



Diamond brick facade mockup

Firestation, Knokke, Belgium 2023-2026. The Firestation is located within a civic zone of parks, recreation, new public facilities, and light industrial development. Visible day and night, the essential technical and utilitarian functions of fire safety, search and rescue, and ambulatory services are given a civic presence along the Natiënlaan road corridor and a new public park.

Together with the contractor Volus and engineering consultants, the design-build process utilized a collaborative approach to project delivery known as *integrated project development*. All core team members were involved in the design and execution of the project using BIM collaborative tools for seamless design and construction execution.

The building is divided into two main forms: the main building and the depot. The L-shape configuration delimits the civic and operational functions of the building. The plan is compact and simple consisting of a square and a rectangle.

The primary public façade consists of CO²-negative facing diamond shaped bricks. At the two primary corners the walls extend into diamond shaped roof forms that demarcate the primary public entry points and visual cultural markers along the road and park. Internally these uplifting spaces house the daily gathering spaces for the fire workers with warm earthen interior faced bricks. Open facades provide unobstructed views to the park and a large internal terrace gives all spaces access to fresh air.

All operational and logistical functions are on the main floor. The distances to the depots are minimal with slides providing invention access between floors. Depot parking is column free and one-directional for efficient departure. The green roof and truck logistics zone collect water and channel it to rain gardens, reed fields, and basins to filter, store and redistribute throughout the site.

Project Manager/ Architect (BIM) Competition - Construction Administration
***First Prize Competition Winner**

ORG Permanent Modernity

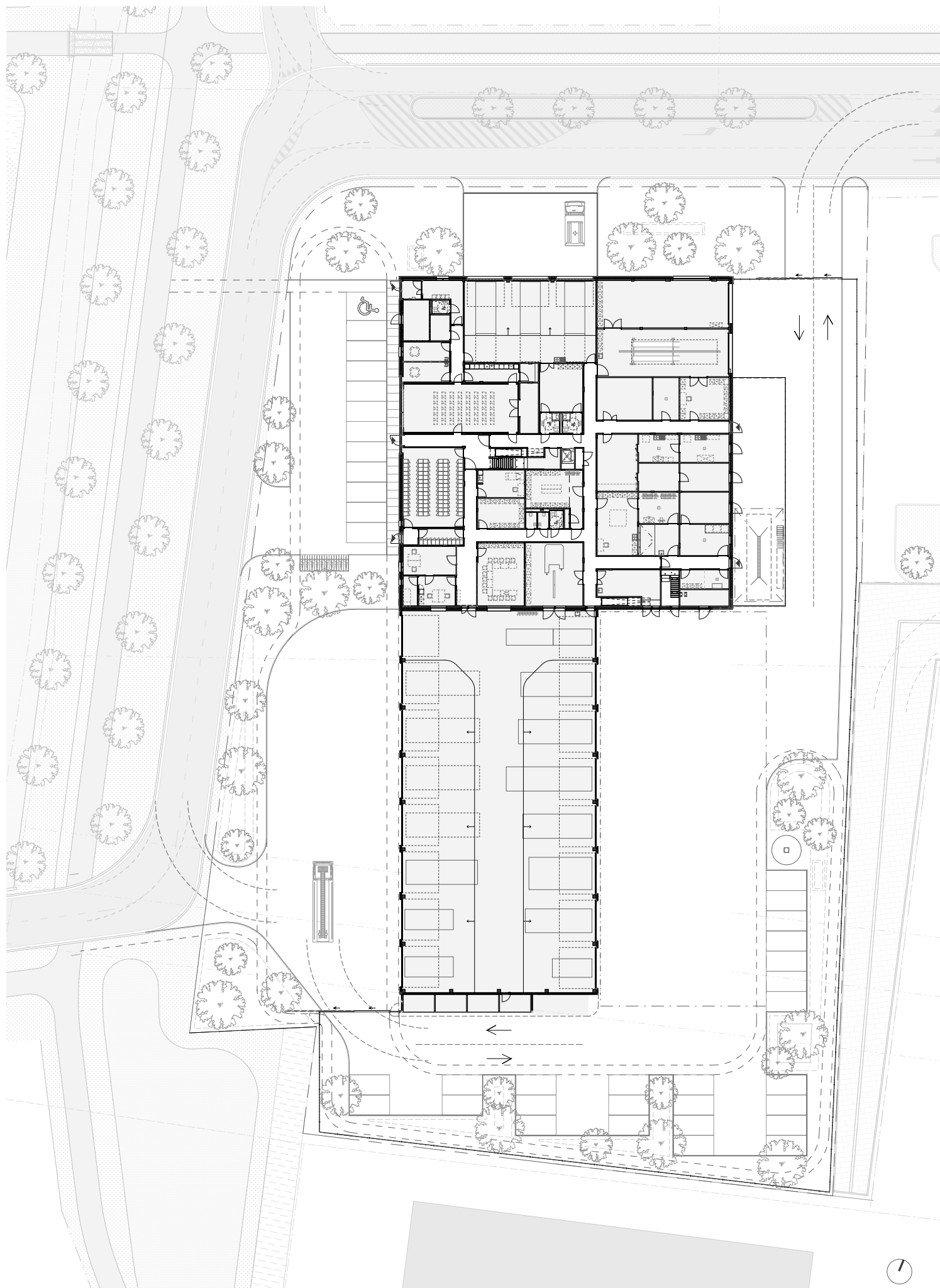
46,823 SF (4,350 SQM)



