

# Designing New Homes: THE HASTOE WAY



# Hastoe Design Guidance

This design guidance from Hastoe sets out how we want to work with our partners in designing and building new, affordable and sustainable rural homes. It's a key element of what we call the 'Hastoe Way' of doing things and outlines the minimum requirements that help to ensure we deliver comfortable and energy-efficient homes that are well designed and work towards meeting UK targets for carbon reduction.

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**Employers' requirements and specification:** for our comprehensive and up-to-date requirements, the latest version of Hastoe's Employers' Requirements must be consulted.

**For Passivhaus schemes:** the Passivhaus Addendum to this Design Guidance must also be consulted.

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# 1. Process and Partnerships

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As a specialist rural housing provider, we pride ourselves on the relationships we cultivate with each local community with which we build affordable homes. It's important we all work in partnership with these communities, important that we recognise the needs of local people and the local environment and important that we take all the necessary steps to start – and manage – the entire process from design through to handover.

This section offers a step-by-step guide to the process Hastoe uses to ensure we work consultatively and appropriately with our design partners as well as local communities.

# Process

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## Brief

Hastoe predominantly progresses Rural Exception Sites that are based on identified local housing need. Once this has been agreed with the host settlement, we will issue a project brief outlining the required accommodation, desired sustainability outcomes and any other special requirements of the scheme.

This first section takes a step-by-step approach to the process up to the planning application stage.

## Site finding

The first challenge is to identify a site or sites within the settlement that may be suitable. The architect should undertake a planning policy review and produce an initial study of potential Rural Exception Sites for discussion with key partners (parish councils, community groups, local authorities and Rural Housing Enablers).

Following this process and subsequent assessment, a summary report shortlisting suitable sites should be produced to enable Hastoe to consider acquisition and to form the basis of any subsequent planning application.

Once a suitable site has been secured, we will appoint appropriate additional consultants or specialists at the early design stage. This will include (but is not limited to) a landscape architect, employer's agent, principal designer and sustainability consultant. We will also review the brief in line with the site selection and obtain a cost plan for the project.

## Scheme design

The detailed design of the scheme should proceed in two stages, roughly in line with [RIBA Stage 2 \(Concept Design\)](#) & [Stage 3 \(Planning\)](#), with each stage requiring a sign-off from Hastoe. These stages seek to ensure all relevant matters are considered early in the design to avoid potential delays to the project.

## Concept

The concept design should be developed, where possible, in conjunction with the landscape architect, principal designer, sustainability consultant and the employer's agent. It should include:

- A detailed context study that will inform and identify the 'sense of place' and help explain subsequent design decisions.
- Consideration of local vernacular, materials, relationship to the village and amenities.
- Analysis of local building forms and materials, typical grain and layouts of settlements.
- Identification of site constraints, opportunities and developable areas.
- A sketch proposal showing suggested layout and building forms.
- Preliminary utilities and services information.
- A topographic survey of the site.
- Overlay of site area with land registry records.
- Preliminary planning validation checklist and early consideration of any necessary third-party reports required for planning validation.
- A brief design statement showing how the proposal might respond to the Context Study.

**Detailed design should not commence until these matters have been approved and signed off by Hastoe.**

## Planning

Detailed design should be developed in accordance with the approved concept and incorporate the input of a landscape architect, principal designer, sustainability consultant and the employer's agent, in particular with reference to the project budget. It is the entire team's responsibility to deliver Hastoe schemes within budget and particular care should be taken in this regard.

### **The Planning Stage review will need to consider the following:**

- Detailed floor plans, elevations and sections including CGIs.
- Detailed site layout showing connections to the settlement.
- Foul and Surface Water drainage strategies.
- A cost appraisal against budget (prepared in conjunction with the employer's agent) including an analysis of any abnormal items.
- Form factor analysis.
- Ventilation strategy where appropriate.
- An assessment of performance against our sustainability objectives as outlined in the brief, including a preliminary energy model for the dwellings and assumed U values.
- A checklist of any derogations from the Project Brief or any guidance with accompanying explanations.
- All third party reports required to obtain planning validation.

# Partnerships

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Hastoe understands the need to consult closely with the communities in which it builds. This will require a public consultation event prior to the submission of any planning application and should comprise all the documents approved at the Planning Stage review. The architect will be required to prepare the documentation and attend the consultation event.

Some schemes may require a two-stage engagement with an early consultation around site selection/concept design, responses to which can then feed into the detailed design. We will confirm when any two-stage consultation is required.

## Consultations

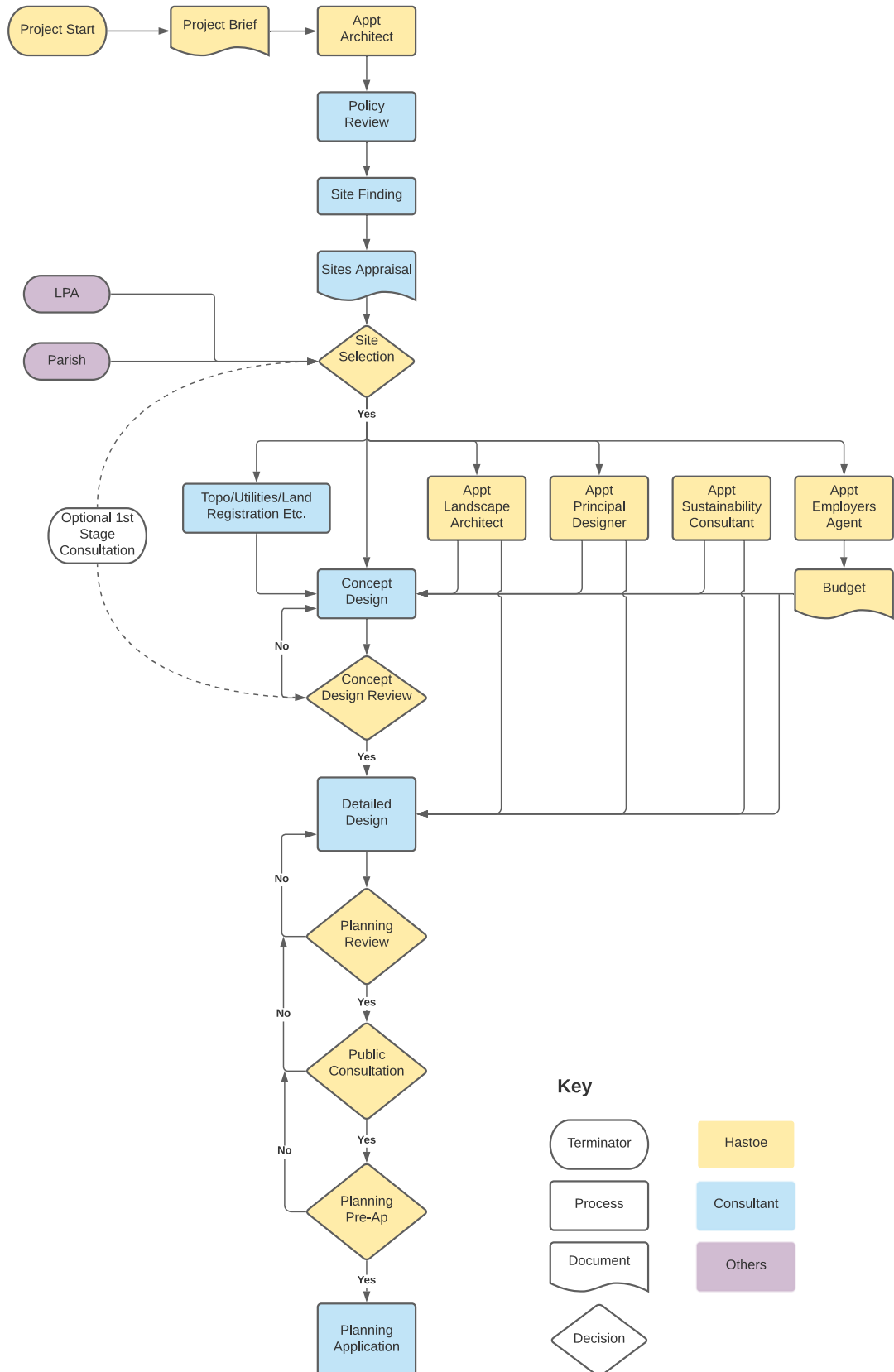
Public consultation events will be organised by Hastoe and will include a wide range of people:

- Local community groups
- Village residents
- Designers
- Parish councillors
- Local planning authority
- Hastoe staff

Consultation events will be held as drop-in sessions during an afternoon or early evening – and/or online – to allow as many people as possible to attend.

**Design-related consultation responses will be considered and any subsequent amendments agreed with Hastoe.**

## The Process and Partnerships end-to-end process





## 2. Layout and Setting

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For Hastoe, the objective of any new site layout is to assimilate the development into the landscape whilst respecting the context and sense of place of the host settlement as identified in an appropriate context study.

The following section outlines what's important in respect of the layout and setting of our schemes.

Landscape, context and sense of place are all important factors involved in good design. Combining them may involve compromise but due consideration of each should ensure that Hastoe continues to deliver high quality developments.

## Landscape

One of the reasons Hastoe wants to appoint landscape designers early in a scheme development is to ensure this important aspect is given due consideration from the start. The landscape design should first consider the setting of the scheme and the need for screening or buffer zones to help integrate the development effectively into the local context.

In addition, space should be incorporated where possible for planting schemes within the development itself, including Hastoe's requirement for fruit trees. Protecting or enhancing local landscape features such as important trees is also vital.

## The Hastoe Orchard and biodiversity interventions

Hastoe provides a free fruit tree to every new home it builds. Each one adds to our virtual orchard across the south of England. Every resident will have an eating apple, cooking apple, pear or plum tree included in their garden. The supplied varieties should readily cross-pollinate or be self-pollinating so the trees produce a good crop.

Features such as bird, bee and bat boxes along with hedgehog-friendly fences should also be incorporated where appropriate to increase bio-diversity.



## Topography

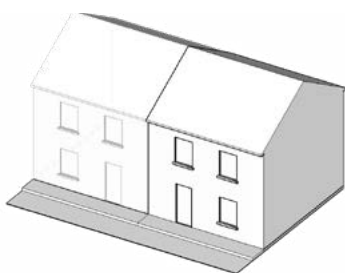
The topography of the site should be considered, particularly in respect of drainage and surface water flows. In addition, site levels will have an influence on access strategies and possibly even building forms. Other significant features such as adjacent buildings, trees, and utility infrastructure all need to be considered in laying out the scheme.

