.

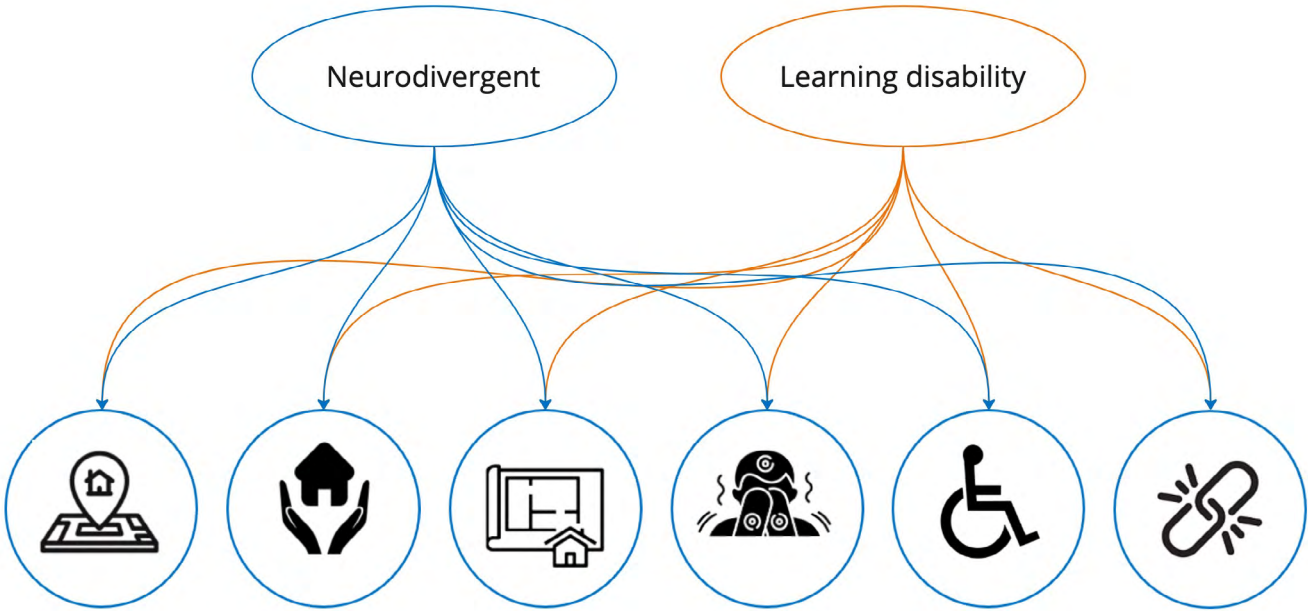


Fig 1 Housing design factors that impact on neurodivergent people and those with a learning disabilities



## 3 SECTION 2

### 3.1 Key issues and design strategies

This section presents the findings from a review of best practice, evidence from research and consultation with neurodivergent residents and those with learning disabilities in Newham about how the design of housing impacts on their safety, health and well-being. There is considerable evidence that the design of the built environment can significantly contribute to reducing stressful situations and creating spaces where residents and their families can thrive. The key issues and the design strategies that can contribute to addressing these issues are organised into five themes presented in the tables below:

- Location and connectivity.
- Safety and Security.
- Flexibility of space and layout.
- Durability.
- Sensory processing.







Location and connectivity




For neurodivergent residents and residents with learning disabilities and their families, proximity to local amenities is important. If homes are not within safe and convenient walking distance from local amenities including shops, schools, and clinics, families tend to prioritise the use of cars over public transport. Furthermore, there can be significant risks associated with managing children and adults who may abscond and have limited awareness of danger on public transport. Adequate provision of blue badges and safe accessibility to parking and pedestrian and cycle movement should be the priority.



Table 1.1 Location and connectivity

LOCATION AND CONNECTIVITY		
	ISSUES AND ADAPTIVE BEHAVIORS	DESIGN STRATEGIES
	Proximity to busy roads impacts issues related both to sensory intolerance to noise from traffic, whilst also needing to attend to the risks of running out into oncoming cars.	Consider locating family homes away from busy roads and/ or provide appropriately sized defensible space between the entrance to the home and the pavement to create a gradual transition from the private home to public spaces.
	The inability to use public transport due to managing children who run off can impede access to key facilities and reinforce car dependency.	<p>Prioritise pedestrian and cycle movement through the creation of active travel routes segregated from vehicular traffic.</p> <p>Provide safe and convenient pedestrian access to key facilities such as shops, GP, schools etc.</p> <p>The design of streets should consider the requirements set out in Newham Submission Local Plan Policy T3, Housing Design Standards LPG<sup>1</sup> Section A3-Streets and public realm, and Transport for London’s Guide to the Healthy Streets Indicators<sup>2</sup> and Healthy Streets for London<sup>3</sup>.</p>

1 Housing Design Standards LPG (2023)  
2 Guide to the Healthy Streets Indicators (tfl.gov.uk)  
3 Healthy Streets for London (tfl.gov.uk)

	Using public transport can be difficult for children with behaviours of concern who have limited tolerance to being in crowded environments. Therefore, most of the families prioritise journeys by car, but have difficulties in accessing car parking safely.	<p>Provide an adequate provision of disabled person parking in line with Design Guidance A3 for people with hidden disabilities who are eligible for Blue Badges<sup>4</sup>.</p> <p>Consider the location of the disabled parking provision: ensuring car parking and/or on street parking bays can be accessed safely through well connected pedestrian routes from a building’s entrance<sup>5</sup>. When car parking is provided in a basement or podium structure, developments should provide direct footways across parking entrances to prioritise pedestrian movement.</p>
	The inability to access key support networks and services can cause behaviours of concern.	Promote the spatial strategy of delivering well-connected neighbourhoods: ensuring all residents live within easy walking distance (often defined as a 15-minute walk) of shops, workplaces, community facilities, parks and civic amenities and that there are sufficient facilities to meet the needs of an increasing population.
	Behaviours can be exacerbated by being confined to the indoors and having a limited tolerance for proximity to others - access to the outdoors can help with deregulating.	<p>Promote proximity to green space and play spaces, which can alleviate behaviours of concern.</p> <p>Incorporate play areas and sport facilities into shared outside space to encourage outdoor sports.</p> <p>Create quiet areas into communal open space which could be accessible for people with sensory overload.</p> <p>Maximise surveillance, safety, and accessibility to private outside amenity space (garden and balconies).</p> <p>Design homes with views of nature and greenery, which can have a calming effect.</p>

4 In 2019 the UK government issued guidance on changes to eligibility for blue badges to include those with hidden disabilities. <https://www.gov.uk/government/publications/blue-badge-can-i-get-one/can-i-get-a-blue-badge>  
5 See guidance in Inclusive Housing Design Guide (2024)

### Safety and security

There are multiple issues related to the safety and security of neurodivergent residents and those with learning disabilities in the home that are exacerbated by adaptive behaviours, sensory seeking and lack of awareness of danger.

There are several design strategies that can contribute to mitigating these risks.

Table 1.2 Safety and security

	SAFETY AND SECURITY	
	ISSUES AND ADAPTIVE BEHAVIORS	DESIGN STRATEGIES
	<p>Unaware of danger.</p> <p>Running out onto busy roads.</p> <p>Absconding.</p>	<p>Avoid front doors of ground floor dwellings opening directly onto the street.</p> <p>Provide secure entrances to buildings with multiple dwellings.</p> <p>Provide lockable doors and windows to prevent absconding.</p> <p>Provide door and window sensors to receive an alert every time door or window opens and closes.</p> <p>Provide coded door locks to private entrances.</p>
	<p>Climbing and falling from balconies.</p>	<p>Secure locking system for balcony doors.</p> <p>Louvered ventilation panels to maximise ventilation avoiding opening balcony doors.</p> <p>Consider winter gardens as an alternative to balconies.</p> <p>Enclose balconies using solid balustrades and lockable sliding panels.</p>

	<p>Climbing out of windows.</p>	<p>Secure locking systems for windows.</p> <p>Louvered ventilation panel to maximise ventilation avoiding opening windows.</p>
	<p>Unaware of harm from hot surfaces.</p>	<p>Separate the kitchen from living areas, for example through sliding or pocket doors.</p> <p>Provide lockable controls on hobs.</p> <p>Locate hob and oven isolator/control switches out of sight and out of reach.</p> <p>Prioritise underfloor heating system.</p> <p>Provide protective covers for radiators to prevent injury.</p>
	<p>Fascination with water and water play, causing flooding.</p> <p>Increased risk of slips, trips and falls.</p>	<p>Specify timed cut-off on taps.</p> <p>Specify timed cut-off on showers.</p> <p>Specify flip plugs that prevent overflow.</p> <p>Specify durable and waterproof flooring.</p> <p>Provide slip resistance flooring in wet areas (e.g. rubber or vinyl flooring).</p>

Flexibility of space and layout

For children and adults who experience sensory processing issues, the noise and smell from food preparation, visual clutter and proximity to others can be a source of sensory overload. Housing design that has sufficient space for flexibility and adaptability for accommodating the need of walking in a circuit, the need of a safe retreat and the need to access outdoor space to help regulate away from stimuli is recommended.

