

The Inn-Trøndelag Health and Emergency Response Centre, in Steinkjer, Norway



The Inn-Trøndelag Health and Emergency Response Centre, in Steinkjer, Norway, has been designed fully digitally in 3D with BIM through the use of digital technical models and an insight model. The building will ensure that health services are brought closer to the inhabitants of the entire region.

Norconsult has participated in the site investigation, the feasibility study, the preliminary project phase, the detail design phase and the completion phase.

Assignment

The Inn-Trøndelag Health and Emergency Response Centre houses an ambulance station, family and child welfare services, a fire station and the Norwegian Civil Defence emergency response department. It is also an approved landing site for helicopters. Total gross area is approximately 14,000 square metres.

The building has been constructed in five storeys plus technical rooms on the roof. Façade material is partly brick and partly plate cladding. Supporting structures are primarily prefabricated concrete elements and steel structures. The ground has been replaced with blasted rock to the original terrain and pre-loaded. The building has waterborne heat in all floors and the energy source

is district heating. The building is fully sprinklered.

The project has been completed with seven detail design partial contracts controlled by the client. The partial contracts are building-related main contract, pipe installation, air handling installation, electrical engineering installation, automation, lift installation and exterior installation. Norconsult has assisted with site investigation, feasibility study, preliminary engineering design, detail engineering design and during the completion phase.

Solution

All engineering design has been carried out in 3D with a BIM through use of digital technical models and insight model. StreamBIM has been used, which results in

► **Disciplines and services**
Acoustics, Architecture, Fire safety, Geotechnics, Interior Architecture, Landscape Architecture

Time span
2016-2019

Client: Steinkjerbygg KF

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quick assembly of large BIM models for distribution of the model and drawings to everyone involved in the project. At the construction site, the tradespeople largely used both BIM kiosks and handheld iPads

instead of paper drawings. The building is heated with district heat from a local chip and bark heating plant at the local firm Innre AS. The choice of a contract strategy with divided contracts has provided the

client with a good project with low building costs. Most of the contracts have been won and performed by local firms, thus providing a good deal of local value creation.