## Building form, scale and layout

The form and scale of the buildings themselves should be derived from the immediate context but will also be influenced by consideration of issues such as form factor and orientation for solar gain, as well as the need to provide interesting facades and active frontages. A sustainability consultant should be consulted early to provide input on energy efficiency. Variable building setbacks can also introduce interest.

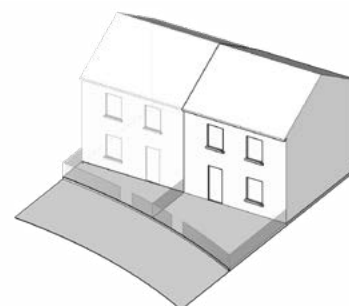
The priority given to these factors may be influenced by the required energy standard, although it's always important to be mindful of the need to construct energy efficient buildings wherever possible.

### House setback



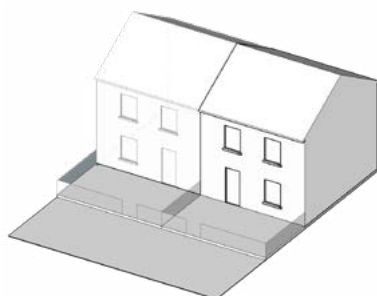
#### Along footpath

Where homes face onto footpaths rather than a street, a small setback of as little as one metre should be sufficient. This provides enough space for a flowerbed and a buffer between the public and private areas.



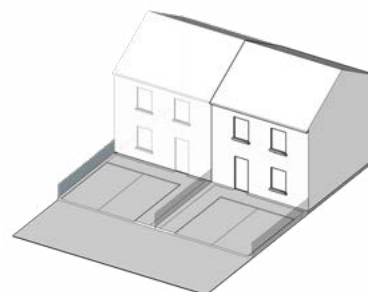
#### Variable setback

Where a street or footpath is curved, the setback can vary considerably between houses, between one to four metres. This can be more appropriate than rotating the houses.



#### Along street

Along a street, setbacks should be no less than two metres to provide a buffer between houses and noise and pollution from passing vehicles. A larger setback also permits a bin store at the front. More than two metres may be required for larger fruit trees.



#### With a driveway

When it is necessary to have a driveway at the front of a house, the setback must include five metres for parking, plus at least an additional one metre of space for a footpath and a small flowerbed.

## Views, overlooking and overshadowing

Site layouts should consider views into and out of the site, as well as avoiding undue overlooking of adjacent private spaces. Layouts should also try to avoid any restriction to amenity or solar gain from adjacent trees and structures where possible.

## Means of access and connectivity

Probably one of the main factors affecting layout will be a consideration of the safe means of access to the site, mainly vehicular but also pedestrian. Consideration should also be given to connectivity to the settlement itself.

## Roads and parking

Roads are expensive and should be used sparingly, limited in length wherever possible whilst complying with local highway requirements. Roads should also be as informal as possible, utilising shared surfaces, low-profile kerbs, small junction radii and crossovers, variable widths and informal layouts. They should be adopted where possible or be to an adoptable standard where not.

In-curtilage parking to the side, front or rear is preferable. While overlooked to comply with Secured by Design requirements, designs should seek to reduce the public visibility and impact of parked cars. On-street parking bays may be appropriate in some locations and can be useful for visitor parking.

## Open space/SuDS requirements

Layouts need to incorporate public open space in accordance with local planning policies, and where possible these should enhance the overall setting of the development. The need for sustainable surface water solutions may also have a space requirement that should be considered within the overall layout. Access will be required for landlord maintenance of any land that will not be conveyed or let.

## Active frontages

Developments should aim to provide active frontages to the buildings, with front doors and windows facing onto the street, providing visual interaction between the public and private realms. Properties should have sufficient private garden or amenity space and, where appropriate, a defensible front garden or space.

## Refuse

Consideration should be given to accommodating the local authority's refuse disposal arrangements, including provision for bin locations both private and on collection day.

## Planning constraints

These will have been identified at site finding stage, but sites in Conservation Areas, AONBs or other special protection areas may require additional consideration of all these matters.

## 3. Streets and Public Realm

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Delivering places for Hastoe residents and the local community to be proud of requires careful consideration of the public realm, which in turn should reflect the sense of place of the host settlement.

On small sites, good public realm requires a careful appreciation of the development impact - particularly of means of access - on the local environment. The buildings and landscape should take precedence over the layout of any access road.

New developments must connect appropriately to the existing village and its surroundings. This will enable residents to access local amenities and encourage integration with the local community. When selecting sites, consideration should be given to accessibility and connectivity, including the possible need for improvements to current routes.

## Street layout

Where to place any access road is a key decision for any site and it will need to consider highway safety, visibility and topography. However, the opportunities for placemaking should not be overlooked.

Car parking should not dominate the street scene. Parking should be placed to the side or rear of properties wherever possible. Where parking is located in front of dwellings, the spaces should be shielded or softened through the use of appropriate landscaping.



*Kirton, Suffolk*



*Framlingham, Suffolk*

## Focal point

Even with small sites, the aim should be to create a focal point for residents within the development. This could be a village green, a square, a play area, flowerbed or bench.



*Green in front of Hastoe homes at Buckland St Mary, Somerset*



*Children from the local school designed the 'constellation above Lavenham' sculpture at the centre of our scheme in the village.*

## Street design

The scale of Hastoe developments will often be small. They should require no more than one access lane and perhaps one back lane to serve the site. These should incorporate appropriate traffic calming where possible in order to keep vehicle speeds low.

Variable street widths are particularly appropriate in rural locations and on the edge of villages. They can be used to respond to context and help generate character. This will also allow for informal parking at wider locations (up to 6.5m) and naturally calm traffic at pinch points (approximately 3.7m) over a short distance. The exact dimensions should be agreed with the local highway authority.

## Shared surfaces

In new developments, consideration should be given as to whether footpaths are always necessary. This is likely to depend on the local context.

For small, lightly trafficked sites, footpaths are probably not required and should not be used. If a footpath is provided, it's important to consider whether an upstand kerb is really needed. Can the footpath and carriageway be a level surface? Many rural places may not require footpaths but careful consideration must still be given to utilities, lighting, landscaping and trees.



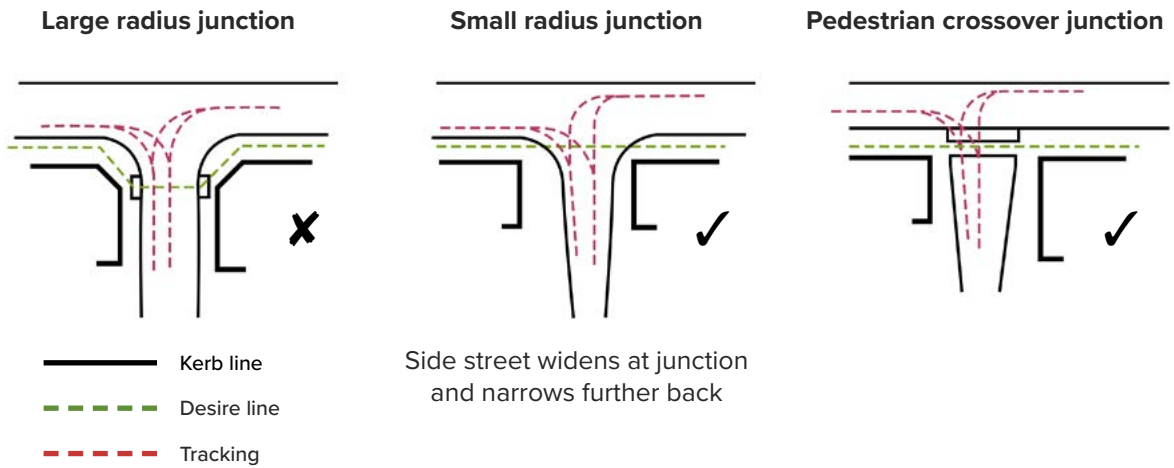
*A narrow footpath is provided for pedestrians at Burnham Overy Staithe in Norfolk.*



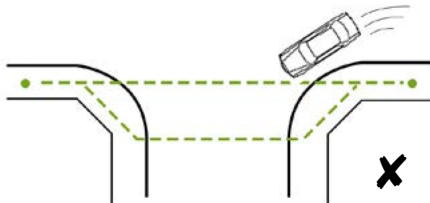
*Pedestrians and cars at Lavenham scheme in Suffolk share the same space.*

## Traffic calming

Junction radii onto the street or road from which the development is accessed should be kept tight (1-2m) to reduce vehicle speed and promote pedestrian desire lines

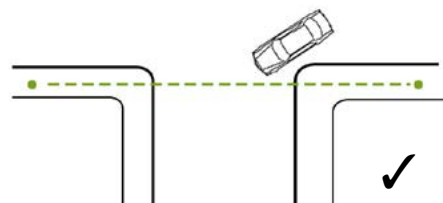


**Large radius (eg. 7 metres)**



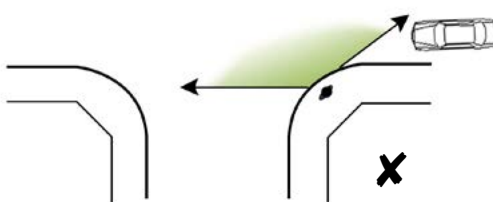
- Pedestrian desire line deflected
- Detour required to minimise crossing distance
- Vehicles turn faster (20-30mph)

**Small radius (eg. 1 metre)**



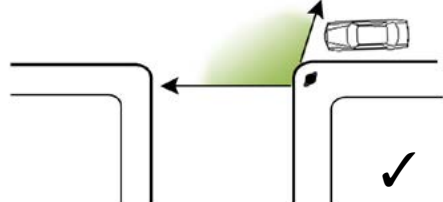
- Pedestrian desire line (---) is maintained
- Vehicles turn slowly (10-15mph)

**Large radius (eg. 7 metres)**



- Pedestrian must look further behind to check for fast turning vehicles
- Pedestrian cannot normally establish priority against fast turning vehicle

**Small radius (eg. 1 metre)**

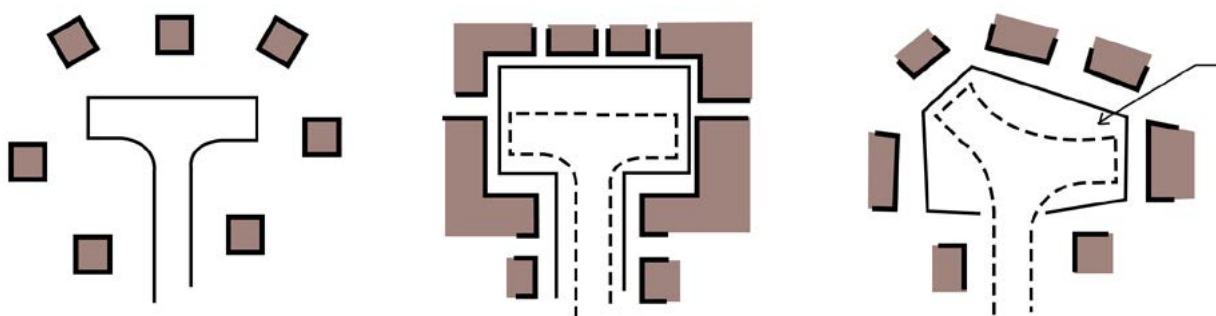


- Pedestrian does not have to look further behind to check for turning vehicles
- Pedestrian can easily establish priority because vehicles turn slowly



Manual for Streets criteria for visibility splays should be applied if the development is on to a road that is within an existing settlement and the existing recorded vehicle speeds are appropriate to the guidance.

