



SIKA AT WORK

KSIECIA JANUSZA STATION, WESTERN PART OF METRO LINE II, WARSAW

SIKA TECHNOLOGY: waterproofing: Sikalastic®-851,
 priming materials: Sikafloor®-161, Sika® Ergodur-500 Pro,
 Sikadur®-53,
 adhesive: Sikadur-Combiflex® CF Adhesive,

BUILDING TRUST



COMPREHENSIVE WATERPROOFING SYSTEM OF FLOOR SLAB

THE STATION KSIĘCIA JANUSZA (C06) is part of the constructed section of the western metro II line, located in Warsaw's Wola district in the area of intersection Górczewska street with Księcia Janusza street. Currently, the Księcia Janusza stop is the most westerly and also the longest station of the extended western metro line II. The opening of the facility is scheduled for the beginning of 2020.

PROJECT REQUIREMENTS

Ensuring the tightness of the construction required the waterproofing of the floor slab on an area of approx. 6000 m², external diaphragm walls, as well as the entrances and the intake ports of the station.

The main factor in choosing the type of technology for waterproofing was the speed of the work. It was also essential to take into account the necessity of laying insulation on very uneven surface.

SIKA SOLUTIONS

The applied Sika solution ensures comprehensive tightness of the object. The choice of technology was determined by the high quality of materials and the possibility of very fast material application.

Installation started with the preparation of the substrate, which required leveling and strengthening. The primer was made of **Sikafloor®-161** epoxy resin. The **Sikadur®-53** epoxy resin; insensitive to moisture, was used as a priming layer in places of increased humidity concrete. The finished layer was broadcasted with quartz sand. Part of the slab had previously been insulated with roofing felt, therefore it was necessary to execute the appropriate connection with the **Sikalastic®-851** insulation coating. For this purpose, the **Sika® Ergodur-500 Pro** epoxy resin was used.

FAST APPLICATION THANKS TO LIQUID WATERPROOFING MEMBRANES SIKALASTIC®

High performance of upper floor slab waterproofing was allowed by the sprayed insulation system **Sikalastic®-851**. This material is a two part, elastic, very fast curing and coloured Polyurethane/ Polyurea-Hybrid liquid applied membrane. The spray-applied resin forms a strong, durable, completely waterproof coating, while thanks to its elasticity, transfers any cracks in to the substrate. On overlaps, between layers of **Sikalastic®-851** waterproofing coating **Sikalastic®-810** adhesive layer was applied. **Sikalastic®-810** is a two part adhesion primer based on polyurethane resin, forming a bonding layer, characterized by good adhesion to flexible polyurethane layers (PUR).

In the inner corners between the top slab and the wall **Sikadur-Combiflex® CF** adhesive was applied (facet)





PROJECT PARTICIPANTS

Owner / Investor: Metro Warszawskie Sp. z o.o.

Designer: Arup / Buro Happold

Main Contractor: Gulermak

Sub-contractor: JON Sp. z o.o. S.k.

Sika Poland: Wojciech Szymula, Krzysztof Sleszycki

Our most current general Sales conditions shall apply, please consult the most current local product data Sheet prior to any use.



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