



SIKA AT WORK

RIVERSIDE RETAIL DEVELOPMENT, CHELMSFORD

WATERPROOFING: SikaProof®-A and Sika® Watertight Concrete

BUILDING TRUST



RIVERSIDE RETAIL DEVELOPMENT CHELMSFORD



SIKA PROVIDES THE WATERTIGHT SOLUTION TO NEW RIVERSIDE RETAIL DEVELOPMENT

Forming part of the new £120 million Bond Street retail development on the banks of the River Chelmer in Chelmsford, a major new department store has been assured of a watertight future thanks to a comprehensive range of waterproofing solutions from Sika.

The new 120,000 sq foot department store forms an anchor to this retail development which will also include other major retailers, riverfront restaurants, a five screen cinema complex and a 275 space basement car park. Due to the development's proximity to the river, the water table on the site was high, which meant that consulting engineers had to pay close attention to the threat of water ingress. To overcome this they designed a dual waterproofing system approach to ensure against potential water ingress into the building's large basement car park and service areas.

Sika was ideally placed to meet the requirements of this design by providing a dual system of more than 7,000m² of the company's innovative Sikaproof®-A12 membrane system, together with 4,500m³ of Sika® Watertight Concrete. This combination of a membrane system and watertight concrete offers a dual approach to minimise risk and deliver outstanding levels of watertightness.

The membrane surface of Sikaproof®-A is embossed with a grid pattern, which contains a sealant, and is topped by a thin layer of fleece which forms a mechanical bond to the concrete when it dries. The grid

pattern is also unique. It offers additional protection, due to the integrated sealant, which bonds tightly with the surface of the concrete, forming mini watertight compartments. Therefore, even if the membrane is damaged or pierced, moisture or pressured water cannot spread between the membrane and the concrete structure as it is contained within the small damaged grid square.

Sika® Watertight Concrete is a high quality solution for below ground and basement construction that prevents water from migrating through the concrete. State-of-the-art Sika admixtures work within the concrete, firstly to reduce the water/cement ratio, thus increasing the density of the mix and minimising the size, volume and continuity of the concrete's pores, and secondly, fill the remaining pores.

To complete the system, construction joints were sealed with both the Sika® Tricosal Metal Waterbar and the SikaSwell® jointing system, which consists of joint sealing profiles that expand on contact with water to seal any voids between adjoining concrete slabs.

Sika is the only manufacturer to offer a complete range of waterproofing solutions covering membranes and watertight concrete as well as specialist mortars and renders for refurbishment applications. By providing a range of systems, the company is ideally placed to offer architects, contractors and consultants a single solution approach that offers the highest levels of water ingress protection, whilst minimizing any risk.

With this landmark retail development set to open in 2016, the successful application of the Sika® Waterproofing System has ensured this major new department store in Chelmsford remains impenetrable to water thanks to a high quality and appropriate waterproofing solution.



FM 12504



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