View from main road toward NE corner of fire station

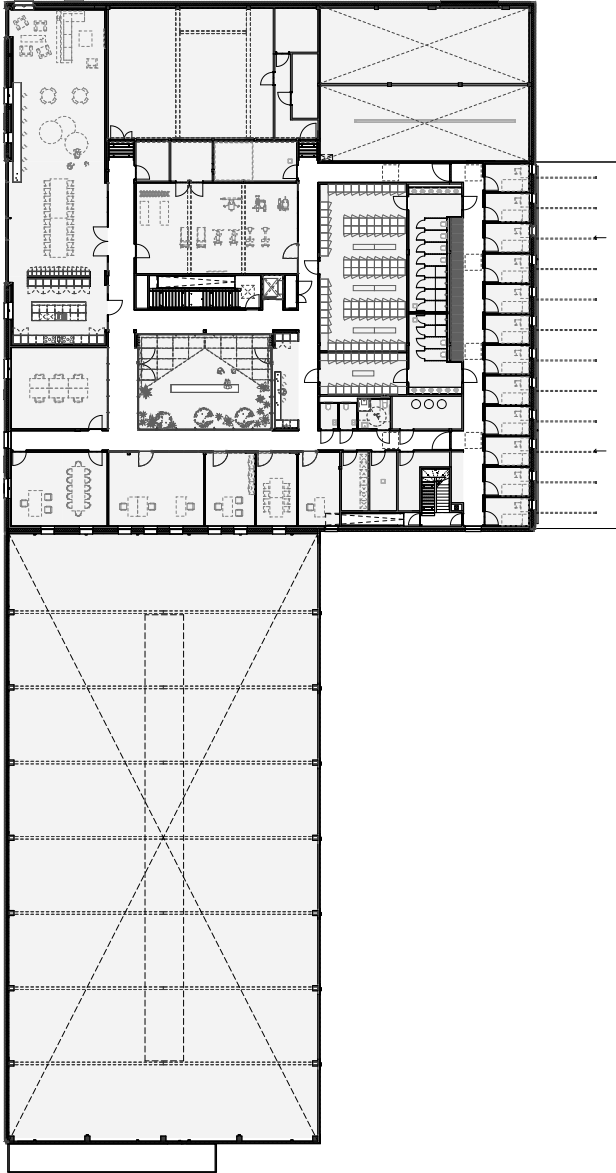


View from park toward NW corner of fire station

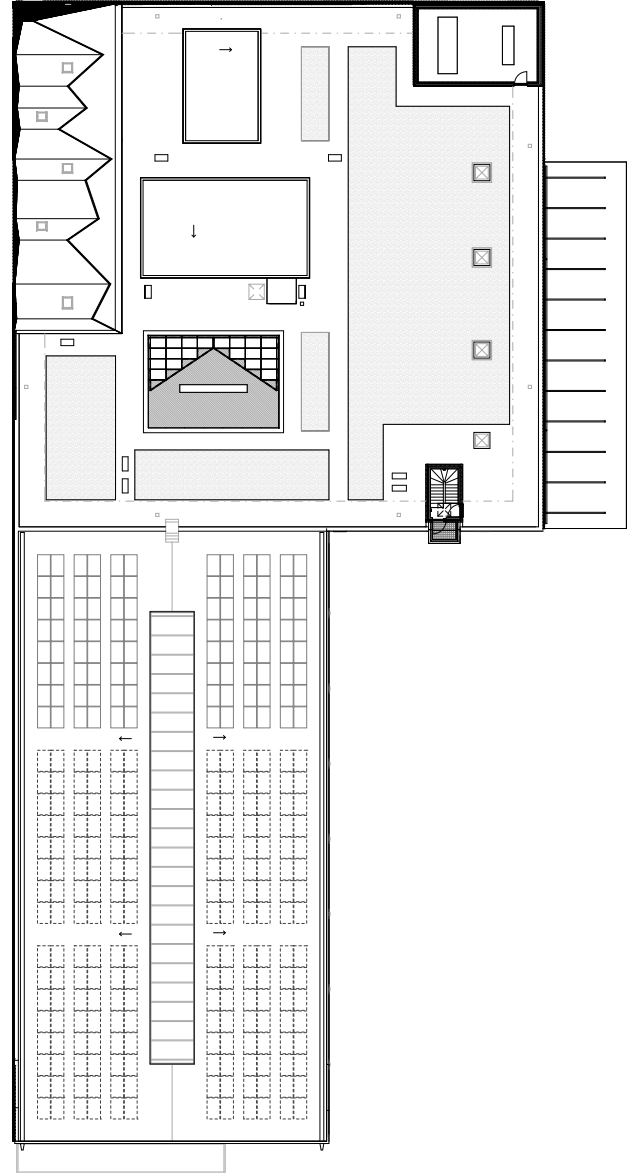


Level + 0 ground plan