Where turning heads are required, these can be softened or accommodated within informal spaces which reduces the vehicle dominated approach.



Vehicle speeds must be kept low (below 20mph) for all projects. Traffic calming should happen by placemaking. It must not be an afterthought. Vehicle speeds should be calmed by the positioning of buildings, landscape or through the use of pinch-points.

## Car parking

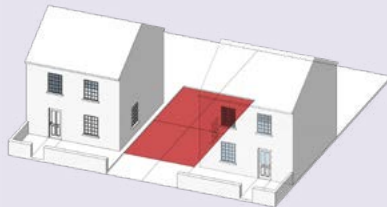
Residents should be able to park near their homes in overlooked parking spaces.

Adequate car parking for the correct number of spaces per dwelling (and for visitors if required) should be agreed with the local highways and local planning authorities. Informal, additional parking spaces (for example where a road widens along variable width lanes) can help prevent inconsiderate parking along verges or footways.

Parking should not dominate the street scene and no more than four car parking spaces in a row should be permitted. Car parking is normally best placed to the sides of dwellings, particularly on smaller sites. If electric charging points are provided, they should be in the curtilage of the house.

The scheme design should prevent car parking from dominating the setting.

### Parking patterns



#### Narrow curtilage (preferred)

Space efficient configuration suitable for detached, semi-detached or end-of-terrace homes. Can be used side-by-side with an identical configuration to form a two space wide driveway serving two homes.



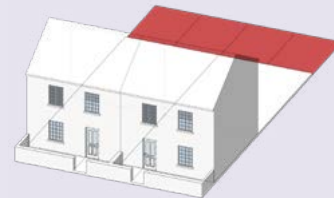
#### Wide curtilage

Suitable for detached, semi-detached or end-of-terrace homes. This configuration should never be used side-by-side with other curtilage configurations to avoid an unsightly 3-4 wide driveway forming.



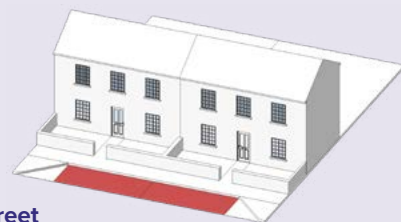
#### Front parking

This option should be used sparingly and must only be used when another option is not possible. The driveway should be configured in such a way to leave room for footpaths, a bin store, or planting.



#### Rear parking

This layout should be in the form of a rear lane or courtyard parking. This parking must be overlooked by a habitable room and should be clearly in relation to the dwelling.



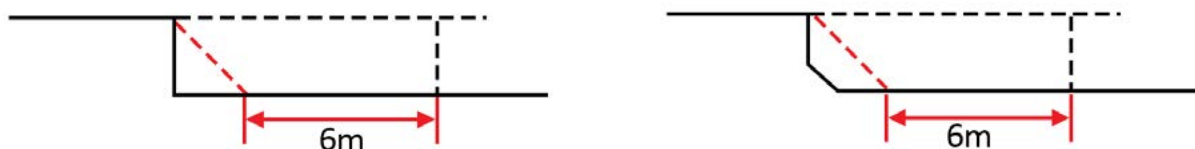
#### On-street

Can be used for homes where one parking space is required or wide home types where a second parking space can be provided elsewhere. Should be used when a footpath is present between the homes and parking space.

Parking bay sizes should generally be as follows:

- Perpendicular bays 2.5m x 5.0m
- Parallel bays 2.0m x 6.0m

For parallel parking bays, the end of a run must be squared off as illustrated below and not finished with a 45-degree cut.



Designers must check local authority guidance for any variation in bay sizes and for any requirement for disabled parking. They should also make provision to comply with paragraph 12.2 of Part M(4)2 of the Building Regulations.

## Visitor parking

Layouts should also be assessed for locations for visitor parking. These are places along the streets and lanes which may not have designated parking bays but do have wider street dimensions where people can sensibly park cars.

## Cycle parking

All developments should allow for adequate, convenient and secure cycle parking and storage. Local authorities should be consulted about their standards for the number of cycle spaces required per dwelling. At a minimum, storage for one cycle per dwelling must be provided.

Cycle parking should be easily accessible, ideally in the rear garden, without the need to carry the bike through the house.

## Street materials

Some variety of materials within the streetscape is appropriate, in particular to distinguish between the carriageway and the footway. Overdesign is discouraged, however blacktop may be the most sensible choice on the highway but the overuse of setts at junctions can be detrimental to creating a quality place.

The context and the use of local and permeable surfaces should be considered along with the use of quality kerbing, for example conservation kerb or (local) natural stone.

Avoid an overuse of bollards.



*Little Kimble, Buckinghamshire*



*South Tawton, Devon*



*Brancaster, Norfolk*



*Crawley, West Sussex*

## Landscaping

Every scheme must aim to be as green as possible, so the inclusion of street trees, verges, private planted strips at the front of homes, SuDS and water features are recommended.



*Sharnbrook, Bedfordshire*



*Tingewick, Buckinghamshire*



*Turners Hill, West Sussex*



*Kirdford, West Sussex*

## Refuse collection

Refuse storage, whether in wheelie bins, larger communal bins or bagged, should be concealed as much as possible to help maintain a quality streetscape. Storage and collection procedures, along with required access for refuse vehicles, should be agreed with the local authority and their waste management team. Recycling must be encouraged.

## Lighting

Where lighting is required, it should be discreet and low level. However, lighting may not be required or be desirable in some rural and village locations. Early consultation with the relevant authorities will assist in assimilating appropriate lighting schemes.

## Maintenance and adoption

Where roads are proposed, these should be adopted (or created to an adoptable standard where adoption is not possible). In rural areas, the opportunity to soften the highway design with a view to providing shared, but safe, spaces will often contribute to the success of the scheme. This can be the right approach.

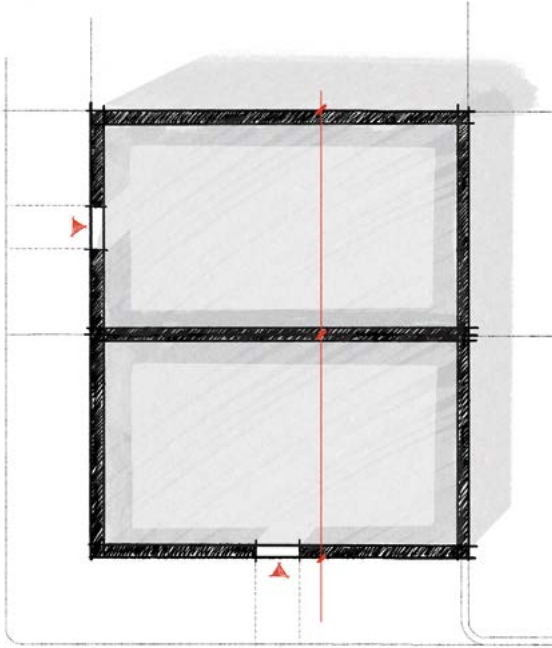
For all schemes, the preference is that new streets and lanes should be adopted by the local highway authority through a Section 38 agreement.

## 4. Example House Types

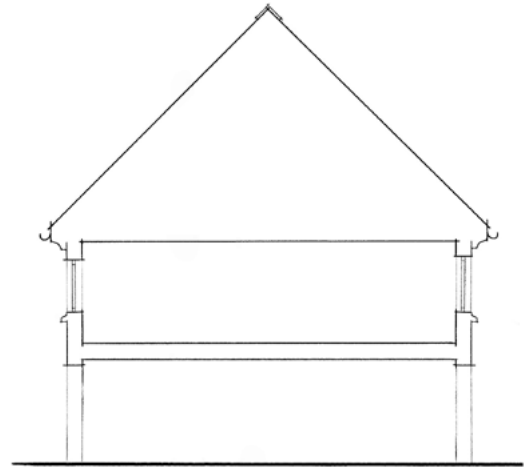
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This section provides examples of a range of house types to demonstrate how Hastoe's criteria for developing homes to our New-Build Standard can be incorporated in the designs. These criteria include meeting the Nationally Described Space Standard and Building Regulations Part M (Cat 2) to ensure that good design is being created in an affordable context.

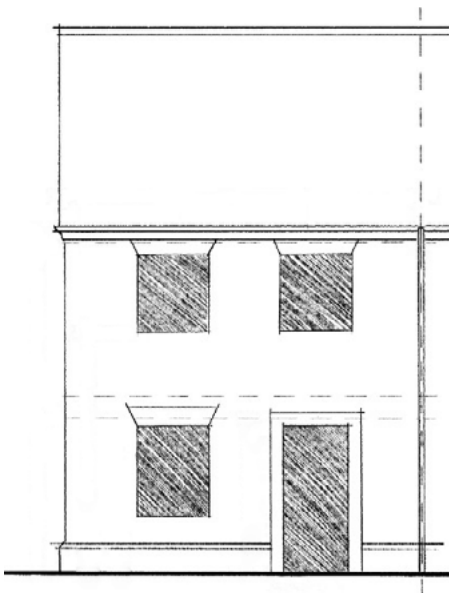
## Narrow or square house types



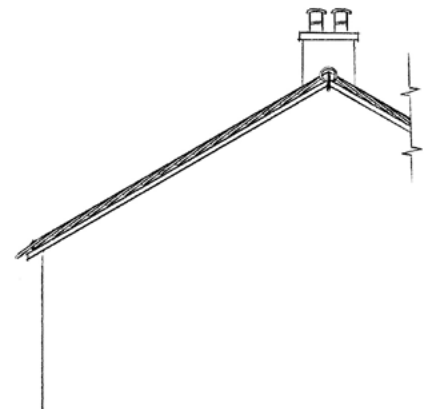
**Plot plan:** This house type is useful in deeper plots. The plan shows a wide typology to form the end of a terrace.



