MAYOR OF LONDON

London Plan Guidance

Housing Design Standards

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Table of contents

London Plan Policy	Policy D6 Housing quality and standards Other relevant policies that are listed beside each standard
Plan making	N/A
Planning Application type and how the London Plan Guidance will be applied	This guidance provides a list of housing standards that are applicable to all self-contained residential applications (Use Class C3). This document focuses on housing across tenures, including Build to Rent and specialist older persons housing. However, it does not provide guidance on other specialist forms of housing such as shared living, temporary accommodation and student accommodation. The standards are broken down into those that are expected to be met, and those that are best practice and therefore strongly encouraged. The abbreviations in brackets after each standard indicate the type of development to which the standard applies. These are: • new-build: [NB] • changes of use: [CoU] • conversions: [C] • all of these types of housing development: [All]. The standards aim to ensure that development proposals create well-designed and sustainable places that are of high quality.
Who is this guidance for?	This guidance is aimed at developers and their design teams seeking planning permission, and borough development management officers. The guidance is categorised under three themes (or parts): placemaking and the public realm; shared and ancillary facilities; and homes and private outside space. These broadly follow the design process and aim to assist design teams in designing residential developments.

1 About this document

1.1 What are the 'housing design standards'?

1.1.1 This document brings together, and helps to interpret, the housing-related design guidance and policies set out in the London Plan 2021. It provides a set of standards that relate to housing design. It does not attempt to reproduce the content of the Plan, and compliance with this guidance should not be inferred to mean compliance with the policies. It applies to the creation of new housing that fall within Planning Use Class C3. This includes most forms of housing for older people (including extra care), but not shared living which is treated as *sui generis*.

1.1.2 This guidance responds to the impact of the COVID-19 pandemic, including the shift to increased homeworking. It also recognises the climate emergency, and the role that residential development has to play, and the contribution it has to make, in reaching net zero. These housing design standards will provide homes that: are safe, inclusive, comfortable, flexible, durable, well-built and well managed. They aim to achieve net zero-carbon homes that are designed to last at least 200 years; with eventual disassembly in mind. They encompass designing with residents' wellbeing in mind, and express what it means to optimise site capacity for a residential development, as opposed to simply maximising the development of a site.

1.1.3 The standards have been ordered to align with the design process, and the document signposts the relevant policies from the London Plan (see last column in the tables) and other guidance throughout. This aims to assist designers and borough officers when designing and assessing a development. The standards are split into those that are expected to be met for all relevant housing applications, and those that are strongly encouraged as they represent best practice. Meeting best-practice standards should not be a justification for not meeting affordable housing requirements in the London Plan. This document also highlights where standards are not directly applicable to specialist older persons housing.

2 Part A: Placemaking and the public realm

2.1.1 Good placemaking involves taking cues from the landscape and topography; the local climate; and the pattern of buildings, streets and open spaces. Design teams must consider the context and history of a place as well as any future plans, and look for opportunities beyond the immediate development boundary. Early engagement with a representative and diverse range of local people, which is proportionate to the scale of development, is also crucial. As good placemaking is synonymous with good environmental design, it is vital for development to retain and reuse as much as possible to minimise embodied carbon as well as operational carbon. This guidance encourages existing buildings and infrastructure to be retained or reused where possible, and any demolition to be robustly justified. Designers should also consider how London's climate will change in the future.

2.1.2 The layout of any development will be influenced by a wide range of factors. As a result, only a rigorous design process will identify the tensions and priorities and find the solution that, on balance, will produce the best all-round solution. Large developments should provide a wide range of dwelling types and tenures. There should be no perceptible qualitative difference between buildings designed for different tenures, and mixed tenure development is encouraged. London urgently needs more homes, but these need to be well designed, sustainable dwellings. As a result, the design-led approach advocated in the Plan requires developers to optimise, rather than maximise, development opportunities. The priorities may vary but they include optimising a building's orientation and form to maximise the quality of daylight and thermal efficiency, which is vitally important to tackling climate change and residential quality.

2.1.3 All parts of the public realm should feel safe and welcoming for everyone, both day and night, with a particular focus given to creating spaces that are safer for those groups that are more likely to have safety concerns in public spaces. It should be designed and built not just to last, but also to improve over time. This means using high-quality, durable materials and components that age well and require little maintenance. Simple, compact forms are effective in reducing carbon emissions, and the spaces between buildings are as important as the buildings themselves.

2.1.4 The accessibility of walking and cycling should take priority in the design of buildings, places and the surrounding area. Residential design must recognise the shift to at least 80 per cent of journeys by sustainable modes, and the mental and physical benefits of providing safe, attractive and convenient environments for pedestrians, cyclists and users of other micro-mobility options. This must be complemented by an inclusive approach such as the provision for people with a range of disabilities and who choose a range of transport modes; and careful consideration of lighting, servicing, deliveries and emergency access. The parking, and movement of private vehicles, where required, must not compromise this. Where new streets or

routes are created, or there are changes to existing streets, the allocation of highway space must be based on the Healthy Streets indicators. Thoughtful design can create space for informal, inclusive play and social interaction where gatherings and events can take place. It can also provide biodiversity gains and other ecological services through planting and incorporating Sustainable Urban Drainage Systems (SuDS). It is important that streets and all other parts of the public realm are overlooked and are well used. Active frontages and frequent entrances (shared and private) play an important role, and front gardens and boundaries require careful thought. New and, where possible, existing streets will be expected to include carefully selected trees and appropriate lighting.

2.1.5 Public green and blue spaces play a unique role because they belong to everyone, as highlighted further by the COVID-19 pandemic. They should: be multipurpose and biodiverse; be designed to respond to the scale and setting of the development; address deficiencies in local provision; and be inclusive and accessible to people of all ages and those living with a disability, both day and night. Play is a vital component, essential for healthy child development and allowing young people to explore ideas, learn social skills and make discoveries (see Public London Charter LPG).

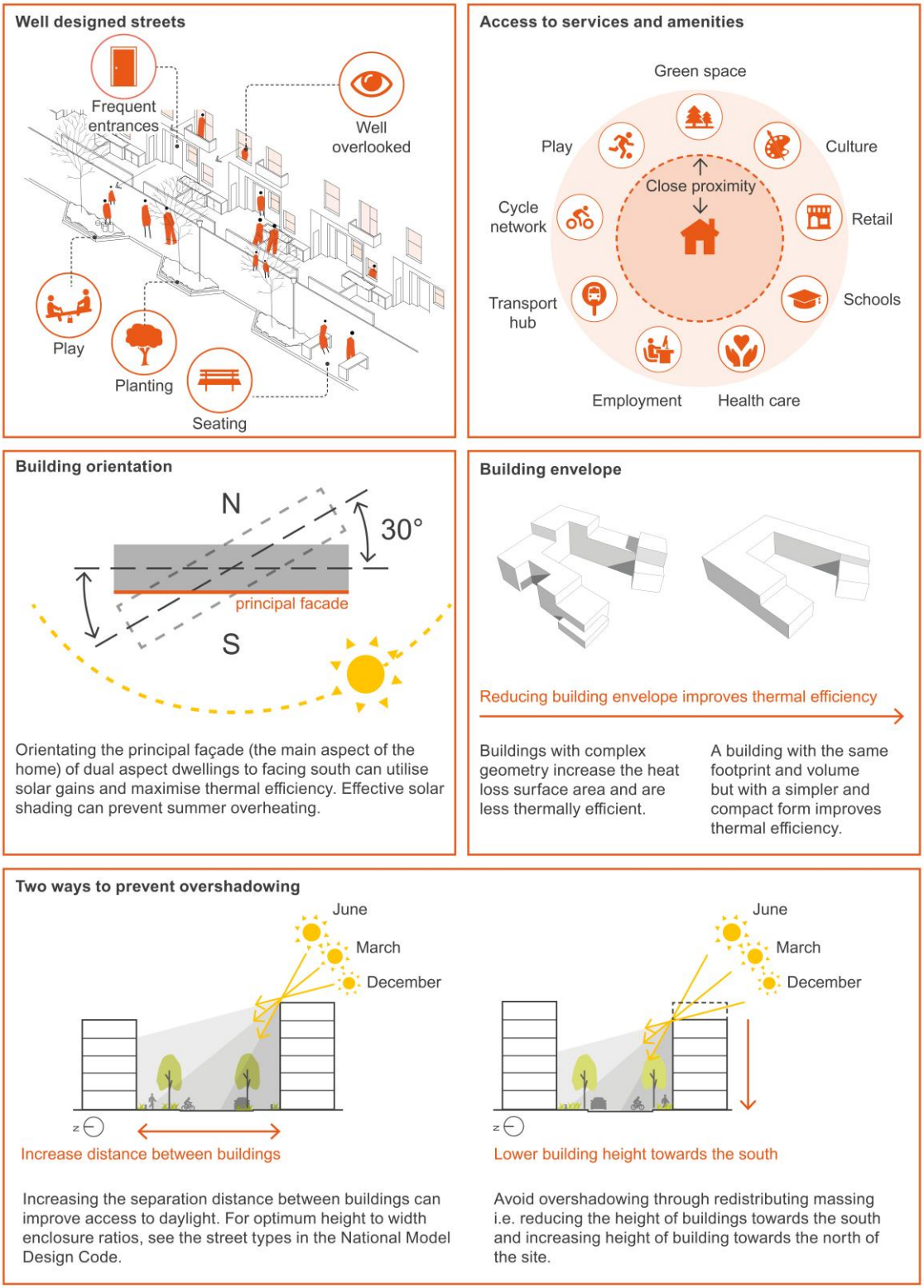
A	Placemaking and the public realm	Policy
A1	**Response to context**	
A1.1	Design proposals should respond positively to the unique characteristics of the site in its wider physical context by demonstrating how the scheme responds to the underlying topography and landscape; the character and legibility of the area; and local patterns of buildings, streets and materials, and how it aligns with an area's local vision and strategy. **[See Characterisation and Growth Strategies LPG]** **[NB]**	**D3**
A1.2	Make every attempt to retain and reuse existing built structures before considering substantial demolition. Where substantial demolition is proposed, applicants should demonstrate that the benefits of demolition would clearly outweigh the benefits of retaining the existing building or parts of the structure. **[See Whole Life-Cycle Carbon Assessment LPG and Circular Economy Statements LPG]** **[All]**	**SI2** **SI7**
A1.3	Heritage assets and their settings should be conserved, enhanced and integrated into the design of new development. They should contribute to the sense of place and make a specific contribution to placemaking and regeneration. **[NB]**	**HC1**
A1.4	The height and massing of new development should align with the design parameters and guidance for sites where this is set out in a local plan, design code, or other policy or guidance document. In areas that are not identified as those that may be appropriate for tall buildings, the height of new development should not exceed the relevant tall building definition. In areas that are within these designated areas, the height parameters should not be exceeded. **[See Optimising Site Capacity: A Design-led Approach LPG]** **[NB]**	**D1** **D3** **D9**
A1.5	New development should be street-based and connect with, and augment, the existing local network of public spaces, streets, paths and open spaces. Where appropriate, development should conserve or reinstate the historic street pattern. **[NB]**	**D3** **D6** **D8**
A1.6	Design proposals should consider the green infrastructure context beyond the site boundary, and refer to the borough's Green Infrastructure Strategy where available. Proposals should incorporate greening that is multifunctional, climate-resilient, and which optimises opportunities to enhance biodiversity. **[NB]** *Note: Where a local Green Infrastructure Strategy is not in place, refer to resources and data tools such as the GLA's Green Infrastructure Focus Map.*	**G1** **SI13**
A1.7	The most favourable orientation for each new building will be heavily influenced by the site-specific opportunities and constraints. Layouts should optimise the orientation of new buildings to maximise the quality of daylight and thermal comfort for residents, minimise overheating, and optimise thermal efficiency, by utilising and controlling solar gains. **[NB]**	**D6** **SI4**

