

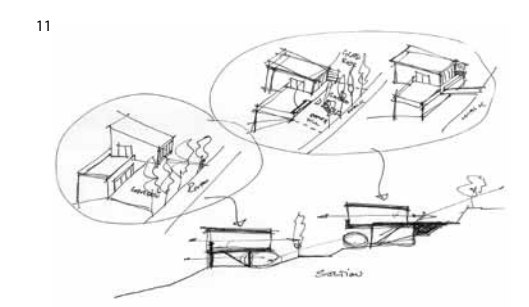
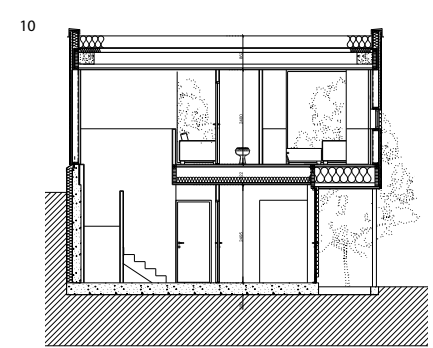
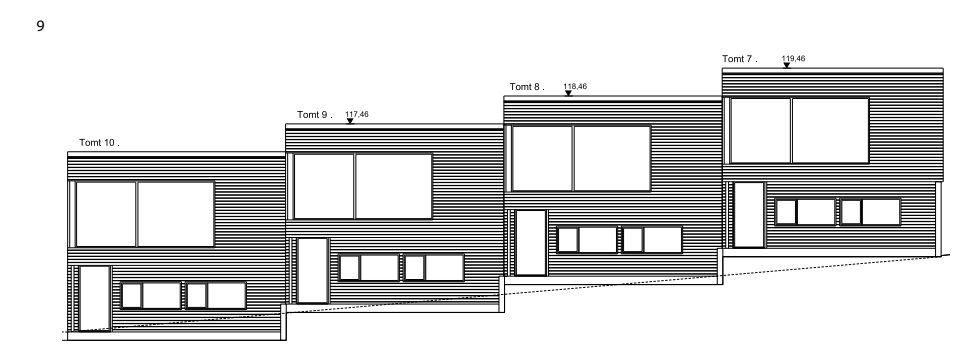
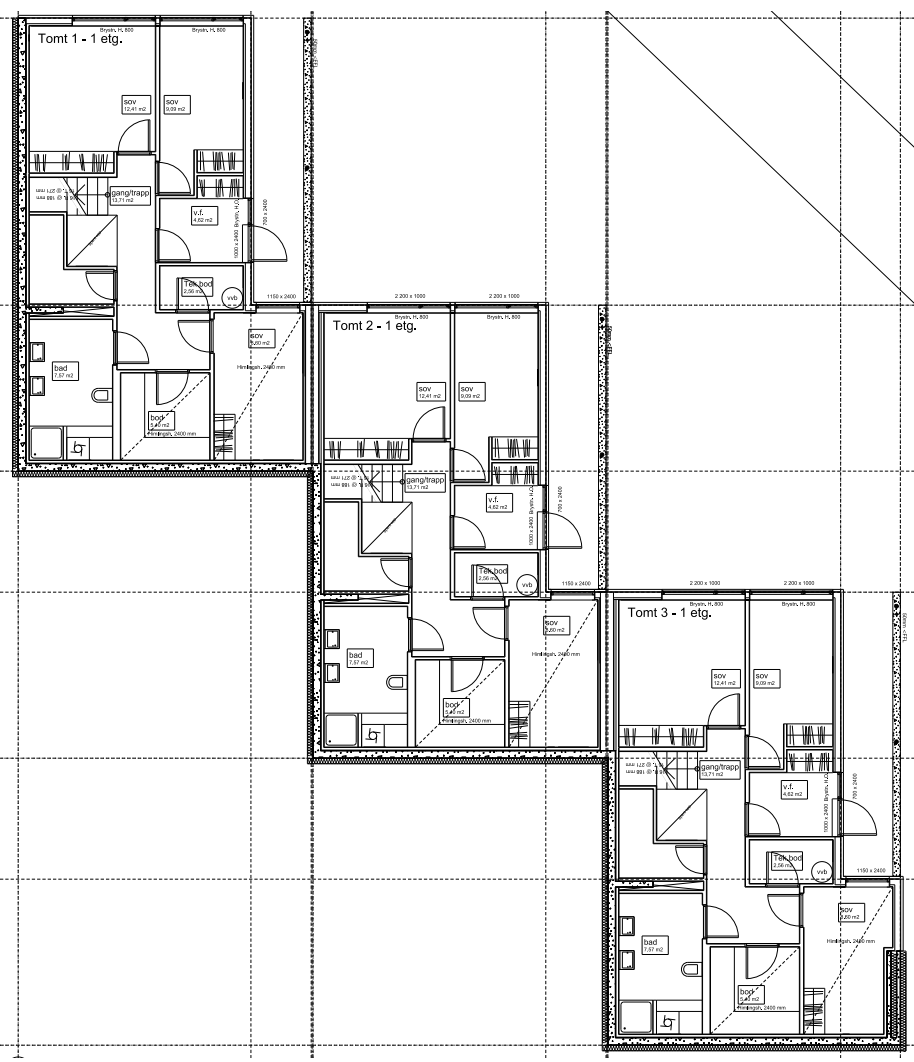
27 low cost houses in Stavanger, Western Norway, constructed using a traditional timber frame system.

The site is on a north facing slope with dramatic views, which poses difficult design problems for an environmentally considered home. However even with the unfavorable outlook and orientation the homes are extremely energy efficient, benefitting from the insulative advantage of being dug into the ground together with superinsulated walls and triple glazing.

A mechanical ventilation heat recovery system supplies air and a community combined heat and power unit supplies energy for water and home heating.

The accommodation is arranged to make the best of the views and light. Due to the nature of the sloping site, access to the homes is generally at the first floor level and subsequently accommodates the living and dining areas. Bedrooms are located on the lower ground level with bathrooms and storage rooms located in the area sunken into the ground. This arrangement also allows the dual aspect living areas to enjoy the benefit from sunlight for most of the day.

The houses had to meet strict Norwegian 'Lifetime Homes' standards, being able to convert and re-arrange accommodation to meet the changing demands of a growing and ageing family. Bedrooms can be moved between floors, and stairs can be fitted with access lifts.



Illustrations

- 1/ The site in Stavanger, Norway
- 2/ Reinforced concrete slab foundation and retaining walls
- 3/ External walls constructed on concrete slab
- 4/ Roof joist installation

Illustrations

- 5/ Composite roof joists with views to the mountains beyond
- 6/ Timber framing on concrete slab foundation
- 7/ Utility installation
- 8/ Low E glazing installation
- 9/ North facing elevation
- 10/ Typical short section
- 11/ Initial concept sketches