**Section:** showing typical roof pitch of 45 deg. All dimensions remain standard.



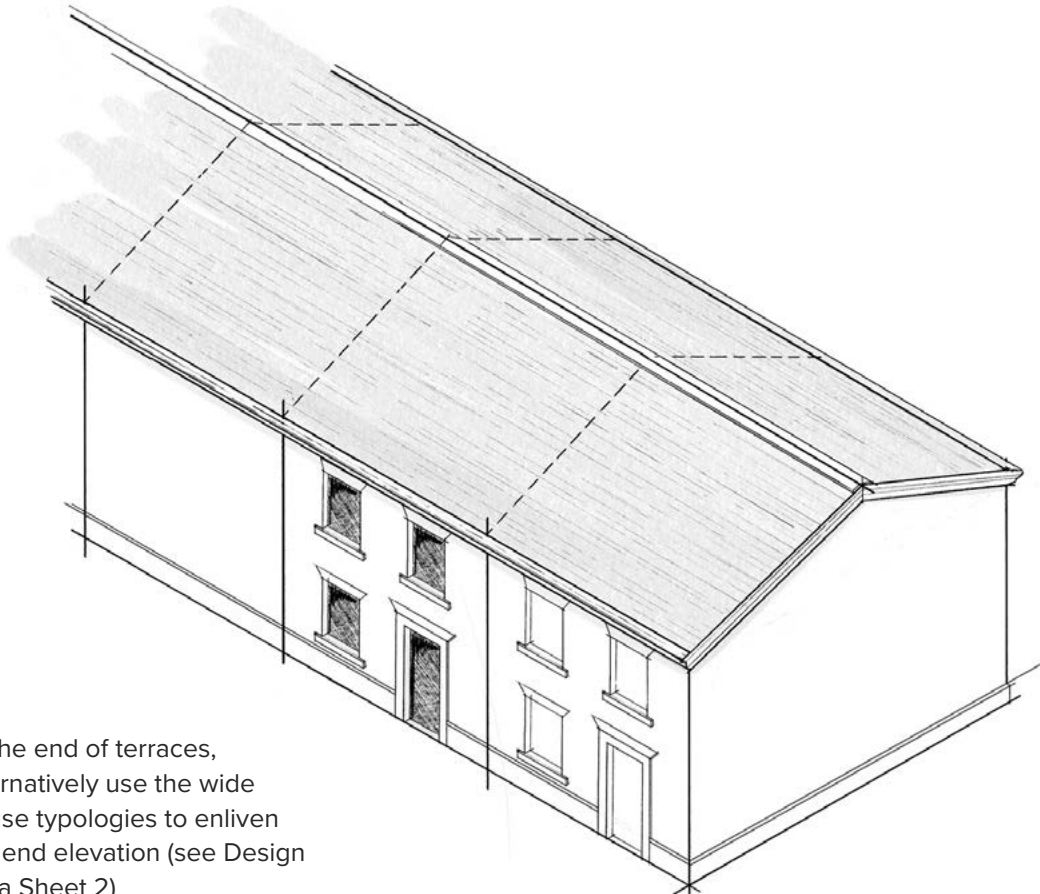
**Base Elevation:** showing horizontal and vertical setting out to brick dimensions. Centre lines of apertures should stack from floor to floor.



**Gable end:** Mortar bedded Verge. Place MJ and RWP on front elevation 450mm from corner.



## 2 bed 4 person & 3 bed 5 person typologies



At the end of terraces, alternatively use the wide house typologies to enliven the end elevation (see Design Data Sheet 2)

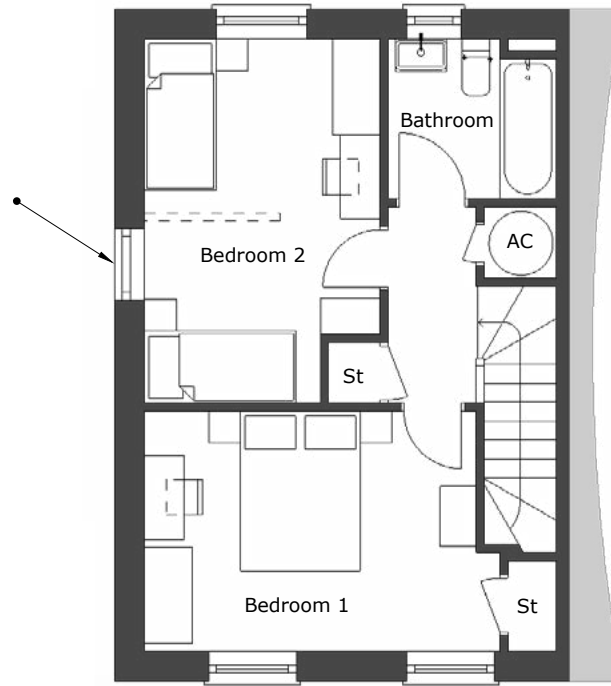
House type	2-bed 4 person (narrow)	3-bed 5 person (narrow)	2-bed 4 person (square)
Depth	8400mm	9600mm	7350mm
Width	5700mm	9600mm	6550mm
Eaves height	5250mm	5250mm	5250mm

Note: Dimensions are for initial site design and will vary in detail design depending on the external wall build up chosen.

## 2 bed 4 person – Narrow

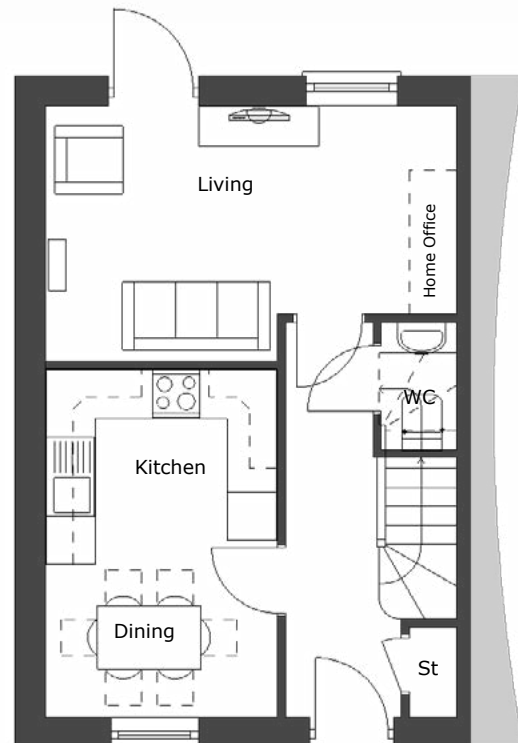
79 M2 (2B4P Space Standard)

2 bed units to have 2 windows in twin bedroom to allow future subdivision of room



First Floor Plan

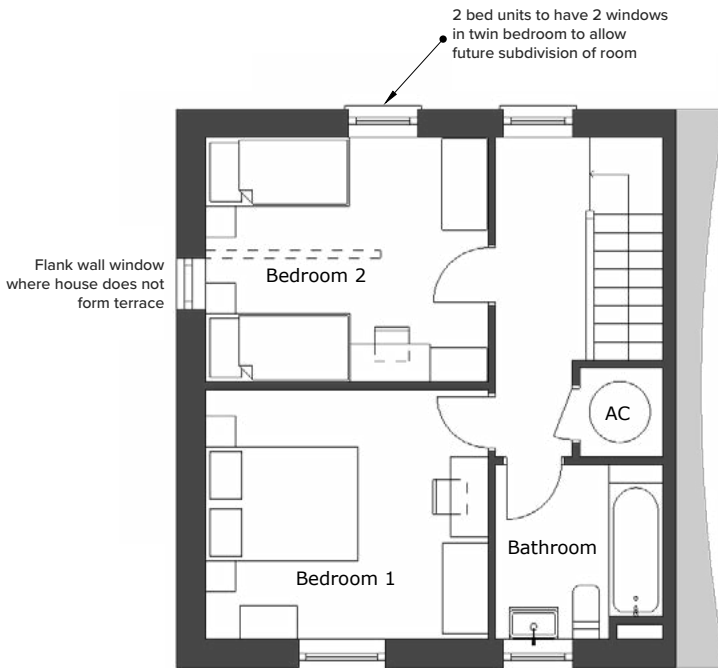
Ground Floor Plan



Complies with NDSS and Building Regulations M4(2) adaptable standard

## 2 bed 4 person – Square

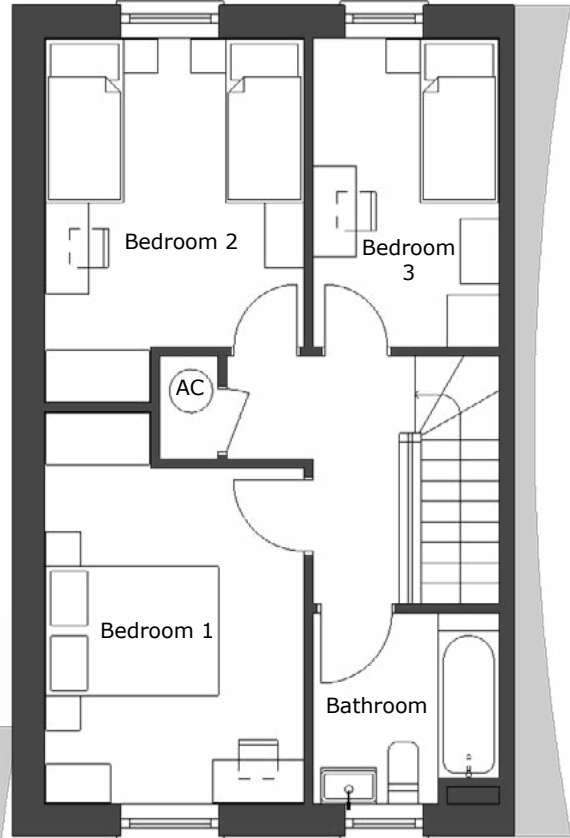
79 M2 (2B4P Space Standard)