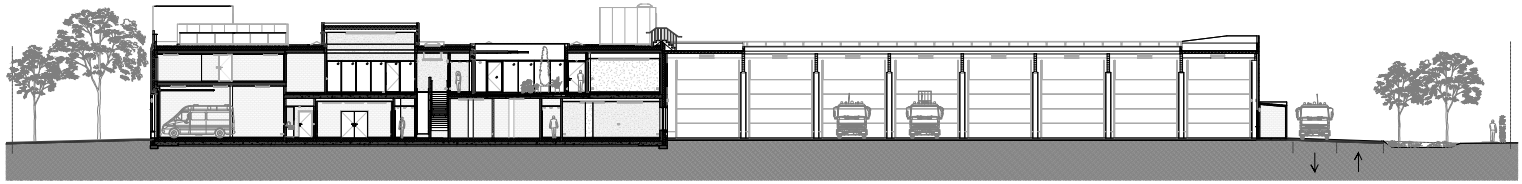
0 25m



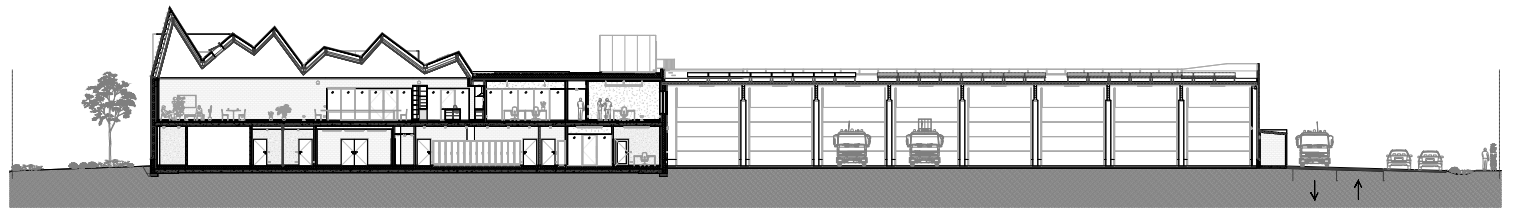
Level + 1 plan



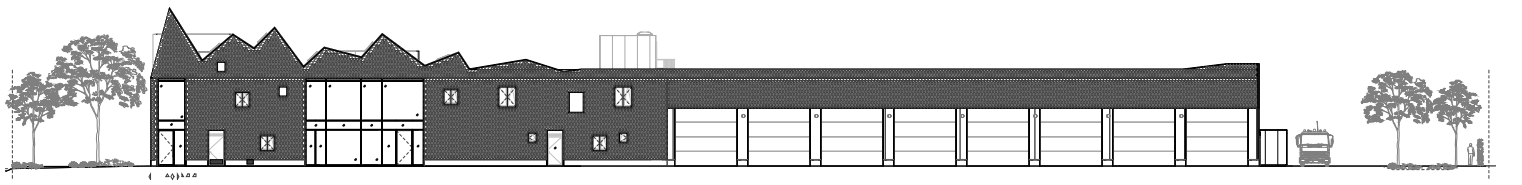
Roof Plan



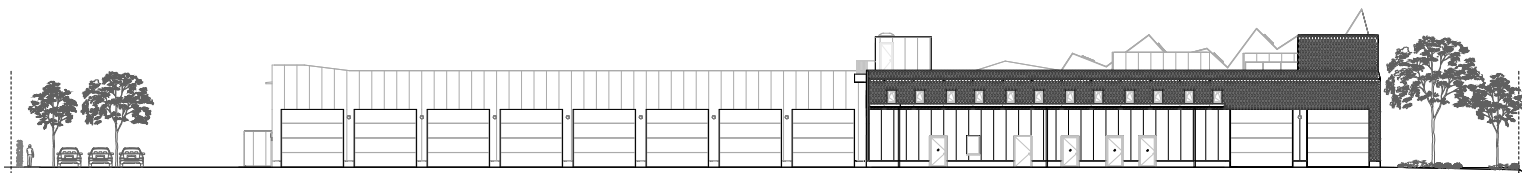
