

New build development and design input - Project 120: wheelchair accessible housing by design, Tower Hamlets

Context

Tower Hamlets is one of London's most densely populated boroughs, with a large and diverse social housing waiting list and a significant proportion of residents with complex disability needs. The borough's demographic profile, including a high rate of consanguineous relationships within some communities, has contributed to an elevated prevalence of children with significant physical and cognitive disabilities. Housing these families appropriately is not simply a welfare matter; it is a practical challenge of considerable scale, and one that cannot be solved after the fact by adapting properties that were never designed to meet their needs.

The role described here grew from a recognition that the existing approach to wheelchair housing was failing. Wheelchair users on the social housing register were being offered properties built to lifetime homes standards, which then required extensive and expensive adaptation before they could be made genuinely functional. Money was being spent twice: once to build, and again to rip out and modify. The OT at the centre of this case study, who has been with the service for fourteen years, was instrumental in developing a different model, one built on early engagement with planners and developers, systematic data on the needs of wheelchair applicants, and a design standard that goes well beyond the minimum requirements of Part M of the Building Regulations.

The challenge

Wheelchair housing built to the wrong standard

- Properties categorised as wheelchair accessible under lifetime homes standards were routinely failing to meet the actual needs of wheelchair users, requiring significant adaptation after tenants moved in.
- The cost of retrospective adaptation was substantial: tens of thousands of pounds spent per property to correct design failures that could have been avoided with OT input at the planning stage.
- Part M of the Building Regulations sets a minimum accessibility standard that the post-holder considers inadequate for full wheelchair users, particularly where properties are above ground floor and communal facilities such as lifts and doors have not been specified to the right standard.

Demand without a mechanism to respond

- When the post-holder and colleagues audited the housing register in 2012, they identified approximately 120 people in Tower Hamlets who were full-time wheelchair users requiring social housing; the number has since grown, with over 300 still on the waiting list.
- No systematic mechanism existed to capture the specific functional needs of wheelchair applicants and translate that information into design briefs for new developments.

- Housing associations and private developers building in the borough were not receiving clear guidance on what the council required of wheelchair properties, resulting in inconsistency and frequent shortfalls against agreed specifications.
- Emerging Need for Autism-Specific Housing. Referrals for families with autistic children began increasing significantly, averaging around 35 families per month, with many children having severe and complex needs requiring environmental modifications that standard housing cannot accommodate.
- Assessment services for autism in the borough had a two-year waiting list, creating a pipeline of families in unsuitable temporary housing while awaiting both diagnosis and appropriate rehousing.
- No design framework existed for autism-specific housing; the learning has been built from scratch through individual cases and iterative design development.

The role

The post-holder leads on wheelchair accessible housing across the borough, combining clinical assessment of applicants with active involvement in planning and development processes. The two functions are inseparable: clinical knowledge of individual need informs the design standards the service demands, and the design standards only hold if there is someone with the authority and expertise to enforce them.

Medical assessments are completed for all wheelchair applicants, capturing not only diagnosis and functional level but the specific design requirements of each individual: whether they need a wet room, a hoist, a through-floor lift, and what configuration of each. This information is held in a central spreadsheet managed by a project officer, and is used proactively when new wheelchair properties are coming through the development pipeline. Rather than advertising a property and matching it to whoever is at the top of the waiting list, the service identifies in advance which applicants are suitable for a specific property and builds to their requirements from the outset.

The post-holder attends design meetings with planners, architects and developers at an early stage, sits on the same floor as the planning team, and joins council meetings on new-build programmes. He has developed his own OT design brief for wheelchair properties, which goes significantly beyond Part M and is shared with all housing association development partners as a clear statement of what is expected. Requirements include two lifts rather than one for any wheelchair property above ground floor, fully automated communal and fire doors, height-adjustable hand basins in wet rooms, and car parking provision even in car-free zones where feasible.

Where developers fail to deliver against agreed specifications, the post-holder will escalate to enforcement. On more than one occasion this has resulted in a developer being required to demolish and rebuild a block that did not meet what had been signed off. The test he applies is simple: would he put a family member in a wheelchair into this property? If the answer is no, the property is not acceptable.

The post-holder has more recently developed an equivalent programme for autistic children, initially prompted by identifying a four-bedroom property within a development that could be reconfigured for a family with severe autism. That first property, delivered with L&Q, led to a programme that has now completed ten family-sized autism-specific homes. These properties include reinforced walls, biometric access, stair restrictors, secure enclosed balconies and anti-climb fencing, designed to enable children to move and play safely without risk of harm to themselves or damage to the property. The autism element of the service is now led by a colleague who has completed a master's degree in autism funded by the housing department.

Benefits to the system

Housing and development benefits

- Purpose-built fully wheelchair accessible properties require no retrospective adaptation, eliminating the cost of ripping out and reinstalling fixtures that were wrong first time.
- A clear design brief shared with development partners removes ambiguity about what the council expects, reducing the frequency of non-compliant builds and the time and cost associated with remediation.
- The data system that maps applicant needs to incoming properties means that wheelchair stock is allocated precisely and efficiently, without refusals or unsuitable offers.
- Planners within the borough have developed their own understanding of wheelchair design standards through sustained engagement with the post-holder, and now challenge developers directly when submissions fall short.