A1.8	Particular consideration should be given to the impact of new development on the level of daylight and sunlight received by the existing residents in surrounding homes and on existing public green space. **[NB]**	**D6**
A1.9	The orientation and massing of buildings, and the separation distances between them, should ensure that the public realm is not unduly overshadowed to the detriment of health, wellbeing, biodiversity or amenity. Where demonstration is necessary and/or a building over 30 metres high is proposed, a micro-climate/wind/daylight and sunlight assessment should be submitted. **[NB]**	**D6** **D8**
A1.10	Avoid compromising the day-to-day functioning and long-term viability of adjacent non-residential uses, in accordance with the 'Agent of Change' principle. **[All]**	**D13**
A1.11	Masterplans and development briefs for large-scale developments subject to an Environmental Impact Assessment should be Air Quality Positive. All other development should be at least Air Quality Neutral. **[See Air Quality Positive LPG and Air Quality Neutral LPG] [NB]** *Note: See Air Quality Positive LPG for definition of 'large-scale development'.*	**SI1**
A1.12	Air Quality Assessments should be submitted with all major development proposals. **[All]**	**SI1**
A1.13	Major developments (both new-build and refurbishments) should be net zero-carbon by following the Energy Hierarchy. This means being lean, clean, green and seen. **[See Energy Assessment Guidance and 'Be Seen' Energy Monitoring LPG] [All]** *Note: See standard A1.14 for being lean; standards B7.1 to 7.2 for being clean; standard B8.1 for being green; and standard 10.2 for being seen.*	**SI2**
A1.14	All development should be lean and thermally efficient, resulting in at least a 10 per cent improvement over Building Regulations through energy-efficiency measures. Where possible, it should avoid complicated forms that increase the external surface area and therefore the heat loss of the building. **[See Energy Assessment Guidance] [All]**	**SI2**
A1.15	Development referable to the Mayor should calculate and minimise whole life-cycle carbon emissions (encompassing both operational and embodied carbon) and demonstrate actions taken to reduce life-cycle carbon emissions through submission of a Whole Life-Cycle Carbon (WLC) assessment. **[See Whole Life-Cycle Carbon Assessment LPG] [NB, CoU]** *Note 1: Refer to WLC principles in table 2.1 of Whole Life-Cycle Carbon Assessment LPG.* *Note 2: This standard is also strongly encouraged for all major development.*	**SI2** **SI7**
A1.16	Design for a long life by specifying high-quality, durable, low-maintenance materials that age well and require little maintenance. **[All]**	**D3**

A1.17	Design with flexibility and adaptability in mind by considering how new buildings could be adapted to accommodate new uses over time; and how eventual disassembly will facilitate the reuse of materials and components and minimise waste and pollution. Development referable to the Mayor should submit a Circular Economy statement. **[See Circular Economy Statement Guidance LPG]** **[NB]** *Note: This standard is also strongly encouraged for all major development.*	**D3** **SI7**
A1.18	Incorporate SuDS in line with the drainage hierarchy. Where development in areas at risk from flooding is permitted, ensure that the design and layout make space for water. Ensure that homes and infrastructure are set back from the banks of rivers and streams and incorporate flood resistance and resilience measures. **[NB, CoU]**	**SI12** **SI13**
A2	**Land-use mix**	
A2.1	The mix of uses should be in line with strategic and local targets and consider the need for non-residential uses (including shared workspaces) to reflect changing patterns of work. The land-use mix should take account of the need for local access to amenities both day and night, and facilitate convenient pedestrian connectivity to activities and services. **[NB, CoU]**	**D3** **T2**
A2.2	Ensure that the mix of dwelling types reflects strategic and local need and recognises the importance of mixed and inclusive communities. Large developments should aim to deliver a wide range of housing tenures and typologies and respond to specific local needs such as specialist housing for older people and multi-generational housing. **[All]**	**H10**
A3	**Streets and public realm**	
A3.1	Prioritise people walking and cycling while providing vehicular access for emergency and service vehicles, and meeting the access needs of disabled people. **[NB, CoU]**	**D5** **D8** **D12** **T2**
A3.2	Adopt a 'Healthy Streets' approach so that streets are designed as social spaces that invite footfall, and are safe, healthy, accessible, inviting, active and well lit. Ensure frequent entrances and active frontages with windows and balconies that overlook the street and public realm, encourage neighbourly engagement and increase passive surveillance. **[See Healthy Street Approach]** **[NB]**	**D3** **D8** **T2**
A3.3	Connect into, and improve and extend where beneficial, the existing network of foot and/or cycle paths. Where none exist, establish new routes, such as segregated cycle paths, that provide an alternative to heavily trafficked existing routes and connections to transport hubs/key destinations. **[NB]**	**D8** **T2** **T5**

A3.4	Ensure that front boundary treatments complement the style and materiality of the building (or buildings) and make a positive contribution to the streetscape. **[NB]**	**D3**
A3.5	Provide cycle parking (including for adapted cycles for disabled people); electric vehicle charging points if car parking is provided; and parking and charging points for micro-mobility for public use, where appropriate. **[All]**	**T5** **T6** **T6.1** **H13**
A3.6	Incorporate trees in new streets while ensuring that pavement widths can accommodate the trees without compromising pedestrian movement, or interfering with underground cables and services. Ensure tree species are suitable for the location and the type of development, and will remain appropriate and manageable when mature. **[NB]** *Note: Where possible, existing trees should be retained.*	**D5** **D8** **G1** **G7** **G8**
A3.7	Incorporate informal planting, seating, play and leisure opportunities; and provide shelter in new and, where feasible and appropriate, existing streets. **[See Making London Child-Friendly Guidance]** **[NB]**	**D5** **D8**
A4	**Public open space, biodiversity and urban greening**	
A4.1	Ensure that development proposals do not result in the loss of protected open space; and, where possible, create areas of publicly accessible open space, particularly in areas of deficiency. When creating areas of high-quality green open space, these should be at ground level, unless site constraints dictate otherwise. **[NB]**	**G4**
A4.2	Proposals should result in a net increase in biodiversity by conserving and extending existing habitats; and creating new ones to strengthen local ecological networks. **[See Urban Greening for Biodiversity Net Gain: A Design Guide]** **[All]** *Note: Opportunities include the provision of artificial nesting sites through the use of, for example, swift bricks.*	**G6**
A4.3	Minor developments should demonstrate no net loss of green cover. **[See Small Site Design Codes LPG]** **[All]**	**H2**
A4.4	Major developments should meet the local boroughs' Urban Greening Factor target scores or, where none exist, achieve a score of 0.4. **[See Urban Greening Factor LPG]** **[All]**	**G5**
A4.5	Where appropriate, make drinking water freely available in public spaces. **[All]**	**D8**

A5	Inclusion and accessibility	
A5.1	The public realm should be barrier free, usable by everyone and encourage social interaction. Consider seating, incidental play and places to hold social events during the day and, where appropriate, during the evening and at night. **[See Public London Charter LPG]** **[NB, CoU]**	**D5** **D8**
A5.2	At least 10 per cent of new dwellings should meet Building Regulation requirement M4(3) 'wheelchair user dwellings' in Approved Document M, Volume 1 (ADM); the remainder should be 'accessible and adaptable dwellings' (referred to as M4(2) or Category 2 in ADM). **[NB]** *Note: For further details refer to Part B: standard B1.4 and Part C: standards C1.1 to C1.3.*	**D7**
A5.3	Developments should be tenure blind. There should be no perceptible difference in the quality of the design or materials used when housing different tenures. 'Poor doors' and gated forms of development are unacceptable. **[All]**	**D6**
A5.4	Where non-residential amenities – such as gyms, pools, play space and shared workspaces – are provided, these should be accessible to all residents, and ideally to the wider community. **[All]**	**D6** **S5**
A5.5	Proposals should demonstrate that an inclusive design approach is taken, and that active travel routes are safe, accessible and convenient for all Londoners. This should include meeting the needs of different groups, including, but not limited to, those with protected characteristics under the Equality Act 2010. **[All]**	**D3** **D5** **D8** **T4**
A5.6	Provide details of the community engagement strategy. Explain how multiple types of engagement (such as face-to-face and online) have informed the design proposals from the early design stages, and been followed through in the design. **[NB, CoU]**	**D3** **D5**



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1. Connecting homes with streets, creating attractive, social spaces (A1.5, A3.2, A3.4, A3.6, A3.7, A5.1)
2. Access to services and amenities (A2.1)
3. Layouts should optimise orientation of new buildings to maximise the quality of daylight and thermal comfort (A1.7)
4. Simple and compact massing improves thermal efficiency (A1.14)
5. Optimal building heights and separation distances (A1.8, A1.9)

3 Part B: Shared and ancillary spaces

3.1.1 The majority of new homes delivered over the plan period will be flats, and it is therefore important that high-quality, shared indoor and outside spaces and ancillary facilities are provided. Careful design can ensure that the shared areas are a pleasant, inclusive and sociable extension to the home and help build supportive communities. Shared entrances should be safe, visible and identifiable from the public realm while offering shelter to users.

3.1.2 Providing private front doors to ground-floor dwellings has additional benefits: increasing activity in the street, reinforcing the residential nature of the building and reducing the number of households using the core. Two-storey family maisonettes often work well on the ground and first floors; they provide many of the attributes of a house, including a private garden, and are naturally suited to a double-height plinth where that is appropriate for the building. However, the structural and servicing implications of stacking different dwelling types must be given early consideration. The ground floor should also provide a mix of M4(2) and M4(3) homes.

3.1.3 The shared entrance lobby should look and feel inviting at all times of day; be designed to withstand heavy use; and serve as an inclusive and informal meeting space for residents. It is useful to have a clear route through to the shared outside space where one is provided. This may also allow bikes, mobility scooters and wheelchairs to be taken through the core to more secure stores. Generally regarded as a safer and more pleasant arrangement, it can also free up ground-floor space at the front of the building for more active uses. Arrangements for post and deliveries should also be subject to early consideration.

3.1.4 The layout, feel and length of the communal circulation arrangement have a significant impact on the quality of the journey that residents and their visitors experience when navigating the route from the communal entrance to the private front door. Developments should therefore avoid long narrow corridors. Covered outside decks are a healthier, safer and more convivial solution, and allow dwellings to be dual aspect. This has multiple benefits within the home and can also provide a second outside amenity space for residents. Bin stores and plant rooms are generally at ground level, but in larger developments it is worth exploring the potential for these elements to be accommodated in a lift-served basement. This can free up the ground floor for other more active uses, and provide secure private storage rooms for residents.

3.1.5 Fire safety requirements for a second staircase in taller buildings should be incorporated into the layout of the ground and upper floors and accounted for in the overall form of the building. Second staircases should be successfully integrated with the design of the building to ensure the development meets the housing design standards and the affordable housing requirements in the London Plan.

3.1.6 The design of shared, ground-floor outside spaces needs careful thought, particularly when surrounded by tall buildings. Lack of sunlight can be an issue; and while overlooking provides useful security, it can also feel intrusive to those seeking a calm retreat. Thoughtfully placed planting and landscape design can help to define zones; separate different functions; provide varying degrees of privacy; and celebrate seasonal change. Where possible, it is useful to provide a gate from the street to the outside amenity spaces to avoid mowers, for example, being taken through the cores.

