

Design and Specification Policy



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1. Introduction

ng homes are committed to providing housing and environments that are well designed, fit-for-purpose, secure and safe places in which to live, work and play.

As a successful developer of new homes, spaces and community facilities, ng homes, recognises that sustainable, good quality design, supported by an appropriate level of specification, has a positive impact on social welfare and the continued well-being of our natural and built environments.

Furthermore, good quality design and specification has the ability to reduce construction's harmful impact on our environment and assists to meet longer-term sustainability objectives. In recent years as more data has become available, these connections to a wider range of Government policies have become more obvious, and as a result, a range of regulatory and statutory design frameworks and guides have been published. Against this background, ng homes Design and Specification Policy is intended to be a basic, user-friendly guide which blends local aspirations with current and emerging National, Regional and Local strategies, policies, aims and objectives.

2. Compliance

Where applicable, ng homes, designs and specifications will comply with all current legislation including:

- Scottish Planning & Building Control Standards
- The Glasgow City Development Plan
- The Glasgow City Council 'Glasgow Standard' Design Guide
- The Glasgow City Affordable Housing Supply Programme Guide (AHSP) Guide
- Sustainable Housing Design Guide 2008
- Secure by Design (Gold Standard)
- Housing for Varying Needs
- The Green Guide to Housing Specifications.

3. Design and Specification at a Local Level

At a local level, ng homes designs and specifications will inevitably be influenced by specific site constraints and the existing built environment. Therefore, rather than adopting a one-

size-fits-all design or specification, the Association will retain some local flexibility that blends national aspirations with local social needs, delivering a built environment which is fit for purpose, cost-efficient, user and environmentally friendly.

To help achieve these aims, the Association will adopt the standards listed in the Employer's Requirements / Design and Specification Brief (Appendix 1). In addition, the Association will continue to monitor the effectiveness and success of our designs and specifications by completing a full post completion appraisal for each and every project which will include comprehensive tenant and end-user surveys. These findings will feed our ongoing commitment to planned growth and continuous improvement.

4. Technological Advances

The Association recognises that technology (particularly in the fields of renewable sources of energy and climatic change) is advancing every day. Therefore, where new techniques and technologies emerge and make an overwhelming case, the Association will not hesitate to issue instructions and to suit on a project by project basis.

Appendix 1



Employer's Requirements / Design & Specification Brief

August 2022

DESIGN & SPECIFICATION BRIEF FOR NEW BUILD HOUSING

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Reference only available at ng homes

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Not enclosed - To be developed for each project

1.0 Introduction

1.1.1 The Organisation ng homes

50 Reidhouse Street
GLASGOW
G21 4LS
Tel: 0141

1.1.2 Background

ng homes is a community based housing association with the majority of its stock in the North West of Glasgow and are committed to providing good quality, high standard accommodation at affordable rents for people requiring mainstream accommodation and for people with particular needs.

Ensuring equality of opportunity, treatment and access to our services is pivotal to all our customers and individuals, regardless of any particular housing needs they may have.

Consultants/Contractors should confirm their compliance with the Brief or draw alternatives to ng homes' attention in writing.

Consultants/Contractors should inform ng homes as early as possible if the requirements of this brief conflict with the financial constraints of a scheme, statutory requirements, good practice, or their professional judgement.

Nothing in this brief lessens the professional responsibility of the Consultants/Contractors.

1.1.3 Project Description and Outline Programme

(Insert short description of project). ng homes are committed to progress the development as quickly as possible. It is hoped to achieve a Tender approval by early **(insert month and year).**

1.1.4 Specialist Contractors and Consultants

The Consultants/Contractor appointed by the Association will be responsible for all work within the terms of their appointment, including the use of any advice, design or information obtained from any third party. Third parties include specialists and specialist contractors not appointed by the Association.

Consultants/Contractors will be required to inform the Association of all intended nominations of Contractors/Specialists etc.

1.1.5 Standards

The scheme, must, as a minimum standard, comply with current legislation governing building standards and must be completed to the satisfaction of the relevant Local Government Departments.

It is the Consultants'/Contractor's responsibility to ensure that up-to-date standards are being used. All references to the Building Regulations, the Building Standards technical handbook and similar documents refer to the current issue, or any documents, which may supersede them.

The principles of barrier free design and lifetime homes - as highlighted in Scottish Government 'Design Guide "Housing for Varying Needs" Part 1: Houses and Flats - should be followed wherever possible within the limits of cost and the topography of the sites.

ng homes are required to achieve Glasgow City Council Interim Standard (September 2017) for grant funding purposes and details of the standards can be found here:

<https://www.glasgow.gov.uk/CHttpHandler.ashx?id=39199&p=0>

which includes the Scottish Government's Building Standards Technical Handbook with information on Section 7, Silver Level, Aspects 1-8 and other standards which are to be achieved.