N/S Section A-A



N/S Section B-B



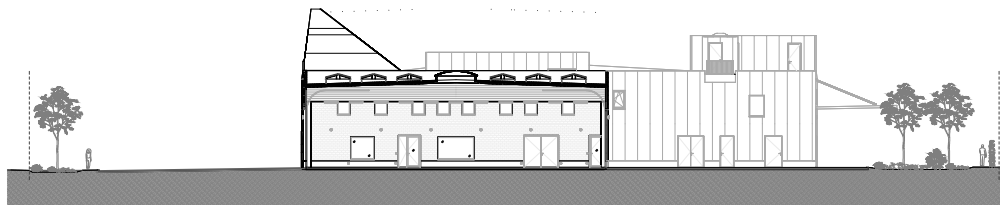
West Elevation



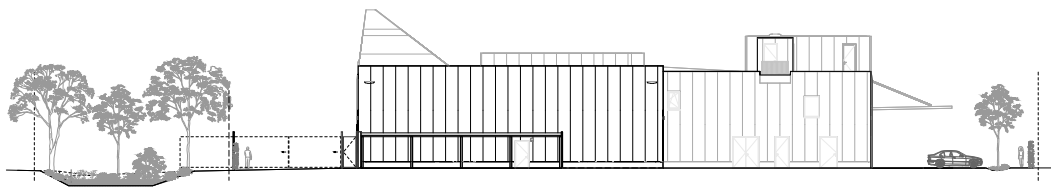
East Elevation



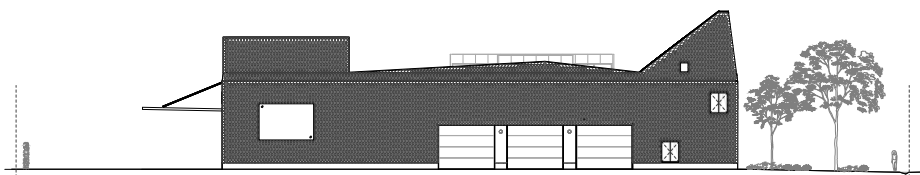
W/E Section C-C



