



Building Biology and Ecology Institute

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THE PRINCIPLES OF ECOLOGICAL BUILDING AND DESIGN

Ecological Principles

1. Building materials should be as much as possible from renewable or non-depletable resources, be recyclable and durable;
2. Building materials should not contribute to environmental problems in their production, installation, demolition and disposal;
3. Building materials are best sourced locally to avoid excessive transportation;
4. Construction should minimize waste and unnecessary packaging;
5. Building design should consider efficient energy use and the use of renewable and self-generated energy sources;
6. Building design should consider efficient water use and environmentally friendly and self-sufficient waste water disposal;
7. The landscape design around a building needs to consider principles of sustainable and environmentally friendly use.

Biological Principles

8. Building materials should be as much as possible of natural origin;
9. Building materials need to be of low toxicity, non radioactive, and not outgas harmful chemicals;
10. Building materials need to allow air diffusion and create a breathing third skin, thus regulating the humidity of the indoor environment and filtering and neutralizing air pollutants;
11. The indoor air temperature should be within the optimum range for the health of the occupants;
12. The indoor environment should not promote, accumulate or circulate harmful vapours, particles, radioactivity, bacteria, viruses and fungi;
13. Building design should consider principles of natural heating and ventilation;
14. Buildings need to be adequately insulated against unwanted noise, and use natural light spectrum lighting;
15. Building design should consider the principles of electro-biology - to create an environment that does not change natural ionization, natural magnetic fields and beneficial cosmic and terrestrial radiation, and minimizes technical electro-magnetic interference;
16. Building design should consider site placement to avoid harmful earth radiation;
17. Building design should consider ergonomics.

Spiritual and aesthetic Principles

18. Colour used appropriately will promote the psychological well being of the occupants;
19. The building design should consider principles of harmony and proportion;
20. The design and building process needs to be a holistic approach and consider both eastern and western spiritual philosophies;
21. The building design should have soul and be a creative expression of its occupants.

Social and Community Principles

22. The design of a building should foster healthy family and community relationships;
23. Buildings are best designed to complement or reflect the local character of the community;
24. Housing developments should be planned to be away from major traffic routes and centres of industry;
25. Commercial and housing developments should be socially responsible.