The guidance in the following documents should also be followed, except where varied by this brief. Any conflicting guidance should be referred to ng homes:

- Scottish Planning Principal Policies re Sustainability and Place Making
- GCC Design Guide for new Residential Areas
- GCC Glasgow Standard – A design Schedule for Affordable housing in Glasgow
- Secure by Design (SBD) Policy – Gold Standard
- Current British and European Standards and Codes of Practice
- All relevant Local Authority and Water Authority requirements in respect of drainage and water supply by-laws must include arrangements for surface water drainage – SUDS scheme where required
- The Clean Air Act 1993 and all subsequent amendments
- The current edition of the Regulations for the Electrical Equipment and Wiring of Buildings
- issued by the Institute of Electrical Engineers
- Rules and regulations of the electricity and gas utility services
- The Control of Pollution Act 1974 Section 60 and 61, and all subsequent amendments.
- The Construction (Design and Management) Regulations 2017 and all subsequent amendments.
- The requirements of N.H.B.C. or any other third party warranty agreement to be applied.

All Consultants'/Contractors should be familiar with the contents of the above documents.

ng homes are seeking simple structural designs by having relatively few house types and simple stacking of flats. Overall house areas should be designed so that room sizes are the principle consideration and not overall areas.

This Brief/Employers Requirements are not intended to restrict the consultants'/Contractors' scope for finding a creative solution for the site. If the guidelines cannot be achieved, then the consultants should discuss the issue with ng homes staff.

1.2 The Project

1.2.1 Title

Insert project description

1.2.3 Proposed Project

Insert project plans, breakdown of stock tenure and type of housing to be provided. 10% of the properties to be wheelchair adaptable.

1.2.4 Purpose

Insert the reason for the project and its intention e.g.

- Contribute to the physical regeneration of North Glasgow in line with GCC objectives in the Local Housing Strategy(LHS) and Social Housing Investment Priorities(SHIP) and City Plan 2
- Begin to address shortfall of accommodation types identified in the Local Housing Strategy
- Provide affordable housing within the North Glasgow area
- Assist the continuing sustainability of the North Glasgow community.

1.2.5 The Association

This new build project is of critical importance to ng homes and to the residents of North Glasgow. It represents protection and continuation of the significant financial investment in the area over a considerable number of years and will promote regeneration in the area through a mix of tenures.

The effective solution to the housing problems in North Glasgow can only be achieved by the direct involvement of the community and ng homes is committed to this method.

1.2.6 The Tenants

The investment in the area must produce good quality desirable homes that are attractive to tenants. ng homes' presence in the area must be seen as promoting positive benefits.

1.2.7 The Local Community

Within the area of North Glasgow, ng homes' involvement must be seen as providing good quality, well managed and maintained housing. ng homes must demonstrate the ability of the voluntary housing movement to produce the type of homes and environment that tenants want.

1.3 The Site

Insert background information.

- 1.3.1 Previous use
- 1.3.2 Site Specific Information
- 1.3.3 Ground Conditions
- 1.3.4 Ownership
 - e.g. the site is owned by ng homes.
- 1.3.5 Location
 - See attached plan.
- 1.3.6 Surrounding Boundaries
- 1.3.7 Existing Constraints
 - The final design should take account of any constraints imposed by the existing roads, services and general topography.
- 1.3.8 Zoning
 - The site is currently zoned for residential but the Consultants/Contractor to apply for zoning for Class 1 or 2 Retail for commercial units.
- 1.3.9 Access point facilities
- 1.3.10 Transport Facilities
- 1.3.11 Amenity Facilities
- 1.3.12 Parking Facilities
- 1.3.13 Existing Services
- 1.3.14 Crime and Vandalism
- 1.3.16 Communication Facilities

Houses should have individual aerials but flatted accommodation should be provided with a communal satellite system subject to discussion with the Association.

In flatted accommodation access to a communal WiFi system will be a requirement.

2.0 Project Details

2.1 Tenant Participation

2.1.1 The Association

ng homes would wish to involve tenants in the design process. We will consult on scheme design and house mix prior to submission to planning.

2.2 Housing Mix/Tenure

2.2.1 Housing Mix

ng homes intend to build up to a maximum of x houses for social and x mid market rent.

The following housing mix has been identified for the development.

Residential Mix	Size m2	Total Size m2	Unit No.	Bed spaces	Total Bed spaces
Total Units/bedcaps					

2.2.2 Particular Needs

Some particular needs accommodation in the form of housing for older people and wheelchair housing has been identified. These should be built to Scottish Homes Scotland Guide Housing for Varying Needs. Since the development is in excess of 20 units. 10% of the development should be designed as wheelchair adaptable.

2.2.3 Location of House Sizes

The layout of the flats/houses will be determined in discussion with the consultants but there is a presumption against concentrations of larger family accommodation.

2.2.4 Good Practice Guides

In considering the brief for the project, proposals should reflect the good practice guides referred to earlier in this document and the WRAP principles of recycling/minimising construction waste.

