

Estate Layout

Distribution of House Grouping Models

2.5 Distribution of House Grouping Models

All new housing developments should adopt combinations of the "urban" and "rural" housing grouping models identified above. Estates consisting entirely of minimally detached houses will not normally be acceptable.

It is important nevertheless that the models are not located arbitrarily or separately zoned but are related appropriately to the centre or edge of a town and to the framework of public routes, spaces, entrances and edges at the local site level.

Town

Denser "urban" forms are generally most appropriate in more traditional town centre areas and on former industrial sites within the town, at least where immediately adjacent to denser built up areas. However this model will also be appropriate in any new development where there is a need for an urban focus, perhaps adjoining a local centre which includes shopping and community facilities. Conversely, the more widely spaced "rural" model should not be precluded from the more historic urban areas e.g. within a site bounded by Victorian villas.

Site

The established lines and orientation of the built frontages to the Public Space Framework should provide a template for the distribution of the 2 housing grouping models identified.

The **urban model** can create the more formal visual impact appropriate to the more important, busier routes where it is also able to provide a noise barrier to more informal areas to the rear. Main gateway entrances to a site or to a minor cul-de-sac/ courtyard space as well as corners and other focal points are also appropriate locations for this model. Formal continuous built enclosure can sometimes be the preferred character for the frontage to an important public space or "village green". Flatted accommodation with limited private amenity space may benefit from such a location. Denser linked forms are also appropriate in discreet mews courtyard locations.

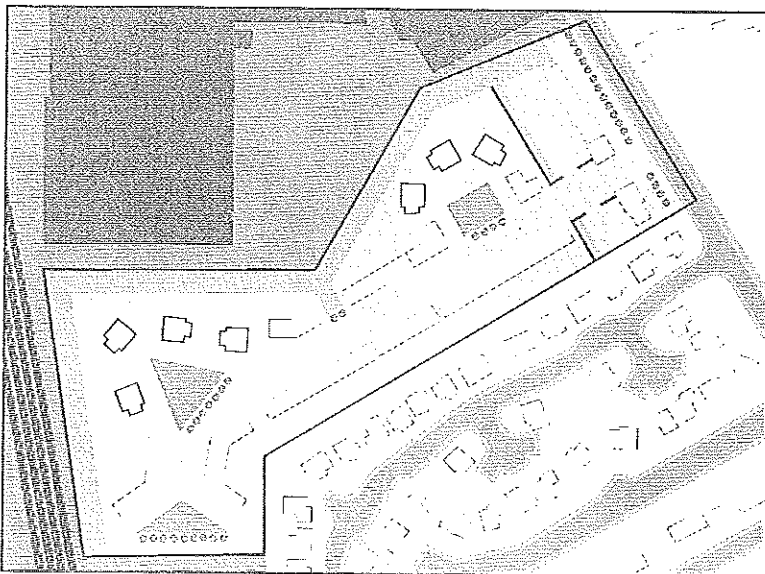


Figure 15 DISTRIBUTION OF HOUSE GROUPING MODELS

Flatted option along main road, internally site shape determines location of open space and, in turn differentiation of urban and rural house models.

