



Shell Bitumen

# LAYING THE FOUNDATIONS FOR SUCCESS



**PROJECT:** Yas Marina Circuit  
**CITY/REGION:** Abu Dhabi  
**COUNTRY:** UAE



## KEY FACTS

- Benefits:**
- A binder capable of withstanding the demanding conditions created during a Formula One race.
  - Ability to withstand the extreme heat and stresses of the local climate

**Application:** F1™ Race Track

**Product Family:** Shell Cariphalte RT

**Client:** Abu Dhabi Motorsports Management

**Contractor:** Cebarco-WCT

**Project Engineer:** Tilke & Partners Abu Dhabi (Consultants)

## INTRODUCTION

Situated a 30 minute drive from Abu Dhabi, the capital of the UAE, the Yas Marina Circuit is home to the Abu Dhabi Formula One™ Grand Prix. The \$1.3bn circuit was announced in May 2007 and hosted its first Formula One™ race in November 2009 with the race being won by Sebastian Vettel of the Red Bull Racing team.

The circuit covers a length of 5.5KM and required a binder capable of withstanding the demanding conditions created by a Formula One race and the extremities of the local climate.

## TECHNICAL AND LOGISTICAL CHALLENGES

The extreme temperatures of the Abu Dhabi climate presented a technical challenge in the development of a race track both capable of withstanding average temperatures of up to 40C whilst also complying with the stringent track requirements of the Fédération Internationale de l'Automobile (FIA).

## THE SOLUTION

Shell Cariphalte Racetrack is a Shell-innovated, high-performance binder with high shear and stress resistance properties that is formulated for enhanced road performance (compared to conventional PMB's) in terms of resistance to extreme heat, mixture deformation (rutting (or deformation)), cracking, stripping and ageing - significant properties for roads demanding extremely high performance of high intensity usage such as motor racing tracks.

Previously used for the Formula One racing circuits in Bahrain, Malaysia and Singapore, the product offered a solution compliant with strict FIA regulations and capable of withstanding the extreme heat conditions of the Abu Dhabi climate.

## THE RESULTS

Paving work was completed in late August 2009, delivering a total of 5KT of Shell Cariphalte RT, in time for the Abu Dhabi 2009 F1 Grand Prix. The project was successfully completed with no quality, supply or HSSE related incidents.

## FOR FURTHER INFORMATION

Please contact your Shell Bitumen representative or visit: [www.shell.com/bitumen](http://www.shell.com/bitumen)

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