Some features of the space and layout requirements for internal circulation and sanitary facilities set out in Building Regulation M4(3)<sup>1</sup> for wheelchair users could be of equal value in providing flexibility to address the needs of these families.



Table 1.3 Flexibility of space and layout

FLEXIBILITY OF SPACE AND LAYOUT		
	ISSUES AND ADAPTIVE BEHAVIORS	DESIGN STRATEGIES
	Open-plan layouts increase levels of visual, auditory, and olfactory stimuli and proximity to other people, which can be overwhelming and increase distress and discomfort, resulting in agitated and disruptive behaviours.	<p>Provide clear simple, and intuitive layout that is recognisable in terms of functions (food preparation, bathing, toileting, sleeping).</p> <p>Compartmentalise space according to function (sleeping, personal hygiene, food preparation, dining, social interaction, private, quiet space).</p>
	Restlessness and pacing are repetitive movement behaviours where a person walks back and forth, often due to anxiety, sensory overload, or as a self-regulating mechanism to process emotions or environment.	Provide a layout that permits visual and physical connection between different rooms allowing walking in a circuit, which can help people to regulate.

	Disorientation is confusion about time, place, or surroundings, and occurs due to sensory processing differences, cognitive processing challenges, or difficulty with spatial awareness and navigation.	<p>Design dwelling layouts that incorporate sightlines and visual cues including attention to lighting and visual contrast.</p> <p>Prioritise one-storey dwelling layouts whenever possible to facilitate layout legibility and orientation around the house.</p>
	Sensory overload and confusion caused by visual clutter.	Allow space for built-in storage systems that offer opportunities to organise numerous items and create coherence and order.
	Coping with sensory overload.	Incorporate safe, quiet, enclosed or semi-enclosed rooms or alcoves that can act as retreat spaces for people to regulate.
	Access to outside space can be an effective way to regulate. Issues related to proprioception (the awareness of the body in space) mean that many benefit from the use of trampolines, swings, etc.	<p>Provide access to safe, private defensible spaces and/or private amenity spaces that can contribute to people being able to regulate.</p> <p>Provide inclusive play and sport equipment in shared outside amenity space.</p> <p>Consider managed access to shared outside amenity space.</p>
	Needing to use the toilet more frequently and for extended periods of time due to issues related to continence and constipation puts a greater demand on the need for toileting facilities in dwelling houses.	Provide more than one sanitary facility in dwellings with more than four bedspaces.
	Limited tolerance for proximity to others and unexpected encounters. Some neurodivergent people and people with learning disabilities experience anxiety or distress when others get too close or appear suddenly, requiring increased personal space and predictable social interactions.	Provide gradual thresholds and wide hallways to help manage unexpected encounters or forced proximity with neighbours.



1 Approved Document M: Access to and use of buildings: Volume 1: dwellings: Category 3 wheelchair

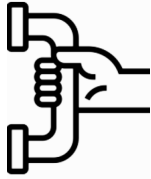


Durability

The impact and management of adaptive and sensory-seeking repetitive behaviours that can cause damage beyond that caused by usual wear and tear needs to be considered. Examples of behaviours include banging and picking at walls, jumping, pacing, picking at fixtures and fittings, water play but also ‘pica’ (a compulsion to eat non-food items) that might involve picking at and eating carpet, digging holes in walls, and eating plaster. To deter these behaviours, specifications prioritising the need for robust and durable materials and products should be considered early in the design and build process. Product specifications for all fixtures and fittings, including door handles, WCs, washbasins, kitchen cabinets, worktops, and taps, should be robust and durable. Features to consider are material strength that can withstand elevated levels of usage, ability to take greater weights, and product lifespans that do not require ongoing maintenance and repair. Whilst these products can be more costly, they will reduce costs of replacement in the long term.



Table 1.4 Durability

DURABILITY		
	ISSUES AND ADAPTIVE BEHAVIORS	DESIGN STRATEGIES
	Jumping and pacing.	Specify cushioned vinyl flooring designed to absorb impact from dropping heavy items or jumping. This material commonly used in workshops and gyms can reduce sound transmission to neighbouring properties.
	Banging, thumping and picking at walls.  Pica (swallowing non-food items such as plaster and paint).	Specify durable and impermeable materials for walls and floors.

	Proprioception (the awareness of the body in space) issues and limited standing balance.  Reliance on hoists to transfer people from one room to another.	Consider reinforcing walls (minimum 30mm pattressing) to ensure secure fixing <sup>1</sup> to support rails that may be required for those with mobility impairments.  Ensure that the ceiling structure in every bedroom is robust enough to allow for the fitting of an overhead hoist capable of carrying a load of 200kg <sup>2</sup> to host ceiling track hoists that may be required for residents who are unable to weight bear.  Specify surfaces that facilitate ease of movement for mobility with wheeled walking aids, for example laminate, wood adhesive-free recyclable vinyl flooring <sup>3</sup> .
	Pulling on washbasins and shower fittings.  Bouncing on toilets; limited control and balance causing individuals to sit down heavily onto to the toilet seat.	Specify robust fixtures and fittings, including windows, door frames, taps and WCs.
	Tendency for fascination with water and water play can result in flooding.	Specify durable waterproof flooring and seals in wet areas.  Specify flood detection and timed cut-outs on taps and showers.

<sup>1</sup> As recommended in Habinteg Inclusive Housing Design Guide 2024  
<sup>2</sup> In accordance with ADM Vol 1 Category 3: 3.35c  
<sup>3</sup> Runnalls, J. (2024) The Inclusive Housing Design Guide. London: RIBA.








## Sensory processing

Environmental noise is an issue for many neurodivergent people due to the anxiety and distress it causes due to hypersensitivity to sound. It can also impact relationships with neighbours if adults or children exhibit repetitive adaptive behaviours (pacing, jumping, banging, and shouting) due to noise transmission between properties. Residents have described how this can impact on maintaining relationships with neighbours. Thermal comfort for these residents is another key priority due to the limited ability of many to tolerate extremes of temperature or understand how to make adaptations. Neurodivergent residents could also experience sensory overload from the smell of food preparation, visual clutter, and tactile stimuli. There are different design strategies to address these key issues at design and construction stage.



Table 1.5 Sensory processing

SENSORY PROCESSING		
	ISSUES AND ADAPTIVE BEHAVIORS	DESIGN STRATEGIES
<p>Acoustic</p> 	<p>Hypersensitivity to domestic sounds, food preparation, mechanical extractors, washing machines.</p> <p>Hypersensitivity to external noise, traffic, car alarms, sirens, and noise from neighbouring properties.</p> <p>Self-regulating behaviours, including shouting, banging, jumping, and pacing, can disturb neighbours and impact relationships.</p>	<p>Ensure satisfactory level of sound insulation to the construction of walls and floors to protect against sound within a dwelling and between neighbouring dwellings.</p> <p>Ensure good acoustic conditions from ventilation system operation and conceal extractors to minimise noise.</p> <p>Install acoustic glazing in windows to reduce noise transmission.</p> <p>Specify absorbent materials for flooring to muffle sound and prevent noise transmission (e.g. cushioned vinyl flooring or carpet).</p>

<p>Visual</p> 	<p>Hypersensitivity to strong visual stimuli can cause confusion, disorientation, and distress. Triggers might include:</p> <p>Glare from south-facing windows. Glare from light sources. Glare from shiny surfaces. Flickering lights. Strongly contrasting patterns. Visual clutter.</p>	<p>Specify dimmable and warm LED lights that can be tailored to meet individual preferences.</p> <p>Provide built-in storage that reduces visual clutter.</p> <p>Provide integral blinds to reduce glare from natural light.</p> <p>Design rooms with indirect light.</p> <p>Avoid strongly contrasting patterns in wall coverings and furnishings.</p> <p>Avoid large areas of shiny surfaces that cause reflection and glare.</p> <p>Use muted colours in interior décor.</p>
<p>Thermal comfort</p> 	<p>Limited ability to regulate temperature.</p> <p>Distress and agitation from overheating.</p>	<p>Prioritise dual aspect layouts that maximise options for natural ventilation.</p> <p>Provide integral blinds that minimise solar gain.</p> <p>Provide external shading.</p> <p>Maximise purge ventilation through vents adjacent to windows that maximise ventilation without increasing noise by opening windows.</p> <p>Maximise purge ventilation through a mechanical extract ventilation system (MVHR) which should meet the maximum permitted noise levels as required from Building Regulation Part F: Ventilation.</p>
<p>Tactile</p> 	<p>Hypersensitivities to tactile stimuli.</p>	<p>Specify slip-resistant flooring (e.g. rubber or vinyl flooring) in wet areas.</p> <p>Specify soft surfaces and smooth curves.</p> <p>Specify eco-friendly materials (e.g. linen, cotton, bamboo and corn).</p>
<p>Smell</p> 	<p>Hypersensitivity to odours-intolerance of smells from food preparation.</p>	<p>Separate kitchen and dining areas from living areas or provide flexible options such as sliding doors or hatches.</p> <p>Provide a retreat space that can be used to consume food away from the kitchen/dining space.</p>

## 4 SECTION 3: DESIGN GUIDANCE

### 4.1 Introduction and context

This section sets out recommendations and priorities for the design of general needs housing that can contribute to creating homes that are not only accessible but also comfortable, safe, and conducive to independent living for many neurodivergent people and those with learning disabilities. It builds on and provides further information with regards to the key issues and design strategies outlined in Section 2, categorised by various aspects and areas of the home.

