

PROJECT	Bowbrook GreenSquareAccord
CLIENT	Keepmoat Homes
PRODUCT	Alpha Flow Permeable Paving

According to Alzheimer’s UK, there are around 900,000 people with dementia in the UK and this figure is expected to rise to 1.6 million by 2040.

Dementia is an umbrella term and is caused when diseases, such as Alzheimer’s, vascular dementia and other conditions, damage the brain. As well as memory problems, dementia can also cause issues with vision and perception, leading to problems such as a welcome mat by a door looking like a black hole. The Equality Act and Building Regulations (Part M) make provision for people with dementia and there are some, when specifying paving for care homes and in the public realm, that can make a significant difference.

One of the key points that can be addressed by speaking to a reputable paving manufacturer is the consistency of light reflection values (RV) throughout the landscape design. LRV measures the amount of light reflected back from a material when illuminated by a light source. The more light reflected, the higher the LRV. It is usually measured using a spectrophotometer. Research by Liverpool John Moores University demonstrated that an ‘uneven’ appearance of ground surface or patches of darker tone or colour can be confusing and potentially cause accidents. The institution also described how paving patterns or changes in colour that are arbitrary can cause confusion.

It has concluded that strong paving patterns – such as chequerboard – may cause disturbance, as consistent light reflectance values are required. When Keepmoat Homes was involved in the building of the planned dementia care facilities in Litchfield, Staffordshire, the company spoke to specialists at Brett



Landscaping. Keepmoat was working on a centre that would house up to 90 people in six buildings and needed the paving to be suitable for the residents at the centre. It required external paving which registered between 25 and 45 on the light reflective value spectrum. Rigorous and extensive testing of the LRVs of Brett’s products enabled Keepmoat to install paving that falls within the strict parameters of the guidelines.

Testing of Brett’s Alpha Flow permeable paving systems at Brett’s manufacturing plants in Kent and Dorset, showed that the LRV was consistent on individual colour ranges. It also revealed that the variance between all three colour ranges (Autumn Gold, Brindle and Charcoal) is ideally suited for the project. Brett’s Alpha Flow paving is already widely used across the country for developments where developers are looking to improve surface water drainage and prevent flooding.

Existing Alpha Flow pavements are also still offering between 15 and 20 years of low maintenance service. Other than the consistency of light reflective values, Alzheimer’s UK has called for other work to help those living with dementia. It also recommends carefully selecting materials to avoid reflective or dark surfaces which could confuse perception, planning continuous, level routes and avoiding steps if possible.

