

Hanson

A better service and more durable driveway surfaces is the promise of Hanson Aggregates which has just introduced Homefalt, a new brand of asphalt for homeowners.

New surfacing tackles driveway problems

Greater performance and better tolerance to variable laying practice are the principal claims of Homefalt, Hanson Aggregates' new branded asphalt for driveways.

The new product is designed to overcome laying and performance problems that can afflict domestic drives, particularly in the Midlands and southern England following hot weather.

Hanson's ultimate target is nil complaints from home owners, with people needing new drives aware of Homefalt's reputation and asking for the material by name.

"The cause of the problems cannot be put down solely to any one source or party's fault," says Jack Ramsay, Technical Manager of Hanson Aggregates' product technology department.

"Our conventional driveway asphalts have adequately stood the test of time and parked vehicles on most occasions. But a handful of asphalt driveways have failed prematurely each year,

usually due to a combination of circumstances beyond our control."

Hanson decided to neutralise the circumstances and take firm control, coming up with the Homefalt range and also a series of product data sheets. These are intended to clearly inform the specialist contractor of how to achieve the very best of results.

"Our customers in this market are usually small contractors and it is their clients, the home owners, that are complaining to us when their driveways begin to break up," says Ramsay.

"Generally speaking, the end user will approach a contractor for a driveway surfacing, specifying the desired appearance only. The contractor then sources the material from us and tells the owner of the driveway to contact Hanson, the name on the product delivery sheet, if there are any problems with the new surfacing.

"Contractors may surface a number of driveways and only a small percentage will fail when the same method of application has apparently been used. So they understandably think a lack of material quality is the fault," he says.

According to Ramsay, premature failure of asphalt driveways is, in most cases, caused by a number of harmful influences compounded by incorrect handling and laying of the material.

Correct compaction of the asphalt while it still retains sufficient heat is required to ensure adequate mechanical interlock to ensure resistance to softening and deformation in hot weather. This is essential for resisting the constant loading from a parked car and the high stress caused by a tyre turning with power steering.

"When we visit people's homes to respond to complaints we often find many influencing factors have contributed. Softening and scuffing problems become acute following hot weather during the first year since the material was laid."

Ramsay's worst case scenario is a large sheltered south facing driveway close to a relatively high speed road. These conditions would prevent the material from losing heat and encourage softening. The owner will usually have to break hard on the material after entering the driveway at a fairly high speed and have the option of turning the car around on the surface before leaving.

"Even high performance materials do not stand much chance of performing well in these conditions if they are laid incorrectly," says Ramsay. "Site inspection and laboratory analysis of samples taken from failed driveway surfacings often shows poor preparation of the substrate and insufficient material

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compaction. It is important that we generate more effective communication with contractors to get across the hows, whys and importance of good preparation and laying.”

Ramsay says Hanson returned to the driveway material drawing board a year ago. A series of mixes related to the high strength Stone Mastic Asphalt (SMA) family of materials were worked on and trialled. Ultimately, two Homefalt products have been developed to suit requirements in the Midlands and Southern England.

“Homeowners in the south generally prefer a close and fine texture, whereas in the Midlands a more open and stony textured surface tends to be more popular. However, both materials are available for our customers throughout Britain.”

The key to both mixes is strength and resistance to deformation, which is provided by Homefalt’s fibre rich stone structure, says Ramsay. Laboratory work also targeted workability and development of materials that could be compacted well and relatively easily at working temperature.

Trials at Hanson’s Dagenham and St Ives production and development centres involved testing cored samples of Homefalt in direct comparison with conventional driveway surfacing materials. Standard wheel tracking and compaction tests were carried out respectively for assessing resistance to deformation and the compaction effort required to reach necessary density.

“The results showed Homefalt could exhibit far greater strength than the conventional material. It can be laid easily, will compact well and perform well. But care is still needed in the application even though there is more laying tolerance,” Ramsay says.

“If we are to fully embrace product branding, the end user must get a performance guarantee, and for this we need to work towards a system of approved contractors, which I can foresee coming about. We want homeowners to be asking specifically for Homefalt, confident in the service they will get, and sure that their drives will last.”



1. Hanson's ultimate aim is nil complaints and homeowners asking specifically for Homefalt.

2. High performance driveway surfacing has been developed to provide greater tolerance for variable laying practice.



3. Open and close Homefalt textures have been developed to cater for different demands in the south and Midlands.