#### **Learning from the experience of current housing provision**

Many of the issues raised by residents in Newham during the Housing design needs study consultation relate to existing housing stock built in the post-war era and before 2016 and the implementation of the Approved Document M: Access to and use of buildings: Volume 1: dwellings (ADM, 2016). However, in recent years, national and local planning housing design requirements and updated building regulations, have led to developments that are delivering higher quality and safer homes, located in more accessible places. This means that some of the issues related to physical access, space, and layout have been addressed in housing construction since 2016 and are also considered to be improved through application of the emerging Housing Design Standards LPG (2023).

There were, however, key issues that emerged from the consultation work related to location and connectivity; enhanced security to prevent tendency for absconding; sensory processing issues, and enhanced durability that are specific to the needs of neurodivergent residents and people with learning disabilities that needed to be addressed with additional guidance.

The study has also looked at how existing Building Regulations, design best practice and design guidance - listed in the Reference section - are already contributing to addressing emerging issues, like safety and sensory processing, and what additional recommendation should be introduced to offer comprehensive guidance when designing homes for neurodivergent people and people with learning disabilities. Whilst several recommendations made in national and local planning policy and current building regulations can contribute to addressing those needs - for instance, issues related to sensory processing, such as thermal comfort, could be addressed by compliance with the Approved Document O: Overheating, Policy CE4 of the Newham's Submission Local Plan (2025) and Standard C6 of the Housing Design Standards London Planning Guidance (2023) - there is a lack specific design guidance to address key issues of concern. The purpose of this document is to offer practical solutions that are complementary to the existing regulations developments should comply with.

## 4.2 How to use the design guidance

The design guidance combines the existing best practice and requirements and introduces additional recommendations to help meet the needs of neurodivergent and people with learning disabilities.

The design guidance is organised broadly following the approach used by design strategies: from addressing neighbourhood connectivity, to home and room layout, to the recommended interior specifications that could facilitate meeting housing design needs of neurodivergent residents and residents with learning disabilities.

The intended users of the guidance will primarily be developers in Newham who are seeking to meet the requirements of policy H11.4 in Newham's Submission Local Plan (2025) (see 'Which homes should meet these requirements?'). The guidance will also be used by planning officers to assess proposals against the requirements of policy H11.4.

To ensure the delivery of homes that could meet the needs of Newham residents in the waiting list, developers should aim to optimise the delivery of a range of design strategies from the guidance, in particular those that do not have a significant impact on the design of units or significantly diverge from existing best practice guidance.

The guidance is clear on when developments are expected to meet or exceed existing standards and when there are alternative solutions to achieve specific priorities.

A 'housing design needs' section in the design and access statement should provide information demonstrating which and how design measures have been incorporated into new homes to meet the needs of neurodivergent people and people with learning disabilities. Applicants should provide drawings of flat layouts, bay studies and landscape and parking strategies to ensure convenient use of homes, outdoor spaces and parking for those residents. Where developments are unable to meet some of the design requirements set out in this guidance, the design and access statement and/or planning statement should set out convincing evidence and justification.



43 Which homes should meet these requirements?

The design guidance has been developed in the planning context of the Newham’s Submission Local Plan (2025), London Plan (2021), Housing Design Standards LPG (2023) and Building Regulations, in particular the Approved Document M: Access to and use of buildings: Volume 1: dwellings (ADM, 2016).

The key requirement in the Newham’s Submission Local Plan (2025) that is of relevance to the delivery of these homes is policy H11.4, which requires:

4. Development referable to the Mayor of London should design a proportion of social rent rooms in accordance with the recommendations of Newham’s forthcoming ‘Housing design needs study’ guidance.

The following design guidance only applies to referable developments delivering housing against the requirements of Newham Submission Local Plan (2025) Policy H11.4.

In addition, part 7 of policy H11 requires the following through parts a and b:

7. All new residential developments should:
- a. meet requirement M4[2] of Building Regulations Approved Document M (for ‘accessible and adaptable dwellings’) as a minimum and ten per cent of residential dwellings in new residential developments should meet the enhanced requirement M4[3] of Building Regulations Approved Document M (for ‘wheelchair user dwellings’); and
  - b. where they are delivering social rented homes that are wheelchair user dwellings, design these dwellings to meet Building Regulation M4[3](2)(b) standard (wheelchair accessible dwellings); [...]

Recognising these requirements, it is primarily intended that homes designed using the requirements of this design guidance will be M4[2] units in the social rent tenure, as M4[3] social units will be fully adapted and prioritised for bidding by wheelchair users. However, it is recognised there will be neurodivergent residents and residents with learning disabilities who use a wheelchair. There may also be cases where wheelchair units are not bid for under choice based lettings, and therefore may be consequently bid for by residents with the highest priority on Newham’s housing waiting list. Therefore, there is likely to be some overlap with need for these homes and M4[3](2)(b) units.

Therefore, developers should seek to implement relevant requirements in this design guide to provide:

- M4[2] units in the social rent tenure; and
- Some (but not all) of the M4[3](2)(b) homes where these

would not conflict with relevant building regulation requirements for fully adapted wheelchair homes. Specific layout proposals or fixtures and fitting proposed for these homes can be discussed with the borough’s Occupational Therapist at an early stage of design, as currently recommended in the implementation text to policy H11.7 of the Newham’s Submission Local Plan (2025).

It is acknowledged that the recommendations of this design guidance may result in design strategies or solutions that are not in alignment with some best practice guidance for general needs housing; however, the purpose of this guidance is intended to better meet the needs of our diverse population, and meeting these needs requires varied housing design and choice. Furthermore, is expected that only a small proportion of a scheme’s overall unit numbers are expected to meet these requirements (between two and five percentage of the total units proposed by a scheme)<sup>4</sup>. The exact number of units secured for these purposes will be determined on a case-by-case basis, and conditions or heads of terms may be used to secure these requirements.

In terms of wider housing provision, a significant number of people would benefit from Supported Housing, where formal care and support are provided according to need in a variety of ways, either in group homes, on-site for people in self-contained apartments, or support to people living independently. Whilst this guide is focused on the design of general needs housing, several recommendations would equally apply to the design of Supported Housing.

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<sup>4</sup> This requirement has been derived from analysis in Newham’s Strategic Housing Market Assessment, which suggests that around 4.22% of population change between 2020 and 2040 will be autistic people and people with learning disabilities. This may be an underrepresentation of need, as it does not account for people who currently live in unsuitable housing in the borough and may wish to move to more suitable accommodation.

## 4.4 When to apply the design guidance

Some requirements need to be addressed at masterplan and building level while others could be addressed with minor adaptations to layout, finishes and fittings.

It is recommended to consider this guidance at an early stage in the design process to ensure that the design requirements can be addressed in cohesive way across the development: from masterplanning, to building and homes layout, to façade elements, such as windows, fences and balconies.

When designing homes for neurodivergent people and people with learning disabilities it is also important to consider the scope of finishes and fixture recommended to guarantee a safe and healthy life. Most of the guidance related to finishes, lighting and fixture and fittings could be addressed at the construction stage, although it is highly recommended to consider them at design stage to avoid any potential conflict with fire and safety requirements.

# DESIGN GUIDANCE

A. Location and connectivity

B. Access, Approach, and Orientation

C. Space and layout

D. Internal stairs

E. Living, Kitchen and Dining

F. Bathrooms

G. Bedrooms

H. Noise

I. Thermal comfort and ventilation

J. Private and communal outside space

K. Interiors

## 45 A. Location and connectivity

**A1.** Development should, in line with Newham's Submission Local Plan (2025) Policy BFN1, be located within a safe and convenient walking distance from local amenities including shops, schools, and health facilities to support and facilitate the daily life of neurodivergent people and those with learning disabilities.

**A2.** Development should locate family homes away from busy roads to reduce the risk of running out into oncoming cars for neurodivergent people and people with learning disabilities that have a low awareness of danger.

**A3.** Development should provide, in line with the London Plan (2021) Policy T6.1 (G.) and Newham's Submission Local Plan (2025) Policy T3, an adequate number of disabled persons parking which should be:

- a. the minimum three per cent London Plan Policy T6.1 (G) requirement; and
- b. additional blue badges spaces of a number equivalent to 80% of the units provided to meet the needs of neurodivergent people and people with learning disabilities delivered under policy H11.4.

