Major Commercial Building Succeeds with Premium Waterproofing

PREPRUFE® takes the worries out seawater damage in high performance, below grade foundation application.

Project	Baltic Park Molo
Owner	ZDROJOWA INVEST
Engineer	PKBI Pikus, Adamski Sp.p. Warszawa
Architects	PPA Płaskowicki + Partnerzy Architekci Warszawa
General Contractor	ERBUD S.A. Warszawa
Applicator	PROGRES Izolacje Warka
GCP Solutions	PREPRUFE® 300R, BITUTHENE® 4000

Project Profile

Supporting a seaside commercial building

The Baltic Park Molo commercial building project includes four buildings, a 150-meter promenade topped with a pier, and a communal recreational space. Built on a common base, two five-star hotels have a chance to become an icon of Swinoujscie.

The commercial building boasts almost 600 rooms and suites with views of the sea,61 apartments and 16 flats, and approximately 2000 m2 of retail space. In addition, it houses several restaurants, a nightclub, a bowling alley, a fitness club, a luxurious spa and wellness zone, a waterpark, and one of the biggest convention centers in the city, accommodating up to 1,200 people.

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Building amid challenging conditions

Construction was centered near the coast where the water table is high, requiring the use of an advanced waterproofing system, especially below grade. The presence of seawater in the soil and the extensive use of the basement required a stable and effective below grade waterproofing system with a high performance vapor barrier. The basement was intended for “dedicated” spaces (medical rooms, spa, swimming pool, kitchens, cafeteria, print room, and meeting room) in which a dry and healthy environment was essential.

The commercial building design specified different areas of basement environment, so below ground waterproofing beneath the slabs was needed to prevent seawater travelling between the membrane and structural concrete from one area to the next. Seawater underground resulted in muddy working conditions, and the damp surfaces added complexity to the project. This led to the need for a membrane resistant to saline and suitable for application in these challenging circumstances.

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Finding an exceptional waterproofing solution

The use of a highly durable and chemically resistant membrane such as Preprufe®waterproofing was essential to protect the commercial building structure. Preprufe®is a pre-applied membrane consisting of a robust film of high density polyethylene (HDPE), impermeable to water, water vapor, and gas, coupled with a special multilaminar matrix. Its tenacious adhesion to the concrete prevents the phenomenon of migration of water and moisture in the membrane and concrete interface, thereby eliminating possible infiltration of water via cracks.

Horizontal laying of the Preprufe®300R waterproofing was carried out over a layer of blinding. Previously, the whole surface of the piles was treated with Bituthene®LM to seal any pores in them.

Bituthene®4000 waterproofing membrane with Primer W2 was then applied to the walls. This solution includes Bituthene(R) 4000 self-adhered waterproofing membrane, applied cold, with a thickness of 1.5 mm. The Bituthene® 4000 membrane consists of an adhesive compound comprised of rubber-bitumen coupled, with a special crossed laminated film of high density polyethylene (HDPE).

Blue360℠ Product Performance Advantage.
Because every project, large or small, deserves the best level of protection.

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