

THE 25 GUIDING PRINCIPLES OF BUILDING BIOLOGY

Building biology is about creating healthy, beautiful, and sustainable buildings in ecologically sound and socially connected communities. In the selection of materials and the design of living environments, ecological, economic, and social aspects are considered.

HEALTHY INDOOR AIR



Supply sufficient fresh air and reduce air pollutants and irritants



Avoid exposure to toxic molds, yeasts, and bacteria as well as dust and allergens



Use materials with a pleasant or neutral smell



Minimize exposure to electromagnetic fields and wireless radiation



Use natural, nontoxic materials with the least amount of radioactivity

THERMAL AND ACOUSTIC COMFORT



Strive for a well-balanced ratio between thermal insulation and heat retention as well as indoor surface and air temperatures



Use humidity-buffering materials



Keep the moisture content of new construction as low as possible



Prefer radiant heat for heating



Optimize room acoustics and control noise, including infrasound

HUMAN-BASED DESIGN



Take harmonic proportion and form into consideration



Nurture the sensory perceptions of sight, hearing, smell, and touch



Maximize daylighting and choose flicker-free lighting sources and color schemes that closely match natural light



Base interior and furniture design on physiological and ergonomic findings



Promote regional building traditions and craftsmanship

SUSTAINABLE ENVIRONMENTAL PERFORMANCE



Minimize energy consumption and use renewable energy



Avoid causing environmental harm when building new or renovating



Conserve natural resources and protect plants and animals



Choose materials and life cycles with the best environmental performance, favoring regional building materials



Provide the best possible quality of drinking water

SOCIALLY CONNECTED AND ECOLOGICALLY SOUND COMMUNITIES



Design the infrastructure for well-balanced mixed use: short distances to work, shopping, schools, public transit, essential services, and recreation



Create a living environment that meets human needs and protects the environment



Provide sufficient green space in rural and urban residential areas



Strengthen regional and local supply networks as well as self-sufficiency



Select building sites that are located away from sources of contamination, radiation, pollutants, and noise

In real life, all criteria cannot always be met. The goal is therefore to optimize each criterion within an individual's framework of feasibility.