For example, a scheme of 150 units, delivering six social rent units to meet the requirement of this design guide (four per cent of the total units), will be required to deliver five blue badges parking spaces, in line with the London Plan policy T6.1 (G) requirement for all developments. The scheme would then need to deliver an additional five blue badges spaces for homes that respond to the needs of neurodivergent people and people with learning disabilities, resulting in ten blue badge spaces in total across the whole scheme.

**A4.** Development should prioritise pedestrian and cycle movement and provide safe and direct pedestrian connections to outside space, the public realm, and parking spaces through:

- a. Generous footways of minimum 2.4 m; and
- b. Parking spaces within 50m distance from the building's entrance; and
- c. Direct footways across parking entrances when car parking is provided in a basement or podium structure; and
- d. Visual distinction between pedestrian and vehicular routes when shared surface is proposed as the road network.

## 46 B. Access, approach and orientation

### Progressive privacy

**B1.** Development should provide a smooth and safe sense of arrival to homes that progressively lead from the public space to the private amenity space. When developing family homes within a courtyard block, development should ensure that the private amenity space of the ground floor dwellings is well defined and protected through appropriate defensible space and that rear gardens that open onto the communal amenity space could allow a secondary access to the ground floor dwellings which can be used by people with limited awareness of danger. An example of this layout design is shown in Fig. 2 .



Perimeter block in Sugar Island with mews houses accessible both from the front door and from the communal courtyard.

Fig 2 Mae Architect, Sugar House Island, Newham



## Orientation and dual aspect

**B2.** Development should provide dual aspects dwellings to ensure neurodivergent people and those with a learning disability can benefit thermal comfort through passive ventilation (Fig. 3).

**B3.** Development should mitigate the effect of glare and thermal discomfort from direct sunlight at certain times of the day and at different times of the year through:

- a. Providing rooms with indirect sun light orientation; or
- b. Providing integral blinds which remove ligature risks and the tendency for children with behaviours of concern to pull them down; or
- c. Providing an external shading system.



Fig 3 Fraser Brown MacKenna Architects, Regent Place, Tower Hamlets, deck access units

## Private entrances

**B4.** Development with family homes at ground floor should avoid front doors open directly onto the street. Defensible space with lockable gate should be provided to enhance security and prevent absconding. They will also help in creating a gradual threshold.

**B5.** Development should provide high security front doors (e.g. keyfob door entry system, door keypad entry system) to manage the access from the dwellings to outside space for people with low awareness of danger. This guidance should not conflict with fire safety requirements.

**B6.** Development should provide entrance and communal doors with a vision panel to provide visibility on communal areas and entrances, which can help neurodivergent people and people with learning disabilities to manage unexpected encounters or forced proximity with neighbours (Fig. 4).

Dual-aspect layouts are recommended for all newly built dwellings in accordance with C4.1 Housing Design Standards LPG (2023) and Newham's Submission Local Plan (2025). This maximises the options for passive ventilation to maximise thermal comfort.



Fig 4 Entrance door with visual panel in Newham's passive house scheme, Leather Gardens, Newground Architects



4.7 C. Space and layout

C1. Development should incorporate a clear and easy to navigate layout that is recognisable in terms of functions: food preparation, dining, relaxing, bathing, toileting, sleeping and regulating. Where possible, rooms should be visually and physically connected to allow walking in a circuit, which can help people to regulate (Fig. 5).

C2. As recommended in the Housing Design Standards LPG (Fig. 6), development should exceed the minimum design standards set out in the Nationally Described Space Standards (NDSS). This additional space is required to accommodate adaptive behaviours, the need for retreat spaces, and the provision of assistance with personal care, which continues to be necessary throughout people’s lives.

Homes meeting the needs of neurodivergent residents and residents with learning disabilities should, as a minimum requirement, provide the additional space as set out in the Approved Document M4(3) Category 3: wheelchair user dwellings.

In addition to the minimum space requirement for wheelchair user apartments, development could provide more generous and flexible layout through:

- a. Providing additional room/alcoves that could be used as a retreat for time out (Fig. 7); and
- b. Providing flexible designs that allows the separation of an open-plan living layout into two separate rooms: a living room and a kitchen/dining room. A direct physical or visual connection between the two rooms is required through sliding doors or kitchen hatch or glazed panels to ensure surveillance into the adjacent room (Fig. 8-9-10-11); and
- c. Providing additional built-in storage to make better use of extra space required for wheelchair dwellings (e.g. wheelchair transfer zone) when not allocated to wheelchair users (Fig. 12); and/or
- d. Providing an additional room for a carer or a connected self-contained one-bedroom annexe suitable for the extended family who can offer or benefit from care support (Fig. 13).

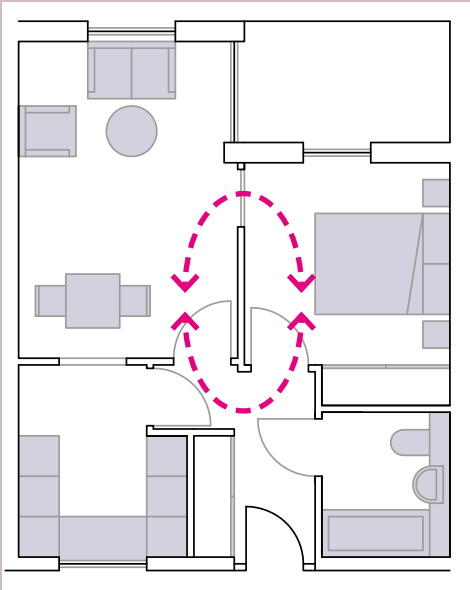


Fig 5 Circular Layout

The layout shown in Fig. 5 demonstrates how adjacent rooms could be physically connected to allow walking in a circuit. The diagram shows a 1 bed apartment but the same principles could be applied to a larger home. In family homes it is recommended to allow at least a connection between kitchen, living room and circulation space to accommodate adaptive behaviours that include restlessness and pacing. An ideal layout incorporates a circular route around the dwelling.

Type of dwelling		Minimum gross internal floor areas (GIA)* and storage (sqm)						Best practice extra space		
Number of bedrooms	Number of bedspaces	1-storey dwellings		2-storey dwellings		3-storey dwellings			Built-in storage	
1b	1p	39/37	43/41*					1.0	1.5	+4
	2p	50	55	58	63			1.5	2.0	+5
2b	3p	61	67	70	76			2.0	2.5	+6
	4p	70	77	79	86					+7
3b	4p	74	84	84	94	90	100	2.5	3.0	+10
	5p	86	97	93	104	99	110			+11
	6p	95	107	102	114	108	120			+12
4b	5p	90	101	97	108	103	114	3.0	3.5	+11
	6p	99	111	106	118	112	124			+12
	7p	108	121	115	128	121	134			+13
	8p	117	131	124	138	130	144			+14
5b	6p	103	115	110	122	116	128	3.5	4.0	+12
	7p	112	125	119	132	125	138			+13
	8p	121	135	128	142	134	148			+14
6b	7p	116	129	123	136	129	142	4.0	4.5	+13
	8p	125	139	132	146	138	152			+14

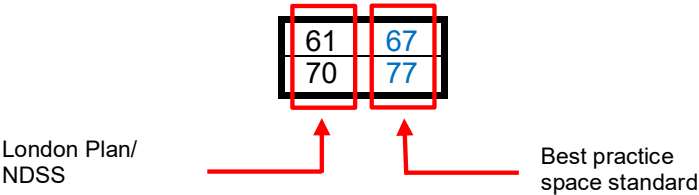


Fig 6 Housing Design Standards LPG (2023) - Table A1.1 Minimum and best practice internal space standards for new dwellings



Enclosed spaces with padded interiors are particularly beneficial for providing sensory feedback. Recessed seating incorporated into built-in storage could serve this purpose, as in Fig. 7.

Fig 7 Creating recessed seating and retreat spaces

The 3-bedroom, 5-person apartment layout shown in Fig. 8 includes an additional room (study) that could be used as a retreat for time out.