2.2.5 Space Standards

The space standards should meet Housing for Varying Needs and also comply with Glasgow City Council's The Glasgow Standard, Building Regulations and Scottish Building Standards technical handbook (domestic).

2.2.6 Layout Plans

All floor plans should indicate room areas, typical furniture layouts, radiator positions, electrical points, kitchen equipment and bathroom fixtures with relevant activity spaces.

A development layout should be provided specifically detailing the location of any peculiarities of the site such as the location of utilities boxes or access paths for landscape maintenance.

2.3 Specification

2.3.1 Detailed Specification

The detailed specification will need to be developed throughout the design process but should be updated to take account of changes made on site and changes in Building Regulations/Codes of Practice, and planning guidance and the 2017 Building Regulations for domestic units.

The detailed specification should incorporate careful selection of benign materials resulting in a preferred list and should not include ozone depleting materials. Timber should be FSC or equivalent 3rd party label.

2.3.2 Maintenance Costs

In general terms ng homes will wish to minimise future expenditure and components should be selected for their durability.

The design should also provide low cost in use since many tenants will be on low incomes.

2.3.3 Design Standards

New build housing should be designed for minimum 60 years life. All the design aspects e.g. flats, houses, garden layouts, etc. should be fit for purpose. The design should also meet the requirements of any third party insurance scheme decided upon by the Association.

2.4 Project Finance

2.4.1 Funding

The majority of funding for this project will be provided by Glasgow City Council, with the balance of costs to be raised through ng homes.

The scheme must therefore meet Glasgow City Council funding requirements which include achieving the Glasgow City Council Interim Standard (including Silver Aspects 1-8 of the Building Regulations) and their cost targets. (See '1.1.5 Standards p4' for link/info to standards.

3.0 Project Management

3.1 Client Control

3.1.1 Committee Control

ng homes' Board of Management has delegated authority to the Directorate to progress and manage the new build development programme within the terms of that authority. Ultimate control remains with the Board.

Design team meetings dealing with practical/technical issues will be attended by the nominated member of the Property Services Team.

3.2 Management

3.2.1 Co-ordination

The Architect will be responsible for co-ordination of the Design Team and Contractor; however the staff member will be responsible for co-ordination between the Design Team, Contractor, ng homes and Glasgow City Council.

A programme should be produced by the Design Team for agreement with ng homes. Once the programme has been agreed, ng homes will review progress against programme on a regular basis.

ng homes will require a cost plan stage prior to the production of tender documentation. This will be agreed with DRS and any changes/alterations will be incorporated into the tender document.

3.2.2 Communication

All decisions and instructions will be made in writing to the Design Team leader and copied to any consultant and parties affected.

All meetings will be minute and any decisions taken clearly recorded and advised to the appropriate person. Minutes should be circulated to all parties present at the meeting, the Association and other members of the design team as appropriate.

All design decisions reached in discussion with the Area Committee should be recorded and confirmed in writing by the Association.

3.3 Consultants' Appointments

The selection and appointment of professional consultants and contractors will be through the Consultants Framework. The form of contracts to be used will be the JCT then, following novation of the Architect/Design team, the SBC Design and Build Contract for use in Scotland (2016) in line with ng homes' policy on Procurement. The conditions of appointment for each of the following professionals should be those of the appropriate professional institute.

It is intended that the Design Team will consist of:

Architect
Quantity Surveyor
Structural Engineer
Landscape Architect (via Architect)
M&E Engineer (via Architect)
Principal Designer (selected from Design Team Architect/QS or Engineer)

All disciplines will be required to provide the full service as detailed in their respective professional conditions and will be appointed under the appropriate professional conditions.

3.3.1 Design Team Leader

The Architect shall be the leader of the Design Team, and as such, shall be responsible for ensuring that the Design Team works effectively together to achieve the objectives laid down by the Association's brief to Consultants/Contractors. Included in the remit of the design team leader shall be the role of Principal Designer and convening, chairing and minuting of the Design Team meeting.

4.0 Project Timetable

4.1 Timetable

Site start in xxx with completion in xxx 20xx

5.0 Design Guidelines

5.1 Estate Layout

5.1.1 Proposed Development

The proposed development is for up to xx units of xx housing.

The housing to be provided will be a mix of xxx and it is intended that the development will provide general family housing with an element of particular needs designed to be adaptable for wheelchair accommodation. The housing mix based on xxx is outlined in Section 1.2.3 but the mix may be adjusted to reflect planning requirements. 10% of the units must be wheelchair or wheelchair adaptable

Parking provision should be off street with one space per house. Some visitor parking must also be provided.

5.1.2 Definition of Public and Private Spaces

All external spaces must be well defined and their function clearly determined at the outset and designed accordingly. These must be shown on the plan to the client.

