



home zones •
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RESIDENTIAL STREET ENVIRONMENTS



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Home Zone Principles

Home Zones are residential streets or groups of streets where people and vehicles share the whole road space safely and on equal terms, although the motorist should feel like a 'guest' in the area. They are designed so that quality of life takes precedence over ease of traffic movement and they aim to promote neighbourliness and a sense of security. Home Zones are growing rapidly in popularity and one of their main features is street resurfacing – frequently with precast concrete block and flag paving, and other related products.



The ideas behind Home Zones were first developed in the Netherlands during the 1960s and known as the 'Woonerf' system, forming an integral part of Dutch urban living over the years. In the UK, the principles formed part of the early local authority urban design guides, such as the Essex Design Guide, incorporating the 'defensible space' concept which aimed to use design to enable residents to 'take ownership' of local public spaces, encouraging natural surveillance and reducing crime. Examples of this approach can be seen in various towns and cities in the UK

during the 1970s and 1980s. Other aims of Home Zones today include encouragement of cycling and walking, rather than driving - so reducing vehicle congestion and pollution, inclusion of older residents within the community and improving 'Liveability' and the appeal of urban environments.

In 1998 the Government announced that it would work with local authorities to evaluate the effectiveness of Home Zones, establishing 9 pilot schemes in England and Wales. Today, the Government's Home Zone Pilot Projects

and Challenge programmes are expected to create some 70 Home Zones by 2005: information on these schemes and the Challenge programme can be found on www.homezoneschallenge.com.

From a legal perspective, The Transport Act 2000 (for England and Wales) and the Transport (Scotland) Act 2001 enable local traffic authorities to designate Home Zones in their areas. Standardised traffic signs for Home Zones have also been developed.



»» Designing Home Zones



»» New development Home Zone in Moretonhampstead, Devon

Guidelines are now available on all aspects of Home Zones, in particular 'Home Zone Design Guidelines': 2002, from the Institute of Highway Incorporated Engineers (IHIE) and 'Home zones – A planning and design handbook': 2001 by Mike Biddulph, of the Joseph Rowntree Foundation. There are two types of Home Zones: retro-fit schemes for existing streets and new projects forming part of new-build housing developments. With existing streets, the on-going and full participation of the local community is essential and how to successfully achieve this is dealt with in detail in the above guidelines. However, Home Zones are growing in popularity as integral parts of new housing

developments and here developers, consultants and local authorities will be responsible for design, probably without the opportunity for local consultation. Home Zones need to be designed as vibrant public spaces to accommodate play, exercise and relaxation by residents including children, the elderly and disabled people. They should be individually designed to give a sense of identity and community. They must create a safe and secure environment while enabling vehicle access and parking. Home Zones should be integrated with the surrounding area to provide a network of routes for pedestrians and cyclists, whilst dispersing vehicle traffic evenly. The aim is to reduce traffic speeds to 10 mph

within the Home Zone. They should be limited in size, as buses will not run through them but should still be accessible to residents.



»» Home Zones within a council-owned estate in North Portsea, Portsmouth



Paving Home Zones



The various guidelines recognise the need for paving materials to give each Home Zone individual visual appeal and definition of a specific character. Most of the paving in Home Zones will be shared surfaces but without traditional stepped kerbs to identify the carriageway. So, a variety of colours, patterns and textures is needed to clearly differentiate the following areas:

- Public from 'private' spaces
- Gateways (entrance and exit) of the Home Zone
- Shared areas from non-vehicular areas
- Different areas of relevance to visually impaired people
- Parking and areas which can be used by vehicles
- Dedicated play or sitting areas
- Traffic junctions without road markings

Precast concrete block and flag paving offers this diversity while also providing a firm, even surface enabling ease of movement by wheelchair users and others. The use of contrasting materials – in both appearance and texture – and other features such as dished drainage channels are welcomed by the guidelines, particularly to help visually impaired people to negotiate streets. However, restraint is also needed to avoid a confusing, overpowering design balanced against a 'wall-to-wall paving' appearance.

The IHIE document offers detailed guidance on various components of Home Zones, including:

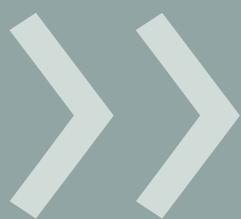
Gateways – marking the entrance and exit with a distinctive change in surface material, perhaps linked to other features such as street furniture. One design approach gives access to the shared surface over the footway of a conventional street via dropped kerbs

with 'Blister' tactile paving on the footway. Another alternative has a ramp up from the traditional street to a shared surface, located no more than 10m from a junction.

Vehicle tracks – should be as narrow as practicable but a minimum of 3m wide, with 4.5m minimum passing places if necessary.

Parking – should include some on-street. Individual spaces should be clearly indicated and arranged perpendicular, parallel or angled to buildings. Blocks of parking spaces should be used to break up and divert vehicle routes.

Traffic calming devices – vertical features such as road humps, cushions and ramps should be used with care and may be difficult for some pedestrians using shared spaces. Horizontal features such as road narrowings and chicanes are highly effective.



Making the most of Home Zones



Concrete block and flag paving, with drainage and other precast concrete products, are ideally suited to all Home Zones – whether created within existing communities or as part of new residential developments. They offer cost-effective solutions meeting the criteria set out in the guidelines, including proven long-term performance, durability and minimal maintenance



while offering endless variety in shape, scale, colour and texture.

The concept of a uniform surface shared by people and cars is fundamental to Home Zones and concrete block paving as well as ‘small element’ paving flags are ideal. With existing streets, the Home Zone surface will generally be created by raising the carriageway level up to meet the footway, eliminating stepped kerbs. This can be easily and economically achieved using an overlay construction of block or small element flag paving. In addition, weather independent ‘dry’ construction methods without curing optimise available working times to fit in with the requirements of residents and, as only small plant and equipment is needed, disturbance is minimised.

In terms of design, a wide choice of colours is available today – ranging from vibrant to muted tones – as well

as varied mixes of colours that can emulate other materials such as stone or clay. Surface treatments can also be applied to paving blocks, flags, kerbs and other products to give different textures, some exposing aggregates and others giving a weathered appearance. Finally, different shapes and sizes, ranging from large flags to the smaller paving blocks, give the range called for in the guidelines to suit the particular scales of different spaces. Despite the huge choice, precast concrete paved surfaces give consistent frictional characteristics and joint widths ensuring safety and ease of use by the whole community. All these attributes combine to enable designers to select paving styles ranging from traditional to contemporary, giving each Home Zone its own special character.



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