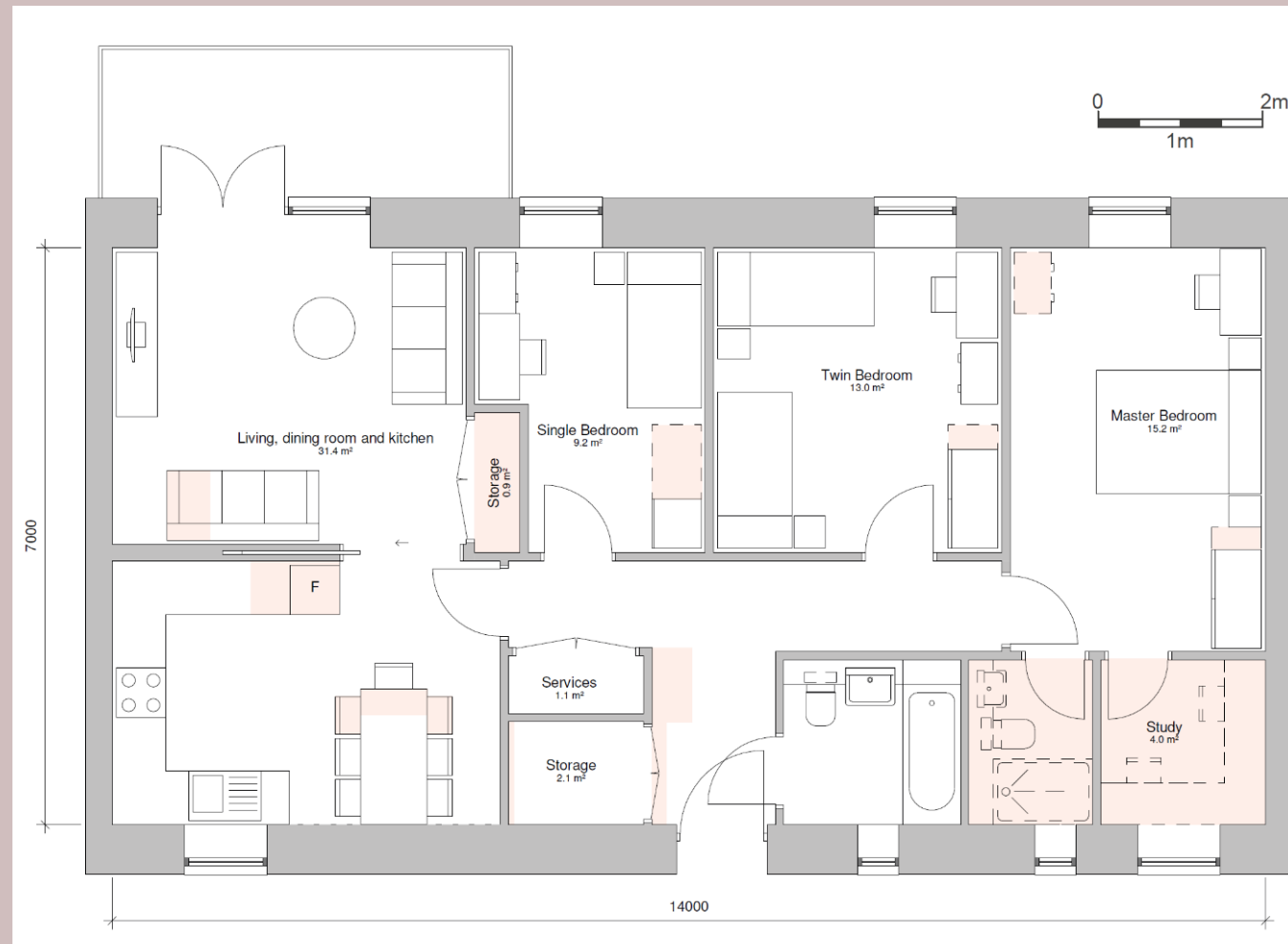


Fig 8 Housing Design Standard LPG (2023), 3 bed 5person apartment with additional 'study'



Fig 9 Vincent Street, Canning Town, Newham, Jestico+Whiles

The layout above in Fig. 9 demonstrates how the kitchen-dining area can be separated from the lounge to control access to the kitchen. An additional visual connection between the rooms is recommended.

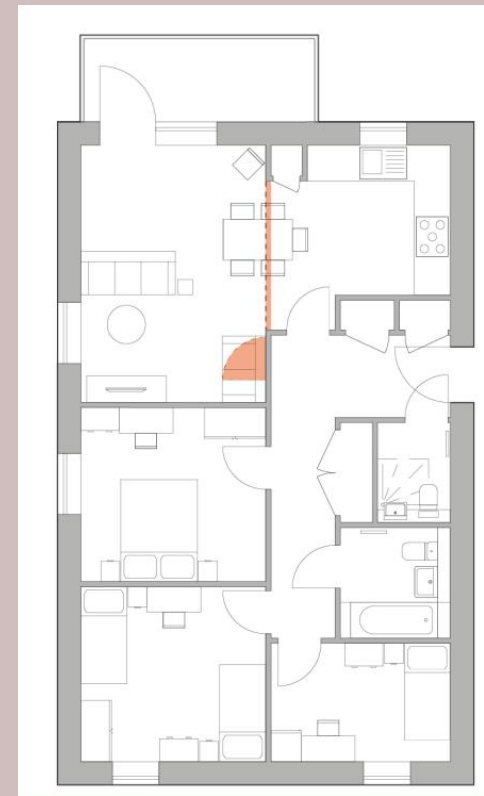


Fig 10 Housing Design Standards LPG (2023), Separate or combined kitchen/dining and lounge

The layout in Fig. 10, extracted from the Housing Design Standards LPG (2023), demonstrates a flexible design that provides options for either separating or combining kitchen/dining and lounge spaces.



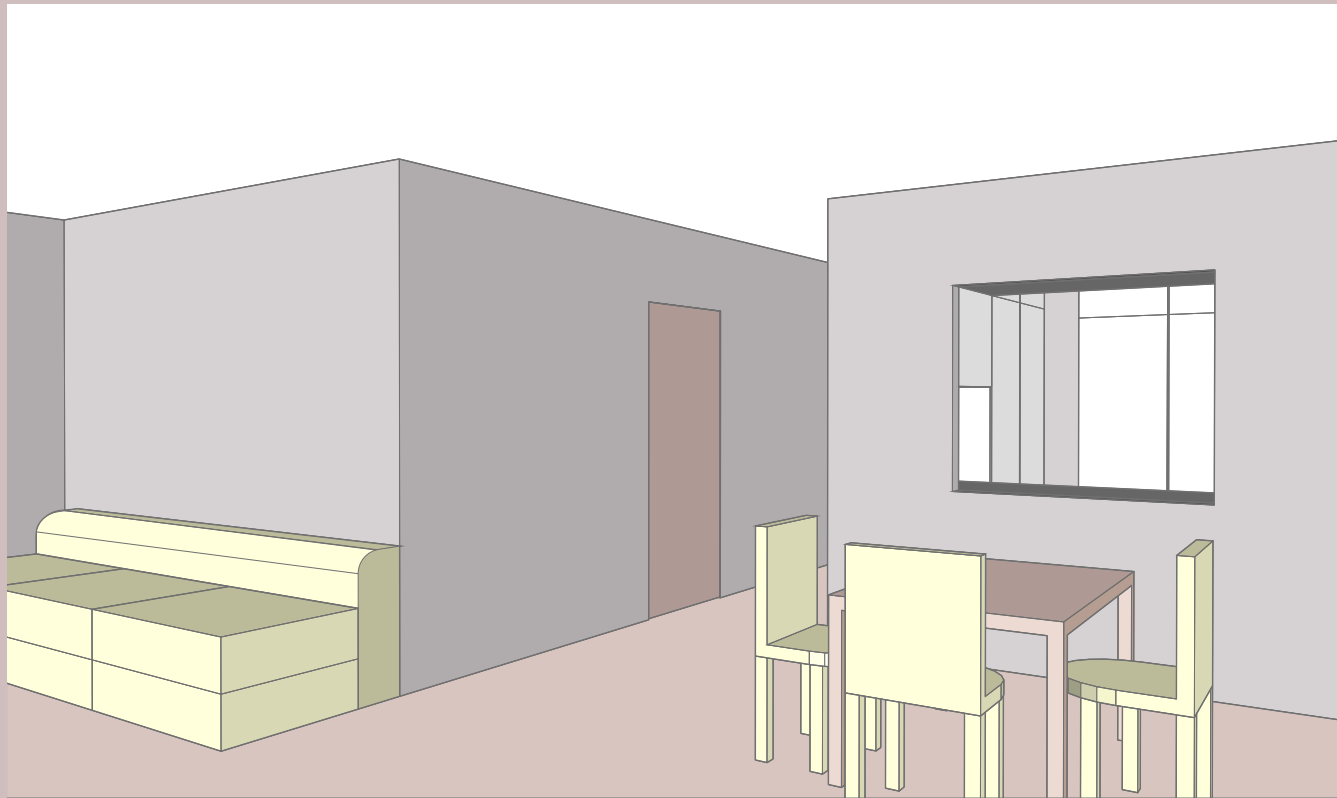


Fig 11 Defined kitchen, dining and living zone. Kitchen open onto living room through a hatch

A glazed panel or an opening that can provide a sightline between the kitchen and the living room is recommended to afford supervision.