Estate Layout

Distribution of House Grouping Models

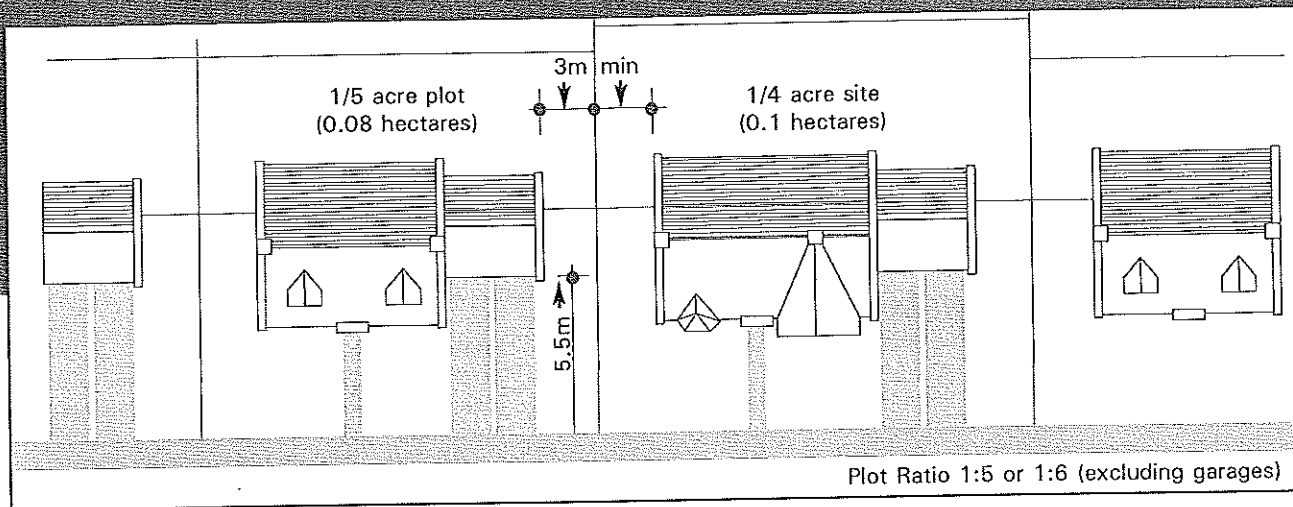


Figure 16 "RURAL" MODEL ARCADIAN / INDIVIDUAL PLOTS
Minimum dimensions - enhance visual differences

The rural model is most appropriately located within a discrete courtyard or cul-de sac and, indeed, it is in this context that large self-build type plots are best located, preferably the lesser component of any development site. On a general access road, fewer, more widely spaced, houses will result in a quieter, less trafficked street. This model would be equally acceptable to define the edge to a village green where it might continue the parkland character of the open space. In this circumstance the fewer but more prestigious houses may afford better control and foster a higher standard of maintenance for the enclosed green. This model can also provide an attractive main road frontage where a landscape character is sought.

Building Height

Options for greater height should naturally accompany the urban housing model. Where two storey housing predominates, primary edges, entrance points, and corner junctions offer the opportunity for combinations of 2½ or 3 storey buildings or, at inner town locations, even greater height. Increased storey height at focal points will assist in establishing a general sense and understanding of the place.

In the case of flatted development, storey height may be restricted according to the quality of the greenery in the enclosed court or associated car parking area.

Density

The Council's Local Plan provides indicative house numbers for certain identified sites. Otherwise housing densities will be subject to the general guidance provided in paras 2.4 and 2.5 in terms of :
public open space and roads, private garden ground, daylighting and privacy and house grouping models and the location of each type.

Estate Layout

Street Design and Roads Standards

2.6 Street Design and Road Standards

Road Hierarchy and Parking Standards

All roads, footpaths and car parking areas intended for adoption by Falkirk Council must conform to "Design Guidelines and Construction Standards for Roads in the Falkirk Area". This sets out standards for the road hierarchy of distributor road (individual direct vehicle access prohibited), general access road, minor access road and cul-de-sac (a shared surface permitted for max 20 units). Parking is required at the rate of one space for a house less than 3 bedrooms and 2 spaces for larger houses. Visitor parking is at the rate of 1 per 4 houses.

Street Widths

In addition to achieving more intimate spaces (see para. 2.3. **Built Edge**), narrowing the street width will encourage slower vehicle movements. This is more feasible where

- (i) car parking is to the rear, accessed to the side of the house or through a pend allowing the house frontage to move forward,
- (ii) there remains an acceptable distance between windows on either side of the street or
- (iii) habitable rooms are not directly opposite one another.

PEND ACCESS: Where this serves an approved parking provision to the rear, missives must ensure that the entrance remains open and is not enclosed as a garage.

WINDOW TO WINDOW DISTANCES: The general standard applied is that "habitable" rooms (living rooms, bedrooms) must be 18m. apart if directly opposite. Thus, in order to achieve the appropriately narrowed street, such openings must not be directly opposite but may be angled from each other.

Turning Heads/Visitor Spaces

Road geometry should fit tidily with the housing layout and avoid a turning head leg or end-on visitor parking bay intruding into a front garden. The "Y" turning head and lay-by parking are preferred.

