Class: *History Of Architecture II (ARCH 2321)*

Name: *Francisco Cuevas Lopez.*

Professor: *Robert Zagaroli*

Assingment: *1 – ZEB Pilot House*

ZEB Pilot House

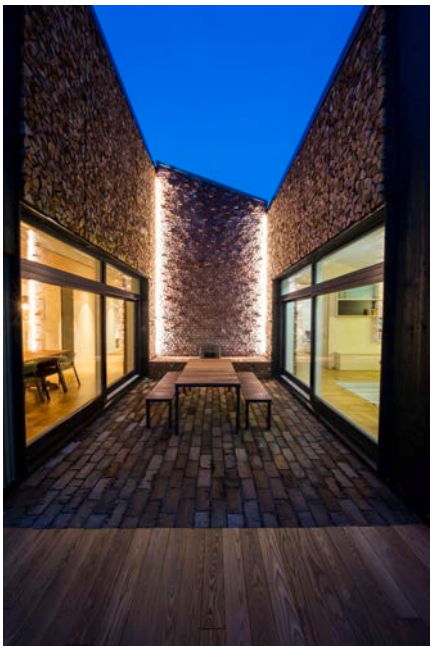
Text description provided by the architects. Snøhetta is an active partner within ZEB (The Research Center on Zero Emission Buildings). The ZEB Multi-Comfort House is a cooperation between Snøhetta, Scandinavia's largest independent research body SINTEF, ZEB partner Brødrene Dahl, and Optimera. The volume of the house describes a single family house, however, the building is intended for use as a demonstration platform to facilitate learning on building methodology for plus houses with integrated sustainable solutions.

Characteristic tilt to the southeast

The house in the garden has a characteristic tilt towards southeast and a sloping roof surface clad with solar panels and collectors. These elements, together with geothermal energy from energy wells in the ground, will serve the energy needs of the family house and generate enough surplus to power an electric car year-round! For this to become a successful reality, architecture and technology must come together and ensure optimization of both comfort and energy use.

Daylight, view, and contact with landscape and outdoor space is reconciled with the need for balancing sealed walls and windows. Heating and cooling is solved passively through placement of glass surfaces, orientation, house geometry and volume, and choosing materials with good thermal characteristics. Materials used on interior surfaces have been chosen on the basis of their ability to contribute to good indoor climate and air quality as well as aesthetic qualities.

Outdoor atrium



An outdoor atrium with fireplace and furnishing opens for outdoor dining from early spring to late fall. A feeling of cabin life, in one of the world's most advanced family houses, in a room with walls of stacked firewood and bricks.

Landscape

The landscape is formed as a garden where visitors can walk around the building and discover the elements that make this an exceptional family house. The garden has a swimming pool and shower

utilizing solar- generated thermal heat surplus, a sauna heated with firewood, and storage rooms as shielding from neighbours. A breakfast spot on the eastern side with a view to neighbouring farmland is paved with recycled timber blocks, creating an inviting surface.

This project was finished in 2014, and it is located at Larvick, Norway.