



Proven performance

Faster floor slabs for this new housing development

The challenge

This development of around 15 new build homes, located in Belbroughton in Worcestershire, required a concrete floor solution that would allow fast, efficient construction of high-quality floor slabs. Each plot required a floor slab of around 50m². The chosen solution would need to deliver a high-quality surface and be installed quickly within the build programme to optimise productivity and speed of construction. It also needed to help the client, IP Developments, ensure good working conditions for their site workers and minimise noise as much as possible in this rural, village location. After discussions between the developer and Tarmac's experienced Technical Sales Representative TOPFLOW Horizontal self-compacting concrete was chosen for this development.

Our solution

TOPFLOW Horizontal is a free flowing, self-compacting concrete, that allows fast, easy placement and rapid construction floor slabs with a high-quality finish, achieving SR2 tolerance to BS8204-1. As a highly fluid mix, it can be pumped into place and is finished with a dapple bar only, avoiding the need for mechanical compaction or power floating. This saves time and means less equipment is required on site. It is also safer for site workers, reducing manual handling and the risk of conditions like Hand-Arm Vibration Syndrome (HAVS) from using hand-held vibration machines. Where required TOPFLOW concretes can be supplied with steel or synthetic macro fibres for structural toppings over block and beam floors in accordance with NHBC requirements.

Results and benefits

Around 60m³ of TOPFLOW Horizontal was supplied to the site from Tarmac's Walsall Plant and used to construct floor slabs for four of the new build homes. As expected, using TOPFLOW Horizontal enabled much faster completion of floor slabs, with four plots completed in under two hours, compared to one or two plots per day using a conventional concrete. The final floor slab, poured directly from the mixer, was completed in just nine minutes. Technical support and guidance was provided throughout from Tarmac's experienced Technical Sales Representative to make sure the client got the best possible outcome. The client was delighted with the outcome. As well as achieving a great finish, the rapid completion of the work and low level of noise on site minimised the disturbance for local residents.



Building **our** future