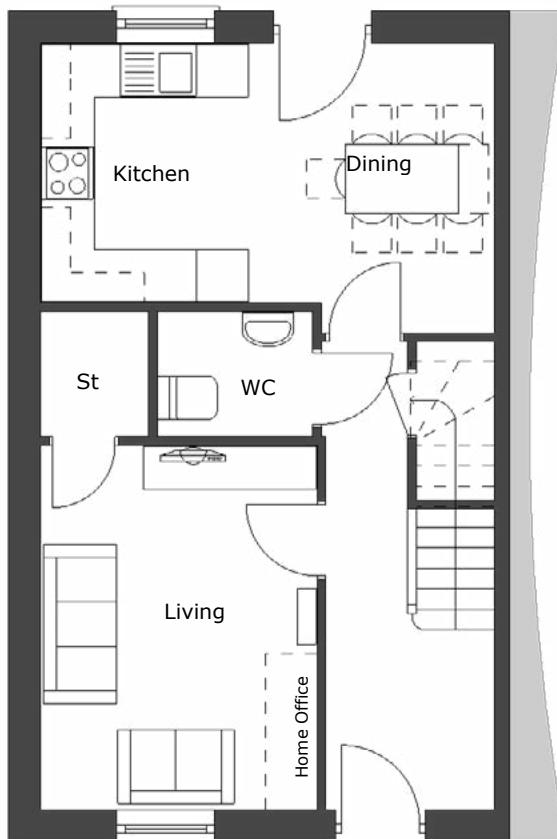
Complies with NDSS and Building Regulations M4(2) adaptable standard

**3 bed 5 person – Narrow**  
**93 M2 (3B5P Space Standard)**

**First Floor Plan**

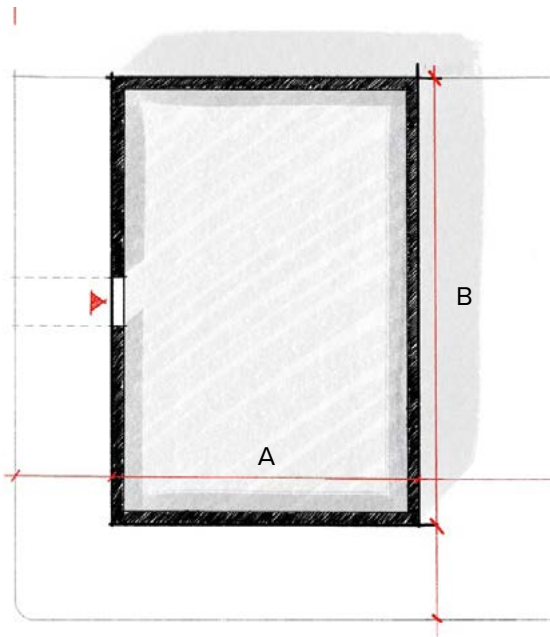


**Ground Floor Plan**

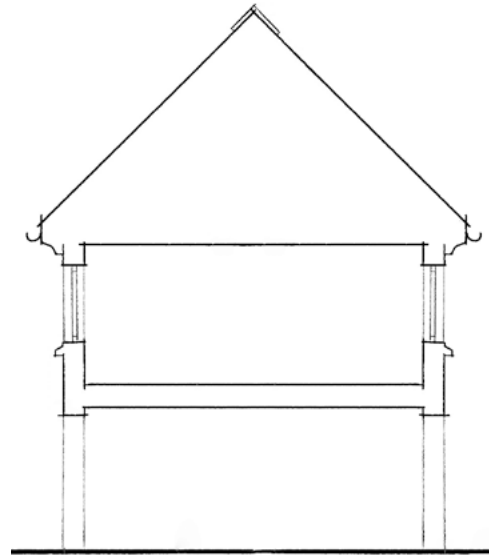


Complies with NDSS and Building Regulations M4(2) adaptable standard

## Wide house types



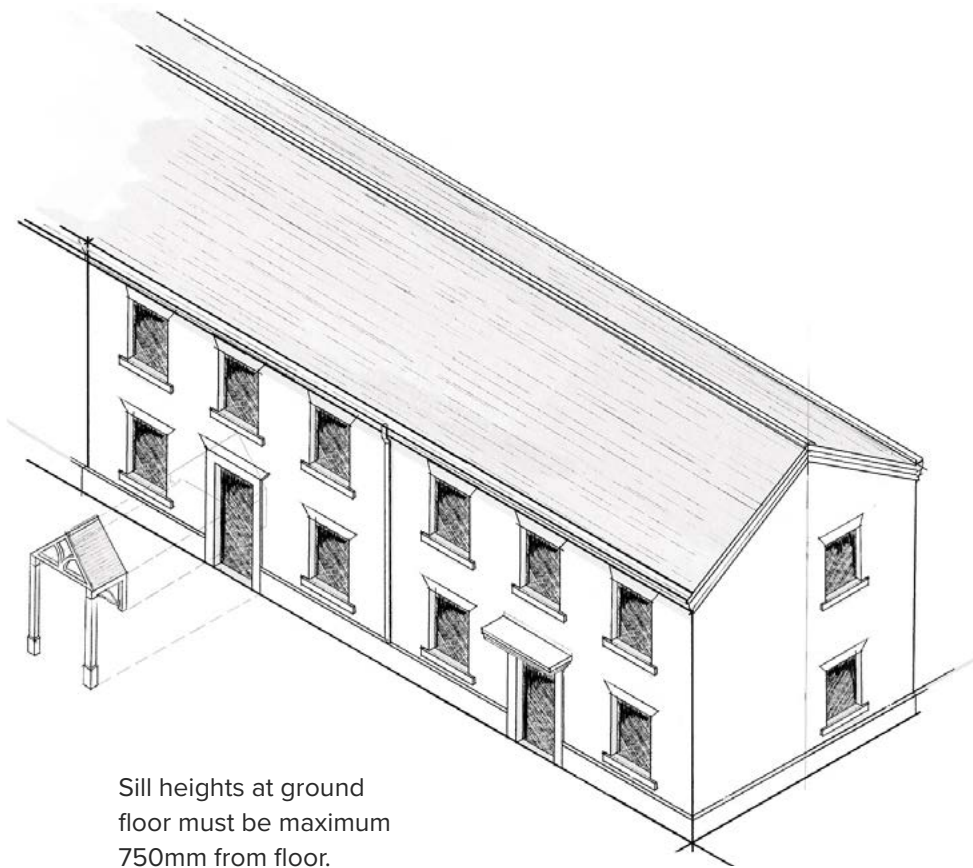
**Plot plan:** use this house type to create a strong symmetrical composition at the end of a terrace or in shallow depth plots.



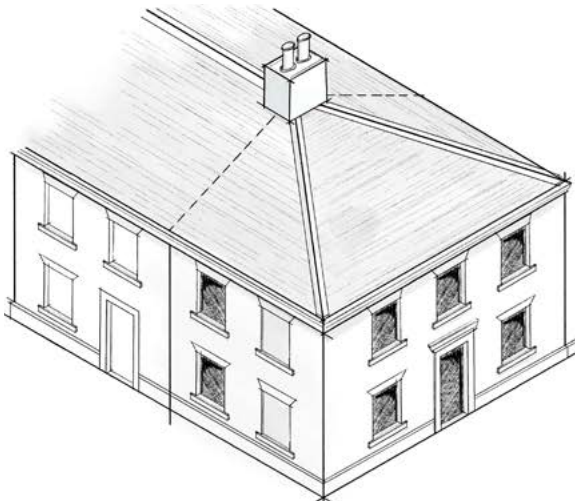
**Section:** showing typical roof pitch of 45 deg. All dimensions remain standard.

House type	2-bed 4 person	3-bed 5 person
Depth	5550mm	5800mm
Width	8900mm	9600mm
Eaves height	5250mm	5350mm

## 2 bed 4 person & 3 bed 5 person typologies



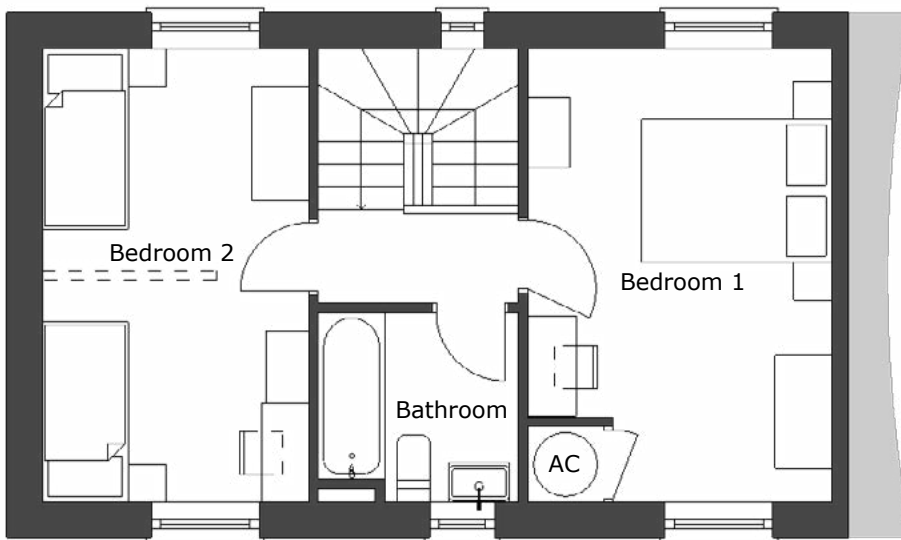
Sill heights at ground floor must be maximum 750mm from floor.



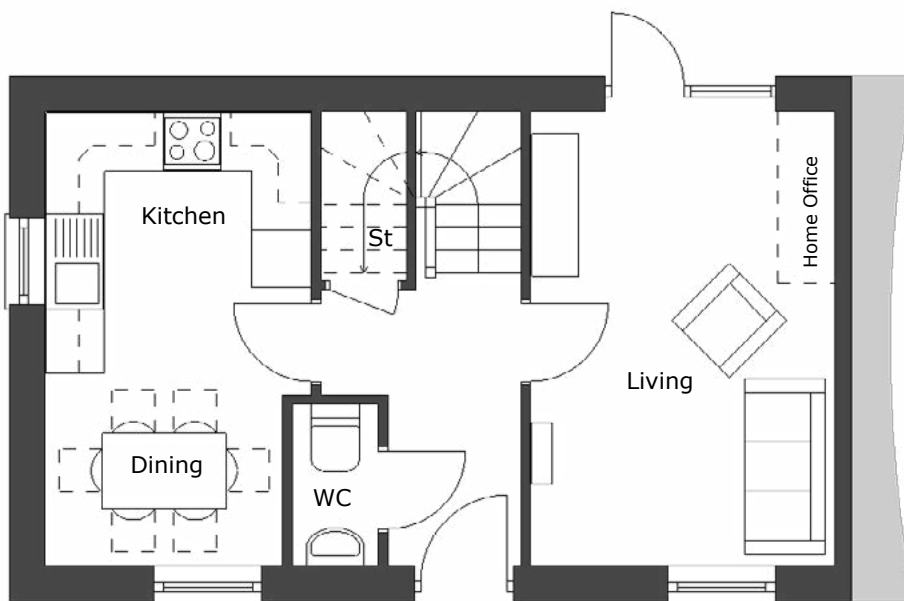
Rotated through 90deg. this typology can also be used to form the end of a terrace of narrow fronted houses, enlivening the end and adding interest.