Health and social care benefits

- Families housed in appropriately designed properties are less likely to present repeatedly to health and social care services with housing-related crises, falls, carer breakdown or care package escalations.
- Autistic children housed in environments that meet their sensory and safety needs are better able to access education and community participation, with downstream benefits for the whole family.
- The post-holder's willingness to advocate directly with housing options and homelessness teams on behalf of specific families ensures that the most vulnerable cases are not lost in bureaucratic processes.

Benefits to individuals and families

Wheelchair users in Tower Hamlets are housed in properties that are genuinely usable, not merely accessible on paper. The distinction matters: a property that meets Part M may still have a fixed basin a wheelchair user cannot reach, a single lift that creates total dependency, or communal doors that cannot be independently operated. The design brief developed through this service addresses each of these failures because it has been built from clinical experience of what wheelchair users actually need to live independently.

For autistic families, the impact is more profound still. These are households where the design of the home is not a quality-of-life issue but a safety imperative. Families who had been moving between temporary placements, cycling through different schools and living with constant risk are being housed in environments specifically built around the needs of their children. One such family, with four non-verbal autistic children all requiring maximum support with personal care and daily living, had been in temporary housing with the children out of school; that family is among those the post-holder is actively pursuing housing for now.

Developing the role: a practical guide

Getting into the design process early

- Establish a presence in planning meetings from the outset: proximity to planning colleagues matters, and being on the same floor makes a practical difference to whether the OT's voice is heard at the right moment.

- Develop a written OT design brief that goes beyond regulatory minimums and reflects the real functional requirements of the population you are housing; share this with all development partners as a condition of engagement.
- Do not wait for properties to be completed before reviewing them: OT input must happen at design stage, before plans are signed off, because changes become exponentially more expensive once building has begun.

Building and using clinical data

- Assess every wheelchair applicant and record their specific functional requirements systematically: what adaptations they need, what property configuration is required, what size of accommodation their household needs.
- Use this data proactively to match incoming properties to suitable applicants before the development is complete, so that the property is built to the right specification and the right person is ready to move in.
- Share the aggregate data with the mayor's office, planning department and housing associations to make the case for the type and number of wheelchair and accessible properties that need to be built: this is one of the most powerful tools for influencing development pipeline decisions.

Holding developers to account

- Be clear that the OT design brief is not advisory: it reflects what has been agreed with the housing authority and what will be expected on completion.
- Be prepared to escalate when developers fail to deliver: enforcement is a legitimate and necessary tool, and using it in even one case sends a clear signal to all development partners about the seriousness of the commitment.
- Use the personal test as a professional guide: if you would not house your own family member there, the property is not ready.

Developing specialist expertise over time

- Autism-specific housing emerged from a single case and grew into a programme: the willingness to try something new with one property, document what worked, and build from there is replicable in other specialist areas.
- Invest in the team: the decision to fund a colleague through a master's degree in autism is an example of a housing department taking OT professional development seriously as a strategic investment.
- Take final-year OT students: the post-holder has taken six in a single year, teaching plan reading and design analysis; one has returned as a band five, and the pipeline of housing-interested OTs grows as a result.

Essential skills and knowledge

- Ability to read and critically analyse architectural plans, identifying functional shortfalls from a wheelchair user's perspective before they are built in.
- Detailed knowledge of Part M and its limitations, and the ability to articulate clearly and confidently why specific requirements exceed the minimum standard.
- Holistic clinical assessment skills that capture not only diagnosis and functional level but the specific design requirements that will enable independence in a given property type.
- Confidence to challenge developers, housing associations and internal decision-makers when what has been agreed is not being delivered.

Demonstrating impact

- Track the number of wheelchair properties delivered to the full OT design brief, compared to properties built to Part M minimum, as a measure of the standard being achieved.
- Record the cost of retrospective adaptation avoided: properties delivered right first time with no post-occupancy modification required represent a direct saving against the previous model.
- Monitor refusal rates: a service that is successfully matching applicants to appropriate properties should be achieving low or zero refusals.
- Document the number of autism-specific properties delivered and the profile of families housed, as evidence of a specialist programme meeting a need that would otherwise go unmet.
- Capture tenant feedback through post-occupancy surveys and use it to update the design brief: this creates a continuous improvement loop and builds the evidence base for future design decisions.

Top tips for managers

- Put the OT in the room with planners and developers from day one: the influence of this role depends entirely on early involvement, and that requires physical proximity and a seat at the development table.
- Resource the data infrastructure: a project officer to maintain the needs database is not an optional extra but a core part of what makes the matching system work.
- Back the OT when they push back on developers: the willingness to use enforcement, including requiring demolition where necessary, is only possible if senior management is aligned and supportive.
- Invest in specialist training: funding a colleague through a master's degree in autism is an example of treating OT expertise as an asset worth developing, not a fixed resource to be managed.
- Plan for succession: fourteen years of accumulated knowledge about wheelchair design, local development relationships and what good housing looks like for this population is not easily replaced; build the team, take students, document the standards, and do not let that knowledge walk out the door.

"We are the right person, in the right place. We can articulate what is required, what is right. Because what's good for you is good for me, and as OTs we are built like that: we take into account the service user and their needs. And if you're not taking the service user's needs into account, you're in the wrong job."

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