3.1.7 Specialist advice should be sought when designing above-ground outside spaces, such as raised podia and roof gardens, as these present different opportunities and challenges. Drought-tolerant planting will reduce the amount of water needed, and grass should generally be avoided. Where these spaces are surrounded by private gardens and visible from surrounding flats, designers should consider the boundary treatment carefully and consider installing purpose-built garden pods or storage spaces. This avoids the need for residents to install individual garden sheds; and the consistency improves the outlook for those who use, and look down on, the courtyard. These spaces should also be designed to be inclusive, with level access, to be accessible to all.

3.1.8 Good design, particularly for larger developments, requires the design team to work with clients and building services engineers to gain an understanding of the building-management strategy. This will include how the various systems work and interact; the key components; the optimal location for plant and equipment; and the preferred distribution routes. It will also include identification of the parts of the systems that require frequent access for routine readings, checks, adjustments and general maintenance; and the implications of major renewal when that becomes necessary. Elements that need to be considered include lifts and common areas; plant rooms; window cleaning; photovoltaics and roofs generally; trees and planting (including watering, mulching and maintenance); play equipment; water-reuse systems; and shading devices. Designers should aim to make horizontal pipe runs as short as possible by optimising riser locations, and consider locating soil and vent pipes and heat interface units where they can be accessed from the communal deck or corridor to avoid disturbing residents. A window-cleaning strategy should also be agreed, and requirements for the cleaners' rooms and garden/equipment stores should be established.

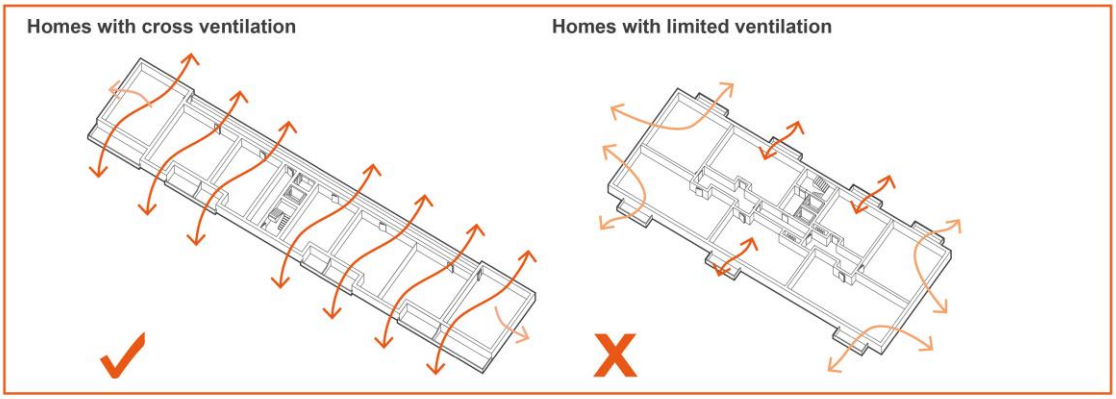
B	Shared and ancillary spaces	Policy
B1	**Approach routes and entrances**	
B1.1	Private and communal entrances should be visible and clearly identifiable from the public realm. **[NB, CoU]** *Note: Canopies or recesses can be used to make the main entrance more visible and provide shelter. This can aid those who are neurodiverse or partially sighted.*	D3 D6
B1.2	Ground-floor apartments and maisonettes should have 'own door' access from the street where possible. **[All]**	D3 D6
B1.3	Where a core provides access to one or more M4(3) dwellings, all parts of the internal and external circulation network should be designed to meet the approach requirements of M4(3) (as defined by Approved Document M, Volume 1*)* to ensure that all residents have equal access to all the shared parts of the building and any associated open space or facilities intended for their use. **[NB]**	D5 D6 D7
B1.4	The entrance lobby should be safe, welcoming, durable, well-lit and at least partially glazed; and, where appropriate, should include glazing manifestations. It should also include signage to aid wayfinding and any necessary instructional signage relating to fire safety. Where an access core serves four or more dwellings, an access control system with audio-visual verification in all dwellings should be linked to a main front door with electronic lock release. **[All]** *Note: Glazing manifestations are visible designs on glass to prevent people colliding with it.*	D3 D5 D6 D12
B1.5	Lifts and stairs should be within sight of the entrance area or clearly signposted. Floor and flat numbers should be clearly marked on each landing within the stairways of high-rise buildings; and be visible in both normal conditions, and poor-light or smoky conditions. The stairs should be prominent and attractive to encourage healthy lifestyle choices. **[NB, CoU]**	D5 D6 D12
B1.6	Establish whether a concierge is envisaged at the outset; but ensure that the building (or buildings) could function safely and effectively without one if the management regime were to change over time. **[NB, CoU]**	D3 D6
B1.7	Ensure that, and demonstrate how, post and deliveries can be safely received, stored and collected by, or delivered to, residents. **[All]** *Note: For Major development, this should be demonstrated with a management plan.*	D6
B1.8	**Best practice:** Where basements are provided, offer step-free private-storage facilities at basement level for residents to store bulky or occasionally used items, in addition to storage within the home. **[All]**	D6

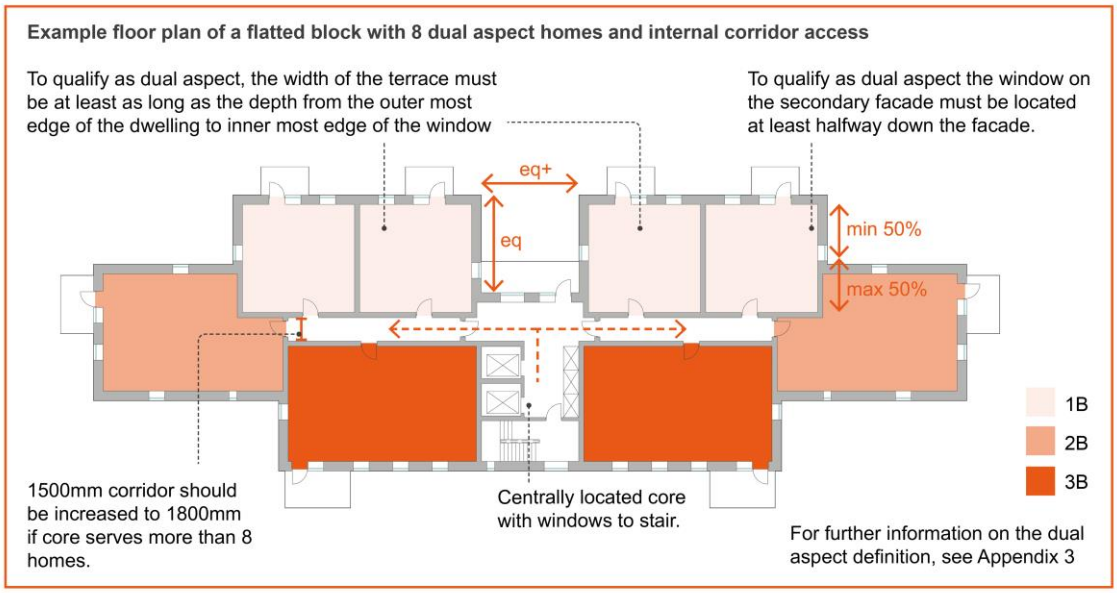
B2	**Internal circulation and dwellings per core**	
B2.1	Communal circulation spaces such as corridors should be at least 1500mm wide. Consider additional width within and adjacent to cores to allow wheelchair users to turn and/or pass each other more easily. **[NB, CoU]**	**D5** **D6**
B2.2	Internal corridors, particularly 'double-banked' corridors (those that serve flats on both sides), should be kept short and receive daylight and natural ventilation. (This standard is not directly applicable to specialist older persons housing.) **[NB, CoU]**	**D6**
B2.3	**Best practice:** Provide access galleries (or 'decks') that facilitate dual aspect homes as an alternative to internal corridors. **[NB]** *Note: Access galleries are unlikely to be appropriate in the upper floors of tall buildings.*	**D6**
B2.4	In lift-served buildings, at least one lift (more if indicated by a capacity assessment) should be a fire evacuation lift suitable for people who require level access to evacuate from the building. Protected lobbies in front of lift entrances need to be provided to ensure the safety of those that need to evacuate along with clear signage, lighting and pictograms of the evacuation route to the safe area/evacuation lift. **[All]** *Note: This requirement for evacuation lifts is in addition to any requirement to provide fire-fighters lifts under the building regulations.*	**D5** **D12**
B2.5	The number of homes accessed by a core should not exceed eight per floor. Deviation (by exception) from this standard will need to be justified and mitigated by increasing the corridor widths to 1800mm, locating homes on both sides of the core and introducing intermediate doors to create sub-clusters. (This standard is not directly applicable to specialist older persons housing.) **[NB, CoU]**	**D5** **D6**
B3	**Storage of bicycles, mobility scooters and wheelchairs**	
B3.1	Secure, step-free, long-stay cycle storage should be provided in accordance with the London Plan and the guidance set out in the London Cycling Design Standards. Storage should be in easily accessible locations and feel safe. Provision should be made for: • one space per studio or one-person, one-bedroom dwelling • 1.5 cycle spaces per two-person, one-bedroom dwelling • two cycle spaces for every dwelling with three or more bedspaces Two additional short-stay visitor spaces are required for developments with 5-40 dwellings, and thereafter one additional space per 40 dwellings. (This standard is not directly applicable to specialist older persons housing.) **[All]** *Note: See section C10.5 for cycle storage requirements in private gardens.*	**T5**