W/E Section D-D

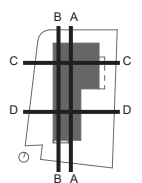


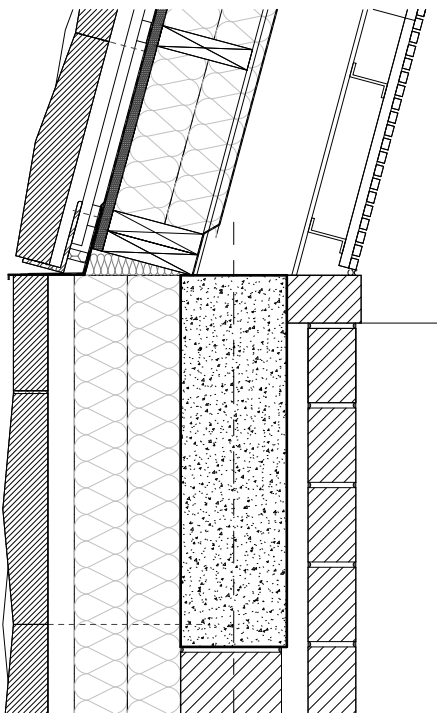
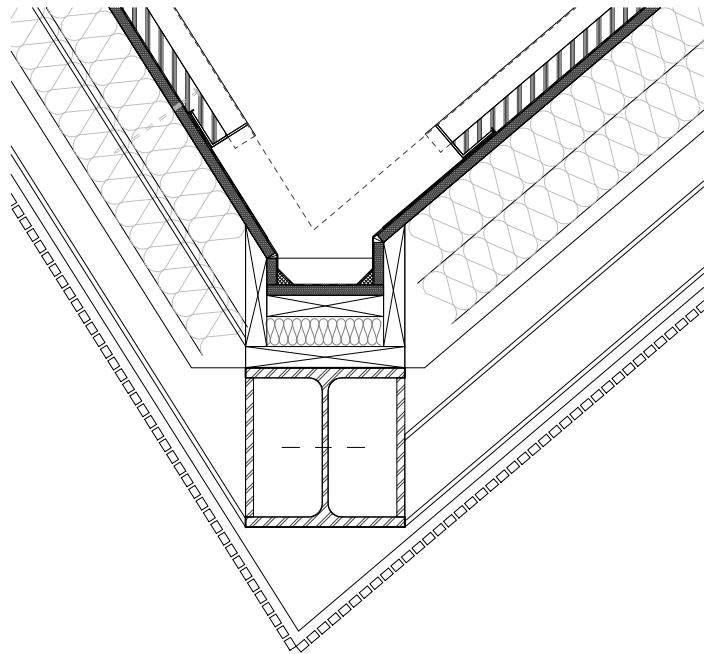
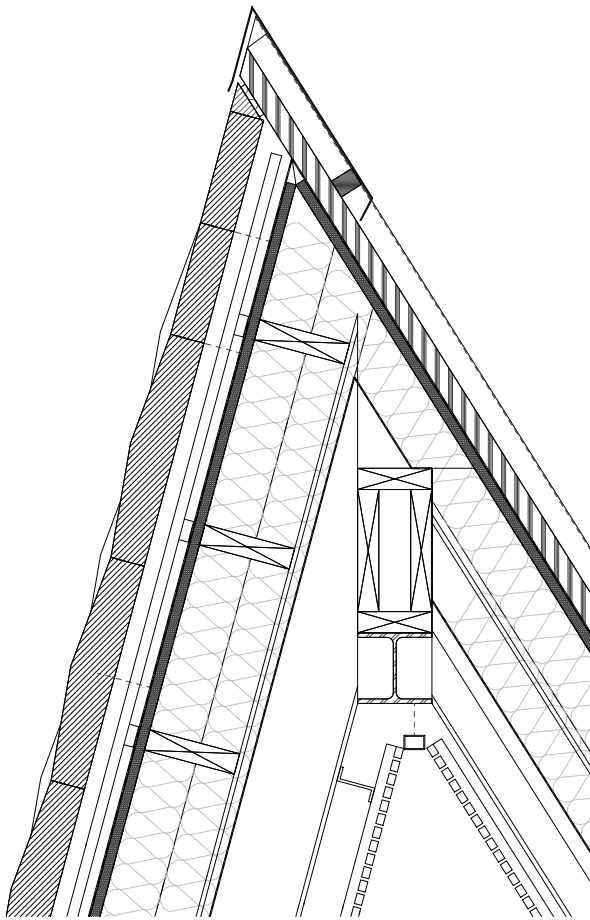
South Elevation