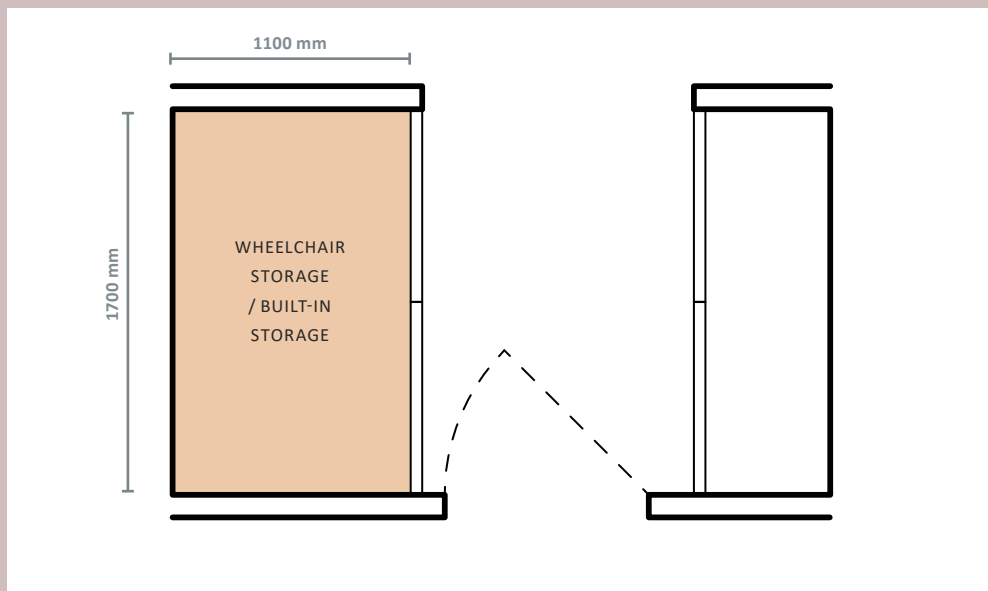


Fig 12 Repurposing wheelchair charging space

Fig. 12 shows an example layout of an entrance with wheelchair storage and transfer space as required in M4(3). The additional space this provides could be repurposed as built-in storage to remove visual clutter or as a recess that can serve as a refuge for a child who needs to regulate.

The Multigen House, developed by PRP for Chobham Manor is a new housing typology proposing a separate self-contained one-bedroom home to the rear of a three-bedroom family dwelling. This allows extended families or carer to live together while retaining some independence.



Fig 13 Multigenerational House, Chobham Manor, Stratford, PRP and Richard Chivers

4.8 D. Internal stairs

- D1.** Development that provides family homes as two-storey dwellings should provide a full height balustrade and full height stair gates to deter neurodivergent people and those with learning disabilities with limited awareness of danger to climb or jump down the stairs.
- D2.** When delivering family homes as two-storey dwellings, hallways, stairs, and landings should provide motion-activated lighting to ensure nighttime wayfinding and safety.

4.9 E. Living, Kitchen and Dining

- E1.** Development should exceed the minimum floor area required for kitchen, dining and living and provide a larger kitchen to accommodate more storage space and recycling space to reduce clutter as recommended in the Housing Design Standards LPG (2023) best practice (Fig 8).
- E2.** Development should provide a kitchen/dining area separated from living space to control access to the kitchen and reduce the risk of burns from hobs and ovens and reduce sensory overload from the noise and smells of food preparation. A direct physical or visual connection between the two rooms is required through sliding doors, kitchen hatch or glazed panel to ensure surveillance into the adjacent room (as per guidance C2.b of this guidance).
- E3.** Development should avoid a gallery-style kitchen and provide larger kitchens to accommodate enough space for food preparation as a family and to ensure neurodivergent children and children with learning disabilities can develop mealtimes life skills experience. A C shape kitchen layout is the most suitable, as this will also allow space to accommodate a dining table when required by a specific family’s needs.

- E4.** Development should meet the best practice outlined in the Housing Design Standards LPG (2023) C2.6, which requires that the main sitting space in a home for up to two people should be at least 3m wide and increased to 3.5m wide in homes with three or more bed spaces to achieve a functional layout. Meeting this best practice standard will be beneficial to neurodivergent residents and those with a learning disabilities because it will maximize opportunities for flexible use of the space. This might include:

  - a. being able to divide space to provide secluded spaces to regulate through arrangement of furniture; and/or
  - b. Creating a recessed built-in seating and retreat space;
  - c. Better acoustic control with space for sound-absorbing furniture;
  - d. Space to maintain comfortable personal distances during interaction;
  - e. Space for pacing without obstacles;
  - f. Adaptability for changing support needs or mobility and other sensory equipment.

4.10 F. Bathrooms

**F1.** Development should meet the minimum requirements of M4(3) (Table 3.5) for all homes with four bedspaces or more to have two sanitary provisions: a bathroom with a level access shower and a separate WC/cloakroom. Providing additional sanitary facilities will respond to the needs of the member of the family who is neurodivergent or has a learning disabilities to use WC for extended periods of time.

The dimensions set out for the minimum space requirement for an M4(3) wheelchair-adaptable bathroom (Fig. 14), would be sufficient to accommodate a layout which provides space to assist and supervise personal care.

**F2.** When designing accessible bathrooms, development should provide a bathroom with a WC visually separated from washing facilities to minimise distraction. A typical accessible bathroom schedule as suggested from Living in the Community Housing Design for Adults with Autism, Andrew Brand (2010) (Fig. 15) will provide:

- a. Fully tiled wet room.
- b. Space for care and assistance if required.
- c. Washing facilities (shower and wash hand basin) that are on the same side of the room and are identified by the colour of the wall.
- d. Slip-resistant flooring.
- e. Anti-flood detector.
- f. Isolator mechanism on sink and bath outlets.
- g. Concealed cistern to deter tampering.
- h. Large bore waste pipe for ease of removal of blocked items.
- i. Secure fixing of toilet roll holder.
- j. Concealed pipework.
- k. Anti-ligature fixtures.
- l. Concealed extractor to minimise noise.
- m. Outward opening door accessible from the outside.

**F3.** Development should provide ensuite bathrooms/shower rooms in shared housing and family homes to prevent night disturbance to others.

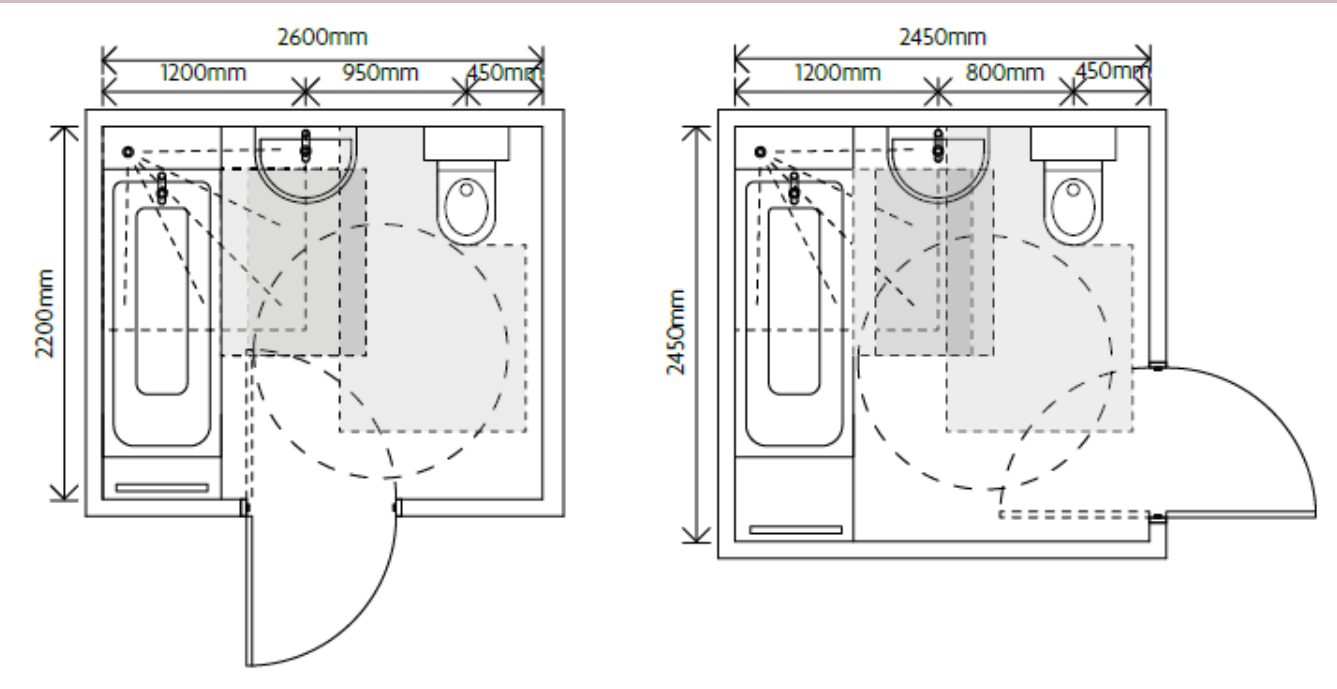


Fig 14 Dimensions of a wheelchair adaptable bathroom as suggested in ADM Diagram 3.15



4.11 G. Bedrooms

G1. When designing bedroom layouts, development should provide larger rooms to allow for better zoning and a more flexible layout for different furniture configurations and future adaptability, in particular for bedrooms that need to accommodate required equipment and double bedrooms that might be shared by siblings or by neurodivergent people and people with learning disabilities and their carer.

