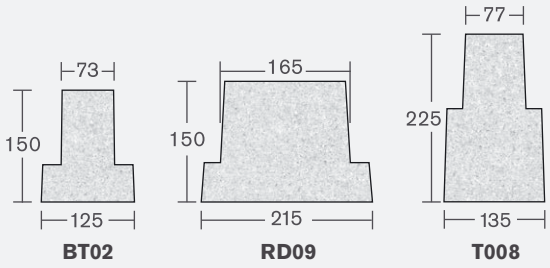
# BEAM AND BLOCK - PRESTRESSED BEAM DETAILS

Technical Datasheet

## PRESTRESSED BEAM DETAILS




| Beam Reference | Width (mm) | Height (mm) | Weight (kN/m) | Weight (kg/m) | Max Length |
|---|---|---|---|---|---|
| BT02 | 125 | 150 | 0.326 | 32.8 | 5.5 |
| RD09 | 215 | 150 | 0.622 | 64.2 | 6.8 |
| T008 | 135 | 225 | 0.576 | 58.7 | 7.9 |

## CAMBER DETAILS

Bison Precast prestressed concrete beams exhibit an upward curve known as camber which is a result of the compressive force near the bottom generated by the prestressing tendons.

An allowance of span/300 should be taken into account in floor finishes or bearing levels.

## CONSTRUCTION DETAILS

All Bison Precast flooring systems are supported by comprehensive layout drawings, specifications and relevant details applicable to each application.

There are three beam types which are produced in standard profiles of 150 x 125mm, 150 x 215mm and 225 x 135mm (depth x width) to give a range of capacities to suit all loading options. Beams are placed at appropriate centres depending on span and applied load (see loadspan chart).

The beams are positioned in accordance with the layout drawings, perpendicular to the end supports with a nominal bearing of 100mm to each end when supported by brick or block. A 75mm nominal bearing is required when supported by steelwork.

The beams may be staggered at the internal walls and multiple beams may be required to support partition walls.

A wide range of infill blocks are available for use with the system including Thermalite, Aircrete and Floorblock.

Bison Precast also provides a choice of medium and dense aggregate blocks.

Where required, blocks should be cut using suitable mechanical means to leave a clean, vertical, square-edged face.

Once all the blocks have been placed in position the floor is grouted using a 4:1 sharp sand/cement mixture, which is brushed in the direction of the beams and then at right angles to ensure all joints are completely filled.

**Bison Precast** Hoveringham, Nottingham NG14 7JX
**tel:** 01636 832000 **email:** concrete@bison.co.uk

forterra.co.uk