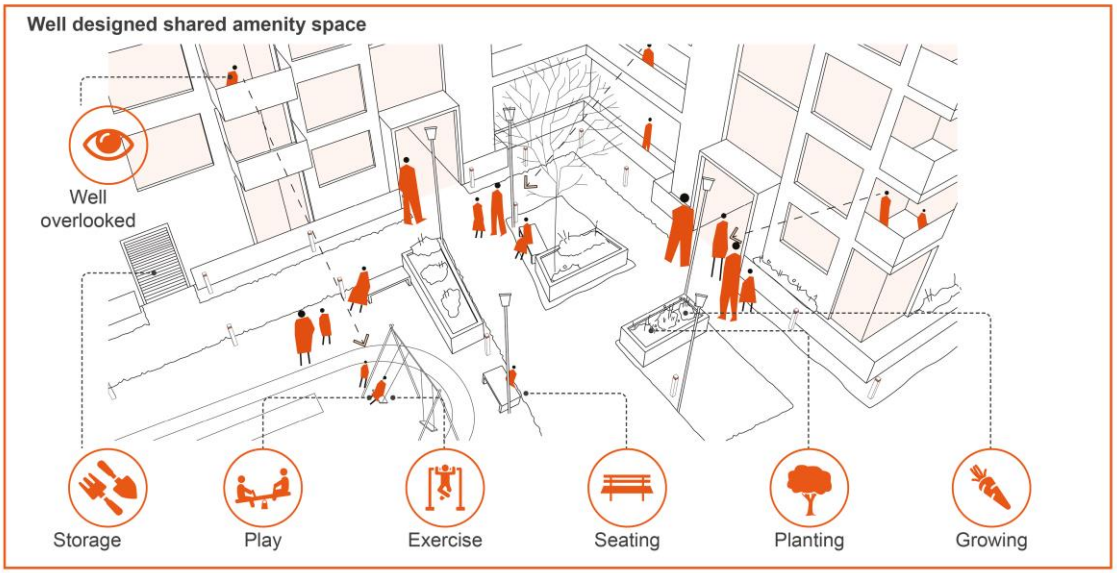
B3.2	All apartment buildings should provide secure and convenient storage and charging facilitates for micro-mobility devices, mobility scooters and wheelchairs. Fire protection between the storage and any escape route must be provided. Access to the storage from the core and/or the courtyard (where one exists) is preferable to access from the street. (A higher level of provision will be required in specialist older persons housing.) **[All]** *Note: This includes buildings that do not have any M4(3) homes to ensure that visiting wheelchair users are catered for.*	**D5** **D6**
B4	**Car parking**	
B4.1	Car parking is not permitted in the Central Activities Zone; Inner London Opportunity Areas; Metropolitan and Major Town Centres; locations with a PTAL of 5 or 6; or Inner London locations with a PTAL of 4. In other locations, proposals must not exceed the maximum residential parking standards set out in Table 10.3 of Policy T6.1 of the London Plan. **[All]** *Note: This standard does not apply to disabled persons parking spaces.*	**T6.1**
B4.2	Ensure that the location and organisation of resident car parking does not impede walking, cycling and public transport use; or negatively affect the use or appearance of the public realm and open spaces. **[All]**	**D3** **D6**
B5	**Access for emergency and service vehicles and fire safety**	
B5.1	Demonstrate how the design proposal achieves the highest standards of fire safety. Ensure that every apartment building has a safe and convenient means of escape, and an associated evacuation strategy for all building users. **[All]** *Note: Development will need to meet the latest fire safety requirements, including those for a second staircase.*	**D12**
B5.2	Provide a dedicated, unobstructed, suitably sized and located external space with a connection to a sufficient water supply from which a fire appliance can operate. **[All]**	**D12**
B6	**Dealing with waste and recycling**	
B6.1	Ensure that the proposed arrangements for dealing with waste and recycling conform to the local authorities' storage and collection strategies and requirements. Separate collection of dry recyclables, food waste and other waste should be considered in the early design stages to help improve recycling rates; reduce smell and vehicle movements; protect the street scene and community safety; and prioritise active frontages. **[All]**	**D3** **D6**
B6.2	Communal refuse and recycling facilities should be accessible to, and useable by, all residents including children and wheelchair users. They should be located on a hard level surface; be well lit and ventilated; and have a floor gulley to facilitate cleaning. **[All]**	**D3** **D6**

B6.3	When located within the footprint of a residential building, the waste and recycling room should be designed and positioned to minimise the impact of noise and smell on the occupants. **[All]** *Note: The distance between the entrance to a flat and the communal bin store should not exceed 30m as set out in Approved Document H.*	**D3** **D6**
B7	**Supplying energy efficiently (being clean)**	
B7.1	Use local energy resources (such as secondary heat and local heat networks), and supply energy efficiently and cleanly by connecting to district heating networks. **[All]**	**SI2** **SI3**
B7.2	Appraise and optimise network efficiency by minimising distribution heat losses, and by locating vertical risers within buildings in positions that reduce horizontal pipe runs to a practical minimum. **[NB, CoU]**	**SI2** **SI3**
B8	**On-site renewables (being green)**	
B8.1	Developments should be designed to maximise renewable energy by producing, storing and using it onsite through the use of, for example, photovoltaics and heat pumps. Keep parapets low, while maintaining safety for maintenance personnel; and where possible, locate plant and lift overruns to the north to minimise overshadowing. **[All]** *Note: South-facing and flat roofs are the most beneficial for solar photovoltaics.*	**SI2**
B9	**Shared outside amenity space**	
B9.1	Apartment buildings should generally offer at least one secure, communal outside green space, as a ground-level courtyard, a raised podium or a roof terrace. These spaces should be overlooked by residents; and be available and accessible to all occupants, including wheelchair users, regardless of tenure, and accessed via the cores. **[All]**	**D6**
B9.2	Communal outside spaces should be: multifunctional; designed for socialising, play, relaxation, exercise and, where appropriate, food growing. They should be green and biodiverse, and afford year-round visual interest when viewed from the surrounding dwellings. **[See Making London Child-Friendly Guidance]** **[NB, CoU]**	**S4** **G1** **G5** **G8**
B9.3	Ground and podium-level amenity spaces should include play spaces that are overlooked by nearby homes. Where a development is likely to accommodate 10 or more children/young people, provide at least 10m^2 of play space per child (accessible to all, regardless of tenure) that is appropriate for a range of different age groups**. [All]**	**S4**
B9.4	**Best practice:** Provide space and facilities for community gardening that include food-growing and composting. **[All]**	**G8**

B9.5	Maximise the quality and availability of daylight and sunlight in communal outside spaces, particularly in winter. It is particularly important that spaces designed for frequent use (including sitting and play spaces) receive direct sunlight through the day, particularly at times they are most likely to be used. **[NB, CoU]**	**D6**
B9.6	The design of raised podia (typically located over underground or undercroft parking) should reflect the limited light levels and soil depth typically associated with these spaces. Grass should be avoided in favour of drought-tolerant planting, and innovative approaches are encouraged. These include trees and climbing shrubs planted at ground level and allowed to grow through voids in the podium. **[NB]**	**G1** **G5**
B9.7	Proposals should consider lighting; sustainable watering solutions; tool storage; food growing and composting; and how future residents can be involved in the design and ongoing maintenance of shared outside spaces. **[All]**	**D3** **D6** **SI13**
B9.8	**Best practice:** Provide a separate, secure access route from the street to every outside space to avoid taking mowers and other large maintenance equipment through the building. **[NB, CoU]** *Note: Access routes should be wide enough to accommodate machinery that is likely to be used.*	**D3** **D6**
B10	**Management and maintenance**	
B10.1	Communal indoor and outside spaces should be designed to: minimise the amount of management and maintenance needed throughout the lifetime of the building; and facilitate safe access to the relevant parts of each management system. **[All]**	**D3** **D6**
B10.2	Major developments must submit energy performance data to the GLA's 'Be Seen' monitoring portal. **[See 'Be Seen' Energy Monitoring LPG]** **[All]**	**SI2**







1. Access galleries create dual aspect homes and encourage neighbourly interaction (B.2.3)
2. An example floorplan layout that provides a centrally located core with 100 per cent dual aspect homes (B2.1, B2.2, B2.5)
3. Well-designed communal outside areas for all residents to use throughout the year (B9.1, B9.2, B9.3, B9.4, B9.7, B9.8)

4 Part C: Homes and private outside space

4.1.1 All homes are required by the London Plan to meet the nationally described space standard (NDSS). However, this is an absolute minimum, not a target. This guidance encourages homes to exceed these standards by introducing a new best practice space standard to improve residential quality, and also to help accommodate the changes in working patterns experienced as a result of the COVID-19 pandemic which are likely, in part, to endure. Particular attention needs to be given to occupants using the kitchen, bathroom and appliances while other household members are working from home. This guidance also recommends more generous private space – again, in response to issues highlighted during the pandemic. Homes should generally have at least two habitable rooms, each with a window. Deep, narrow, single aspect studios will not provide a suitable quality of accommodation; homes are therefore expected to be dual aspect unless there are compelling reasons why that cannot be achieved. This has multiple benefits including ventilation; outlook; options in areas with poorer air quality or noise generators; and the possibility of a window to the kitchen and bathroom to allow better air movement, moisture and odour control. Optimising the layout of every home remains the initial goal, but avoiding loadbearing walls within dwellings will provide flexibility over time and allow layouts to be reconfigured with relative ease as lifestyles evolve. Designing a cellular layout as well as an open-plan option will secure adequate frontage and enough windows to allow successive generations of residents to make their own choices.

4.1.2 Visual privacy is more difficult to achieve in dense environments, particularly on lower floors. Off-setting or angling windows can mitigate problems; and fixed or movable screening devices can also be effective where they are an integral part of the overall design. It is also important to achieve high levels of soundproofing in party walls and windows, particularly where homes are located next to non-residential uses and communal spaces, such as entrances; lift and stair cores; bin and bike stores; and other sound-generating facilities. Consideration should be given to the internal layout of homes, including vertical stacking, to reduce noise impacts (for example, between living rooms and bedrooms). The standards in this section also aim to complement the consideration of daylight and sunlight impacts using the BRE guidance (Site layout planning for daylight and sunlight). This process involves a two-stage approach: firstly, by applying the BRE guidance; and secondly, by considering the location and wider context when assessing any impacts. With extreme weather events becoming increasingly common, design must balance daylight, passive solar gain and overheating considerations. Summer heat can be reduced through orientation, shading, fenestration, insulation, high-albedo materials, the provision of green infrastructure and other strategies. In areas with poorer air quality and/or high background noise levels, careful design will be needed to ensure passive ventilation is possible, in line with carbon reduction targets and the need to avoid additional waste heat and noise associated with mechanical ventilation.

C	Homes and private outside space	Policy
C1	**Inclusion and accessibility**	
C1.1	Development should meet the detailed requirements for the 90 per cent of dwellings that are required to meet M4(2) and the 10 per cent required to meet M4(3) set out in Approved Document M, Volume 1 (ADM). All require step-free access from the street (or parking/drop-off area) to the main private entrance. **[NB]** *Note 1: Accessible housing should be clearly identified in the planning application. M4(3) homes should be identified as either M4(3)(2)(a) 'wheelchair-adaptable' (and the default option), or (M4(3)(2)(b) 'wheelchair-accessible', as set out in ADM.* *Note 2: The principal bedroom should provide a clear access zone of at least 750 mm to both sides and foot of the bed (or a minimum of 1,000mm in M4(3) homes).* *Note 3: See Policy D7 for development where flexibility should be applied. Where this is the case, exceptions must be justified, and the affected dwellings described as M4(1).*	D7 H2
C1.2	**Best practice:** Dwellings that cannot provide step-free access from the street [described as M4(1)], should be designed to meet all other M4(2) requirements including step-free access to private outside space. **[All]**	D5 D6
C1.3	When an M4(3)(2)(a) wheelchair-adaptable home is proposed, drawings submitted at the planning application stage should clearly show how the layout can be adapted to meet the requirements for a wheelchair-accessible home in the future. **[All]**	D7
C1.4	When undertaking community engagement, identify any specific cultural requirements within the local community that need to be addressed in the design. **[NB, CoU]** *Note: This standard should be applied as part of standard A5.6. Examples include a preference for the kitchen to be separated from the living and dining spaces; and the need for larger kitchens to accommodate specific cooking and/or eating conventions.*	D5 D6
C1.5	**Best practice:** Family homes with three or more bedrooms should predominantly be located on the lower floors of buildings (and not above the fifth floor) so that they provide safe, convenient access to, and overlooking of, outside play and amenity spaces. **[NB, CoU]**	D6
C2	**Internal space standards**	
C2.1	All new dwellings must meet the minimum space standard in Policy D6 Part F(1-8) and Table 3.1 of the London Plan. **[All]** *Note 1: These space standards should be exceeded for M4(3) homes, which will need to be considerably larger to meet the minimum spatial requirements set out in Approved Document M, Volume 1.* *Note 2: This standard aligns with the NDSS, except for ceiling height, and is shown in Table A1.1 in Appendix 1 of this document.*	D6
C2.2	**Best practice:** New dwellings should meet the best practice space standard in Table A1.1 detailed in Appendix 1. **[All]**	D6

<table>
<tr><td>C2.3</td><td>A minimum ceiling height of 2.5m is required for at least 75 per cent of the gross internal area (GIA) of each dwelling to enhance the spatial quality; improve daylight penetration and ventilation; and assist with cooling. Any reduction (from 2.5m) in floor-to-ceiling heights should only be for essential equipment in the ceiling voids above kitchens and bathrooms. [NB, CoU]</td><td>D6</td></tr>
<tr><td>C2.4</td><td>Best practice: The floor-to-floor height of ground-floor dwellings should be at least 3.5m in order to promote flexibility and greater daylight; and allow for easier conversion to non-residential uses if required. [NB]</td><td>D6</td></tr>
<tr><td>C2.5</td><td>The following combined floor areas for living/kitchen/dining space should be met or exceeded: [NB, CoU]
<table>
<tr><td>Designed level of occupancy</td><td>Minimum combined floor area of living, dining and kitchen spaces</td></tr>
<tr><td>One person</td><td>21 sqm</td></tr>
<tr><td>One bed, two persons</td><td>23 sqm</td></tr>
<tr><td>One bed, three persons</td><td>25 sqm</td></tr>
<tr><td>Two bed, four persons</td><td>27 sqm</td></tr>
<tr><td>Three bed, five persons</td><td>29 sqm</td></tr>
<tr><td>Four bed, six persons</td><td>31 sqm</td></tr>
</table>
Note 1: In open-plan layouts, the floor area measured should be clearly identified. It should not include the space immediately inside the front door, or any circulation space needed to access other rooms.

