

- 1 Coursing Slips
- 2 Telescope Ventilator
- 3 FASTFLOOR Beam
- 4 HEMELITE or TOPCRETE Floor Block
- 5 DPC
- 6 Screed
- 7 Insulation

To find out more about FASTFLOOR and the best solution for your project
call **0333 003 4701** or email fastfloor@tarmacbp.co.uk

TARMAC.COM

FASTFLOOR

BEAM AND BLOCK

The traditional flooring system



FASTFLOOR

BEAM AND BLOCK

FASTFLOOR BEAM AND BLOCK flooring system comprises inverted T-beams infilled with either Topcrete dense aggregate block or alternatively our preferred lightweight aggregate Hemelite block.

This traditional building method using modern materials is an effective solution for both suspended ground and internal floors.

VERSATILE

FASTFLOOR BEAM AND BLOCK can be installed in inclement weather and is maintenance, rot and damp free.

EASY TO USE

This system is easy to handle and fit on site using standard tools.

SOUND INSULATION (INTERNAL FLOORS ONLY)

The Building Regulations Approved Document E requires that internal floors in dwellings provide the minimum sound insulation of $40R_w$ dB. This can easily be met using a FASTFLOOR BEAM AND BLOCK floor system with 50mm of screed and a plasterboard ceiling. Note - This construction would not be suitable for separating floors.

FIRE CLASSIFICATION

All our products conform to a fire rating of Class A1 to BS EN 13501.

THERMAL PERFORMANCE

FASTFLOOR BEAM AND BLOCK delivers good U-values and thermal bridging values and these are detailed in the information to the right.

Traditional beam and block flooring with a choice of dense or lightweight aggregate block

PRODUCT PROPERTIES

PRODUCT	COMPRESSIVE STRENGTH N/mm ² *	BLOCK THICKNESS mm	BLOCK SPAN mm	BLOCK WIDTH mm	THERMAL CONDUCTIVITY λ (W/mK)	DRY DENSITY kg/m ³	BLOCK WEIGHT kg**	LAI D WEIGHT OF FLOOR kg/m ² **	COURSING SLIP SIZE
HEMELITE STANDARD	3.6*	100	440	215	0.45	1360	13.1	185	215 x 100 x 40
HEMELITE STANDARD	7.3	100	440	215	0.47	1450	14.0	193	215 x 100 x 40
HEMELITE STANDARD	10.4	100	440	215	0.49	1520	14.7	199	215 x 100 x 40
TOPCRETE STANDARD	7.3	100	440	215	1.28	1950	18.5	237	215 x 100 x 40
TOPCRETE STANDARD	10.4	100	440	215	1.28	1950	18.5	237	215 x 100 x 40

* Must be ordered as Flooring Grade material as they are transverse tested to ensure suitability

U-VALUE PERFORMANCE EXAMPLES

PRODUCT	P/A RATIO	U-VALUE (W/m ² K)	INSULATION TYPE (K=W/mK)	INSULATION THICKNESS (mm)	
				WITHOUT FOUNDATION BLOCKS	WITH FOUNDATION BLOCKS **
HEMELITE FLOOR BLOCKS*	0.50	0.13	POLYSTYRENE (0.038)	225	215
			EXTRUDED POLYSTYRENE (0.031)	185	175
			PIR (0.023)	140	130
HEMELITE FLOOR BLOCKS*	0.60	0.13	POLYSTYRENE (0.038)	230	220
			EXTRUDED POLYSTYRENE (0.031)	190	180
			PIR (0.023)	140	135
HEMELITE FLOOR BLOCKS*	0.70	0.13	POLYSTYRENE (0.038)	235	225
			EXTRUDED POLYSTYRENE (0.031)	190	185
			PIR (0.023)	145	140
TOPCRETE FLOOR BLOCKS*	0.50	0.13	POLYSTYRENE (0.038)	230	220
			EXTRUDED POLYSTYRENE (0.031)	200	180
			PIR (0.023)	140	135
TOPCRETE FLOOR BLOCKS*	0.60	0.13	POLYSTYRENE (0.038)	235	225
			EXTRUDED POLYSTYRENE (0.031)	190	185
			PIR (0.023)	145	135
TOPCRETE FLOOR BLOCKS*	0.70	0.13	POLYSTYRENE (0.038)	235	230
			EXTRUDED POLYSTYRENE (0.031)	195	185
			PIR (0.023)	145	140

* Spanning the 440mm dimension ** Depth of Tarmac's Durox or Toplite Foundation Blocks = 900mm

THERMAL BRIDGING

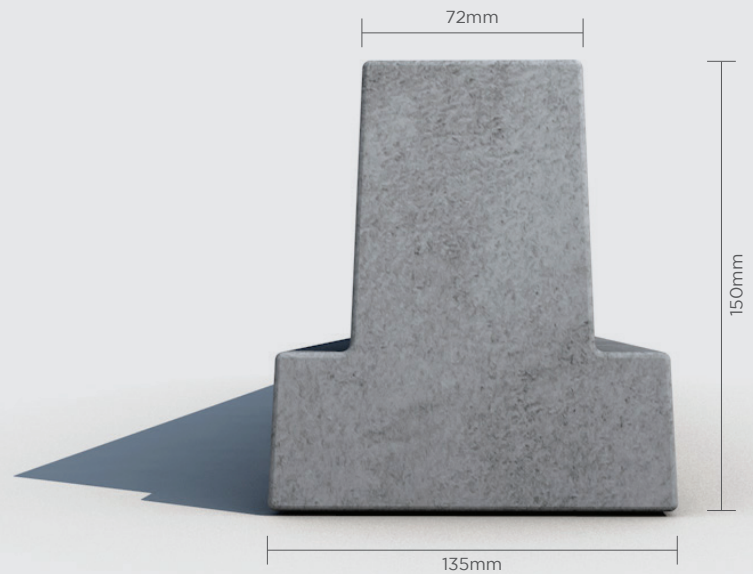
In addition to the heat loss through the floor, expressed by the U-value of the floor, considerable heat is also lost at the junction with the external wall. This is described as thermal bridging.

Dealing effectively with thermal bridging can benefit the SAP energy calculations up to 12% for a typical semi-detached house. Up to 2% of this can be attributed to the ground floor junction with the external wall.

The construction industry has developed a number of schemes that provide simple, cost-effective detailing. Further information is available via the following web links:

www.cba-blocks.org.uk/tech/thermal-bridge.html

www.labc.co.uk/registration-schemes/construction-details



TYPICAL FASTFLOOR BEAM AND BLOCK DETAIL

- 1 The R-value of the perimeter insulation should be at least $0.8\text{m}^2\text{K/W}$
- 2 Ensure the floor insulation is tightly butted against the external wall
- 3 Continue the cavity insulation at least 225mm below the top of the concrete