There should be provision of private open space which meet the Design Guide for New Residential areas to 75-80 % of the properties. In flatted accommodation the method of provision should be agreed with the association.

Every dwelling should have a zone of private space around it and this cannot be achieved where the public space overlaps, the boundary is unclear, or where the private space is exposed or unprotected and should meet Secure By Design Standards. The form of division must again be made clear on the plan. Any form of fencing should be appropriate to the environs.

Private front gardens, boundaries - max 900 high
Divisional fencing - max 1200 high

Private rear gardens - boundaries min 1800 high with secure access gate.

5.1.3 Development Form and Layout

The design of the development should, where appropriate, take cognisance of existing buildings adjacent or adjoining the site.

Larger family dwellings should be well distributed to limit concentration of children in any part of the development.

5.1.4 Orientation and Outlook

Generally dwellings sited to maximise solar gain, however living room windows should always be to the front of the dwelling and window sizes should facilitate Silver Standard.

As far as possible each dwelling should offer 'active and passive' views from the windows. The active view will be the public side and this should be carefully designed to protect individual privacy.

Dwellings should be orientated to avoid bedrooms backing onto the living room or potentially noisy room of another property.

5.1.5 *Car Access and Accommodation*

Emphasis should be placed upon the visual attractiveness of hard landscape areas, the sensitive integration of roads and parking provision into the layout.

Shared pedestrian/vehicular access ways are favoured for small cul-de-sacs on the site only for those serving elderly and disabled person dwellings.

Roads and footpaths should be built to the appropriate highway authority adoptable standards. The layout should take account of the national and local requirements for maximum carrying distance for dustbins, access for ambulances, and fire appliances.

Large grouped parking and garaging areas are unacceptable. In general, for housing, no more than three car parking spaces should be placed together.

Whilst current car ownership is low, parking provision should be designed as in curtilage parking requirements or in small groups which meet the needs of the parking standards set out by the City Council. Driveways should be fit for purpose.

Materials specified should facilitate surface water run off and facilitate attenuation if required in order to meet The Glasgow Standard.

5.1.6 Footpaths

There is a general presumption against footpaths across the sites.

Footpath links are required to surrounding facilities.

The gradient for footpaths should generally not exceed 1:20 for paths with handrails. Generally a maximum gradient of 1:15 should be adopted, particularly for elderly person access and 1:20 for disabled person dwellings.

Where steps provide a short and direct route an alternative means of access, such as a slowly ascending path should be provided if possible.

Inclining paths should be paved with materials which offer good grip. Drop pavement crossings should be provided in both directions at all road junctions with change of level indicated by textural changes for the visually handicapped.

Path widths should be between 1200-1500 mm even on house footpaths and care should be taken to avoid planting adjacent to footpaths bushes and trees that overhang at face level.

5.1.7 Children's Play

Generally, play provision shall be made specific to particular age ranges and detailed accordingly. All play facilities where required shall be provided to Planning Department requirements and satisfy City Plan ENV2 Requirements. It should be designed to meet minimum requirements of the Scottish Building Standards technical handbook 2017 domestic.

5.1.8 Landscaping

Consultants/Contractors will be expected to liaise with the appropriate member of staff responsible for coordinating landscape maintenance to ensure designs are compatible with our landscape maintenance contractor.

Soft and hard landscaping design should be clearly separated and used to reinforce security and privacy to dwellings and support footpath links by preventing short-cutting and erosion of edges and provide for minimum future maintenance.

Small grassed areas should be avoided and rather given over to intensive shrub planting or suitable hard landscape. Planting should be of a native species based on defined habitat types.

5.1.9 Street Lighting

The lighting scheme generally should ensure visual security of all public areas and that all areas in need of supervision are particularly well lit and should meet SBD standards.

Design should attempt to reduce the visual impact of street lighting columns.

The street lighting must be designed to the required standard of the local authority in order that it can be adopted.

5.1.10 Street Furniture

Street furniture, where appropriate, should be designed in conjunction with ng homes.

Street nameplates and direction signs should be clearly visible and be fixed at a height where they are not easily defaced or damaged.

Cast iron or concrete bollards should be provided where appropriate.

5.2 External Curtilage

5.2.1 Privacy and Security

The need for privacy must be recognised as a most important factor in layout design where possible, gardens and living rooms should not be overlooked. Where private areas are adjacent to public areas which are heavily used physical protection should be given (i.e. substantial walls and fences). The scheme should be Secured by Design gold standard.

Public areas should be of high quality, combining visual attraction and security. They should be well lit and dense planting of trees and bushes in close proximity to footpaths which might hinder visual security should be avoided. Community involvement in the design of open areas is desirable.

Where practicable, and desired by the local community, a common open space for community ownership should be provided.

Materials should be robust but attractive and easy to maintain.

5.2.2 Gardens

Gardens for family dwelling must meet the minimum requirements laid down by the City of Glasgow Council. All private gardens should be enclosed with a fence.

