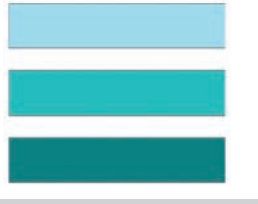


PKB MERONK sc.

Contact Andrzej Meronk
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 Phone +48 58 768 5000
 Email am@gd.pl
 Website www.meronk.pl / www.isbcad.pl



History of the Company

Our structural engineering consultancy company was established in 1994. We first and foremost design structures in steel, wood and reinforced concrete.

The company has designed many structures for the hotel, housing and commercial industry. We are a well known firm in Poland with a good reputation and have alliances with some big architectural consultancy offices in the country.

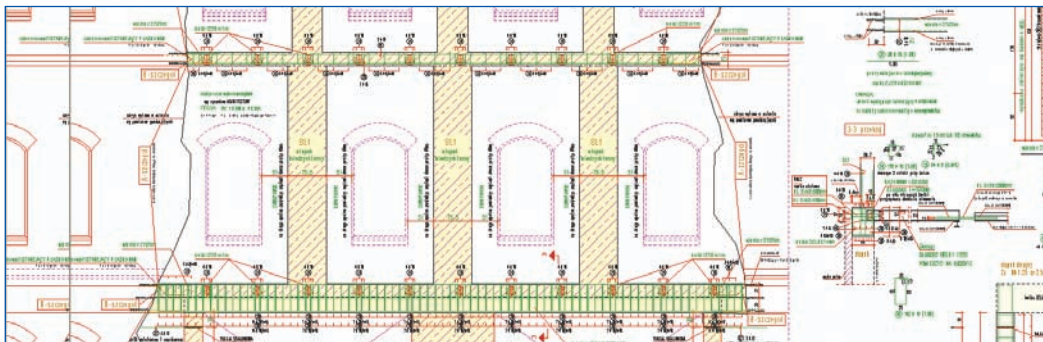
The company is located in the middle of Danzig. We have 15 CAD workstations and implement modern design software. Our offices are also equipped with modern printing facilities. All our projects have been designed and detailed with the software of GLASER -isb cad-, AIA, Allplan, AutoCAD, RoboBat and ABC.

The owner of the company has 23 years of experience in structural design, six of them gathered in Germany. He has worked in a concrete precast firm, on some construction projects and for years in structural design consultancy firms in the past. He has been involved in the design and detailing of

about 400 building structures, design and detailing of 3.500.000 m² of semi-precast lattice girder (filigran) slabs for over 4.000 projects.

The design of the semi-precast lattice girder slabs in filigran method is in conformity with the quality assurance systems documented in ISO 9002.

In the design and detailing of semi-precast lattice girder slabs, we have cooperated with many production facilities in the northern region of Poland. At the moment we design about 60.000 m² of lattice girders every month for about 50 to 60 projects.



ALFA Shopping Centre, Białystok, Poland

Short Description

The project regards a shopping centre in Białystok that has been built on an underground garage with about 600 parking spaces. The total surface area of the development is about 80.000 m². The design consists of a plate and column system, based on monolithic and brick walls with steel prefabricated construction fragments. All slabs are made of semi-precast lattice girders. The total area of semi-precast slabs is about 60.000 m²; about 7.000 of them are irregular. It took about 12 months to produce these slabs. Adapting this new complex to existing structures is unique in Poland. Normally older buildings are demolished but nowadays they are placed under the protection of the historic buildings council. The town of Białystok and the designers involved have respectfully implemented a historic building and a new commercial space.

Project Information

Owner: Andrzej Meronk
 Architect: Maciej Kuryłowicz - APA - Warsaw - Poland
 General Contractor: JWK - Gdańsk - Poland
 Engineering Office: PKB MERONK sc.

Construction Start: 10/12/2006
 Construction End: 10/06/2008
 Location: Białystok, Poland



The building has an underground garage with about 600 parking spaces. The total surface area of the development was about 80.000 m². The design consists of a plate and column system, based on monolithic and brick walls, with steel prefabricated construction fragments. All slabs were made of semi-precast lattice girders. The total area of semi-precast slabs developed was about 60.000 m² about 7.000 of them being irregular. It took about 12 months to produce the lattice girder slabs.

The major challenge posed by this project was adapting the newly designed structure to the facade of an existing prehistoric building (ca. 1.900). In order

to protect the stability of the existing structure and as a basis for the basement of the new building a pile wall of about 6 m high and 5 m away from the existing structure was erected. After finishing the basement and upper floors the roofing was designed in steel and glass.

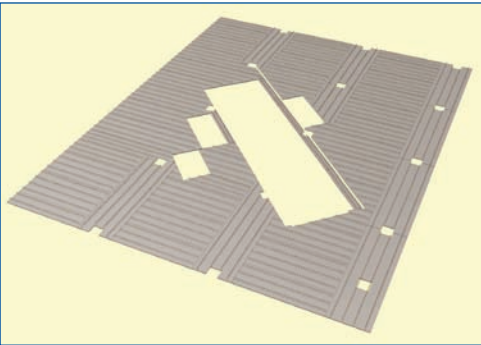
The facade of the existing structure e.g. adjoining walls, roofing etc. was also reinforced to grant stability. After stabilising the facade it was restored, staircases were added and lifts were implemented. The building of the new ALFA complex to adapt to existing structures is unique in Poland. Normally such old building are demolished. Such old



Used software: GLASER -isb cad-, Allplan Engineering

existing structures have now been placed under the protection of the warden of monuments. The town of Bialystok and the designers involved have gained respect for implementing the use of a historic building thus making this project exemplary of how existing or prehistoric buildings can be utilized for contemporary or commercial functions.

The facade of the ALFA Center was also designed to reflect that of the existing building using modern technology. About 150 individual pieces of the facade were prefabricated. This made it possible to preserve the monumental character of the facade.



ALFA Shopping Centre, Bialystok, Poland

