

Beam and Block Concrete flooring solutions

Introducing Poundfield Precast

Poundfield Precast Ltd is a leading precast concrete manufacturer based in Creeping St Peter, Ipswich. Part of SigmaRoc, a large construction materials group.

For the residential and commercial property industry, our beam & block flooring is a cost-effective alternative to timber flooring that can be laid in all weathers.

For more information, please visit www.poundfield.com



Beam & block flooring

Poundfield Precast flooring systems carry the CE Mark Accreditation British Standard EN 15037-1:2008 so you can be assured of receiving consistently high quality precast concrete products manufactured to meet with current construction and installation best practices.

Beam & Block suspended flooring systems are cost effective, easy to install and can be laid in all weathers. They can be used for both ground and upper floor levels in domestic and industrial buildings and only minimal levels of excavation are required.

Poundfield Precast Flooring Division specialises in the following sectors:

- Large Contract Sites
- Installations and Project Management
- Self-build support and technical consultations
- Extensions to domestic houses
- Full technical support to builders merchants
- Commercial and bespoke projects – from patios to railway platforms

Always in stock and cut to 25mm increments for quick delivery, our beams offer the perfect solution to your flooring needs.

What services do we offer?

- Full packages on projects where applicable and unrestricted
- Tailored designs to meet your requirements
- Both beam and block and EPS systems available at request
- U-values as low as 0.08W/m²K
- BBA approved and CE accredited
- Manufactured to 25mm increments
- A range of infill blocks – all blocks are transversely tested for flooring



Our beams

Our precast concrete beams are suitable for use in a number of building projects, from one off properties to multi-million-pound developments.

Poundfield beams are made from a precision steel mould using pre-stressed steel wires covered in a bespoke concrete design to give a high quality product, this process enables Poundfield to have a superior finish to other suppliers known as Wet-Cast finish or A-Grade.

Wet-cast beams are more operative friendly than extruded beams. With the smooth wet-cast finish, no further work is required on the product.

Extruded beams are commonly left with further maintenance required on the beams by means of removing snots and burrs. This maintenance needs to be done prior to block placing otherwise blocks sit proud/uneven into the floor.