For elderly persons, smaller garden areas will be acceptable, but where the layout permits, each garden space should be flexible so that it can expand, or contract with adjacent soft landscape areas to be maintained by the authority.

Mowing strips should be provided adjacent to buildings, subject to prior approval where required.

All houses have to have access from front to rear without passing through the living areas of the dwelling. In terraced housing pends should be provided.

Paving slabs should be provided adjacent to ground floor windows to facilitate cleaning and they should also be provided under or adjacent to clothes lines and drying areas.

The planning department will insist on an 18 metres placing of dwellings for overlooking.

The minimum depth garden for family dwellings should be nine metres. All private gardens should be enclosed with a fence and should be turfed.

Suitable land drainage should be incorporated.

Layout plans of gardens with unusual features such as sloping gardens or which require access for utility companies should be provided at as early a stage as possible in order to inform tenants at allocation.

5.2.3 Fences, Walls and Hedges

These must be of a height and substance appropriate to their function in a range of situations. All types of fences, walls and hedges should be identified on the plan and approval obtained.

Brick walls should have robust copings with well-detailed damp proof courses and low porosity bricks.

Where privacy screens are required at the end of terraces, along the sides of end gardens or where private gardens adjoin well-used paths or spaces, a 1.8m high close boarded fence or wall should be provided.

All enclosed gardens should have gates - designed to prevent removal.

5.2.4 Provision for Clothes Drying

Dwellings with private gardens should have suitable provision including adjacent paved area.

Clothes poles should be provided.

Where flatted accommodation is being provided each flat should have access to private, secure external drying facilities provision and location to be agreed with the Association.

5.2.5 In-Curtilage Parking

Provision should be made wherever possible for taking the car to the dwelling and for providing for its storage within the curtilage. This is expected to be the case for all family dwellings but for flats, whilst adjacent parking is generally achievable parking should be provided in small groups which are capable of being easily supervised.

In certain parking bays, provision will be made for disabled person's cars and an extra wide bay provided.

For the disabled persons dwellings, a carport or garage adjacent to the dwelling is required with direct access from the provision to the main entrance door if appropriate.

Entrance footpaths should be separate from driveways.

Dropped pavement crossings shall be provided between footpaths and parking areas.

5.2.6 Bin Storage

Provision should be made for bin and recycling storage for each house including in accordance with Glasgow City Council's recycling policy (currently 4 bins). The architect is required to consult with the local cleansing department with regard to the type of bin to be used and any costs involved will be deemed to be included in the contract sum.

All bin storage areas to be located within 2m of an external door at the side or rear of houses/flats, and should be attractively screened.

External bins should be located no more than 10m from the front door of a flat and be no less than 60L.

If internal recycling facilities (of 3 x 10 litre capacity) are provided in a dedicated location, then external bins may be located up to 50m from the front doors.

5.3 Dwelling Interiors

5.3.1. Space Standards

The houses will require meeting the minimum space standards as required by the Glasgow City Council and Scottish Building Regulations.

Space for consumer durables and household aids should also be identified on the plan.

5.3.2 Layout

All floor plans should indicate furniture layout, radiator positions, electrical points and kitchen equipment.

5.3.3 Entrances

The main entrance should always open into an enclosed lobby or hall but not directly into living spaces. The entrance door should be recessed.

All first floor flats (where the scheme is limited to two storeys) must have their own separate enclosed private entrance at ground level rather than a common staircase. Common staircases would only be accepted for 3 storeys and above using smart homes technology with door entry systems and automatic controls.

Rear doors into gardens should open from a circulation area or kitchen, not a living room.

Where the design allows for easy incorporation, a draught lobby should be provided if possible. This lobby should be able to store a bicycle without obstructing circulation and the fittings for this storage should be included.

Weather and draught stripping to external doors is essential.

5.3.4 Circulation Areas

In family dwellings, space should be provided to park a folded pram, wheelchair or bicycle without obstructing circulation areas.

A suitable location should be provided for hat and coat hooks.

Staircases should not pitch directly down to the entrance door and should be able to incorporate a future stair lift and associated activity spaces.

Single steps and winders should preferably be avoided and staircase widths should be sufficient to allow furniture to be manoeuvred.

The position of windows, doorways, roof access traps, etc. should be carefully positioned to avoid the risk of falls and ceilings over staircases should be at a level easily accessible for decoration.

5.3.5 Kitchens

As a minimum, spaces in the kitchen must be identified for the following appliances: Fridge, freezer, washing machine, tumble dryer (including vent), oven and hob, microwave with future provision shown for dishwasher. In order to achieve this, a reduction in the number of built-in cupboards is acceptable.

Housing for Varying needs worktop/ cooker/ worktop/sink/worktop layouts are preferred and hot and cold supply and waste connections should be left available for washing machine connection and a place for a tumble drier vent highlighted.

