PRECAST CONCRETE SOLUTIONS
FOR URBAN REGENERATION

www.paving.org.uk
Liveability

This brochure, originally published in 2004, provides a useful background to the capabilities of precast concrete paving for urban regeneration. The more recent and extensive Planning with Paving document, however, explores current changes in approach to planning, urban design and ‘place shaping’. The principles involved are demonstrated in Interpave case study documents also available from the website www.paving.org.uk

Regeneration of our urban streets and public spaces is back on the agenda, both at local and national government levels. Pressures for higher density housing and an improved quality of urban life – or “Liveability” – have resulted in a range of major initiatives. In particular, the government’s report ‘Living Places – Cleaner, Safer, Greener’ sets out policy on public space.

In addition, the government backed Commission for Architecture and the Built Environment’s ‘CABE Space’ initiative is specifically concerned with improving quality in public spaces.

At a more local level, organisations such as Living Streets’ campaign for more attractive public spaces for pedestrians, promoting good practice in design, maintenance and management, to encourage walking in our towns and cities as a safe and pleasant – as well as healthy – experience. They have developed a programme of Community Street Audits that is growing in popularity with local authorities.

The audits consider a wide range of criteria which affect the quality of public space including facilities and clear signage, maintenance and parking enforcement, personal security, space and layout, road crossings, aesthetics, traffic and, of course, footway surfaces – the paving. This document concentrates on the drive to improve public paving and the role that precast concrete products can play in achieving this goal.
Improvement schemes can cover everything from lighting to traffic management but paving is always a key issue. There are numerous examples of precast concrete paving transforming unappealing shopping streets into busy boulevards and derelict areas into popular plazas for people to meet.

At the heart of most successful regeneration schemes is a drive to put pedestrians first, redressing the imbalances of the past. Techniques employed often include widening footways coupled with traffic calming measures such as road narrows and raised junctions or crossings, or complete pedestrianisation of areas.

These can all be successfully achieved with precast concrete paving, while still maintaining delineation of pedestrian and vehicular routes where needed, using the impressive palette of colours, shapes and textures available. Concrete block paving can be used for any areas, whether trafficked or not. With concrete paving flags, new developments such as fibre reinforcement ensure an attractive and safe surface over the long term – so minimising possible personal injury claims – even with occasional trafficking by vehicles.

There is no doubt that transforming run-down public spaces, making them safe and attractive, is a major catalyst in regeneration of challenging urban areas. Consultation with local residents, businesses and groups is essential, as well as a long-term approach with planned maintenance.
Accessible, Sustainable & Re-usable

Precast concrete paving is inherently flexible, aiding accessibility and mobility for all in dry or wet conditions. It can be recycled and re-used for reinstatement work leaving no evidence.

With precast concrete flags and concrete block paving, the detailed profiles, sizes and colours required for ‘tactile paving’ can be produced easily and consistently. In some locations, level changes present a real challenge to designers but precast concrete paving is ideal for ramps and steps. The variety of colours demanded by guidelines and Regulations covering accessibility – particularly for ramps and tactile surfaces – are easily achieved while maintaining uniform slip resistant characteristics. An Interpave publication Accessible Paving offers guidance on making the external environment accessible to all.

We have all seen that it is necessary to open up paved areas for access to underground services or repairs to the pavement structure. Unlike other pavement materials, with concrete block and flag paving it is straightforward to complete reinstatement work with no visual evidence that any repair has been undertaken. Guidance on reinstatement is available on the Interpave website www.paving.org.uk. Recycling blocks and flags in this way also adds to the environmental benefits of concrete block paving and the BRE’s ‘Green Guide to Specification’ credits it with an ‘A’ rating for least environmental impact, compared with a ‘C’ rating for asphalt. Concrete block permeable pavements also enable sustainable drainage in urban areas, reducing the impact on infrastructure and helping with sustenance for trees and other planting. An Interpave document Understanding Permeable Paving provides essential information on all aspects of permeable pavements.
Precast concrete paving offers proven long-term performance and durability and can be recycled and reinstated without evidence. There are two other essential qualities of precast concrete block paving, flags and kerbs that singles them out from other materials used in urban areas.

Firstly, their modular nature - combined with the wide range of colours, textures and shapes available – generates a visual interest and a human scale not possible with monotonous, formless materials such as asphalt. Secondly, unlike extracted materials such as stone and clay, precast concrete products are fully engineered and manufactured under controlled conditions, consistently providing accurate product and joint size as well as colour and texture. Unlike many other paving options, precast concrete products combine durability and longevity with minimal maintenance to give long-term, trouble free paving solutions. They offer a unique combination of predictability to ensure safety and accessibility, with scope for endless variety in shape, scale, colour and texture – all at an economic cost.

In terms of design opportunities, pigment technology allows a much wider choice of colours 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 and kerbs to give different textures, some exposing aggregates and others giving a weathered appearance. Combining these attributes with the range of shapes and sizes available enables designers to select paving styles ranging from traditional to contemporary, enhancing all environments from historic conservation areas to brand new urban spaces.

More information on the design potential of precast concrete paving can be found in Interpave’s Planning with Paving document and related case studies.