## 2 bed 4 person – Wide 79 M2 (2B4P Space Standard)

2 bed units to have 2 windows  
in twin bedroom to allow  
future subdivision of room



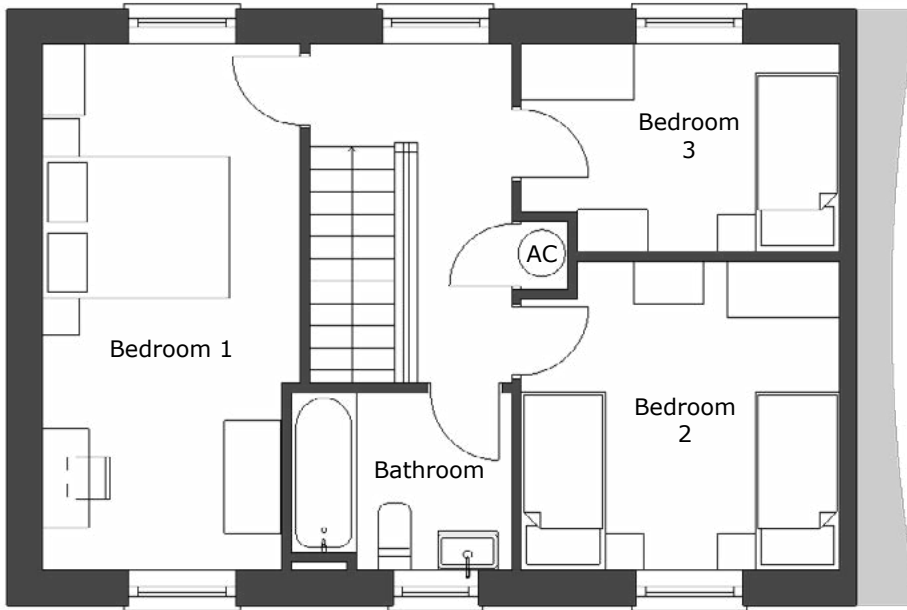
**First Floor Plan**



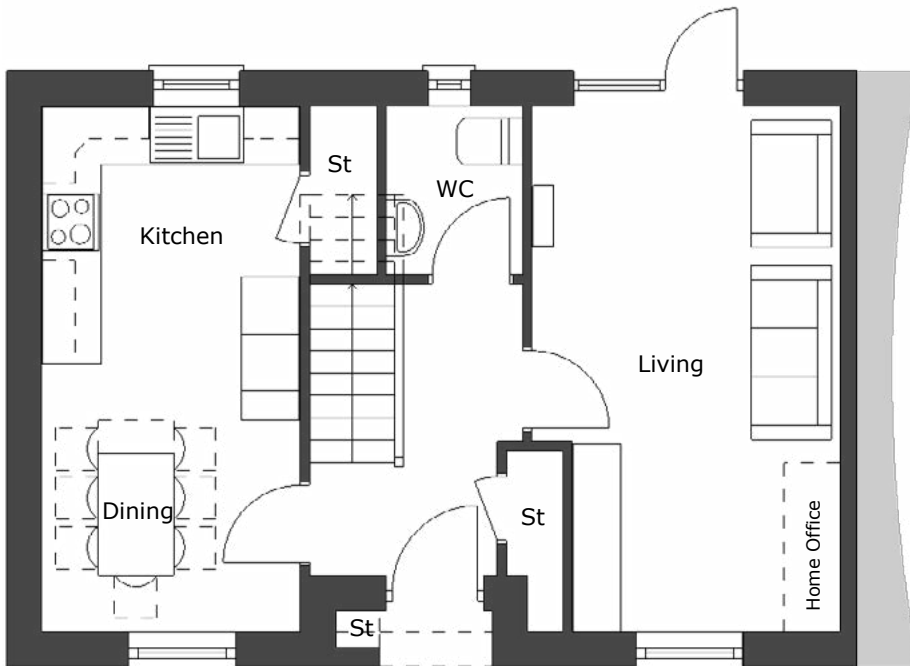
**Ground Floor Plan**

Complies with NDSS and Building Regulations M4(2) adaptable standard

**3 bed 5 person – Wide**  
**93 M2 (3B5P Space Standard)**



**First Floor Plan**

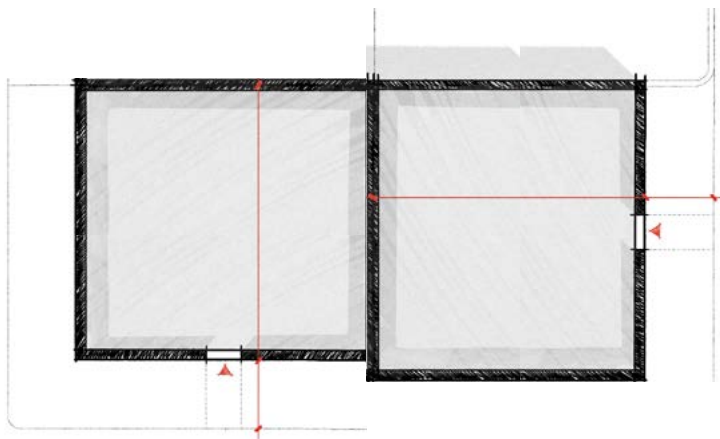


**Ground Floor Plan**

Complies with NDSS and Building Regulations M4(2) adaptable standard

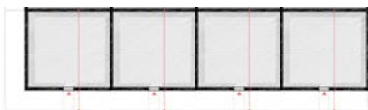


## Bungalow type



**Note:** Due to the large flat form of a bungalow the form factor of this property is above 3. The form is a necessity of this M4(3) compliant unit and is therefore deemed acceptable in these circumstances.

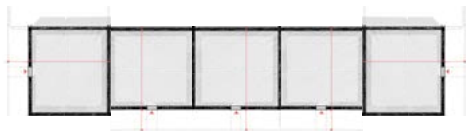
**Plot plan:** these homes can be combined as straight terraces, semi detached combinations and with the end bungalow rotated with a side entrance.



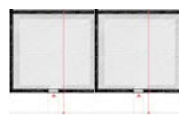
Straight terrace



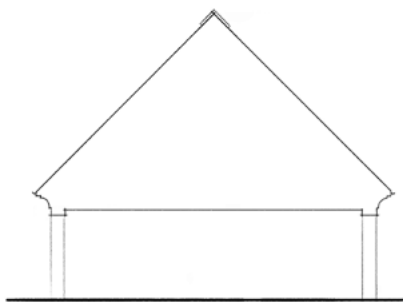
Side entrance semi-detached pair



Rotated end terrace to create enclosing symmetrical composition. Can be used like a row of almshouses.



Front entrance semi-detached pair

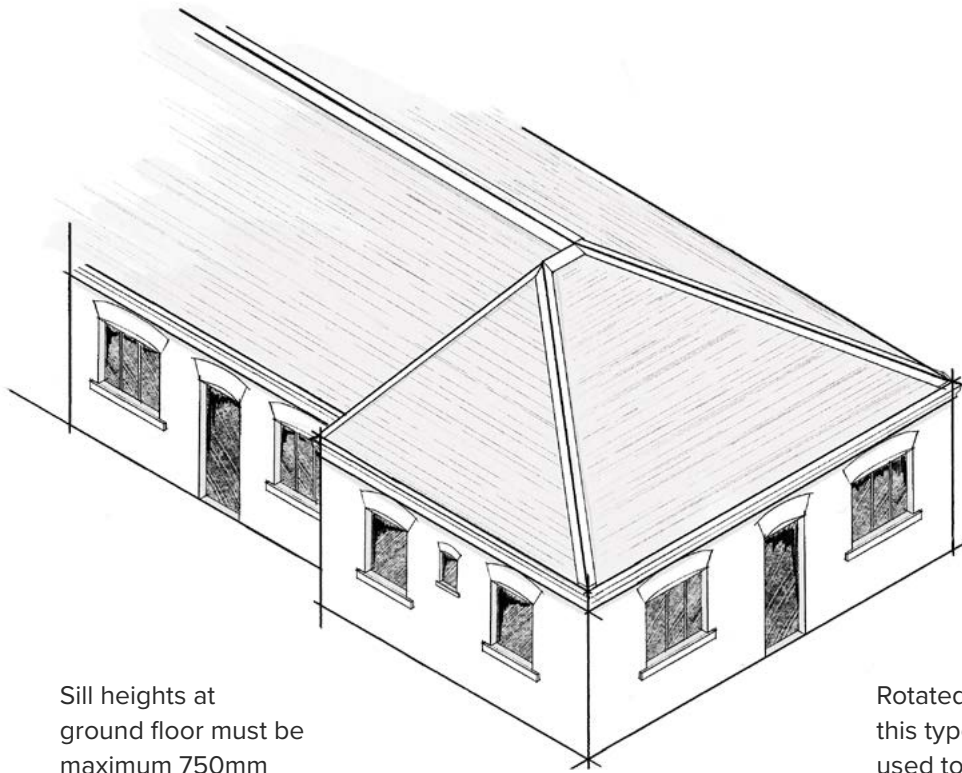


**Sections:** This typology is of necessity low and deep, although the roof should be set at the appropriate pitch for solar panels (where used). This creates a large unused volume and low pitches would therefore be recommended.



**Base Elevation:** showing horizontal and vertical setting out to brick dimensions. Centre lines of apertures should be retained even when aperture widths are varied.