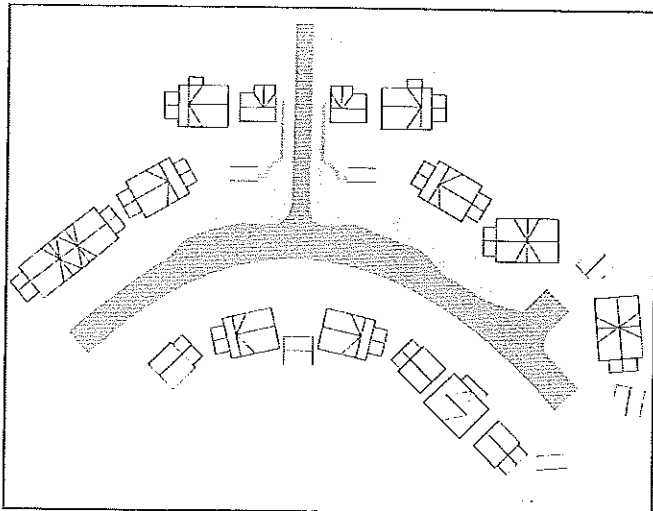


Figure 17 HOUSING LAYOUT & ROAD COMPOSITION

Geometrical harmony and symmetry are the important design tools.

Estate Layout

Street Design and Roads Standards

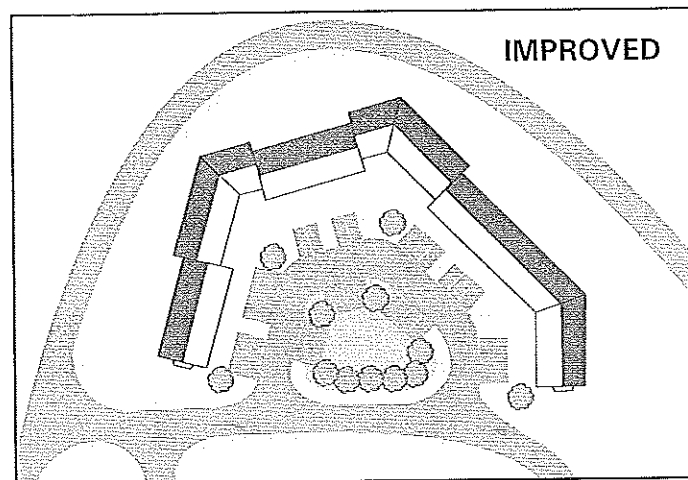
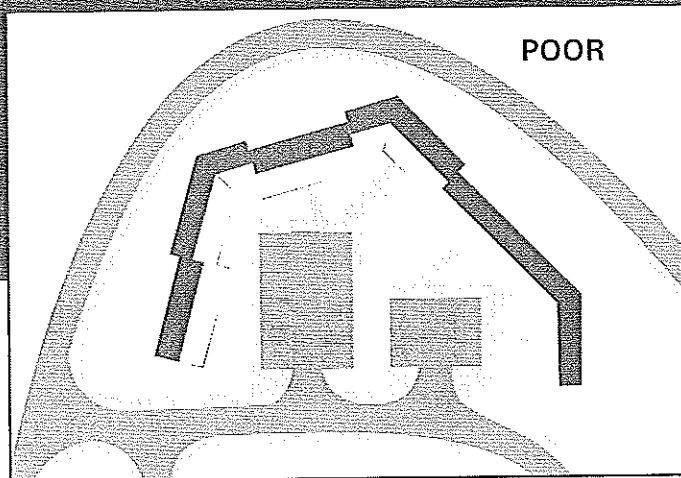


Figure 18 GROUPED PARKING SPACES (e.g. for flats)
Civic place not parking lot.

Grouped Parking Spaces

These should take the form of a traditional courtyard or square, not a parking lot, and should look attractive when empty and be easily supervised from the adjacent housing, street or courtyard.

Refuse Collection

Housing developers should be aware of the current 3-bin collection system and allow flexibility of design for future adaptations of the system.