Note 2: This applies to (M4(2) homes; M4(3) homes will typically exceeds these areas. See standard C2.12 and Approved Document M, Volume 1 for details.</td><td>D6</td></tr>
<tr><td>C2.6</td><td>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 bedspaces to achieve a functional layout. [All]</td><td>D6</td></tr>
<tr><td>C2.7</td><td>Best practice: Exceed the minimum built-in storage requirements by 0.5m^2 and increase the capacity of kitchen waste and recycling bins. [All]</td><td>D6</td></tr>
<tr><td>C2.8</td><td>Best practice: Provide at least two built-in storage cupboards in every home and at least one on every floor. Ensure that at least 50 per cent of the storage provided is located within circulation spaces. [All]</td><td>D6</td></tr>
<tr><td>C2.9</td><td>Best practice: Provide a WC on every floor that includes a bedroom. [All]</td><td>D3
D6</td></tr>
<tr><td>C2.10</td><td>Best practice: Provide an additional bathroom or shower room in homes for six or more people. [All]

Note: Approved Document M, Volume 1 has specific requirements for bath and shower provision in M4(3) homes.</td><td>D6</td></tr>
<tr><td>C2.11</td><td>Best practice: Provide a utility room in dwellings with two or more bedrooms. Where part of the utility room is contributing to the general storage requirement, the area claimed should be clearly identified. [All]</td><td>D3
D6</td></tr>
</table>

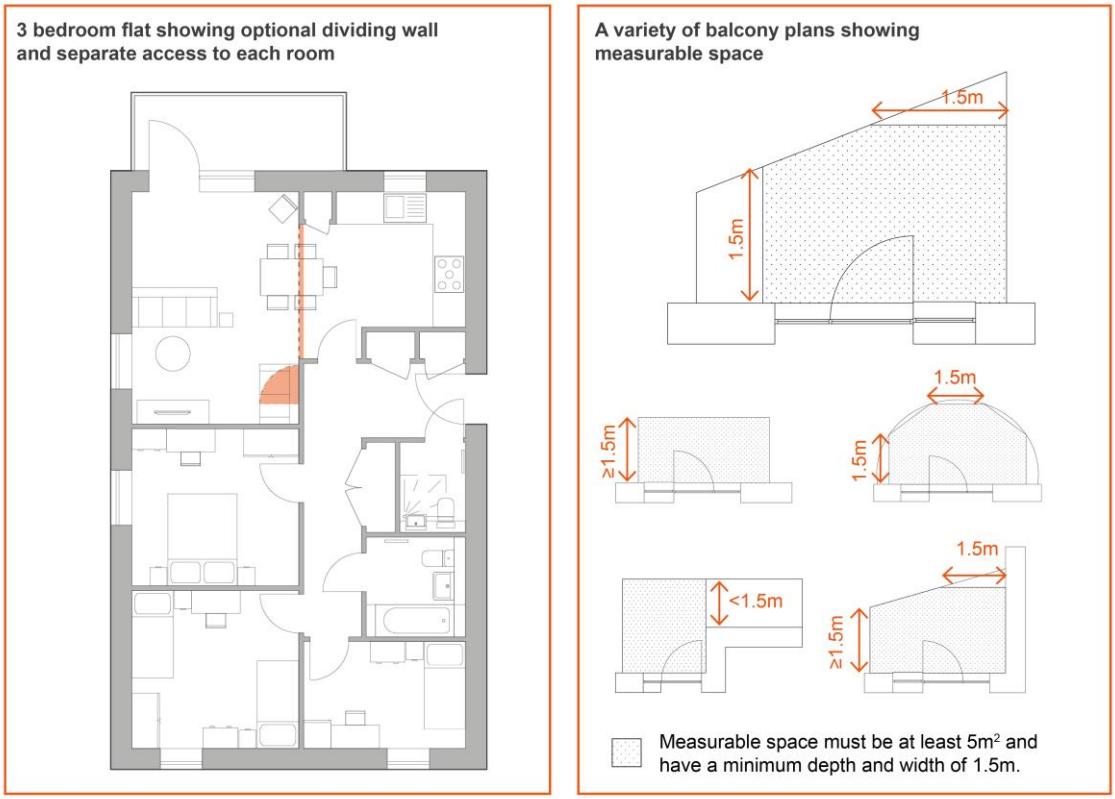
C2.12	Fully furnished internal floorplans should be submitted for every dwelling type proposed, at a scale of at least 1:100 to enable assessment of the layout and ensure it is functional and fit for purpose. **[All]** *Note 1: For convenience, the written and drawn furniture schedules that set out the required items for fully furnished floorplans are contained within Appendix 1 of this document. These are taken from Approved Document M, Volume 1 (ADM). Layouts that cannot comfortably accommodate all of the prescribed furniture for the dwelling type in question (including kitchen units and appliances) will not be considered acceptable.* *Note 2: The overall length of kitchen units should be measured at the mid-line of the worktop in accordance with the guidance for M4(3) homes set out in ADM. Where the washing machine is located out of the kitchen, the overall minimum worktop length may be reduced by 630mm. Note that kitchen requirements for M4(3) homes differ from those for M(4)2 – see ADM for details.* *Note 3: The internal layout drawings should include the overall GIA; the floor area; the width and depth of every habitable room; a north point; and the accessibility category of each dwelling. They should also demonstrate compliance with ADM.* *Note 4: Homes with five or more bedspaces and all dwellings with two or more storeys should provide at least two WCs. (Note: an additional 3m^2 is allowed for in the NDSS, for this purpose; and ADM requires a second WC in M4(3) homes with four or more bedspaces.)* *Note 5: Segregated bins for the short-term separation and storage of waste and recycling should be provided in kitchens or utility rooms as set out in the furniture schedule. The space used for this should not be counted towards the general storage requirement.*	**D6** **D7**
C3	**Choice and flexibility**	
C3.1	**Best practice:** Where open-plan living arrangements are proposed, ensure adequate separation between the kitchen and sitting space. In homes with three or more bedrooms, proposals should demonstrate how the space could be easily modified to provide two separate living spaces (preferably a living room and a kitchen/dining room), each with an openable window. A direct connection between the rooms is useful but not required. Conversely, where two spaces are provided from the start, it should be possible to remove the dividing wall without significant structural implications. **[All]** *Note: This approach is strongly encouraged in smaller homes.*	**D3** **D6**
C3.2	**Best practice:** Avoid load-bearing walls within the home to allow for future flexibility of the internal layout. Locate structural columns on external or party walls where possible. **[NB]**	**D3**
C3.3	**Best practice:** Avoid layouts in which the living space and other habitable rooms are only accessible via the kitchen. **[All]**	**D6**
C3.4	**Best practice:** Provide a dedicated study room in dwellings with three or more bedrooms. **[All]** *Note: To avoid being counted as a bedroom under the NDSS, the floor area should be less than 7.5m^2.*	**D3** **D6**

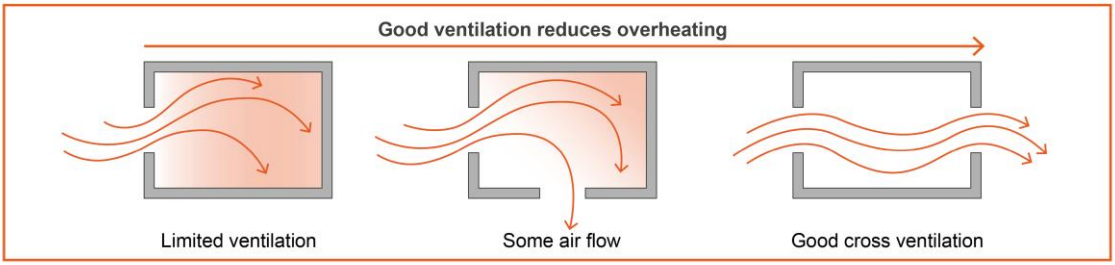
C4	**Aspect, orientation, daylight and sunlight**	
C4.1	New homes should be dual aspect unless exceptional circumstances make this impractical or undesirable; for example, when one side of the dwelling would be subjected to excessive noise or outside air pollution. Where single aspect dwellings are proposed, by exception, they should be restricted to homes with one or two bedspaces; should not face north; and must demonstrate that the units will: have adequate passive ventilation, daylight and privacy; and not overheat (particularly relevant for south or west-facing single aspect units). **[All]** *Note: See Appendix 3 for definition of dual aspect.*	**D3** **D6** **SI4**
C4.2	The location of the main living and eating spaces, and the main private outside space, should be optimised to make the most of the best views and the orientation. These spaces should receive direct sunlight (south-facing is preferable, provided that appropriate shading devices are incorporated) and enjoy reasonable privacy through the careful placement of windows, balcony design or other measures. **[NB]**	**D6**
C4.3	All homes should allow for direct sunlight in conjunction with solar shading. As a minimum, at least one habitable room should receive direct sunlight – preferably the living area and/or the kitchen and dining space. **[NB, CoU]**	**D6**
C4.4	Avoid placing bedrooms and bathrooms on street-facing facades at ground level or where they face onto a busy courtyard or podium. **[All]**	**D3** **D6**
C4.5	The primary window of a habitable room should not be located on an access deck. Where possible, avoid locating windows close to the internal corners of courtyards or L-shaped blocks. **[NB]**	**D3** **D6**
C4.6	Avoid large wide full-height windows to habitable rooms (particularly in bedrooms) where the risk of being overlooked and/or overheating is high. **[NB, CoU]**	**D6** **SI4**
C4.7	All habitable rooms (including a kitchen/dining room) should receive natural light and have at least one openable window that provides a view out when seated. **[All]**	**D6**
C4.8	**Best practice:** Bathrooms should receive natural light through openable window/s. **[All]**	**D6**
C5	**Air quality, external noise and soundproofing**	
C5.1	Where possible, locate habitable rooms away from busy roads, railways or existing buildings that generate excessive noise and/or poor air quality. **[All]** *Note 1: This applies to locations where there is a noisy or vibrant soundscape, particularly at night.*	**D14** **SI4**

