

Project case study

# Dumfries and Galloway emergency care department

## Product

Heidelberg Materials  
Waterproof Gold System

## Volume

6,000 cubic metres Waterproof  
concrete and 26,000 cubic  
metres of SikaProof

## Client

Dumfries and Galloway  
Health Board

## Contractor

Laing O'Rourke

## Overview

Heidelberg Materials has supplied its Waterproof Gold System to build the foundations of a new £270 million district hospital in Scotland.

## Project description

The project's architect, Ryder Architecture, and its contractor, Laing O'Rourke, specified the use of the system to provide a waterproof solution for the hospital's below ground structures, including kitchen areas and operational plant rooms.

Heidelberg Materials' Gold System combines its Waterproof concrete with a membrane, developed and supplied by partner Sika, to provide two lines of defence against water ingress.

The Waterproof concrete contains a capillary pore-blocking admixture to provide a watertight finish. It is available from Heidelberg Materials concrete plants nationwide and the company offers a full technical service to design the right mix for each project, as well as on-site support during placement.

The SikaProof membrane incorporates an embossed grid pattern containing a sealant and is topped by a thin layer of fleece, which forms a mechanical bond to the concrete when it dries. Around

26,000m<sup>2</sup> of SikaProof was supplied to the hospital as well as 6,000m<sup>3</sup> of Waterproof concrete.

The system complies with BS 8102:2009 Type B Construction and has provided a total waterproofing solution for the basement and below ground floor of project.

"The design expertise and commercial collaboration with Sika was a key factor in our Waterproof Gold System being specified for the project," said Heidelberg Materials technical services manager Terry Balmer. "Our system has a proven track record in providing high performance waterproofing solutions for our clients and the 25 year guarantee and on-site support provided by Sika gives added peace of mind."

The new hospital unit will contain 350 beds as well as an emergency care department; combined theatre complex for day surgery; and consolidated ambulatory care. Building work – which will also include a heli-pad and 980 parking spaces – was completed in 2017.