SUDS Ponds

Sustainable Urban Drainage Systems (SUDS) require ponds whose purpose is to retain rainwater from a developed and hard surfaced area so that it can be dispersed into the drainage system at a rate no greater than would be required if the land had remained a greenfield. Para 2.1 **Site Characteristics and Constraints** notes that these and any other water courses and features should be designed integrally with the open space framework within any housing development. This should determine the location of any SUDS pond to achieve its potential as public amenity and focal point, i.e. at the front of houses for best surveillance, safety and maintenance. In general they should be positioned adjacent to, but not be part of, any water course on the site.

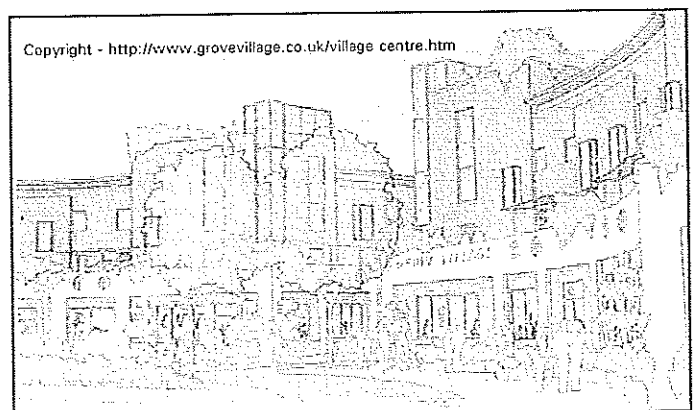


Figure 19 HOUSING AS PART OF LOCAL CENTRE
Contemporary, traditional patterns, 24 hour life.

Estate Layout

Other Planning Considerations

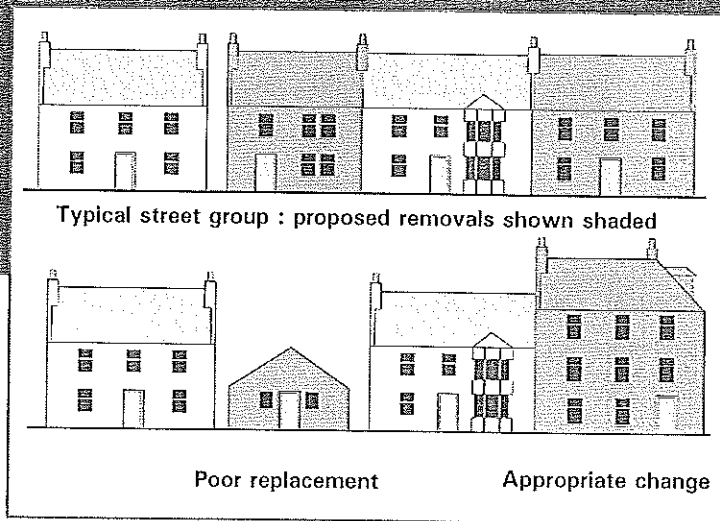


Figure 20 INFILL DEVELOPMENT
Replacing buildings in street

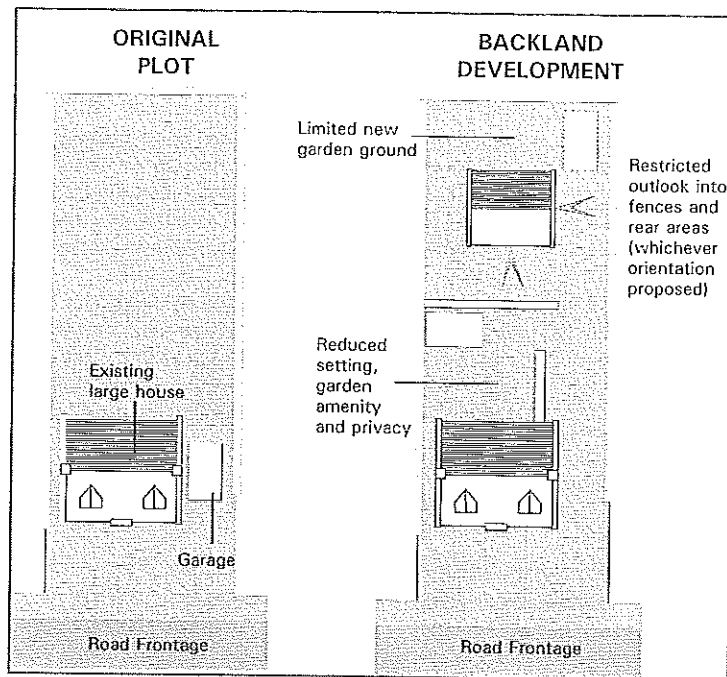


Figure 21 BACKLAND DEVELOPMENT LIMITATIONS
NB. Development may be given consideration where designed in mews or minor outbuilding form with

2.7 Other Planning Considerations

Infill Development

Where there is a gap site, whether in an urban terrace or within a looser group of buildings, it is important to achieve a harmonious "fit" of new with existing. This should pay attention to the adjacent building line, height, scale, window and other door arrangements, proportions and detailed decoration and materials.

