TOWER BUILDING SYSTEM

Tower Technologies
Living Solutions

The Tower Building System Two is a significant step forward in alternative building technologies.

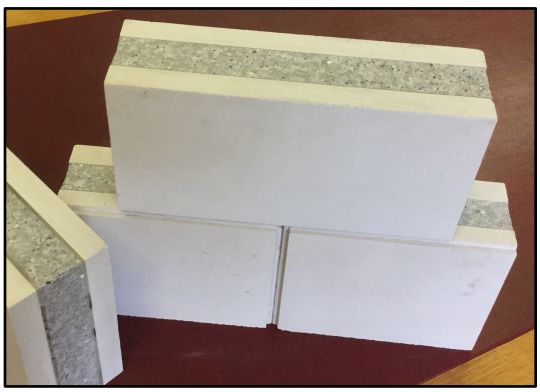
It combines the best of all other integrated building systems but with the added advantage that it can be produced rapidly, in large volumes, and using unskilled and semi skilled labour.

Tower Building Blocks are just at home in community housing as it is in a stylish villa – and cost less to manufacture, transport and install.

Using cement as the binder, the outer panels employ Tower's unique facilitator to combine ash, pearlite or other extenders to reduce weight and take advantage of locally available recycled by-products. Actual press time is just six seconds, on a press cycle time of under two minutes. Post processing is done using standard furniture panel sanding and sawing equipment.

Using metal channel at the base and top plates, the blocks are joined using bottom and side splines and bonded with Tower's proprietary cement resin. The result is a perfectly straight wall that requires no plastering.

With a thermal rating of 1.45 to 2.6, depending on the thickness produced, and a compressive strength of 7 MPa, the system matches or exceeds the properties of older integrated building systems, yet costs less than traditional brick or block walls with glass fibre insulation expanded polystyrene cavity fill.



BLOCK PROPERTIES	
Compressive Strength	7 MPa or greater
Thermal Insulation (r value)	
45 mm core (105 mm block)	1.45 plus r of CFB
80 mm core (140 mm block)	2.60 plus r of CFB
Fire Rating	TBD
Sound Insulation	>57 dB
PRODUCTION DATA**	
Standard Thicknesses and Weights	
105 mm***	Approx 63 kg per m^2
140 mm***	Approx 65 kg per m^2
Standard Block Sizes and Weights	
720 mm x 344 mm	Approx 16 kg
OTHER PROPERTIES	
Cutting on Site	Circular Saw
Jointing	TBS Cement Resin with recessed spline
Plastering	Not Required
Sealing	TBS Roll on Sealant
Painting	Direct to Sealant
Load Bearing Capacity	
Picture Hooks	Up to 600 N
Screws (5 mm diameter)	Up to 350 N
Wall plugs	Up to 600 N

* *Based on SABC 334455 1997*
** *Any size can feasibly be produced*
*** *60 mm at a denisty of 1.05*

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