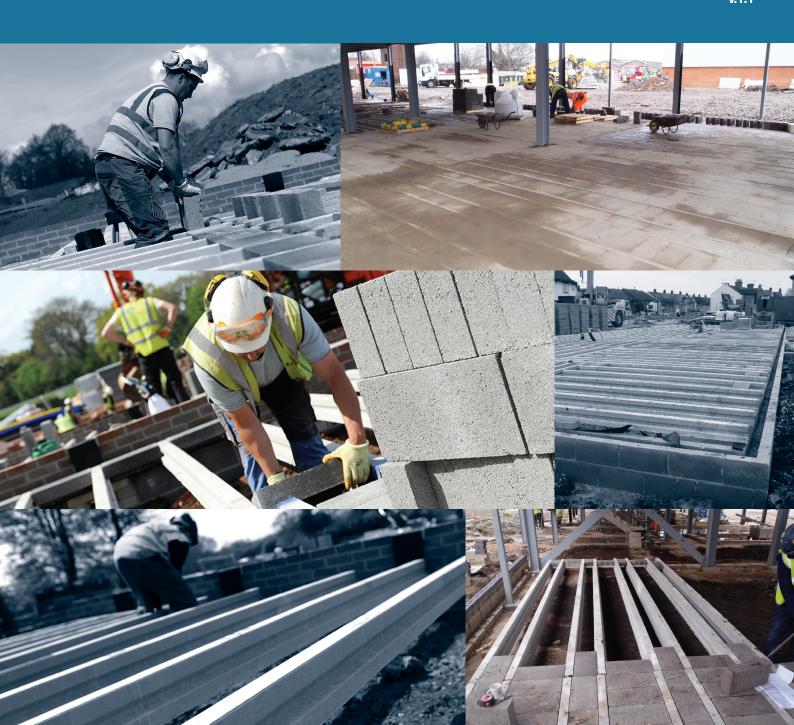
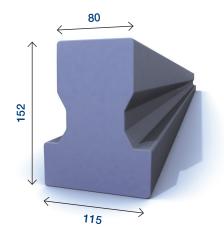


# beam & block flooring product brochure

v.1.1



## beam and block flooring



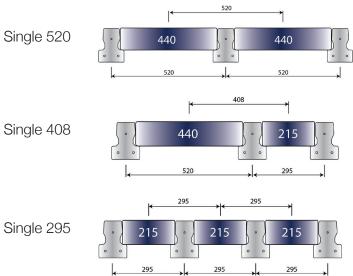
**Beam Profile** 

FP McCann's beam and block system is quick and easy to install. It facilitates the construction of a suspended concrete flooring system that is fully insulated and provides a solid base from which to build. Our beam and block floors help to eliminate problems associated with any shrinkage and soil heave. Additional advantages of this type of system include: increased acoustic performance, fire resistance, all weather construction, thermal insulation and the ability to create an instant working platform. The system also assists the designer to contribute to reducing the carbon footprint of a dwelling with this fabric first solution.

## Did you know?

70% of all ground floors utilise a beam and block system.

### Typical block layout configuration



#### **Estimating and Design Service**

FP McCann's Flooring team offer a fast, efficient and comprehensive estimating and design service. This is facilitated by our tailored design software which enables us to carry out project specific designs using all our products. Comprehensive layout drawings and schedules show the length and position for each beam, arrangements of the infill blocks and any supplementary components. The precast beam and block floor must be assembled in accordance with the layout drawing provided. Any variations must be agreed with FP McCann's Flooring team prior to commencement of installation.

#### **Production**

In conjunction with our modern manufacturing facilities, our production techniques are constantly being updated and developed to:

- Increase efficiency
- Achieve higher quality
- · Assist building designers in realising innovative building designs

#### **Design Notes:**

- 1. Infill blocks must comply with BS EN 15037-2 and be recommended by the manufacturer for use in a beam and block flooring system. Also, they must not exceed the mass specified in the loadings
- 2. Floors must be grouted with a 6:1 sand/cement grout, brushed into all joints prior to commencement of following trades
- 3. Garages and areas with a live load in excess of 3.0kN/m² to have a concrete screed applied with a minimum A98 mesh reinforcement
- 4. Any blockwork partitions built from our beam and block flooring system must have additional beams provided for support. Only those indicated on our layout drawings will have been included in the design
- 5. Where two or more beams are positioned side by side, the joint between them must be filled with grade C25/C30 concrete by others
- 6. Nominal minimum bearing required is 100mm on masonry and 75mm on steelwork



#### **Finishes**

Where grouting is required the floor should be thoroughly 'wetted ' then a 6:1 sharp sand/cement mix is to be brushed into all joints shortly after the installation of the beam and block.

The FP McCann beam and block floor is suited for a sand and cement screed to be applied either directly bonded or onto a separating membrane.

Generally, domestic garage floors should have a 75mm structural topping of grade C25 concrete reinforced with an A142 mesh. Similar finishes may be necessary where non-domestic loads occur.

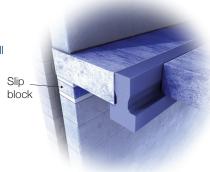
## Optional Extras

#### **Trimmers**

Openings through the floor that are too large to be accommodated by omitting a block can be trimmed. We are able to supply trimmers to suit our floor beams.

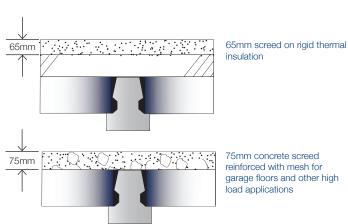
#### Slip Blocks

We are able to supply a range of slip blocks to provide support for the infill block, usually to the periphery of the floor. Providing support for the final block will allow continuation of the inner skin build from a solid platform.



#### **Butt Bearing Plates**

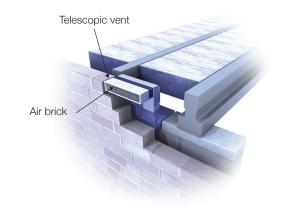
Where beams from adjacent bays share bearing on a 100mm or 140mm wall, they are usually staggered. In certain circumstances beams may clash and where it is not possible to enlarge the wall locally, a butt bearing plate may be supplied.



\* Where dry finished are to be used a levelling screed may be necessary

#### **Telescopic Ventilators**

In accordance with best practice, the void beneath a ground floor should be a minimum of 75mm deep (to be confirmed by your local authority). When measured from the soffit of the beam where clay heave or accumulation of gases is anticipated the void should not be less than 150mm. In situations where this void must be ventilated e.g. to disperse harmful gases, a clear path of not less than 1500mm2 per metre length of external wall should be provided. Care should be taken to ensure ventilation continues through internal bearing walls. We are able to supply ventilators with a clear area of 6600mm2 with a choice of plastic air bricks to match the colour of the outer skin. These ventilators should ideally be placed at not more than 2m centres.





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