



Project | Fløyheia elevator and walkway in Arendal

Illustrasjon: NSW Arkitektur

PERIOD | 2018 - 2020
COUNTRY | ARENDAL, NORWAY
MARKET | GEOTECHNICS AND ENVIRONMENT
PROJECT MANAGER | EIVIND STEIN

Fløyheia will be a new city center with shops and offices in Arendal. The area is located at a hillside height of approximately 55 meters above sea level. An existing tunnel runs under Fløyheia.

To facilitate access from Arendal city square to Fløyheia, an elevator has been built from the existing tunnel, up through a shaft in the hillside mountain and further up in a tower above the shaft. A footbridge takes people from the top of the lift and into Fløyheia shopping center.

NGI has been responsible for rock engineering design and prepared tender documents for the following works:

- Blasting of niche and shaft, rock support and pre-injection
- Anchoring the gate in the niche towards the shelter (tunnel)
- Anchoring of towers and bridge foundations.

According to NGI's design, the niche was constructed by drilling and blasting. The shaft was pre-injected and then operated with a combination of wire sawing and blasting.



Blasted and supported shaft (left). Top of blasted shaft (top right). Architect illustration of the footbridge with Arendal city in the background (bottom right).

The tower foundation is anchored to the rock mass around the upper part of the shaft. Both the gate in the niche towards the refuge and the bridge foundation are anchored in the rock with clamped rock anchors (rod anchors).

The construction work will be completed in 2021. NGI has worked closely with the client Arendal Eiendom KS and the various contractors throughout the project.

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