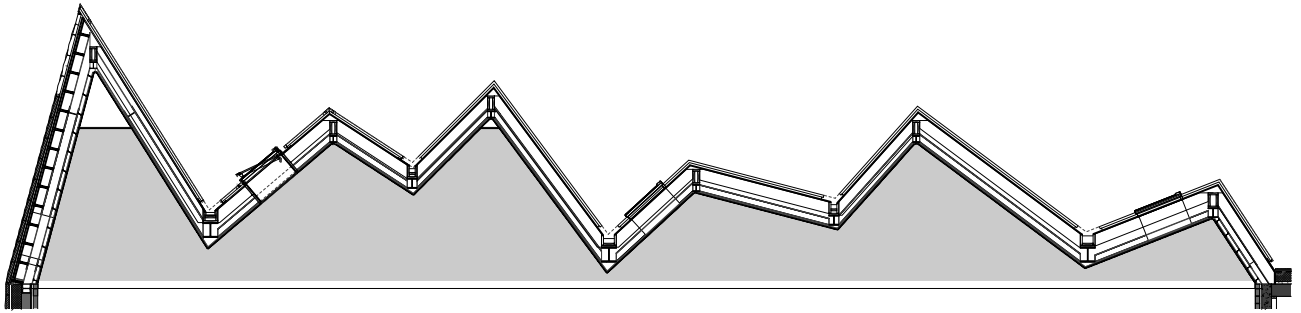
North Elevation

0 10m

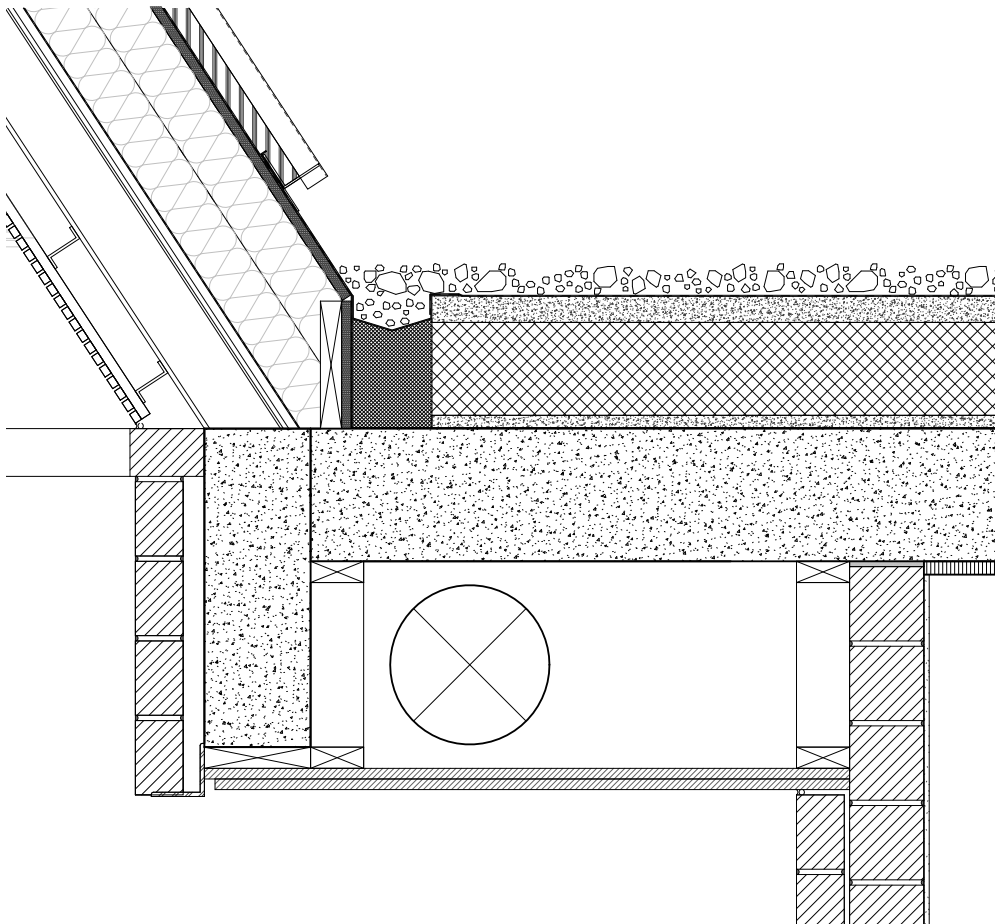


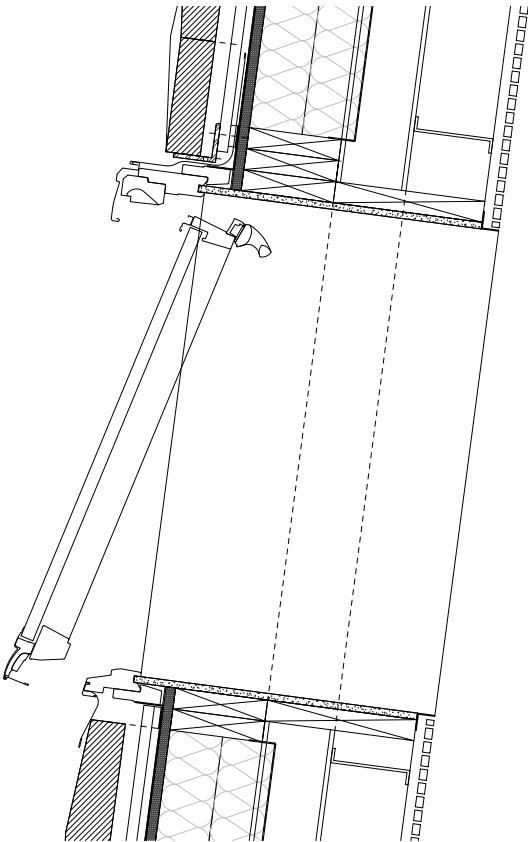
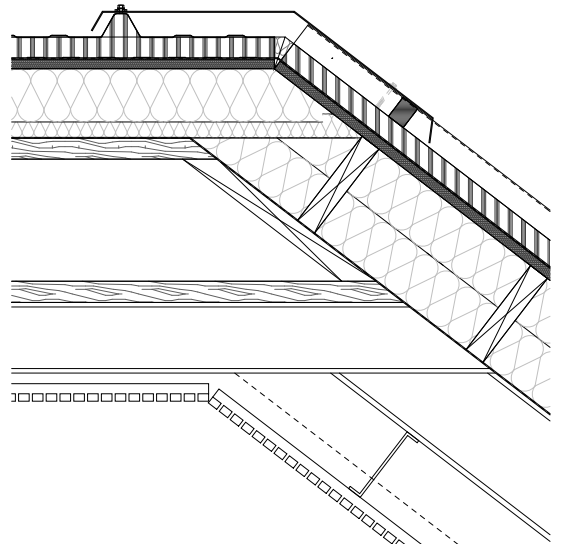
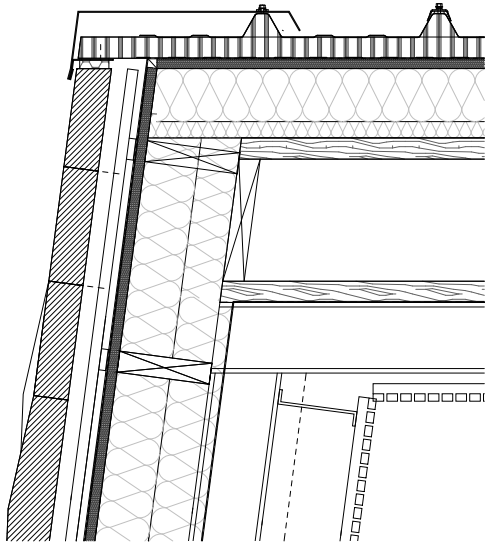


North facade section at social space