Tandem and Backland Development

Tandem development is a form of infill development where one or more houses are proposed within a large garden to the side of a house fronting a road. Backland development is, similarly, located within a large garden but to the rear, with no road frontage.

There will be a general presumption against both of these types of development within large gardens where the concerns are as follows:

- The visual setting and continued dominance of the original house.
- The amenity and size of the resulting private gardens (min. 9 m. length must remain)
- The front outlook from the resulting houses (a particular problem for backland development where the plot may be entirely enclosed with fencing)

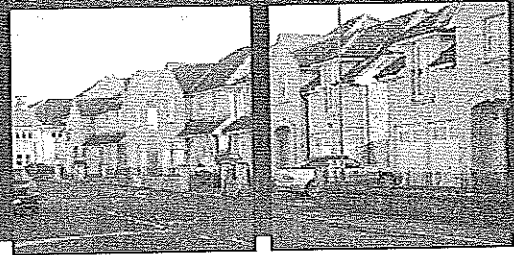
The following development forms may be given some consideration:

- Tandem: where the existing garden creates an inappropriate gap which the new development will sympathetically fill
- Backland: a small scale mews type development to the rear with a shared vehicle entrance from the street (preferred to one or more houses plots with separate accesses)

NB Separate plot development in a front garden to an existing house will generally be presumed against.

Estate Layout

Other Planning Considerations



Sloping Ground

Buildings should integrate with the slope and major underbuilding which creates extensive areas of blank walls will not be acceptable. Housing may be placed parallel with the contours but care should be taken to avoid too regimented an effect from a distance. Consideration should also be given to split-level houses. If the sloped arrangement reveals gable ends, window openings should be added where no conflict of privacy exists.

Rear gardens designed to be as level as is possible on a sloping site may result in steeper slopes linking one level area to the next. In pure landscaping terms it may seem more attractive to create a continuous planted strip across the sloping area, fenced off from the private gardens. However such an arrangement will require to resolve potential problems relating to public maintenance, fly-tipping (adjoining properties included) and social nuisance. It may therefore be preferable to include these steeper slopes as extensions to the private gardens rather than as public or community land. A developer may consider stabilising and planting these slopes even if they are intended to be in private ownership.

Roofscape is an important consideration on a steeply sloping site.

Overshadowing

In order to minimise the possibility of a shadow being cast across the window of an adjacent house or garden, any extension should not project from the rear building line beyond either:

- a line drawn at a 45° angle from the midpoint of the nearest ground floor window of the adjoining house, on the rear building line or
- a maximum of 3.5 metres from the rear building line of the house.

Open Space Standards

The consultation draft **Scottish Planning Policy 11: Physical Activity and Open Space** sets out minimum standards for new residential developments. Essentially, for developments with over 10 units, public open space should be provided as follows (in addition to any private garden ground):

60m² total open space per household to include:

40m² divided between parks, sports areas, allotments, green corridors, semi-natural space and civic space, as set out in the development plan.

20m² of informal play/ recreation space and equipped play areas.

The purpose designed open space activity areas or facilities referred to in para 2.2 **Public Space Framework** will generally be required in larger new housing areas. However some such facilities, e.g. sports pitches, athletics tracks or even a fully equipped play facility, have certain critical dimensions which may not be appropriate for certain smaller housing developments of over 10 units. In this case a developer may be required to contribute to their provision off-site by way of a planning agreement.