## 2 bed 4 person typology



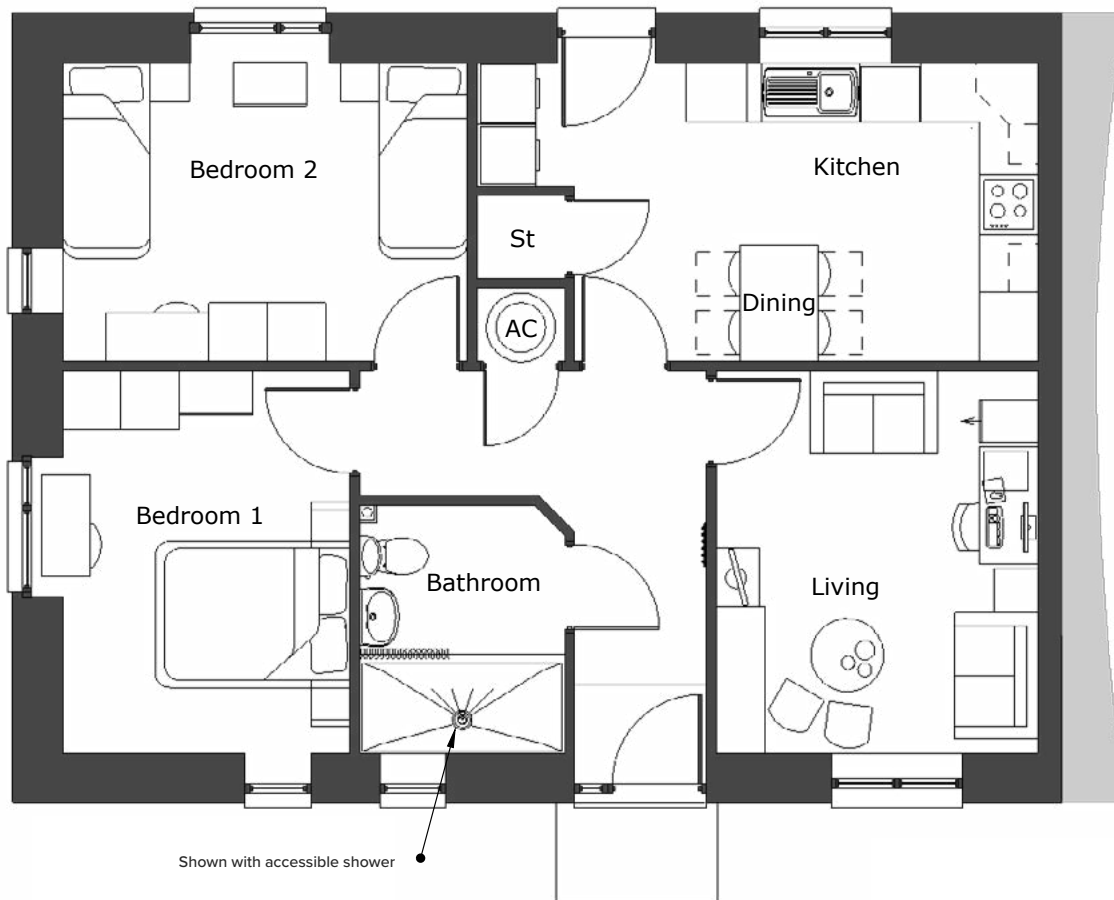
Sill heights at ground floor must be maximum 750mm from floor.

Rotated through 90deg. this typology can also be used to form the end of a terrace, enlivening the end and adding interest.

House type	2-bed 4 person
Depth	9750mm
Width	9500mm
Eaves height	2850mm

Note: Dimensions are for initial site design and will vary in detail design depending on the external wall build up chosen.

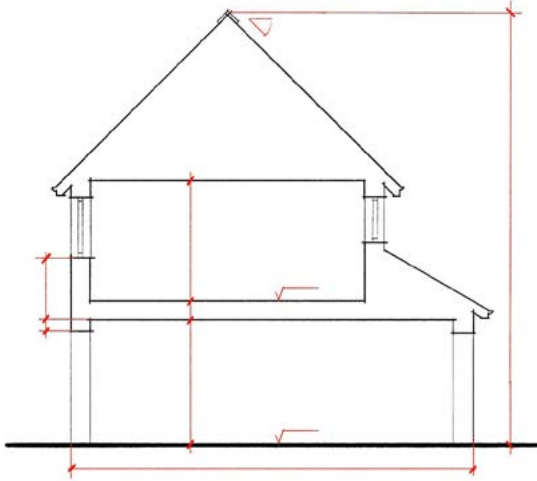
**2 bed 4 person bungalow**  
**70 M2 (2B4P Space Standard)**



Complies with NDSS and Building Regulations M4(2) adaptable standard

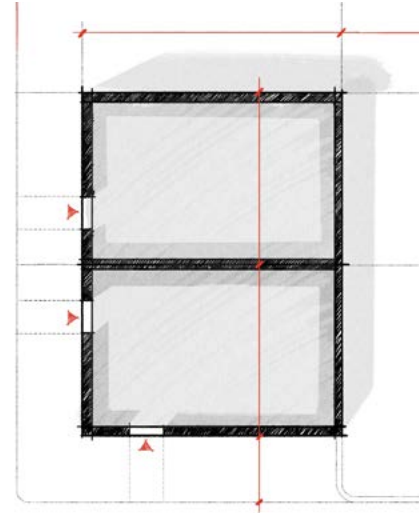
# 1 bed house type

## 1 bed 2 person typology



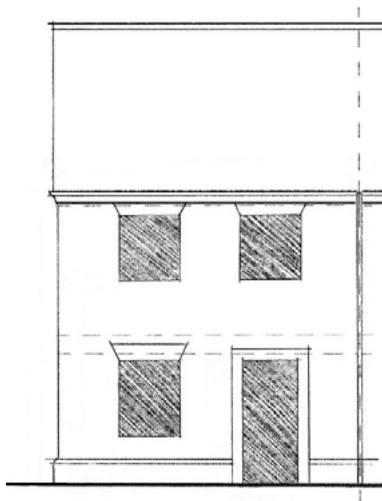
**Sections:** showing 45deg. pitch

**Plot plan:** This house can be used as a terrace or be combined with many of the other typologies. A side entrance door can be used as an alternative to enliven the end elevation.

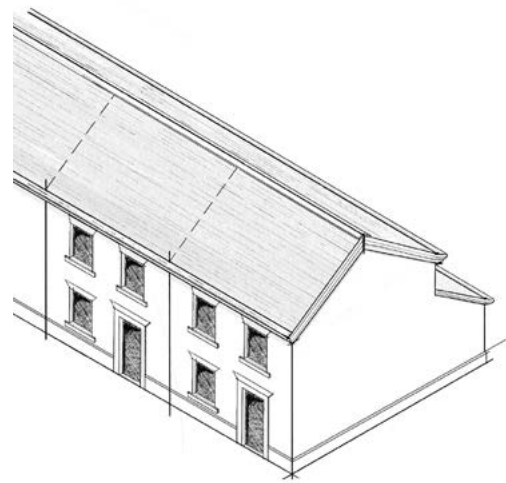


House type	2-bed 4 person
Depth	7850mm
Width	5200mm
Eaves height	2850mm

Note: Dimensions are for initial site design and will vary in detail design depending on the external wall build up chosen.

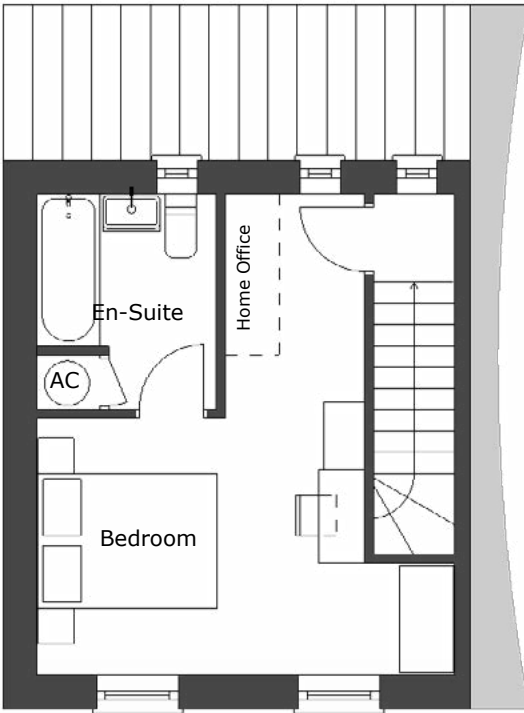


**Base Elevation:** showing horizontal and vertical setting out to brick dimensions. Centre lines of apertures should stack from floor to floor. MJs and RWP's should always appear on the front and rear elevations.



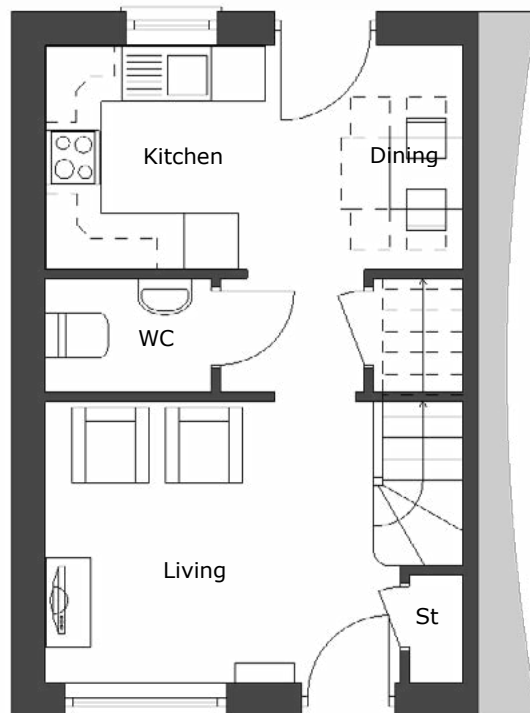
Facades can be paired symmetrically or asymmetrically as shown for the Narrow 2 bedroom typologies to provide different compositions in the street scene.

**1 bed 2 person – Narrow**  
**58 M2 (1B2P Space Standard)**



**First Floor Plan**

**Ground Floor Plan**



Complies with NDSS and Building Regulations M4(2) adaptable standard

## Form Factor

Form Factor is the ratio of heat loss area divided by the treated floor area and is an indication of the efficiency of the building envelope. The lower the form factor, the more efficient the building. It should be measured over the building block, i.e. the whole terrace or mass of building and not the individual dwellings. Building groups should aim to achieve a form factor of less than 3.0 where possible. This is challenging for small houses, and particularly for typologies such as bungalows. We will require preliminary form factor to be presented with any designs so that any adverse implications can be duly considered.

The calculation is relatively simple although the following definitions should be used:

**Heat Loss Area** is the total surface area of the thermal envelope, measured externally.

**Treated Floor Area** is the Gross Internal Floor Area (GIFA) of the building modified as follows:

- Stairs, internal walls and areas below 1.00m in height are omitted
- Areas between 1.00m and 2.00m in height are included at 50%
- Floor area of external frame reveals >130mm are added



In this example layout of a 2B4P:

- GIFA = 79 M<sup>2</sup>
- TFA = 72.21 M<sup>2</sup>
- HLA = 248.8 M<sup>2</sup> (measured externally over all the insulation)
- Form Factor (as an individual dwelling) = 3.44
- Form Factor (as a pair of semi-detached) = 2.88

NB - This is a basic interpretation intended for preliminary design purposes. Always consult the energy modeller or sustainability consultant for detailed calculations of treated floor areas.

