

**Aggregate Industries**

# Sports surfacing gets the colour treatment

Disabled athletes are set to benefit from a specially developed multi use sports surfacing launched by Aggregate Industries.

Outdoor hard standings used for sports purposes often fail to live up to the demands of those who train and play on them. Balls bouncing awkwardly can annoy tennis players, difficulty with changing direction can irritate wheelchair athletes and puddles of water are hazardous for everyone.

Such problems promise to be a thing of the past for athletes who practice their discipline on a new asphalt surfacing. Bardon PlayAble is a surface course, developed by Aggregate Industries through its Sports, Leisure & Heritage department to maximise the performance of both disabled and able bodied sportsmen.

Bardon PlayAble incorporates 0 - 4mm single size aggregate to give a smooth

finish and a virtually clear binder allows vibrant colours to be incorporated within the asphalt. The material is also permeable to allow water to drain away easily and is laid in a 15mm thick layer over an existing surface or can be used on new build projects.

Helen Little met gold medal winning blind Paralympic athlete Bob Matthews at the event and the pair discussed some of the problems faced by disabled athletes using sports surfacings.

"Listening to Mr Matthews proved to be my inspiration for developing Bardon

**"There was a great opportunity to develop an asphalt suitable not just for athletes with a disability, but for able bodied sportsmen as well"** Helen Little

Bardon PlayAble was developed following Aggregate Industries' involvement in an annual conference last year, organised by the Sports & Play Contractors Association (SAPCA) and sponsored by Aggregate Industries. The company's Sector Manager

PlayAble," says Little. "He told me what disabled athletes expect from a sports surface and I realised there was a great opportunity to develop an asphalt material suitable not just for athletes with a disability, but for able bodied sportsmen as well."

Matthews adds: "Bardon PlayAble is a great surface for athletes to train on. Any new material that can improve the facilities for everyone involved in sport, including the disabled, has to be welcomed."

Little discovered that people with impaired vision often find it very difficult to distinguish between different areas of a tennis or basketball court. She looked to make sure that specifiers of Bardon PlayAble can choose a range of contrasting coloured asphalts for use within one sports arena.

Colour pigments, in either pellet or powder form, are injected into the hot asphalt mix during manufacture of the material. Use of a 70 pen virtually clear binder allows each colour to clearly show through and distinctive finishes are further

Bardon PlayAble being laid at Charlton Athletic football ground in London





enhanced with use of an aggregate with a colour that largely matches the required end finish.

Little adds that athletes in wheelchairs can find that conventional asphalt materials give a little too much resistance to their tyres. This means that sudden changes of direction required for many team sports become difficult. Little contacted the British Paralympic Association which is associated with a number of universities who had conducted research into the use of wheelchairs on asphalt material. Little found that smaller sized aggregate creates less resistance between a wheelchair and a surfacing. As a result, a 0 - 4mm single size aggregate was chosen for use in Bardon PlayAble.

The material has been designed to be free draining, allowing it to be used in all weathers without impacting on performance. The pigmented, virtually clear binder does not affect the porosity of the material unlike many other surfaces which are regularly painted which, according to Little, can clog voids.

Aggregate Industries' Technical Research Manager Bob Allen adds that the aggregates and binder specified for Bardon

PlayAble ensure the surface can stand up to the rigours of use by many different types of sportsmen. "The aggregate shape and designed skeletal structure, coupled with a special binder formulation, give a robust and durable asphalt surfacing that ensures turning stresses exerted by foot or wheelchair movements do not result in the plucking out of material."

Bardon PlayAble was first laid around the perimeter of Charlton Athletic football club's ground in south east London last summer. The club works closely with disabled athletes and wanted a distinctive asphalt for its players to use when warming up.

Material for the Charlton contract was produced at Aggregate Industries' plant at Wembley in Middlesex and was delivered to site in insulated lorries. Aggregate Industries prides itself in having strict quality control procedures in place at all plants to ensure that raw materials, including the clear binder, do not become contaminated, which could lead to a discolouration of the finished product.

Further contracts have been secured in the London Borough of Lambeth where 13 playgrounds are set to be turned into multi

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use games areas and surfaced by September 2004. The playgrounds will be surfaced using either Bardon PlayAble or one of a broad range of sports materials from Aggregate Industries, such as Bardon Leisuretex Multiuse. Each of the facilities is to receive funding towards an upgrade through the New Opportunities Fund.

Aggregate Industries' specification for Bardon PlayAble has been included in a guide for the building and developing of Multi Use Games Areas that has recently been published by SAPCA. The document is intended for specifiers of sports areas and multi use games areas who are looking to secure funding for new sports facilities from organisations such as the New Opportunities Fund and Sport England.

Next year's SAPCA conference will be watched closely by Aggregate Industries as Bardon PlayAble will be put forward for an inaugural innovation award celebrating advances in material design.