Kitchen storage (low level and high level units) to be provided in accordance with the minimum requirements of the building regulations and to the standards set out in The Glasgow Standard and Housing for Varying Needs.

Layouts should allow easy access to windows and ventilation controls: windows should not be placed above cookers, washing machine or refrigerator spaces.

Care should be taken that drawers are not fouled by white goods set at 900 to the drawer unit. All doors should have 180 degree hinges. Tiled splashbacks should be provided.

Lighting should be located to provide good illumination of the cooker, sink and all worktops.

Kitchens to be separate rooms (not open plan with living room) and should have provision for a dining area if feasible.

The kitchen should achieve a minimum average daylight factor of 2%.

5.3.6 Utility Room

A separate utility room is desired. A house design will be acceptable which incorporates general storage and pram space into such an area and if possible, with this utility room serving a dual function as a draught lobby.

5.3.7 Bathrooms and WCs

The provision of a second WC and a downstairs shower in five person dwellings and over is essential. Whether this should be an electric shower or provided off the mains system is remitted to the Design Team to decide which is the most appropriate/sustainable for this development

In all ground floor flats where a bath with an over bath shower is being provided, the bathroom should incorporate a space for a future level access shower with trapped gulley and service tails allowing installation at a future date. At least half of the ground floor flats should have level access showers with the remainder having walk in showers

Bathroom design should facilitate use by the elderly and disabled. A platform at the head of the bath is particularly useful.

Partitions forming bathrooms and separate W.C. compartments should be sound insulated and capable of supporting grab rails and poles adjacent to the bath and W.C. These should be fitted as standard in any aged persons dwellings.

All baths to have an over-bath shower, with appropriate tiling and shower screen.

Outward opening doors to bathrooms are essential for elderly and disabled persons, and the locks should be capable of being released externally.

Windows should be of obscured glass and be easily accessible for opening and cleaning.

In mainstream dwellings, walls above wash hand basin and bath have to be tiled to a minimum height of 450mm - or panelled. The decision on which to use is to be decided by the Association.

5.3.8 Bedrooms

The planning of bedrooms should keep in mind the possibility of being used as secondary living space.

The shape of single bedrooms should be such that they accommodate a bed in more than one position.

All double bedrooms should be able to accommodate two single beds.

All bedrooms should have fitted wardrobes

5.3.9 Living and Dining Rooms

The living area has to be able to accommodate sufficient furniture for the size of the accommodation and should be able to accommodate family and visitors. The dining area should allow for circulation and for at least all of the occupants of the dwelling to sit comfortably around a table for meals.

Space for a Home Office of 1.8 m² should be provided within the living room of properties with 2 bedrooms or less which does not obstruct the position of standard

living room furniture. This should have the appropriate an additional double plug point and telephone point to comply with building regulations

These rooms should achieve a daylight factor of 1.5%. Doorways should be at one end of the room therefore maximising the usable wall space

5.3.10 Storage

Overall storage space as required by Glasgow City Council's Planning Department should be used for all dwelling types. The space should be planned in such a way that a proportion can take either the form of enclosed storage or used to enlarge a living room or bedroom.

A balance is required between storage space at ground level and first floor levels and it should always be well distributed throughout the house.

For those dwellings with gardens or entrances at ground floor level a directly accessible external space is preferred to a separate external store.

A small proportion of storage space in the form of built-in cupboards is desired and these are preferred in circulation areas where they are more easily accessible.

Careful consideration should be given to the siting of radiators, power points and switches, door swings etc., to ensure the space can be easily adapted by householders.

Long narrow stores are not generally acceptable, but where unavoidable, should be provided with artificial light and an outward opening door.

Where the general store requirement of the dwelling is grouped together to form what is virtually another small room in order to aid flexibility of use as a study or utility room it should be provided with a window, lighting point and power point.

5.3.11 Mobility Standards

All dwellings should be designed to HFVN standards where possible. The minimum corridor of width should be 1000mm with door sets which meet current building regulations. Thresholds to internal doors should be avoided and level entrances provided to all dwellings.

If possible ground floors of houses should be to visit able standards.

All dwellings to be designed to wheelchair or amenity standard and must be in accordance with Scottish Homes Guide, Housing for Varying Needs.

5.4 Components

5.4.1 Windows

All windows above ground floor level should allow for cleaning and re-glazing internally. Consideration must be given to the external cleaning and maintenance of windows.

There should be no fixed windows as all of the windows should be able to be cleaned from the inside.

Window sizes should facilitate daylighting factors which comply with Building Regulations. Catches to all windows must be reachable from a standing position and easily manipulated with one hand whilst being child safe. In dwellings for the elderly or disabled an appropriate window design should be selected which allows fasteners to be fixed at low levels again whilst being child safe.

The design of window fasteners should allow for trickle ventilation and provide for security. In living rooms, particularly in housing for the elderly, low window sills and avoidance of transoms at eyelevel (for the seated person) are important.