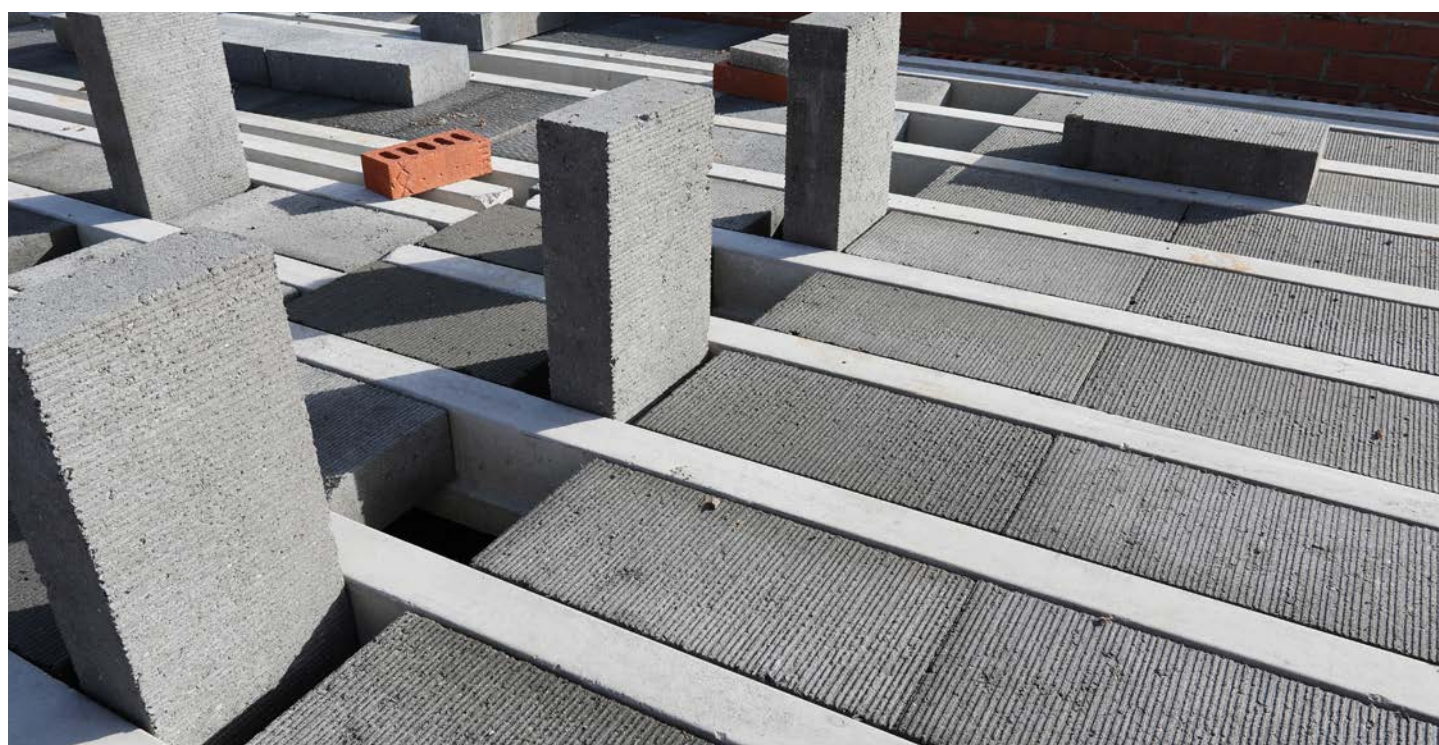
One of the key things to get confirmed early is the block specification for sites. These can often be found on the Architects/Engineer plans and is vital for the pricing element of the project and most importantly the design of the floors.

Each block has it's own self-weight and guide to where they can and cannot be used.

A few examples of universal infill blocks - CEMEX 1400, Lignacite GP, Celcon 3.5N Standard. When a build is getting to digging stage on foundations, the question of blocks must be asked.

For higher loadings, the **D1** beam can span even further and help to reduce foundations costs.

To select the correct beams for your project, speak to a member of our sales team.



Our beams

We have 4 beam types at Poundfield.

With a lightweight profile, our **N1** beam can be easily handled in areas with difficult access. Offering a reasonable span, this beam is also well-suited for thermal flooring. Robust and efficient, the **T3** beam is used for traditional beam and block flooring and EPS floors. The **T3** beam is our highest performance 150mm deep beam and can achieve higher spans than similarly sized beams.

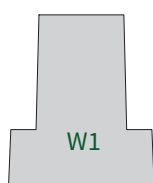
For higher loadings, the **D1** beam can span even further and help to reduce foundations costs.

To select the correct beams for your project, speak to a member of our sales team.



	SINGLE 488	ALTERNATE 376	NARROW 263	SINGLE 522	ALTERNATE 410	NARROW 297
1.50kN/m ²	3762	4259	4800	4120	4608	5316
2.5kN/m ²	3430	3890	4595	3764	4219	4884
4.0kN/m ²	3061	3479	4124	3366	3782	4395
Height	150mm			150mm		
Width	92mm			127mm		
Weight	24kg per metre			34kg per metre		

Table based on finishes of 1.80kN/m² and 1450kg/m³ medium dense blocks



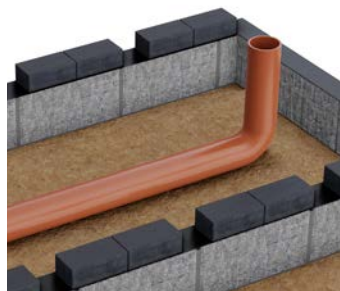
	SINGLE 540	ALTERNATE 428	NARROW 315	SINGLE 540	ALTERNATE 428	NARROW 315
1.50kN/m ²	5127	5697	5800	6555	7208	7300
2.5kN/m ²	4691	5225	5800	5808	6669	7300
4.0kN/m ²	4203	4693	5400	4662	5734	6870
Height	150mm			225mm		
Width	155mm			155mm		
Weight	44kg per metre			67kg per metre		

