

# Flooring

Your Project Our Passion

# Flooring Solutions

Building made faster, smarter and stronger

Charcon's precast and insulated flooring systems are specifically engineered to suit a range of construction projects and designed for fast, efficient installation.

Whatever the flooring requirement, a solution can be found in Charcon's extensive product range – which includes beam and block, hollowcore and prestressed systems, as well as innovative brands such as Beamshield Plus, TETRiS®, Quad-Deck and Spantherm®

## Design

Coupled with technical and design advice from in house professionals, and an integrated approach that can incorporate Charcon products such as FASTBEAM foundations, Quad-Lock ICF, CoreMaster lift cores, precast stairs and landings, Charcon can tailor safe, expertly installed flooring solutions for most developments.

## Quality

Charcon flooring products are factory produced to a high degree of accuracy and quality conforming to BS EN ISO 14001 and BS EN ISO 9001.

In line with its commitment to sustainability, these systems can contribute to higher ratings under the Code for Sustainable Homes and offer energy saving benefits throughout the life of a building.

## Fixing

Just in time delivery is available nationwide saving on storage space, avoiding schedule delays and enabling fast access for follow on trades. Charcon offers an optional fixing service carried out by its own skilled crews. Charcon's main priority is the safety of the workforce and building and countering the risk of progressive collapse.

## Insulated Flooring

### Spantherm®

Spantherm® is an insulated, precast concrete flooring system designed specifically for residential and commercial ground floors.

The composite slab combines structural concrete and high performance Expanded Polystyrene (EPS) insulation to provide a structural floor that minimises cold bridging and maximises thermal performance. Spantherm® Plus and Graphite are also available for improved thermal performance.

Spantherm® can be installed quickly by a skilled Charcon team and in terms of long term benefits, this sustainable flooring system meets levels four to six of the Code for Sustainable Homes and can improve SAP/FEES assessment ratings.



Spantherm's unique insulated underside and ready to use top side

### TETRiS®

Comprising prestressed concrete beams infilled with extruded polystyrene (XPS) blocks, TETRiS® is an easily installed, energy efficient suspended flooring system. Beams are available in various profiles and are manufactured using grade C60 concrete in standard lengths of 50mm increments.

Once installed, the TETRiS® insulation blocks produce a floating floor that isolates the warm structural slab from the cold concrete beams, or any concrete floor blocks used.

Blocks can be easily cut on site to accommodate required spans, widths and services, with underfloor heating systems fixed directly to the TETRiS® panels prior to pouring the screed finish.



TETRiS® beam and insulated block suspended ground floor system

### Quad-Deck

A patented joist and deck forming system, Quad-Deck weighs less than 50% of other hollowcore precast floor systems and uses approximately 40% less concrete than flat suspended slabs.