## 5. Design Elements

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The majority of Hastoe's schemes are built in rural locations on the edges of small settlements. Such places need great sensitivity to ensure development enhances rather than detracts from the quality of the place. We wish to ensure that our designs appear to have grown out of, rather than having been applied to, these rural locations.

Most buildings in these locations are vernacular. They use materials that were available locally and include details that reflect local tradition and climate. The use of simple forms, economic details and natural materials, together with careful, sustainable design, can create architecture that fits perfectly into its environment.

As always, Hastoe has a responsibility to deliver its projects within budget, and this may impact on some of these aspects. However, good design need not cost more and architects are asked to use their skills and expertise to provide appropriate solutions that deliver places to be proud of.

Architects should develop their proposed design following a detailed assessment of local vernacular and context, ensuring their proposal addresses the constraints and opportunities represented by each project. The ability to assimilate the development into the host community must remain a hallmark of the Hastoe Way.

## Walls

Hastoe generally prefers brick finishes where appropriate because of their robust nature and the ease of maintenance. The choice and colour of brick should have regard to local context. Where other materials are proposed for added interest or local distinctiveness, they should be used sparingly and only with the specific approval of the Hastoe development officer.



*Colne, Cambridgeshire*



*Crawley, West Sussex*

## Roofing

Roof coverings will generally be required to reflect local context whilst being appropriate for the position, location and level of exposure. Interlocking tiles that reflect local character are likely to be the most effective solution. Where other materials are proposed for added interest or local distinctiveness, they should be used sparingly and only with the specific approval of the Hastoe development officer.



*Cerne, Dorset*



*Lavenham, Suffolk*



## Porches

Canopy porches are to be provided to the front entrance of all Hastoe homes.

Porch design should take account of the prevailing weather conditions. The design should ensure that water does not discharge over the access paths and in very severe exposures the front porch should be fully enclosed.



## Special features

Elements of local vernacular architecture can help to create more attractive homes. Designers should understand elements of local architectural tradition and consider reflecting their use where appropriate. Some examples would include:

### Brick patterns and projections

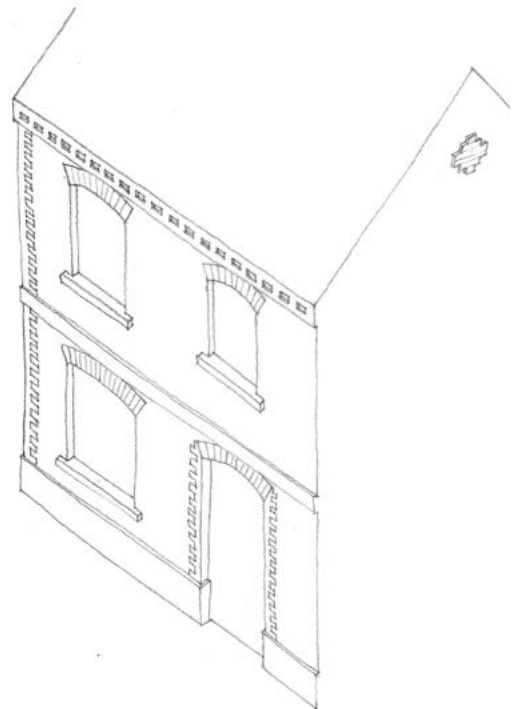
Brick patterns and string courses can be used to alleviate otherwise flat facades. They should be used sparingly unless there are particular local traditions that should be reflected. String courses should occur at first floor level on a 2 storey house. The position can be raised by 2-3 courses or even to the first floor windowsill level to distort the proportion of the facade and make the ground floor look higher.

Contrasting colouring to quoins and window surrounds can provide interest on flat facades. Again this should be done sparingly perhaps to pick out a building that forms a focal point or strengthen a corner plot.

Plinths can also be incorporated. They should be approximately 1/10 of the overall facade height and never as low as 300mm. They can be formed using a special shaped brick although this can cause complications with structural alignment of the outer leaf.

### Feature arches

Where appropriate, feature lintels can be formed using headers rather than stretchers. This creates particularly attractive patterns and blends well with many rural styles. It also reduces the risk of unsightly wide mortar joints that can be created when laying stretcher bricks in a fan pattern.



## 6. Sustainability and Stewardship

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Hastoe homes should be built to the highest standards of sustainability within the budget. They should also help to combat issues such as fuel poverty so the starting point is always to reduce operational energy as far as possible, allowing residents to benefit from low running costs as well as living in a comfortable home. This means focusing on a fabric first approach.

# Sustainability

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With the ambition in the UK to bring all greenhouse gas emissions to net zero by 2050, Hastoe is committed to playing its part in meeting this challenge.

We will continue to test and evolve the standards we set ourselves to help us achieve these targets as more learnings, guidance and evidence are provided to the sector in relation to what net zero effectively means.

In the meantime, any project brief for a Hastoe homes development will provide an indication of the sustainability targets we aim to achieve. These will include:

- Efficient form factors
- Fabric energy efficiency
- The elimination of thermal bridges
- Low air leakage coupled with effective ventilation
- Consideration of passive solar gains
- Effective energy modelling as a design tool and to predict actual energy usage

## Fabric first

In the first instance our approach is to adopt a 'fabric first' approach, to reduce operational energy requirements whilst still delivering warm and comfortable homes. This enables Hastoe to reduce operational carbon emissions whilst also addressing issues of fuel poverty. And it helps to avoid the need to subsequently modify dwellings to required future standards.

The second priority is to consider and reduce embodied carbon where it is feasible to do so. Where possible Hastoe also wishes to consider the full lifecycle costs of its developments. As we begin to solve the problem of reducing operational carbon emissions, these latter two elements will become increasingly important to Hastoe's sustainability objectives and we will want to work with contractors and consultants who can assist in these aims.

# Stewardship

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Sustainability for Hastoe is not only about energy use within buildings. It's also about helping our residents to sustain low-carbon lifestyles, helping to promote a sustainable future for a village and helping generations of residents to live comfortably and economically in the local community. Hastoe homes should be constructed with minimum maintenance in mind. And they should provide places that residents and future generations will value and enjoy.

## Low-carbon lifestyles

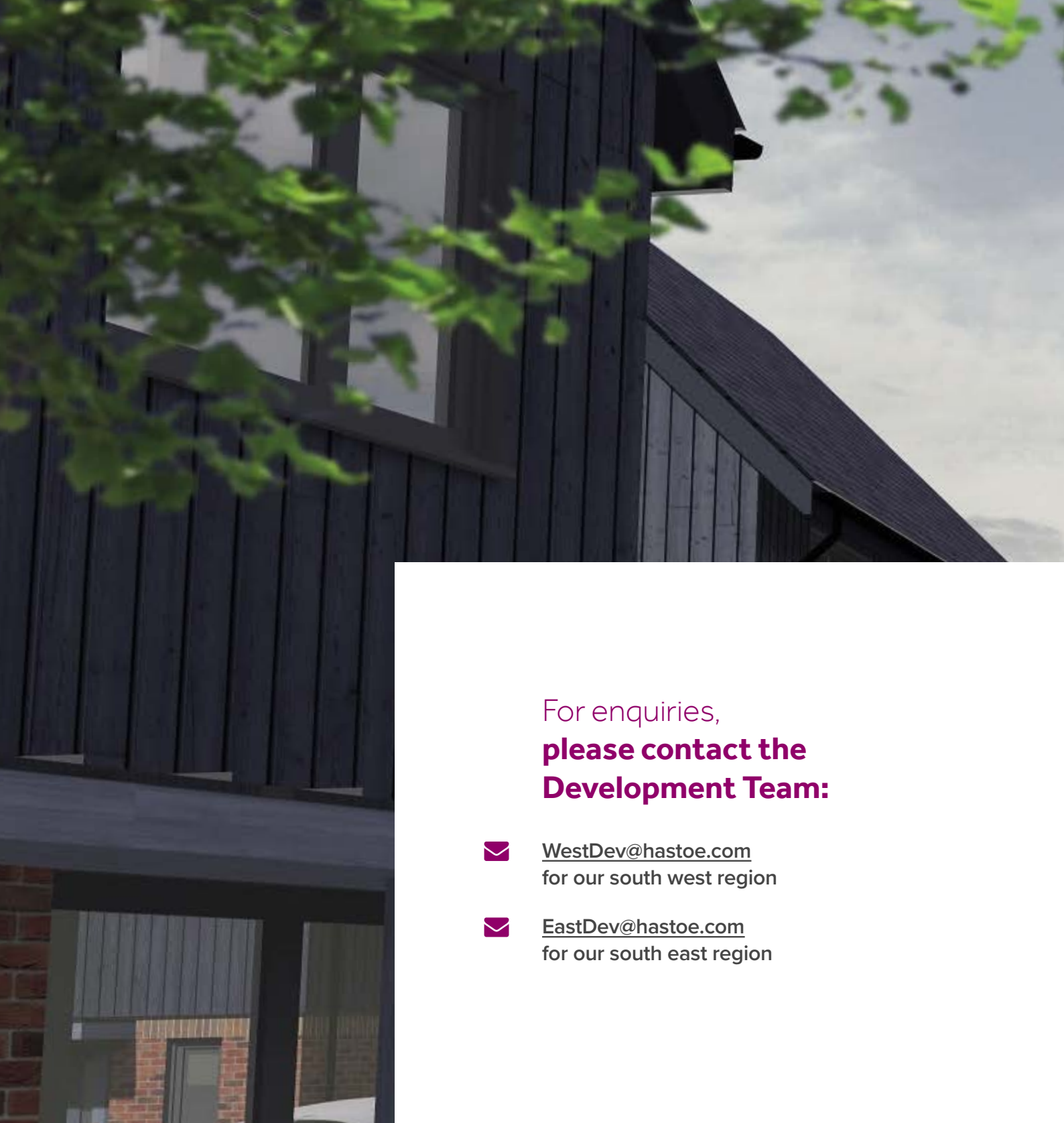
A sustainable development should be designed to encourage residents to leave their cars at home as much as possible and walk, cycle or take public transport. This includes:

- Where possible, having a safe walking route to the village centre, local shops and public transport.
- Where possible, promoting the use of public transport through the location of nearby bus stops.
- Providing parking with electric charging points – or the potential to install them in the future.

## Residents and the local community

New developments should offer a positive experience for both Hastoe residents and people in the surrounding area. They should be open to all and not hidden away out of sight.





For enquiries,  
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