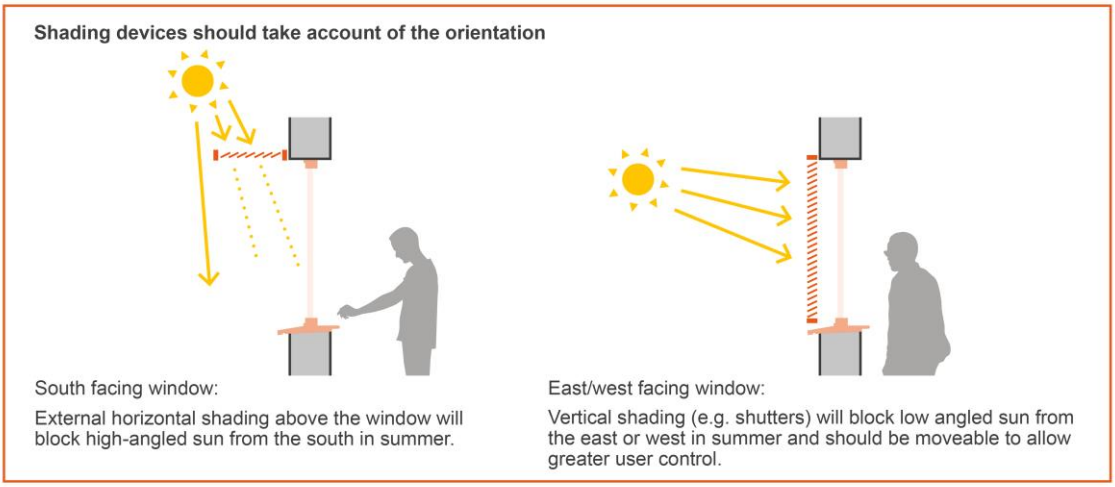
C5.2	Where necessary, adopt sound-attenuation measures to reduce the external noise experienced within the home to an acceptable level. **[All]**	**D14**
C5.2	**Best practice:** Avoid locating bedrooms and living rooms adjacent to corridors; lifts; stairs; bin and cycle stores; wheelchair and mobility scooter stores; plant rooms; and other noise-generating ancillary spaces. **[All]**	**D6** **D14**
C5.3	Provide high levels of soundproofing between rooms, as well as between dwellings, to provide privacy and allow different activities (including work and study) to take part simultaneously throughout the home. In particular, party walls should achieve internal airborne sound-insulation values that are at least 5dB above Approved Document E; and impact sound insulation values that are at least 5dB lower. **[All]**	**D6** **D14**
C5.4	Where equipment such as mechanical ventilation heating with heat recovery (MVHR) is installed, ensure the Acoustics Ventilation and Overheating: Residential Design Guide for internal noise levels is followed. Where possible, locate the MVHR in a circulation space, not a habitable room, and as close as possible to an external wall to minimise distribution losses – ideally within 2m. **[All]**	**D14** **SI4**
C6	**Thermal comfort**	
C6.1	Reduce the risk of overheating, through orientation; dwelling layout; the natural cross-ventilation afforded by dual-aspect; window design; and shading devices (preferably external to the facade). Major development should demonstrate this through an energy strategy in accordance with the cooling hierarchy. **[All]** *Note 1: Specialist older persons housing should be subject to a heatwave strategy. Including active cooling in one or more of the communal spaces can safeguard vulnerable residents during extreme hot weather events.* *Note 2: Solar-controlled glazing can be used to radiate and reflect away much of the sun's heat.*	**SI4** **D6**
C6.2	Daylight and overheating assessments should be analysed together to determine the optimal balance. South and west-facing facades are most at risk to overheating, and the use of shading should be used to prevent direct sunlight from entering the home during at-risk periods. **[All]**	**SI4** **D6**
C6.3	Maximise the benefit of passive ventilation by providing a variety of window opening options that allow controlled ventilation through smaller openings and purge ventilation through larger windows and/or doors. **[All]** *Note: Window grilles and secure openers can be utilised so windows can be safety left open. Types of ventilation that allow air in whilst reducing noise infiltration are encouraged.*	**SI4** **D6**
C7	**Water usage**	
C7.1	Water fittings and appliances should be designed to minimise consumption to no more than 105 litres per person, per day (plus up to five litres for external use). **[All]**	**SI5**

C8	**Digital connectivity**	
C8.1	Provide sufficient ducting space for full-fibre connectivity infrastructure to all end-users unless an affordable alternative 1GB/s-capable connection is available. **[All]**	**SI6**
C9	**Fire safety**	
C9.1	Seek advice from building control at the earliest opportunity and, where possible, also from the local fire service to ensure that the proposed location of the wheelchair and mobility scooter storage and charging space in every M4(3) home is acceptable. **[All]** *Note: The preferred location for wheelchair transfer/storage is close to the main entrance of the dwelling.*	**D12**
C9.2	**Best practice:** Install sprinklers in all homes that are entered at or above first floor level. **[All]**	**D12**
C10	**Private outside space**	
C10.1	Provide a minimum of one 5m^2 of step-free private outside space for homes with one or two bedspaces, with a minimum depth and width of 1.5m. An extra 1m^2 should be provided for every additional bedspace. **[All]** *Note 1: For functional and accessible reasons, the minimum area must be a polygon with at least four sides. Triangular and irregular-shaped balconies will need to be larger than the minimum area to achieve this requirement.* *Note 2: Where inset balconies are provided, the depth should be less than the external facing side to ensure the space is experienced as outside space and that adequate daylight and sunlight can reach the room behind.*	**D6**
C10.2	**Best practice:** Exceed the minimum area of private outside space and increase the minimum depth and width to at least 2.5m to extend its use generally, enable wheelchair users to manoeuvre and turn more easily, and increase opportunities for planting; growing food; storing light gardening equipment; and drying clothes. **[All]**	**D5** **D6**
C10.3	Balconies should be accessed via the main sitting area or kitchen/dining room unless the specific circumstances make this impractical. Consider the need for privacy and/or shade on balconies (ideally adjustable sliding screens or retractable awnings). **[All]**	**D6**
C10.4	Enclosing balconies as glazed, ventilated winter gardens is appropriate in some circumstances. These are where dwellings will be exposed to high levels of noise and/or strong wind, particularly at a high level. Winter gardens should be usable as outside space, thermally separated from the interior, and the floor should be 'drainable' to avoid standing water. Care should be taken to be avoid overheating. **[All]**	**D6**

C10.5	Homes with private rear gardens should accommodate bicycles, mobility scooters and bins, providing that the garden can be accessed directly from the street. Where this is not possible, secure, bespoke covered storage should be provided in front gardens; this should be designed and located to avoid obstructing ground-floor windows. **[All]**	**T5** **D6**
C10.6	**Best practice:** A future management plan should be put in place for proposed buildings. Ensure that windows can be cleaned from the inside unless they can be safely accessed from outside, or where cleaning is the responsibility of the management company. **[All]**	**D3** **D6**







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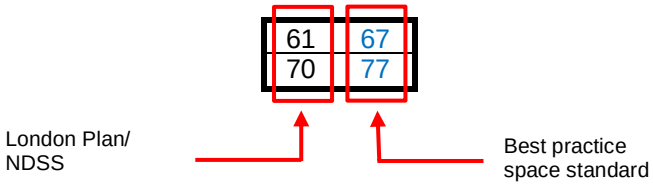
1. Three-bedroom apartment with options to separate or combine living areas (C2.2, C2.4, C3.1, C4.2)
2. Private outside space should be at least 1.5m deep and wide (C10.1, C10.3)
3. Natural ventilation approach to mitigate overheating (C4.1, C6.1)
4. Orientation of windows with shading devices (C6.1)

Appendix 1 Minimum and best practice space standards

A1.1.1 Table A1.1 shows both the minimum internal space standards, as set in Table 3.1 of the London Plan, and the best practice space standard, set out in standard C2.2. The best practice space standard provides additional space, over and above the minimum space standard, to ensure new homes are fit for purpose and of the highest residential quality. They specifically require more storage and better provision for home working.

Table A1.1 Minimum and best practice internal space standards for new dwellings^

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



Key

b: bedrooms

p: persons

^ New dwelling in this context includes new-build, conversions and change of use.

* Where a one-single-bedroom, one-person dwelling has a shower room instead of a bathroom, the floor area may be reduced from 39/43 sqm to 37/41 sqm, as shown.

+ The GIA of a dwelling is defined as the total floor space measured between the internal faces of perimeter walls that enclose a dwelling. This includes partitions, structural elements, cupboards, ducts, flights of stairs and voids above stairs. GIA should be measured and denoted in sqm.

Built-in storage areas are included within the overall GIA and include an allowance of 0.5 sqm for fixed services or equipment such as a hot water cylinder, boiler or heat exchanger.

GIAs for one-storey dwellings include enough space for one bathroom and one additional WC (or shower room) in dwellings with five or more bedspaces. GIAs for two and three-storey dwellings include enough space for one bathroom and one additional WC (or shower room). Additional sanitary facilities may be included without increasing the GIA, provided that all aspects of the space standard have been met.

How to qualify for the best practice space standard:

1. The overall internal floor area of the home must meet or exceed the best practice space standard shown in blue alongside the London Plan/NDSS figures in columns 3-5. The total minimum uplift for each typology is shown in the grey column.
2. The amount of built-in storage must be increased by at least 0.5m^2 as shown in blue in column 6.
3. All one-bedroom homes must have at least two habitable rooms, each with an openable window. Sliding doors or walls may be used to separate the bedroom from the main living space.
4. All habitable rooms should exceed the minimum floor area set out in London Plan Policy D6 part F1-7 (also shown in the technical requirements of the NDSS), and specifically demonstrate better provision for homeworking as set out below:
    - Every two-person, one-bedroom home should demonstrate space for at least two desks in the bedroom unless there is a dedicated study. Where possible, provide space for a desk in the sitting room too, in order to offer choice and improve privacy and/or concentration.
    - Every home with two or more bedrooms should demonstrate space for at least three desks and where possible, one desk per person.

In a well-designed layout, the best practice space standard will allow for additional benefit over and above those set out above. This may include space for a larger sitting room, dedicated study and/or utility room for instance. It is however, up to the discretion of the applicant or designer to plan how this additional space should be used. While it is recommended that the additional space contributes to one or more of the best practice standards (see best practice standards in part C), this is not a requirement.

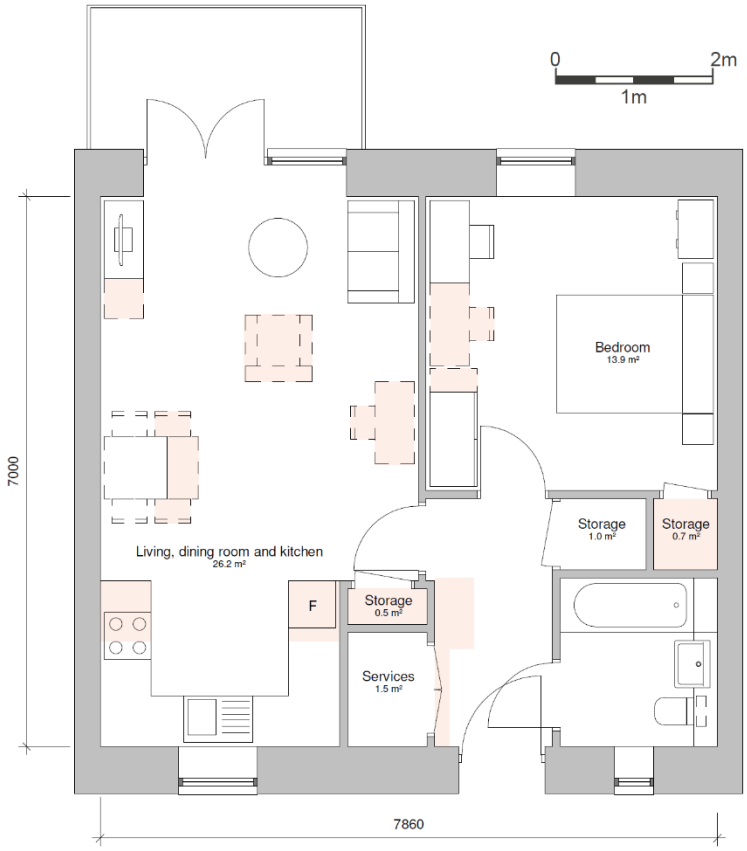
Note for M4(3) homes

As M4(3) homes need to be considerably larger than M4(2) homes, the NDSS is not an appropriate benchmark to take as the starting point for improvement. However, providing the relevant extra features listed above will allow these dwellings to claim compliance with the best practice space standard.