Estate Layout

Security for Properties and Public Places

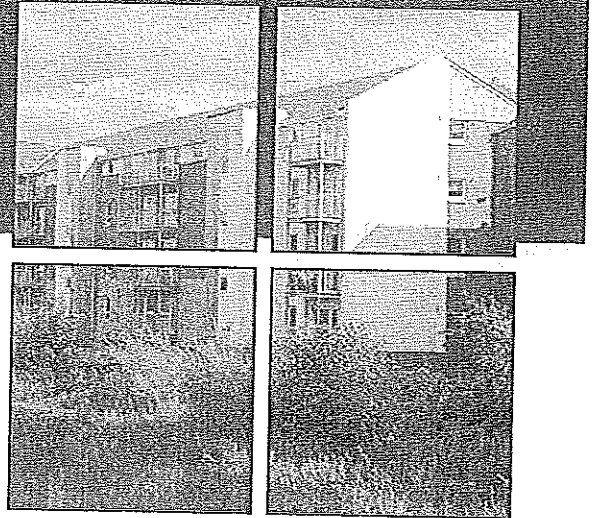
2.8 Security for Properties and Public Places

The Guidance Note seeks to apply the principles of "Safe by Design". Whilst acknowledging the need for individual houses to be adequately secured, the greater concern is to ensure that public streets and spaces are as safe as can be. This is to be achieved as follows:

- clearly defining and differentiating public, semi-public and private space by the design of appropriate boundaries and entrances.
- maximising opportunities for surveillance from the houses.
- arranging the framework of public routes and spaces to encourage greater use by the general public thus reducing opportunities for nuisance activities.

The following is a compilation of the specific measures identified in the Guidance Note which should foster the desired "defensible" environment:

- public areas fronted by buildings (with doors and windows) rather than by high screen fences
- the prohibition of footpath linkages to the rear of houses which can be threatening to legitimate users, conceal criminal activity and provide unsupervised escape routes
- the creation of "permeable" through routes for pedestrian and vehicular traffic to encourage greater usage and thereby better protect the housing environment
- the provision, off the main routes, of smaller culs-de-sac/courtyards, with "gateway" entrances which will maximise potential communal surveillance opportunities and discourage trespass.
- a structure of focal point buildings which makes the area more "legible" (or easily comprehended), enhances civic status, signals a robust, defensible environment and securely absorbs non-housing neighbourhood uses, e.g. shops.



2.9 Sustainable Design

Sustainability is a broad concept which has to do with the good stewardship of the earth's physical and natural resources to ensure the continued health of its plant and animal life.

PAN 44 advises, that "... early attention should be paid to the orientation, siting, spacing and shape of individual buildings and group of buildings to exploit the available sun, arrange the greater protection from wind and to create an energy efficient envelope". SPP 3 expects developers to bring forward proposals which "... create a sheltered micro climate capable of making outdoor environments more habitable".

This Guidance Note can be seen to support the principles of sustainability in the following respects:

- Conservation: Retention of natural and man-made features on any site avoids further depletion of earth resources and reduces energy consumption in the production or erection of new structures and features.
- Public space framework: a well organised pattern of spaces and streets should ensure the right balance of green areas as well as creating meaningful, direct, linkages and encouraging a people and cycle friendly environment. An appropriately stimulating built environment will also assist with aspects of human psychology e.g. the restful qualities of the intimate enclosed space or, conversely, the long panoramic vista. This may assist in reducing some health costs.
- Grouping Patterns: denser and more carefully assembled house groupings are more energy efficient (although the negative effects of overshadowing from taller and conjoined buildings should be avoided).

In addition, the sustainable benefits of natural daylight and thermal insulation can be improved by appropriate orientation of the housing in association with the accompanying protective landscaping i.e.:

- Main living areas within a house, conservatories and rear gardens should be orientated to face south or south-west for daylight and solar energy benefits. Private, non habitable rooms (kitchens, bathrooms, stairs and utility rooms) and garages should therefore face north. However since rear gardens are generally considered less acceptable on road edges, innovative solutions may be required to compensate e.g. through and through living areas.
- Main entry points should, where possible, be located away from cold north winds and to a lesser extent, from prevailing southerly winds. However preference for main doors on the street frontage will be the critical factor in determining location for reasons of natural surveillance and legibility.
- Supplementary protection of the building envelopes from adverse climatic conditions and a more comfortable environment outside can be achieved by including planting and shelter belts, earth mounding and walls. Deciduous trees are better located to the south of the housing units to give summer shading and winter sunlight with evergreens to the north to give shelter from any occasional north winds.