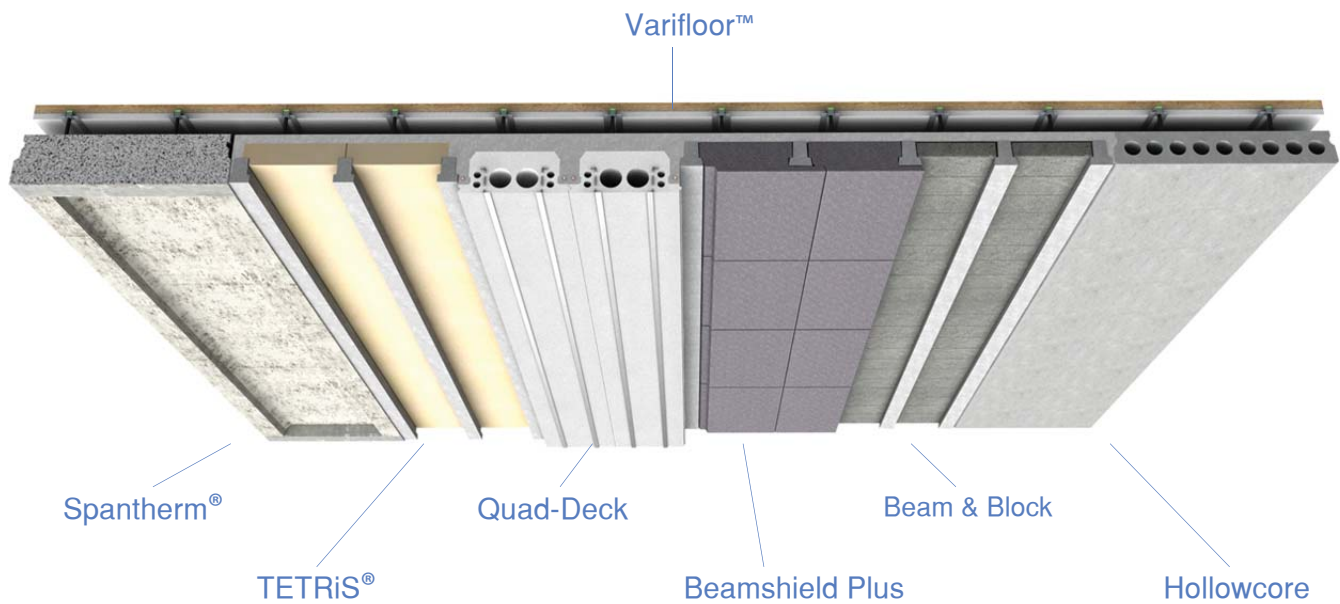
A range of seven thicknesses are available, from 178 to 343mm, creating concrete beam depths of between 127 to 267mm. Quad-Deck can be used to achieve clear spans up to 9.5 metres with low live loads and regular construction methods.

With numerous long term energy saving benefits, the Quad-Deck system offers U-Values from 0.35 to 0.17, less HVAC (heating, ventilation and air conditioning) requirements and more consistent indoor temperatures.



Quad-Deck is suitable for all flooring as well as flat and garden roofs





## Precast Flooring

### Beamshield Plus

Produced using high strength expanded polystyrene (EPS), Beamshield Plus is designed to form an impenetrable layer of insulation between and below supporting T beams – minimising thermal bridging and creating a strong formwork on which to lay structural screed.

Beamshield Plus is available in original white EPS and as Platinum Plus – an EPS panel enhanced with a graphite component to further boost insulation values.

With a thermal resistance up to five times greater than lightweight thermal blocks, Beamshield Plus panels eliminate the need for additional insulation. The panels do not require any fixings as they are supported by concrete T beams and foundation walls.

### Beam & Block

This system is composed of prestressed concrete beams - available in various profiles - with standard building blocks laid in between.

The top surface of beam and block is suitable for the application of flooring over a continuous damp proof membrane and levelling screed or one of Charcon's insulated raised flooring system. Additional insulation can be added between the beam and block and floor finish.

### Varifloor™

Precast flooring combined with Granab®, a patented raised acoustic flooring system with non deformable steel girders and sound dampening elements.

### Hollowcore

Charcon hollowcore flooring slabs range from 150mm to 400mm and achieve a 28 day strength of over 60N. Hollowcore design makes the product easier to transport and handle during construction, and requires less material to manufacture compared to solid concrete slabs thereby reducing carbon emissions.

Hollowcore provides an immediate solid floor surface and is able to accommodate service pipes and electrical wiring, as well as suspended ceilings.

Units are available with various design features, including solid ends, open cores, raking cuts, holes and notches, and can be custom made to exact requirements.



Read more at:  
[www.charconcs.com/flooring](http://www.charconcs.com/flooring)



The distinctive Beamshield Plus locking ridge makes fitting simple and accurate



Beam and Block flooring is a robust solution for any floor especially those bearing heavier loads



Hollowcore is the quick, reliable flooring solution suitable for most projects

# Office Locations

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