

Zlote Tarasy Warsaw, Poland



Site photograph of distinctive glass roof covering the indoor courtyard

The Site

Zlote Tarasy (The Golden Terraces), located in the centre of Warsaw, is a multifunctional entertainment retail and office complex costing \$500 million. With convenient access to the Central Railway Station between Jana Pawla II and Emilia Plater streets, the development includes over 200 shops on four commercial levels.

In addition, the complex comprises of restaurants, a hotel, a cinema multiplex as well as an underground car park suitable for 1,400 cars. The building's central indoor courtyard, covered by a distinctive, transparent roof, caters for concerts and similar musical events.

'Harsh weather conditions necessitated a product which would protect roof decks against the effects of ice.'

The Challenge

The design showed a complicated basement design due to the presence of slabs and piles.

The client required the highest grade basement waterproofing beneath the slabs, therefore a membrane suitable for preventing water travelling between the

membrane and structural concrete was specified.

A diaphragm wall, with a connection between the slab (detail called a lock), required a product that would provide waterproofing continuity at angles.

The roof decks necessitated a suitable membrane that would protect it from harsh weather conditions and from any risk of leaks occurring. As metal tiles were to be placed on top of the membrane, the chosen system would need to be appropriate for this.

The Solution

Preprufe® 300R waterproofing membrane was applied beneath the slabs to an area of 33,000m², preventing water migration between the structure and membrane. Its unique adhesive technology ensures that the risk of leaks in the structure is substantially reduced due to its unique ability to adhere to poured concrete. Preprufe® tape was also used for continuity of concrete adhesion at edges.

Servistrip® AH 205 a solid, active jointing strip which swells when exposed to water to prevent leak paths in concrete, was applied between the slab and diaphragm wall connection. Bituthene® Liquid Membrane was applied to provide waterproofing continuity at angles and penetrations.

Grace Ice and Water Shield®, a self-adhesive roofing underlayment, provided the necessary protection for the 2,000m² roof deck area. Composed of two waterproofing layers – a rubber bitumen adhesive backed by a layer of HDPE laminate, allowing the membrane to effectively bond to the roof deck and self seal around penetrations.

'In colder climates, it is particularly important to have a membrane which will protect against the adverse effects of water and ice - Grace Ice and Water Shield® helps to extend the life of roofs by reducing the risk of leaks.'



Architect's impression of the indoor courtyard



Site photograph – Concrete being poured on the Preprufe



Architect's impression of the Złote Tarasy retail development

PRODUCTS USED

Preprufe® 300R
Preprufe® 160R
Servistrip® AH205
Preprufe® Tape
Bituthene® Liquid Membrane
Grace Ice & Water Shield®

CREDITS

Client: ING Real Estate & Rodamco Europe
Main Contractor: Skanska Polska Sp.z.o.o,
Besix Poland, Modzelewski & Rodek,
Hydrobudowa 6. SA
Structural Consulting Engineer:
Arup & Partners International Ltd
Architects: Epstein, Jerdy Partnership

www.graceconstruction.com

Grace Construction Products Limited 635 Ajax Avenue Slough Berkshire SL1 4BH

Preprufe, Bituthene, Servistrip and Grace Ice and Water Shield are registered trademarks of W. R. Grace & Co.-Conn.

The information given is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and verification. Since the conditions of use are beyond our control we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale including those limiting warranties and remedies which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use which would violate or infringe statutory obligations or any rights belonging to a third party.

These products may be covered by patents or patents pending.

Copyright 2007. Grace Construction Products Ltd UKPP002 Printed in UK 10/07

GRACE