



Revontuli Northern Lights Shopping Centre, Rovaniemi



Revontuli Northern Lights Shopping Centre in Rovaniemi



The Revontuli Northern Lights Shopping Centre is being built in the centre of Rovaniemi, the capital of Finnish Lapland. The building spans across the European highway E75, connecting the western and central parts of town. It is connected to two existing buildings; one of the few buildings surviving the war owned by the builder and a smaller retail building built in the seventies. The Shopping Centre will be finished in time for the Christmas shopping season 2007, and the office block is planned for early 2008.

The main entrance to the shopping centre is located on the north side of the building. Designed to appear as an extension of one of the main streets of the town of Rovaniemi, it is highlighted by an illuminated curved glass wall simulating the "Aurora Borealis" or Northern Lights. More than 30 shops and restaurants are planned in the shopping area found on both sides of the main gallery space. Parking facilities are situated in the basement with a direct connection to both highway E75 and to the town street network. The four storey tall office block is 40,000 m². and contains offices, a medical centre and a gym. The rentable area of the building is more than 22,000 m².

The Shopping Centre was designed to actually span across the highway and one of the conditions was traffic could not be shut off at any time during the building period. One of the main challenges of the design was how to go about the task of building over a busy highway without being able to shut down traffic and access the area below.

The architectural office began using Allplan as a design and planning tool in 2000, first mainly for conceptual design, 3D illustrations and animations. This actual planning work on this building was begun in the Summer of 2006, simultaneously with the actual working drawing stage. Allplan made it possible not only to keep a tight timetable, but also cope with some rather big changes in the construction system initiated by the construction engineer. "The fact that the engineer used an IFC compatible 3D design CAD program enabled us to keep control over what was a rather big project", says Mats Biström, project architect at Arkaari Oy.

The project was completed as a BIM-project (Building Information Model) which reduces the risk for design mistakes. For interchanging information with construction engineers the Arkaari Oy used an IFC interface. One of its main benefits – the instant 3D "envisioning" of all changes in design – was very useful when informing those involved on the building site and when negotiating over other parts of the building process.

About the Company:

Arkaari Oy Architectural office was founded in 1985 and specializes in a wide range of building designs covering office buildings, retail shops and refurbishment projects. Arkaari Oy was one of the first offices in Finland to use Allplan. Although Arkaari's main shareholder, architect Vesa Huolman, will soon be retired; Mats Biström, project architect plans to continue working with ALLPLAN on similar projects with the architects office Innovarch Oy, an office specialized in commercial buildings.

Nemetschek AG
Konrad-Zuse-Platz 1
D-81829 Munich

tel. +49 89 92793-0
fax. +49 89 92793-5308
e-mail: info@nemetschek.de

"With the help of Allplan we can merge our conceptual design in a seamless visual surrounding. Interoperability is the key to our projects. Because we integrate different information in different formats from different fields we experience the design process in a new way"

Mats Biström, project architect at Arkaari Oy.

Products/Solutions

- Allplan Architecture
- Allplan Engineering
- Allplan Building Services
- Design2Cost
- Round-Trip Engineering
- CINEMA 4D

Project Data:

Client:
Skanska talonrakennus Oy

Planning and Construction:
Revontulen kauppakeskus Oy

Construction Costs:
43 Million Dollar

Design Stage:
1997 – 2006