An increased societal focus on energy efficiency has led to the development of new building concepts and standards in many countries, such as the passive house standard in Norway which implies a dense building envelope with restrictions on the use of glass and natural ventilation. Generally low-energy building concepts are based on a rational approach to comfort in housing limited to mainly measurable aspects. This, however, hardly reflects what makes residents feel comfortable at home, since it lacks a holistic understanding of residential well-being. Well-being is a complex and multi-faceted concept that includes atmosphere and feeling at home. In a qualitative study of four Norwegian low-energy housing projects, we investigate and discuss the impact of visual and sensory qualities, like view, daylight and access to fresh air, on residential well-being. The study reveals that it is possible to achieve well-being in energy-efficient housing, but some practices jeopardize the energy-design concept and influence energy use. Residents find strategies to achieve well-being by opening windows and doors, despite restrictions on airing naturally. Access to daylight and view and the ability to open windows or balcony doors to let in air, smells and sounds from the outside are crucial for residents’ well-being and thus important factors to consider when designing and building energy-efficient housing where people feel at home.