UPVC windows or equivalent composite windows (e.g. Velfac) which are double glazed and to Secured by Design Standards are essential.

Glazing for these windows should be of as low a U value as possible (possible use of low e film).

Curtain plates should be provided above all windows.

5.4.2 Doors

The design of entrance doors should place a high priority on security and glazed panels should have wired or toughened glass.

All doors should be solid with bolt through handles.

Letter plates should have internal hoods and prevent access to door locks.

Five lever mortice locks or cylinder locks with latches, and Yale locks should be specified; a security chain should be provided in every house.

A glazed panel or peephole is also desirable to allow occupants to see callers.

5.4.3 Linen Storage

Linen Storage space of 0.5m³ is the minimum for all dwellings. Linen cupboards should be positioned in circulation areas as far as possible and ventilated

5.4.4 Clothes Drying

All cottage flats and houses should have clothes poles provided externally. All flats should have access to a secure external clothes drying space which may be provided as either communal space or as a balcony accessed from the kitchen area.

Internal clothes drying space is also required which should be a minimum of 1m² with suitable ventilation arrangements to avoid condensation.

Drying areas must be located so that washing does not obscure views from the windows, and should not be too close to walls, fences, etc.

For communal drying areas serving blocks of flats the number of poles / length of drying space will comply, as a minimum, with current Building Standards (Scotland) Regulations. Specific requirements are contained within the Housing for Varying Needs Design guide.

5.4.5 Wardrobes

Any built in wardrobes should be formed along internal walls and vented to avoid condensation.

5.4.6 Sun Spaces

Sunspaces should be provided in flats accessed off the living room or kitchen

5.4.7 Finishes

Finishes generally should be approached from the viewpoint of minimising maintenance and should be durable.

All concrete ground floors should be tiled.

The construction of the floors should be such as to achieve Silver Standard.

Non-slip flooring should be provided in kitchens and bathrooms in dwellings for the elderly and disabled.

5.4.8 Roof Space

All roof spaces should be provided with an access trap of at least 550mm in width and fitted with draught seals.

All loft spaces in housing units and for upper floor cottage flats only should be provided with attic trusses and floored to provide a minimum head height of 2 metres. The loft should have light and power installed and a roof light. This will allow the loft space to provide additional storage space for the occupants. Note this reflects the current standard of all our new build houses it does not apply to lofts in flatted dwellings.

5.4.9 Roof Insulation

The insulation should minimise energy loss and assist with achieving the SAP strategy required for the building `

The design should incorporate adequate ventilation at eaves and ridge levels as well as gable ends.

5.4.10 Wall Insulation

The wall insulation should minimise energy loss and assist with achieving the SAP strategy for the building

Accredited Construction Details Guidance should be followed in order to achieve an air permeability of 5m³/m²h or less.

5.4.11 Floor Insulation

The floor insulation should minimise energy loss and assist with achieving the SAP strategy for the building.

5.5 Services Installations

5.5.1 Heating Standards

The heating system should be matched to the form of construction and take account of the thermal capacity of the building. It should be related to the expected use and occupancy and meet Silver Aspects 1-8 standards. All equipment should have an 'A' rating.

Whole house central heating is essential and should provide for the following design temperatures when the outside temperature is -1C.

Living areas	21 ^C
Kitchen and circulation areas	18 ^C
Dining Area	21 ^C
Bathrooms	21 ^C
Bedrooms	18 ^C

Wheelchair, ambulant disabled and amenity standard dwellings:

All areas	21C
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5.5.2 Ventilation

To avoid Mechanical Ventilation with Heat Recovery (MVHR) and the associated maintenance regime Decentralised Mechanical Ventilation (DMEV) should be provided where possible with trickle ventilation to all dry rooms.

5.5.3 Condensation

The design should attempt to minimise condensation risks.

A separate internal drying space should be provided with suitable ventilation arrangements

Particular attention should be paid to adequate general insulation: exposure on gable ends and other prominent positions; possibility of cold bridging around lintels etc.; inefficient or inadequate heating; inadequate ventilation and incorrect location of vapour barriers.

5.5.4 Heating and Hot Water System

The heating system must be user friendly and as far as possible allow for possible extensions to high technology developments.

All water and space heating systems should have adequate thermostats and controls. Hot water cylinders should be provided in larger houses for water demand.

Heating controls and equipment must be positioned for ease of use and maintenance.

The system of central heating in housing for the elderly or disabled should be carefully selected for ease of operation and control.

Radiator control valves should be placed at the top of radiators in all dwellings in accordance with current design guidance and building regulations.

5.5.5. Fuel Policy

The fuel and heating system should be gas fired. Renewable energy contributions should be considered e.g. PV with the ability to have remote monitoring.

5.5.6 Electrical Installation

The provision of electrical sockets shall be as current building regulations, and all sockets will be double sockets.

