25 Building Biology Principals

Site and Community Design

1. Verify that the site is free of naturally-occurring and human-made health hazards.
2. Place dwellings so occupants are undisturbed by sources of human-made air, soil, water, noise and electro-pollution.
3. Place dwellings in well-planned communities that provide ample access to fresh air, sunshine and nature.
4. Plan homes and developments considering the needs of community, families and individuals of all ages.

Electromagnetic Radiation Health

5. Provide an abundance of well-balanced natural light and illumination while using color in accordance with nature.
6. Minimize building material interference with vital cosmic and terrestrial radiation.
7. Adopt appropriate strategies to minimize exposure to harmful Electromagnetic radiation generated as a result of building electrification
8. Adopt appropriate avoidance and shielding strategies to minimize exposure to radio frequency radiation generated by wireless devices within the building and from wireless sources outside the building.
9. Avoid use of building materials that have elevated radioactivity levels.

Indoor Air and Water Quality

10. Assure low total moisture content and rapid desiccation of wet construction processes in new buildings.
11. Provide for ample ventilation. All building materials shall be non-toxic with neutral or pleasant natural scents using natural and unadulterated building systems and materials.
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13. Use appropriate water and moisture exclusion techniques to prevent interior growth of fungi, bacteria and dust mites. Techniques to favor mass flow-through envelope enclosures with high hygric buffering capacity.
14. Assure best possible water quality by applying purification technologies if required.

Occupant Well-being

15. Allow natural self-regulation of indoor air humidity, sound attenuation and healthy ion balance using hygroscopic (humidity buffering) and sorbent materials and finishes.
16. Design for a climatically appropriate balance between thermal insulation and thermal storage capacity.
17. Plan for climatically appropriate surface and air temperature.
18. Use appropriate thermal radiation strategies for heating buildings including passive solar wherever viable.
19. Provide adequate acoustical protection from harmful noise and vibration.
20. Utilize physiological and ergonomic knowledge in interior and furniture design.
21. Consider proportion, harmonic measure, order and shape in design.

Environmental Protection, Social Responsibility and Energy Efficiency

22. Materials and methods of construction shall promote human health and well-being from the extraction of raw materials, through to end-of-building's life.
23. Avoid the use of building materials that deplete irreplaceable natural resources or are being harvested in an unsustainable manner.
24. Minimize energy consumption throughout the life of the building utilizing climate-based and energy efficient design, energy and water saving technologies and renewable energy.
25. Consider the embodied energy and environmental life cycle costs when choosing all materials used in construction.