The specific design and construction of houses also requires to be sustainable, e.g. achieving a balance between window openings and insulation, solar panels etc. to maximise energy efficiency. This is largely beyond the scope of this Guidance Note. (refer paras 1.1 and 1.5)

Architectural Form and Aesthetics

Basic Approaches and Design Advice

3.1 Basic Approach

Advice has already been provided on appropriate house grouping and street patterns to enclose and enhance a framework of public space. This is now complimented by guidance on housing shape and elevational treatment.

Most contemporary house designers, whether serving the volume builder or kit-manufacturer, still aspire to a classical or vernacular tradition of which the pitched roof, rectilinear planned house forms the basic element in any layout. However designs are often poor copies of the traditional house without proper understanding of the principles informing its design. The guidance aims to address this concern, especially to assist the less well qualified designer. More "modern" flat roofed or abstractly designed buildings will be assessed on their own merits.

3.2 Design Advice

Guidance based on the traditional house form, elevation and finishes is as follows:

- The main roof ridge should be parallel to the adjacent roadway.
- Roof pitches should create symmetrical gables and be no less than 45° on a street frontage
- The arrangement of openings should ensure that the gable geometry is reinforced rather than deformed i.e.
 - Main frontage gable absorbing necessarily larger windows in symmetrical arrangement around central axis.
 - Lesser side gable with fewer, smaller windows allowing a more informal, asymmetric arrangement. Wholly blank gables fronting a public street will generally not be permitted e.g. on a corner.
- Adjacent twinned gables will allow for a more asymmetrical pattern of openings.
- Hipped roofs are generally less favoured and never acceptable when mixed randomly with straight gables at close quarters. They may be given more sympathetic consideration in a more formal layout, on the same building line, or widely enough spaced so that the visual relationship with the neighbouring property is immaterial. They are also acceptable as a single storey extension to a straight gabled house and to the rear.

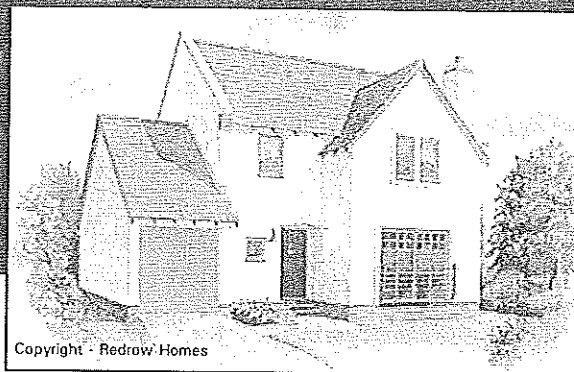


Figure 20 VOLUME BUILDER HOUSE TYPE
Well considered

- All openings should have vertical proportions.
- Main entrance doors should create a focal point on the front elevation. Doors on a gable end generally appear less satisfactory but may be acceptable where formally located and in balance with the window arrangement.
- Forward projections i.e. porches, garages etc. will only be permitted where they are integrated into a continuous streetscape, avoiding an abrupt visual effect. Garages are best set to the side of the house, and behind the building line, rather than dominating the front façade of a detached house.
- High screen fences between houses and extending towards the road should terminate behind the building line.
- Dormer windows may project from the wallhead or roof but must be of traditional small scale proportions and mainly glazed.
- Over elaborate combinations of external wall finishes are to be avoided and any prominent gable ends should preferably be in a single material. A horizontal subdivision at first floor level should therefore be avoided. Render, stone (or a modern understated ashlar type block) should dominate, with brick restricted to base courses and for additional decoration. An all-masonry finish is more appropriate in tightly grouped urban housing.
- Window and door styles must demonstrate local authenticity, painted or stained timber being preferred. Fussy or UPVC "period" designs are to be avoided.
- Roofs should be finished in slate or a modern "look alike" equivalent with a shallow leading edge. Eaves and verge detailing should be as close to a simple line as possible. A skew or clipped convention is preferred to deep barge boarding.
- Chimneys or similar vertical roof features will be encouraged (e.g. for ventilation).