



Shoji Screen - ENGAWA



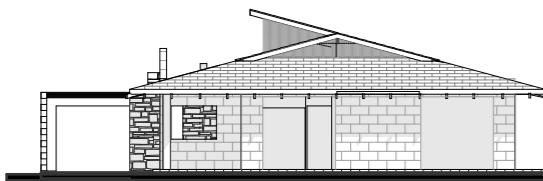
TOKONOMA



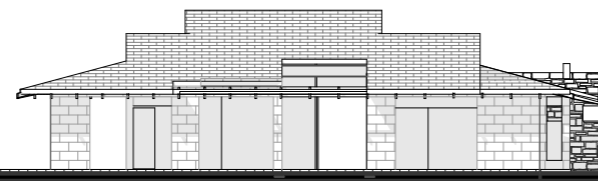
Wall mounted solar panel look like windows



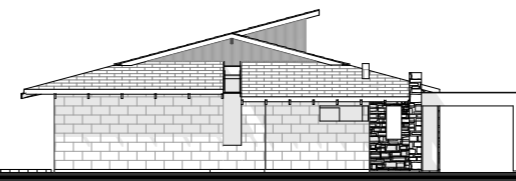
Eaves are cut away at the conservatory & solar panels



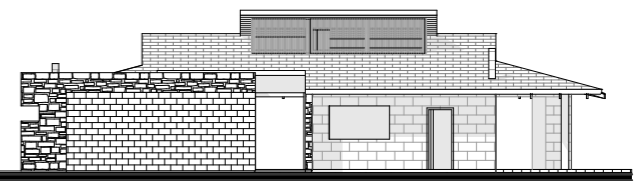
NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION



EAST ELEVATION



FLOOR PLAN

Top of the design brief was eco-friendly and energy efficient. One example of preference for sustainable materials is the use of laminated Pinus Radiata timber beams instead of steel. These also provide the desired Japanese aesthetic.

The skylight over the conservatory acts as the solar collector with a fan to distribute warm air to other parts of the house. The eaves are subtly cut away at the conservatory and the wall mounted solar panels to provide the required exposure the sun's rays.

The house uses no electricity for either water heating or space heating. The highest efficiency log burner available is connected to the hot water cylinder. Large Solar panels are installed on the roof and north wall. The solar and the log burner are completely complementary and both are connected to the underfloor heating providing the luxury feel of a warm timber floor. The solar provides 100% of the hot water in the summer and the log burner provides the backup in the winter and keeps the house cozy. They don't have photovoltaics as yet, but have the provisions built in to install them once a more efficient model is available here in New Zealand making it then a totally off grid home.



bob burnett
ARCHITECTURE