Development should as a minimum provide the Building Regulations Part M4 (3) requirement for an oversized bedroom.

In addition, to create a sense of enclosure, reduce the sensory overload and allow choice and control of lighting and noise in shared bedrooms, the size and the layout of the bedroom should allow for:

- a. Built-in wardrobes to reduce overwhelming visual clutter; and
- b. Built-in beds or sliding partitions or curtains to separate a larger room in two smaller independent areas (Fig. 16-17).

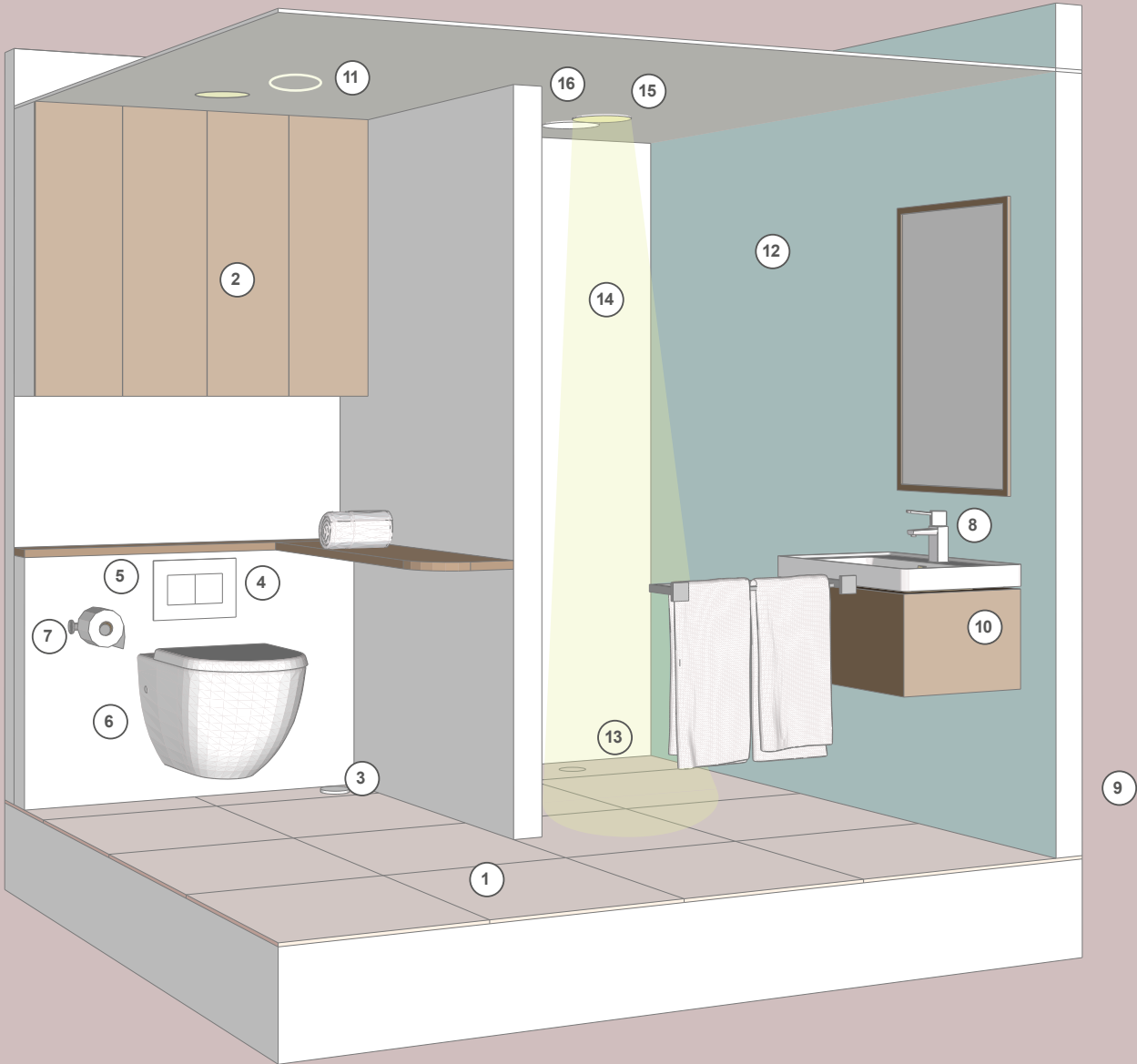


Fig 15 Layout of shower room and toilet room based on the suggested layout in Living in the Community Housing Design for Adults with Autism, A. Brand (2010)

- 1 Fully tiled wet room with level access shower tray. Nonslip tile flooring

2 Fixed storage for towels, toiletries and gloves and wipes

3 Anti-flood detector and isolator mechanism on sink and bath outlets

4 Concealed toilet cistern to control access

5 Push panel flush system

6 Large bore toilet waste pipe with inspection chamber behind toilet pan for easy removal of blocked items.

7 Toilet roll holder and bath rail grouted into wall for durability
- 8 Captive sink plug

9 Regulated temperature and pressure at hand basin, shower and bath outlets. Control valves located in adjacent room with restricted access

10 Fully concealed pipe work and services

11 Emergency lighting

12 Wash facilities located on same side of room with colour highlighted wall

13 Floor drain with inaccessible fastener heads

14 Anti-ligature fixtures including shower head and towel rail

15 Light pipe to illuminate showering space

16 Remotely located extractor fan to minimise noise

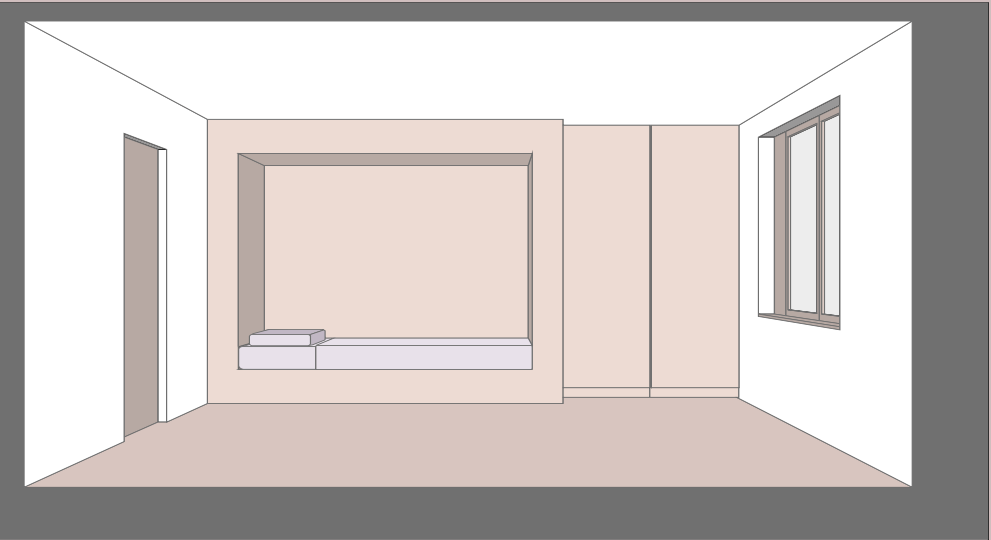


Fig. 16 is a reinterpretation of the autism-friendly student bedroom illustrated in the Mostafa Autism Friendly University Design Guide. A built in bed alcove creates a clear spatial delineation of the sleeping function. Built in storage helps reduce clutter. Soft colour palette and natural materials are recommended to create a calm environment.

Fig 16 Autism-friendly bedroom

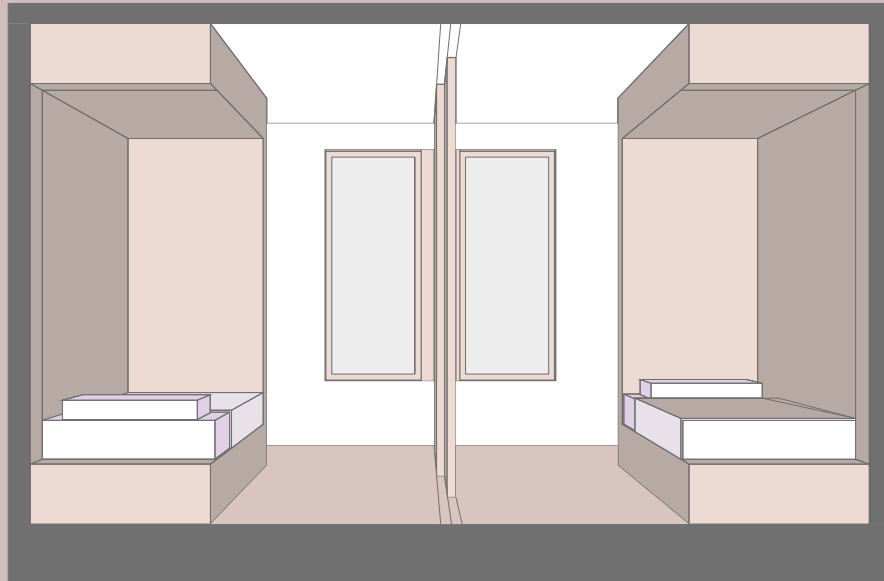


Fig 17 Sliding partitions between twin bedroom

The diagram in Fig. 17 represent the layout adopted by Neave Brown in its Winscombe Street project in Camden (1963). The sliding partitions separate a larger twin bedroom into two independent small rooms if needed.