Table based on finishes of 1.80kN/m² and 1450kg/m³ medium dense blocks

Installation guide

Before installing the Poundfield beam system the following checks must be carried out:

- Over-site has been cleared of vegetation and relevant weed-killer treatments have been carried out
- Sufficient void from ground to underside of beams has been checked and confirmed (Architect or Local Building Control will confirm this based on ground conditions – standard minimum of 150mm+)
- Confirmation on whether a DPM is required in cases where ground conditions are poor
- DPC has been laid over the internal substructure ready to receive the beams
- Drainage is installed in its required positioning before beams are laid and all services are piped out or marked for spacing requirements
- Ensure the adequate ventilation requirements have been met and lintel sets are cured and ready for laying on-top of



The guidelines below are recommended to be followed to ensure a smooth installation of your flooring system. A risk assessment & method statement of your site must be carried out by a competent person prior to your install. If you are unsure at any stage of your install please contact our sales office.



- Ensure you have the correct lifting equipment if using mechanical plant, lifting points should be within 300mm of each end of the beam
- If using manual labour, please ensure that the correct PPE is used as to avoid injury or harm to hands
- 100mm nominal bearing is required on the beams at each end based on brickwork substructures
- Identify and adhere to the recommended start points for your project, these will be indicated by the Beam office if you are unsure
- Ensure that all doubles and triples are placed where indicated on the floor plans
- Use infill blocks as spacers at either end of the beams, the remaining infill blocks can then be dropped into place as required
- Trim any blocks as required around protruding drainage pipes & services
- Cut blocks where required and prep substructure walls for slipbricks

Once the beams and infill blocks are installed, the 'Wet Works' are now required to complete your floor. To do this, follow these simple steps:

- Mix up a standard brick mortar for bedding the slip bricks down
- Slipbrick locations can be found at either ends of the beams in the floor and along a block strip onto a substructure wall. These will be indicated on your design
- Standard practice is 2 no slip-bricks per 440mm spacing (Maximum block) and 1no slip-brick per 215mm spacing (Narrow block)
- Please ensure that the relevant cross-ventilation airflow between internal bays is met to conform to Building Regulations
- Once the floor has been completed, wet heavily with a hose ready for grouting
- Mix up a grout mix of 4:1 sharp sand – cement and brush over the floor and into the joints with a stiff brush
- Mix up a concrete mix using a sufficient aggregate to a C30 standard and deposit within the voids between any doubles or triple beams. This is to create a unified bond between the beams.
- Do not grout Garage Floors. These must remain un-grouted due to Composite Action.



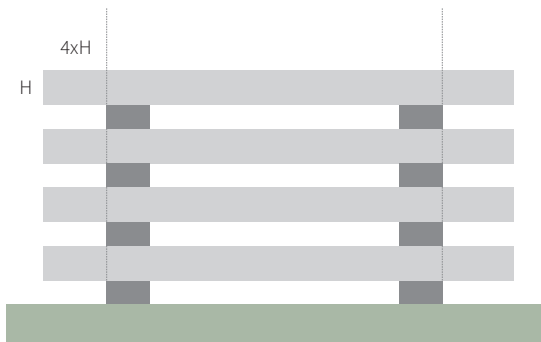
Once the Wet Works have been completed and your floor has set on the concreting. Prepare the floor for screeding.

- Brush off any excessive detritus from the floor to ensure a smooth level surface
- A DPM may be required – please confirm with Architect specification / Local Building Control for affirmation if required
- Install the specified insulation product, ensuring the thickness and grade matches what has been specified
- Confirm with Architect/Engineer for your project on the screed type/reinforcement required – Garages must have a reinforced screed often utilising a mesh reinforcement A142 or A98
- The screed must then be installed by a competent person/s.