Best practice space standard - example layouts

A1.1.2 The layouts below illustrate how a one-, two- and three-bedroom flat can accommodate the additional space specified in the best practice space standard.[1] While it is up to the discretion of the applicant or designer to plan how this additional space should be used, it is recommended that the additional space contributes to one or more of the best practice standards in Part C of this document.

A1.1.3 Examples of flat plans that meet the best practice space standard and some of the other best practice standards



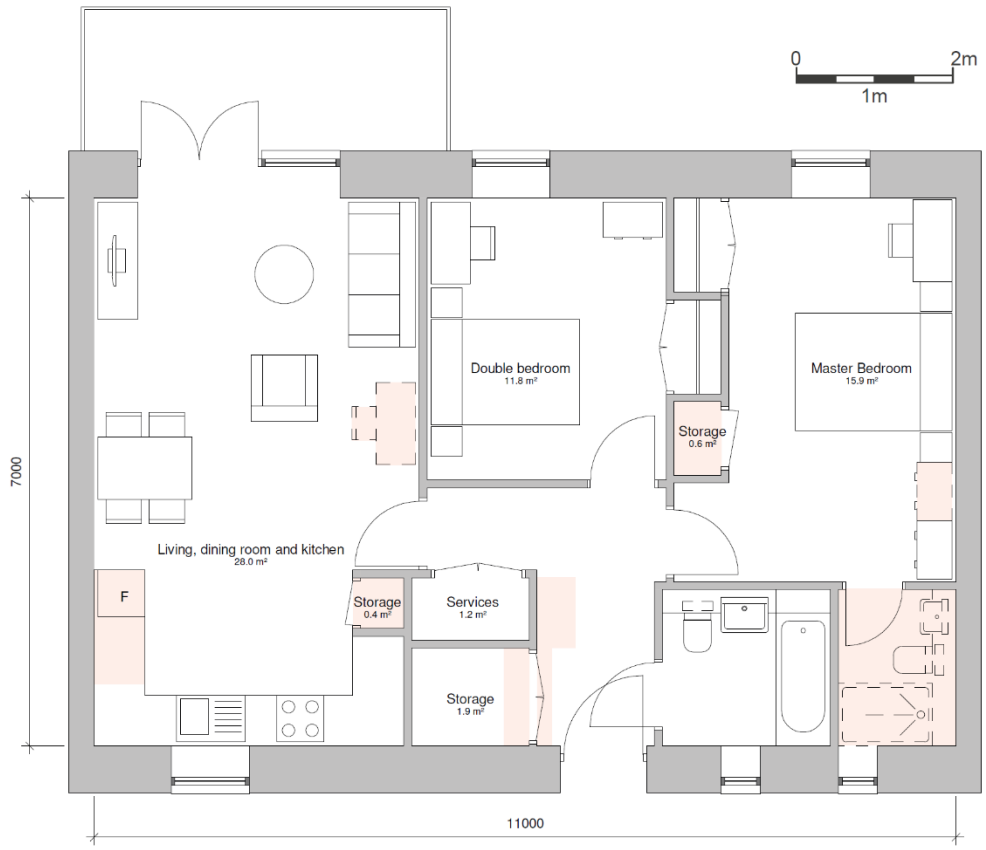
One-bedroom, two-person flat

Additional features facilitated by the best practice space standard:

- extra 1.2 m^2 storage (total 2.7 m^2)*
- generous entrance area
- services cupboard with option to include washing machine
- extra armchair and desk with larger storage unit
- larger dining table
- larger kitchen (more storage and recycling space)
- extra desk or storage in bedroom
- space for larger wardrobe

* allowance for 0.5 sqm within services cupboard as stated in NDSS

[1] These example layouts are based on a layout located on an access gallery or desk that provides cross-ventilation.



Two-bedroom, four-person flat

Additional features facilitated by the best practice space standard:

- extra storage 1.4m^2 storage (total 3.4m^2)*
- generous entrance area
- services cupboard with option to include washing machine
- larger kitchen (more storage and recycling space)
- extra storage in master bedroom
- ensuite with shower
- majority of storage accessed via circulation space

* allowance for 0.5 sqm within services cup'd as NDSS

Three-bedroom, five-person flat

Additional features facilitated by the best practice space standard:

- extra 1m^2 storage (total 3.5m^2)*
- generous entrance area
- services cupboard with option to include washing machine
- flexible living arrangement (open-plan or separate rooms)
- extra seating space in living room
- larger dining table
- larger kitchen (more storage and recycling space)
- space for larger wardrobe in all bedrooms
- dedicated study (or extra storage)
- ensuite with shower

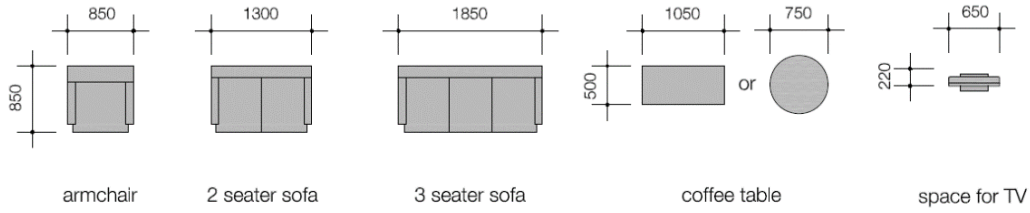
* allowance for 0.5 sqm within services cup'd as NDSS

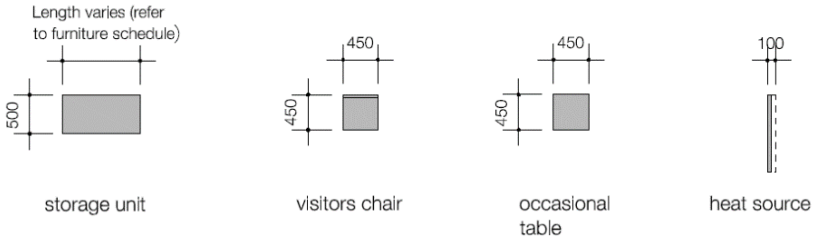
Appendix 2 Furniture schedule

A2.1.1 This drawn schedule should be read in conjunction with the minimum space standard (standard C2.1) and written schedule in Table A2.1. The relevant furniture for each M4(2) dwelling type should be shown on dwelling plans in accordance with standard C2.12. For M4(3) dwelling plans refer to Approved Document M, Volume 1. For dwellings that meet the best practice space standard (standard C2.2), the number of items provided should be beyond those specified in the written schedule.