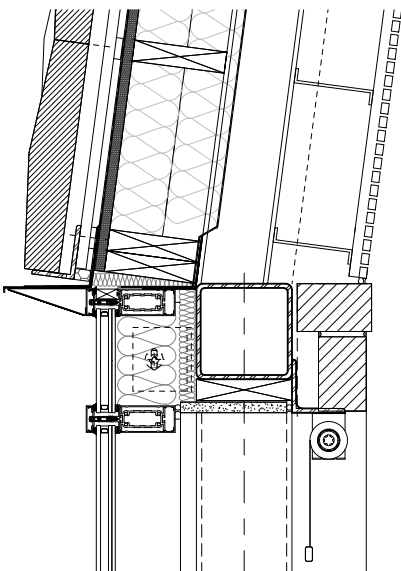


Diamond roof at Level +1 social space

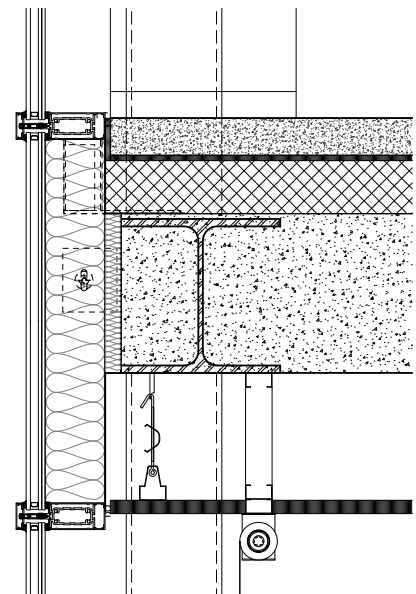




Diamond roof steel and wood framing under construction



West facade section at social space





Level +1 social space looking North