Stacking and lifting guide

- The flooring beams must be stacked the right way up, with timber bearers placed just in from the ends, (maximum four times unit depth, “H”) vertically above one another.
- Care should be taken in the stacking and general handling of the units, taking into account the weight of the products, the stability of the stacks and the load carrying capacity of the ground.
- Timber bearers must be lined vertically through the stack at a maximum 250mm from the end of the units.
- In addition to the precautions to be observed when stacking, e.g. the position of bearers, care must be taken to ensure that the ground or surface on which the components are to be stacked is suitable.
- The ground must be firm and level, and wherever possible stacking of components should be on firm hard-core or oversite concrete.
- The height to which components can be safely stacked on site will be greatly influenced by the condition of the ground on which they bear.
- Another prime consideration should be the height to which a man can reach to pass lifting chains or slings around the components.
- Similar length units should be stacked together.



Correct



Incorrect



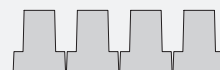
Safety warning



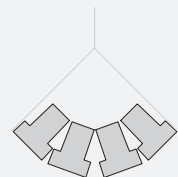
Protective clothing should be worn.
T-beams compact in on themselves when lifted,
KEEP HANDS CLEAR TO AVOID INJURY.

Ensure good manual handling techniques.

- Beam products are generally delivered on articulated vehicles therefore appropriate hardstanding and access is essential.
- The Contractor must inspect the floor units at the time of delivery on supply only contracts and sign the delivery ticket, as no liability for damage can be accepted at a later date.
- Ensure before lifting that the crane is sited on firm level ground and there is sufficient clear working area for turning and slewing with no overhead obstructions.



Before lifting



During lifting

Timeline of events from enquiry to delivery

Enquiry

Customer to send drawings across to Poundfield Precast along with covering letter of what is required.

Quotation

Poundfield Precast will produce a quotation for the customer detailing price, extras and advising of proposed lead times (this period includes time for drawings to be produced). If there is any ambiguity surrounding what is required then we will send back a marked up plan detailing required supports and span directions. Average time 2-3 days for a quote.

Order

If the customer is happy with the price and delivery period we will require a written instruction to proceed.

Drawings

Once an order is received we will produce fully detailed layout drawings to be sent back to the customer.

Approvals

Customer is to approve our layout drawings. Approvals required within 24 hours to adhere to lead times set out in quotation.

Delivery

Beams will be manufactured and delivered following approvals. Confirmation of exact delivery vehicle and dates will be confirmed at this point. During busy periods lead times may be extended.

Supporting your business

If you would like some sales support for your business or branch then please speak to one of the flooring team who would be happy to organise some information to be sent out to you.

We can offer branded banners, merchant counter packs with specification sheets for our beams and floor options.

We can also provide training at our factory site for key members of your team to fully understand Beam and Block flooring. Our comprehensive training session will discuss in detail our beam types, demonstrate a beam and block install to help understand the process of how the flooring is installed onto the site and a chance to tour our facility to see how the beams are cast and cut.

BEAMS STOCKED HERE:

150mm x 3000mm

150mm x 3600mm

150mm x 4200mm

BEAM&BLOCK FLOORING

poundfield.com



On line portal

Our online portal will allow your team to log on with a protected password and download PDF data sheets for customers, upload drawings for us to quote as well as some online training information.

We can also have the PDF downloads branded with your own company logo for when handing them out to customers. Please speak to our flooring team to discuss getting access to the online portal.





This is one of a series of product brochures from Poundfield Precast.
Let us help you with your next innovation in concrete.



For further information please contact us on 01449 723150 or email enquiries@poundfield.com
 Poundfield Precast Limited, The Grove, Creeting St Peter, Ipswich, Suffolk IP6 8QG