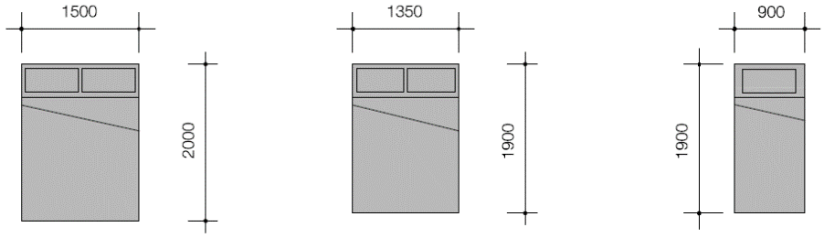
A2.1.2 Furniture schedule

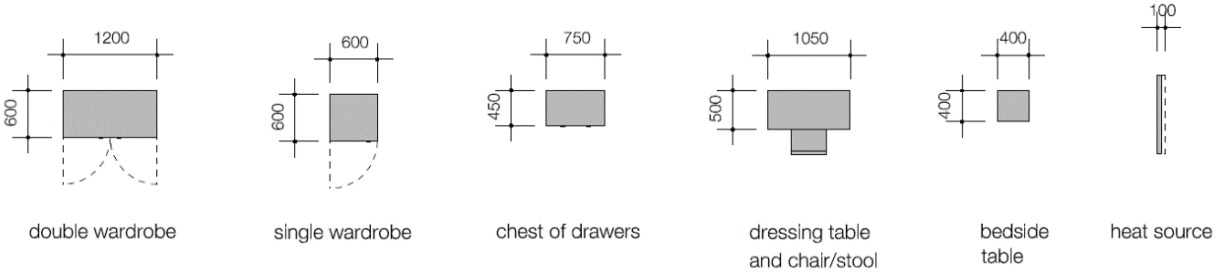
Living space furniture



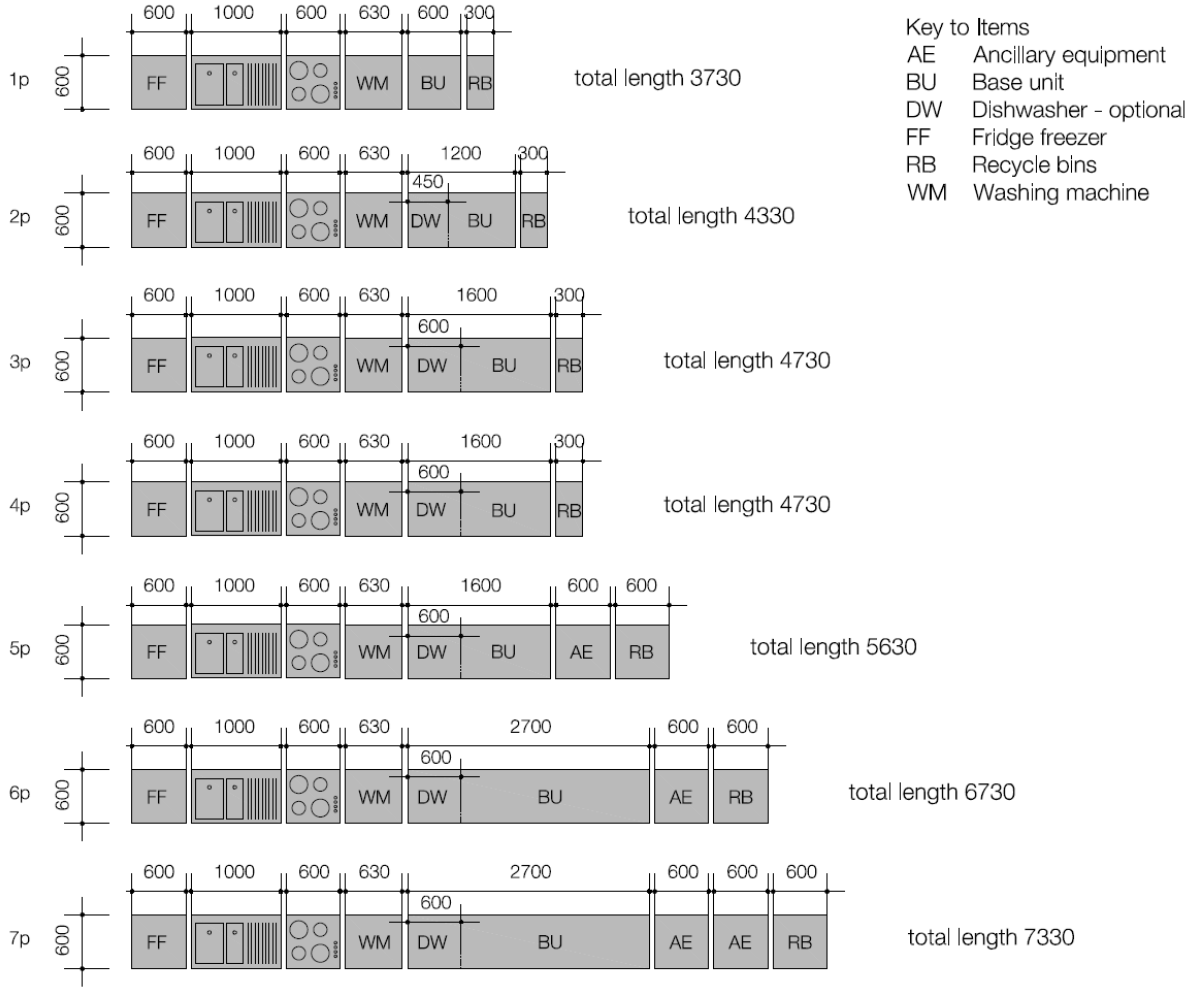


Bedroom space furniture





Kitchen furniture



Dining space furniture

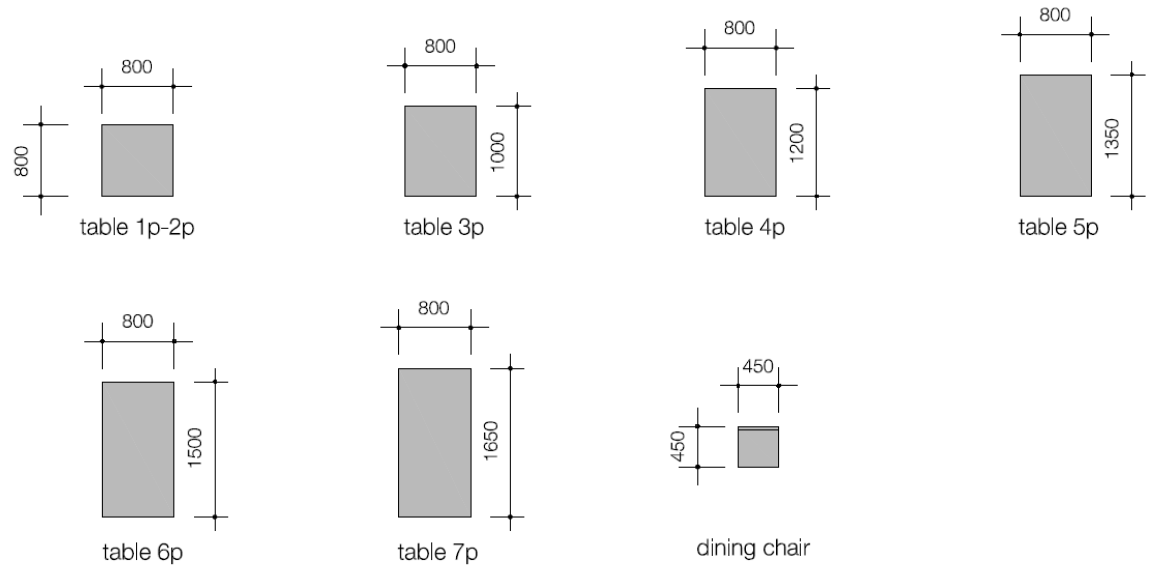


Table A2.1: Written schedule

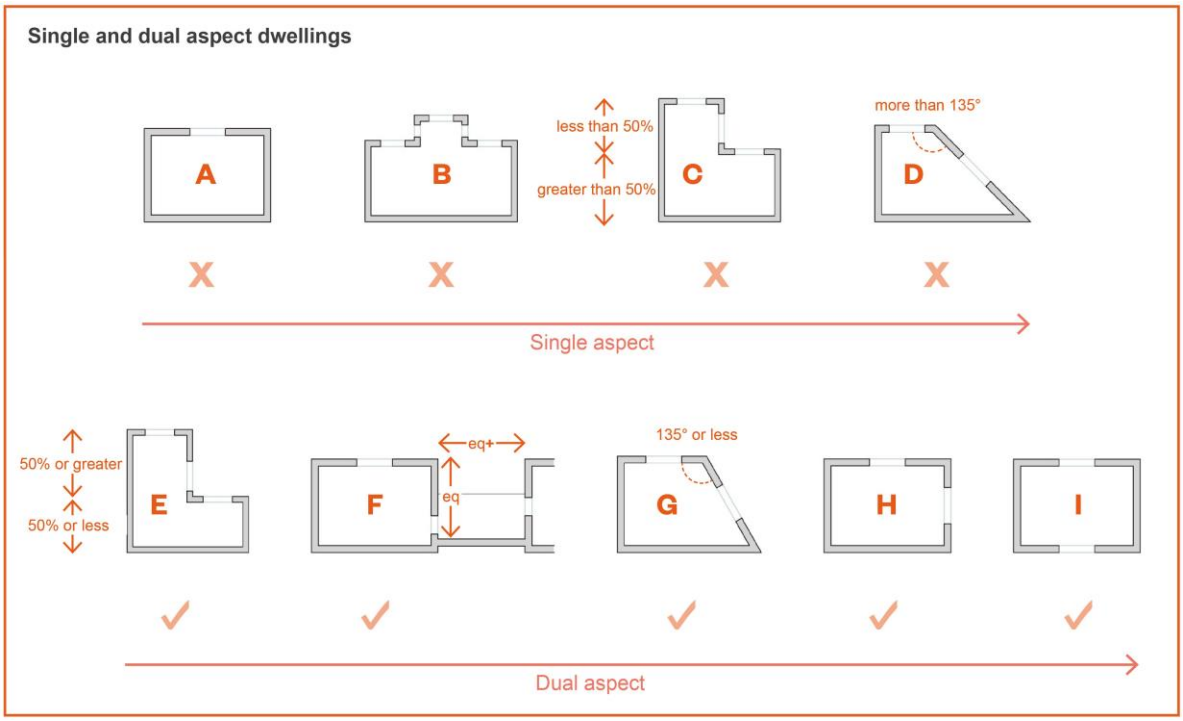
Type of space	Furniture required in each room	Furniture size (mm)	Number of items required (by bedspace)							
			1p	2p	3p	4p	5p	6p	7p	+
Living space	Armchair (or 'sofa seat' in addition to sofa where required below)	850 x 850	2	2	3	1	2	3	4	+
	Settee – two-seater (optional, as above)	850 x 1300	(item optional)							
	Settee – three-seater (optional, as above)	850 x 1850				1	1	1	1	1
	TV	220 x 650	1	1	1	1	1	1	1	1
	Coffee table	500 x 1050 (or 750 diameter)	1	1	1	1	1	1	1	1
	Occasional table	450 x 450					1	1	1	1
	Storage units	500 x length shown	1000	1000	1000	1500	2000	2000	2000	+
Dining space	Dining chair	450 x 450	2	2	3	4	5	6	7	+
	Dining table	800 x length shown	800	800	1000	1200	1350	1500	1650	+
Double bedroom	Double bed in principal bedroom	2000 x 1500		1	1	1	1	1	1	1
	Double bed in other double bedroom	1350 x 1900		1	1	1	1	1	1	1
	Bedside table	400 x 400		2	2	2	2	2	2	2
	Desk and chair	500 x 1050 (+ chair)		1	1	1	1	1	1	1
	Chest of drawers	450 x 750		1	1	1	1	1	1	1
	Double wardrobe	600 x 1200		1	1	1	1	1	1	1
Twin bedroom	Single bed	1900 x 900				2	2	2	2	2
	Bedside table	400 x 400				2	2	2	2	2
	Chest of drawers	450 x 750				1	1	1	1	1
	Desk and chair	500 x 1050 (+ chair)				1	1	1	1	1
	Double wardrobe	600 x 1200				1	1	1	1	1
Single bedroom	Single bed	1900 x 900	1		1	1	1	1	1	1
	Bedside table	400 x 400	1		1	1	1	1	1	1
	Chest of drawers	450 x 750	1		1	1	1	1	1	1
	Desk and chair	500 x 1050 (+ chair)	1		1	1	1	1	1	1
	Single wardrobe	600 x 600	1		1	1	1	1	1	1
Kitchen			length in mm							
	(1) Sink top with drainer	600 x 1000	1000	1000	1000	1000	1000	1000	1000	1000
	(2) Cooker (or oven + hob) space	600 x 600	600	600	600	600	600	600	600	600
	(3) Washing machine position/ worktop	600 x 630	630	630	630	630	630	630	630	630
	(4) Other base units	600 x length shown	600	1200	1600	1600	1600	2700	2700	+
	(4a) Dishwasher/worktop (included in 4)	600 x length chosen	(item optional)							
	(5) Ancillary equipment space	600 x length shown					600	600	1200	1200
	(6) Fridge/freezer space	600 x 600	600	600	600	600	600	600	600	600
	(7) Recycling bins space	600 x length shown	300	300	300	300	600	600	600	600
	(8) Total length of fitments (items 1 to 7)		3730	4330	4730	4730	5630	6730	7330	+
	(9) Wall cupboards	300 x maximum available length								
	Note: Items 3,5,7 may be in other rooms or spaces but should be close to the kitchen									
Bathroom	WC + cistern	500 x 700	1	1	1	1	1	1	1	1
	Bath	700 x 1700	1	1	1	1	1	1	1	1
	Hand wash basin	450 x 600	1	1	1	1	1	1	1	1
	Shower tray	750 x 750	(item optional)							
WC/ cloakroom	WC + cistern	500 x 700	(where required)							
	Hand rinse basin	250 x 350	(where required)							

Appendix 3 Dual aspect definition

A dual aspect dwelling is one with opening windows on two external walls, which may be on opposite sides of a dwelling (see illustration 'I' below) or on adjacent sides of a dwelling (F, H) where the external walls of a dwelling wrap around the corner of a building. One aspect may be towards an external access deck or courtyard (F), although the layout of the dwelling needs to be carefully considered in these cases to maintain privacy. The design of the dual aspect dwelling must enable passive/natural ventilation across the whole dwelling. The provision of bay windows, stepped frontage, shallow recesses, or projecting facades does not constitute dual aspect (B, C).

Dwellings that have opening windows on two adjacent sides can only be defined as dual aspect if the window opening/s are situated at least halfway down the depth of the dwelling (E, F, G, H). Where an aspect is facing a neighbouring wall, this aspect can only contribute towards being dual aspect if the separation distance between this aspect and a neighbouring wall is the same or greater than the distance from the outer corner of the wall to the inner most edge of the window (F). Where the two aspects of a dwelling are not at right angles, to contribute towards being dual aspect the internal angle between these aspects must not be greater than 135 degrees (D, G). This angle is the midpoint between 90 degrees (a dual aspect dwelling with right angled sides – see H) and 180 degrees (a single aspect dwelling – see A).

A3.1.1 Single and dual aspect dwellings[2]



[2] These illustrations represent entire dwellings (not an individual room) and the 'aspects' that contribute to a home being defined as single or dual aspect. Openings are located on the images to show the direction of an aspect, but not the exact number and location of windows in a dwelling.