## 4.12 H. Noise

**H1.** Development should locate family homes and/or habitable rooms away from the source of noise, such as a busy road, railways and existing buildings that generate excessive noise (e.g. industrial buildings). When family homes cannot be located onto local or residential streets, development should ensure that the noise is mitigated through appropriately sized defensible space (between 1.5 and 2m) and a planted treatment boundary.

**H2.** Development should avoid locating bedrooms and living rooms near communal corridors, lifts, bin stores, cycle stores and plant rooms or other sources of noise within the flat, like utility rooms where mechanical ventilation heating with heat recovery systems (MVHR) or washing machines are installed. Where possible, washing machines should be installed in the utility room rather than the kitchen to avoid noise overload during food preparation.

**H3.** Development should specify appropriate finishes and equipment to reduce environmental noise to ensure neurodivergent people and those with learning disabilities are not overstimulated as well as to reduce transmission of noise and potential disturbance to neighbouring dwellings when behaviours of concern like pacing, jumping or thumping arise. This includes:

- a. Appropriate insulation of walls, ceiling, floors, and party walls between adjacent properties that meet the standard requirements of Building Regulation Part E: resistance to the passage of sound;
- b. Sound-absorbent materials for flooring, like carpet, vinyl, rubber;
- c. Mechanical extractors models that meet the maximum permitted noise levels as required from Building Regulation Part F: Ventilation;
- d. Design of internal doors that include soft closers to mitigate against noise of repeated slamming.



## 4.13 I. Thermal comfort and ventilation

I1. Development should, in line with the Newham's Submission Local Plan (2025) policies CE4 (Overheating) and H11 (Housing design quality), reduce the risk of overheating. Design strategies to maximise thermal comfort include:

- a. prioritising dual aspect units that can maximise natural cross-ventilation; and/or
- b. providing external shading devices which can control solar gain (Fig. 18); or
- c. providing integral blinds into windows and doors rather than standard blinds that are easily pulled down and have pull cords that present ligature risks (Fig.19); or
- d. providing louvered ventilation panels to maximise ventilation while reducing the risk of falling associated with openable windows (Fig. 20).



Fig 18 External shading at Monier Road, Fish Island, Tower Hamlets, Hawkins Brown



Fig 19 Integral blinds



Fig 20 Neubau Schukhaus Bruhl, Kollektive Marudo, louvered facade ventilation operated from inside



## 4.14 J. Private and communal outside space

**J1.** When providing external private amenity space for neurodivergent people and people with learning disabilities, development should, whenever possible, locate family homes with three and four bedrooms at lower floors to guarantee a direct and safe access to outdoor space, usually ground floor private gardens or private gardens opening onto a communal podium courtyard (Fig. 22-23).



Fig 21 Winter garden at Windmill Court, later living and care, PRP and Tim Crocker

**J2.** When family homes with three and four bedrooms can only be located at upper floor levels and private amenity space is provided in the form of balconies, development should minimize the risk associated with climbing over balconies providing enclosed outdoor spaces and controlling the access to balconies. This could be done by:

- Providing glazed ventilated winter gardens that could be used as outside space. This balcony typology is also appropriate to reduce the level of noise and pollution for dwellings in proximity to busy roads and other noise sources (Fig.21); or
- Providing adjustable sliding and lockable shading screens to create a sense of enclosure; or
- Providing lockable windows and/or fixed glazed windows with louvered ventilation panels (Fig. 20) to limit access to balconies while allowing for thermal comfort regulation and ventilation; and
- Delivering inset balconies over projecting balconies to enhance the sense of enclosure; and
- Providing solid balustrades. Glazed balustrades are not recommended as they exacerbate the sense of insecurity.

**J3.** When designing shared outside amenity space for neurodivergent people and people with learning disabilities, development should eliminate the risk associated with climbing over fences and absconding and provide a calm retreat. This could be done by:

- Avoiding locating communal amenity space and play spaces on roof terraces; and
- Delivering fenced communal amenity space at ground level; or
- When providing external shared amenity space as raised podium or roof terrace, including creative designs solutions in the barrier treatment (e.g. prickly hedges) that can act as deterrents to climbing; and
- Creating, through landscaping, planting and changes of levels, a design which breaks the communal outside space into smaller quieter spaces which could be accessible for people with sensory overload.





Fig 22 Gallions Reach, view of private amenity garden from the communal podium courtyard



Fig 23 Gallions Reach, view of the private amenity space from the dwelling

The layout shown in Fig. 22-23 demonstrate how dwellings in a perimeter block could provide private gardens opening onto the communal courtyard, creating a direct and safe access to outside space.

## 4.15 K. Specify interiors

### Durability

**K1.** Development should specify materials, fixtures and fittings that are durable and robust to withstand more than ordinary wear and tear and to deter adaptive behaviours including jumping, banging walls, slamming doors and 'pica (a compulsion to eat non-food items).

Factors to consider include:

- Potential risks that could arise from consuming substances that might be toxic;
- Specialist behavioural health design guidance (<https://www.bhfcllc.com/design-guide>);
- Provision of durable fitted furniture, flooring, and wall protectors and protectors around windows and doors, and on walls that could deter tendency to chew and pick at walls, window ledges and door frames.

### Fixtures and fittings

**K2.** Development should specify robust and durable fixtures and fittings, including door handles, WCs, washbasins, kitchen cabinets, worktops, and taps that are specifically manufactured for challenging behaviour environments. Features to consider are material strength that can withstand high levels of usage, ability to take greater weights, and product lifespans that do not require ongoing maintenance and repair.

**K3.** Development should specify switches and sockets that can be fitted flush to the wall to deter the tendency to tamper with and pick at anything that protrudes.

**K4.** Development should preferably provide an underfloor heating system. When radiators are proposed these should be protected to reduce the risk of burning for people with low awareness of danger.

**K5.** Development should provide flood detection systems, timed cut-outs on taps and showers to and flip plugs to prevent the risk of flooding.

**K6.** Development should provide water temperature control systems (e.g., anti-scald showers and taps) to ensure safety for residents with low awareness of danger.



**K7.** Development should specify lockable controls on hobs and locate hob and oven isolator/control switches out of site and out of reach.

**Lockable storage and doors**

**K8.** Development should provide lockable cupboard doors and storage in kitchens and bathrooms for safety reasons to prevent easy access to medicines, toiletries and cleaning fluids.

**K9.** Development should provide lockable doors to utility rooms where equipment such as boilers and washing machines are installed.

**K10.** Development could also provide coded locking systems, sensor or alarms to internal doors – when these are not required to be open as part of the fire strategy – to reduce the risk of access to unsafe environments like bathrooms and kitchens.

**Wall reinforcement for secure fixings**

**K11.** Development should ensure that, as set out in the Inclusive Housing Design Guide (2024), walls are constructed to a minimum of 30mm full-height timber pattressing to ensure secure fixings for support rails. This should also be considered in walls adjacent to stairs to allow for additional stair rail and a full height gate.

**K12.** Development should ensure that ceiling structures in bedrooms are constructed in a way to ensure secure fitting of an overhead hoist capable of carrying a load of 200Kg which can be required for residents who are not able to weight bear.

**Lighting**

**K13.** Development should minimise glare from light sources and south-facing windows which can cause significant discomfort, confusion and distress. Design strategies to minimise uncomfortable glare include:

- a. Providing dimmable lighting systems that can be tailored to individual needs; and
- b. Shading the lighting sources to avoid direct glare; or
- c. Providing task lighting on separate switches that is shaded and directed onto the task areas, such as worktops and wash basins (Fig. 24); and
- d. Avoiding large areas of glossy surfaces on floors, walls and cupboards that can cause glare and confusing reflections; and
- e. Specifying matt finish tiling in bathrooms and kitchen.



Fig 24 Shaded lighting task directed onto the worktop

## 5 BIBLIOGRAPHY

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National Planning Policy Framework (2023)

Nationally Described Space Standards (2015)

Building Regulations

- Approved Document E: Resistance to and passage of sound
- Approved Document F: Ventilation
- Approved Document K: Protection from falling, collision and impact
- Approved Document M: Access to and use of buildings: Volume 1: Dwellings
- Approved Document O: Overheating

British Standard

- BS8300:1 (2018) Design of an accessible and inclusive built environment:  
Part 1: External environment – code of practice
- BS8300:2 (2018) Design of an accessible and inclusive built environment:  
Part 2: Buildings – code of practice

### London Planning Policy and guidance

London Plan (2021)

Housing Design Standards LPG (2023)

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