Room	No of Sockets
Kitchen (associated with work surfaces) + dedicated sockets for Tumble Dryer, microwave, fridge / freezer /kettle, washing machine and cooker	6
General use	4
Dining area	4
Living Area	8
Living/dining area combined	8
All bedrooms	4
Hall	2
Landing	2
Bathroom shaver socket	1
Sunspace	1

Switch and outlet sockets should be located for ease of use and, with the exception of kitchen or workshop sockets which should be located adjacent to work surfaces, should be at least 600mm above floor level. They should be of switch type.

Circuit breakers should be fitted. Consumer units should be at a convenient height and position for easy access.

Earth leakage circuit breakers should be fitted to sockets likely to be used externally.

T.V. aerial sockets should be located in the living room and bedroom area. There should also be ducts for cable and Sky.

The provision of TV aerials and satellite dishes should be considered in conjunction with ng homes.

IRS systems should be provided in flats.

5.5.7 Telecommunication and Broadband Provision

All houses should have ducting provided to allow for the installation of both a BT line and Virgin cable. A duct through the external wall shall be provided for a telephone line and possible future communication system. In the home office space an additional telephone line socket will require to be provided. There should be a phone socket in the lounge and master bedroom.

All flats should have ducting provided to allow for the installation of both a BT line and Virgin cable. The association would wish to provide a communal WiFi system that all residents could access in their homes. The location of the WiFi hub must be secure and have power as well as the access for the broadband connection. The system must be designed to ensure that the signal strength in all properties is sufficient to allow residents to access broadband in both living and bedroom area.

5.5.8 Mains Services

The water main stopcock, gas cock and electrical mains switch should be readily locatable and easily operated. Consideration should be given to providing a switch operated water stopcock.

Distribution pipes should not be buried in floor screeds or behind dry linings unless in ducts with access covers.

5.5.9 Sound Insulation

A high standard of sound insulation shall be provided to party walls and to party floors and the number of sound insulation tests required to be carried out throughout the construction period will be determined by building regulations and achieving the Silver Standard.

5.5.10 Smoke & Heat Detectors

The standard requires:

- One smoke alarm installed in the room most frequently used for general daytime living purposes
- One smoke alarm in every circulation space on each storey, such as hallways and landings
- One heat alarm installed in every kitchen

All alarms should be ceiling mounted and interlinked.

5.5.11 Carbon Dioxide and Monoxide Detectors

These should be installed as per the current Building Regulations.

5.6 Briefing Requirement

Adequate provision shall be made for the prevention of frost damage prior to occupation and all wet heating systems shall be drained off.

Vehicular and pedestrian access shall be provided to all dwellings upon completion irrespective of the position for the estate as a whole.

5.6.1 User Manual

A complete user manual will be provided by the architect. It should be written in user friendly English as it is intended to be given to the occupier of each dwelling, and should be emailed to the Association in draft for checking/approval.

It should set out details of the heating system and controls and the use of all appliances and fittings as well as basic information about the care of the structure of the dwelling. This manual should contain information required to meet appropriate Silver Standard Aspects Level. It should incorporate information on the location of local facilities, including shops, schools and community facilities as well as details of bus timetables.

5.6.2 Handover Procedure

The Architect and his/her representative shall provide one hour of user instructions to the Ng homes staff/occupier upon completion.

The contractor shall be expected to allow for the viewing of dwellings by prospective tenants.

Four weeks written notice is required of the date of practical completion. Handover will not be accepted less than three days before any public holiday.

A copy of the Association's Handover Procedures will be made available to the consultant and the contractor.

5.6.3 Defects

Defects shall be attended to as quickly as possible after completion by the contractor and not more than twelve months from the date of practical completion.

The names and telephone numbers of the sub-contract plumber and electrician to contact in case of emergencies during the Defects Liability Period (DLP) shall be supplied to the client at practical completion stage.

A copy of the Association's Defects Procedures will be made available to the consultant and the contractor.

5.6.4 The Architect has to satisfy himself at the end of the Defects Liability Period that all defects have been properly attended to and sent a letter to the Association discharging himself.

5.6.5 As Built Drawings

The consultants shall supply as installed drawings of scheme and dwelling plans to ng homes in not more than 12 months after practical completion and preferably with the Health and Safety Files.

5.6.6 Inspections

The Architect has to satisfy himself /herself at the end of the DLP that all defects have been properly attended to.

5.6.7 Tenant Participation

A tenant appraisal of the scheme shall be carried out by a member of ng homes' staff who has not been involved with the development. The Architect and/or his/her representative will be expected to meet with the tenants and housing management section representatives on up to four occasions during the first year of occupation.

5.7 Planning Requirements

Details of the site and its location are given in Section 1.2 and 1.3 of the brief.

The City Design guide will provide a reference for the planning requirements of the City. However, the specific requirements of the client group will have to be accommodated within the site.