



TARMAC TARGETING LEVEL FOUR

MMC Magazine takes a broad view of solid wall construction.

One of the reasons the housebuilding industry must embrace Modern Methods of Construction, we are always being told, is due to the shortage of skilled construction workers able to undertake traditional work. It was not without an element of irony, then, that Tarmac chose the opening of a new brickwork facility at Stourbridge College in the Midlands to unveil its new whole house building strategy: bringing together a group of manufactures with whom they are able to offer integrated design solutions centred around its thin-joint technology.

The college represents one of the most up to date facilities of its type in the country, holding Centre of Vocational Excellence (COVE) status and running courses in plumbing, electrics, carpentry and decorating as well as bricklaying and plastering – all being over subscribed every year. Responding to the fact that thin joint blockwork is to be an integral part of the new Technical Certificate being taught from this September

onwards, Tarmac is providing Stourbridge with all of the materials and support services it requires. This change of emphasis in construction education – being mirrored across the country - should mark the beginning of a new consciousness regarding the many advantages

of thin joint blockwork.

Set out across the warehouse sized floor space of the new annexe to the Advanced Technology Centre at the college's Waterfront Business Park site in Brierley Hill were a number of demonstrations showing how the Tarmac house



A member of the tarmac topblock team demonstrates how to construct Durox System using a thin joint mortar.



Left to right - a member of the Stourbridge Education Team joins the Head of Stourbridge College a student and local MP to celebrate the opening of the new centre.



A member of the Alltek team applying the new specialist coating to the solid block wall.

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might go together.

Many specifiers who have considered employing one of the thin joint systems available will be familiar with its attributes but Tarmac Topblock's own area neatly displayed the different arrangements that can be employed to build both cavity and solid external walls, as well as partitions and a Part E compliant party wall. With the official opening completed by local MP Lynda Waltho, one of Tarmac's own technicians carried on laying the 500 mm long, by 200 mm thick aircrete units to show guests just how simple the process is.

A few yards away, Clan Products – which provides the thin joint mortar - was on hand with its own section of solid wall to show how the different fixings it has developed can be used to retain EPS external wall insulation to bring the thermal performance into line with the best that timber frame can offer.

Brian Hewkin, Projects Manager for Tarmac Topblock, asserted: "We are using a 200 mm Durox block with an R value of 0.11 to build a solid wall that will go up just as quickly as timber frames. As long as you've got a joiner on hand to install the floor joists, you can be up to roof level in under two days while the drying out time is greatly reduced. With 100 mm of EPS on the outside you get a U-value of 0.2; 150 mm and this comes down to 0.15 W/m²K, below which it is not worth trying to achieve.

"The new code for Sustainable Homes has been a godsend to us as it is forcing specifiers to look

at Modern Methods of Construction. We can achieve level four with no difficulty using all of the different elements we have brought together here, and level six is possible using renewable energy sources. We are looking at building passive homes very soon."

Because the blockwork is so regular and the joints so repressed, Tarmac is able to recommend a revolutionary new projected wall finish in place of traditional plastering. Alltek UK has a spray applied product containing neither gypsum nor cement which is based instead on marble. Smoothed off at a thickness of three to five millimetres, it provides a very fine finish and is available in a range of through colours.

Tarmac Topfloor can provide the precast beams and Durox infill blocks used at ground and first floor levels, while Keylite has developed a special T-section lintel to support such point loads at window and door openings. Blocks laid in such areas are simply slotted to fit over the web of the lintel.

The Tarmac whole house solution is topped off with a highly insulated SIPs panel roof assembly provided by Unilin Systems. The panels which can span up to eight metres from eaves to ridge are produced in widths of 810, 820 or 1210 mm, and are jointed with a filler foam to complete a totally airtight roof construction.

Tarmac sees its low carbon homes requiring very little heat and the atmosphere inside being kept free of humidity by ducted whole house heat recovery systems.