



Ascot Racecourse
United Kingdom

CONTRACTOR
Laing O'Rourke

APPLICATOR
SJS Ltd

SECTOR
Building

DATE
March 2005

PRODUCTS

- Nitoseal MS300, MS100
- Flamex S
- Thioflex 600 PG
- Nitobond SBR
- Cemtop
- Conbextra BB

THE PROJECT

March 2005 saw the beginning of construction on the £200m redevelopment of Ascot racecourse. The project, undertaken by architect HOK sport and main contractor Laing O'Rourke was one of the most ambitious of its kind in Europe.

The centrepiece of the project is a 45,000 capacity grandstand including an internal naturally lit galleria, with a new parade ring behind the main stands. With a scheduled re-opening of May 27th 2006, a prefabricated modular structure was chosen to increase the speed of construction.

At 350 metres long and 40 metres deep, the new grandstand will hold 45,000 people, including 300 private boxes. As a result, the terracing and public concourse required a robust sealant to accommodate high volume foot trafficking.

THE SOLUTION

Fosroc worked closely with the design team to ensure the best system solution was chosen.

As per the specification, the grandstand terracing and parade ring was sealed with Fosroc's Nitoseal MS300 one part joint sealant. Around 10,000 linear metres of Nitoseal MS300 was applied as part of a double seal. Joint sizes were 20mm x 20mm. Because of its high modulus and movement capacity, Nitoseal MS300 was used for all trafficked joints on the concrete terracing to ensure a robust, watertight seal.

In order to meet fire-resistance requirements, joints were then double sealed with Fosroc's Flamex S one part fire rated silicone sealant. Flamex S is fire rated up to 4 hours resistance, tested to BS476 Part 22:1987 (ISO 834).

In addition, 5000 linear metres of Thioflex 600 was applied to the trackside concourse to ensure a robust watertight seal and minimise the possibility of cracking.

As well as sealants, Fosroc supplied Nitobond SBR for the screed flooring in the main grandstand structure. The flooring in the toilet facilities was also treated with Fosroc products. Again, Nitobond SBR was used, with the cured concrete being topped off with Cemtop. Each of the eight 12m x 4m toilet facilities were given a 10mm thick coating of Cemtop in order to provide a level heavy duty underlay that could withstand continuous foot traffic.

Cemtop was also used to level the surface of the main concourse where puddling had occurred during construction.

Away from the main grandstand, Fosroc products were used in another major redevelopment. The Ascot race track was previously crossed by two roads. This was seen as a major flaw with the old track as horses were not comfortable running over the artificial turf that was laid across them on race days.

To solve this, two underpasses have been constructed to conceal the roads. Fosroc's Conbextra BB cementitious bridge bearing grout was used in the construction of the underpasses supporting the new track. These were constructed with retaining walls and capped with reinforced concrete decks, over which



THE BENEFITS

Fosroc provided a total solution package resulting in expanding life expectancy to the structure