

Heitzman's Principles of Sustainable Buildings:

1. Reuse existing resources
2. Reduce resource consumption
3. Eliminate use of non-renewable energy
4. Use recyclable resources
5. Protect nature
6. Eliminate toxics
7. Apply life-cycle costing
8. Focus on quality vs. quantity

Heitzman Architects will design every project using the following principles:

1. Design for passive solar energy, oriented properly toward the sun and appropriately shaded
2. Incorporate passive cooling
3. Double the minimum amount of insulation required by code
4. Use only non-toxic or recycled materials
5. Use NoVOC and Formaldehyde-free Paint and water-based wood finishes
6. Use Solvent-Free Adhesives
7. Use certified wood or finger-jointed wood for all finish trim

8. Leave structural members visible to avoid the need for additional cover materials
9. If carpet floor finishes are required, use carpet tiles with a company with a take-back reuse program - avoid using wall-to-wall carpet
10. Use recycled content drywall or other natural wall finishes instead of drywall
11. Use composite lumber for exterior decks.
12. Replace 35% of Portland Cement in concrete with Fly Ash.
13. Avoid vinyl materials. Non-vinyl resilient flooring materials include rubber, cork and linoleum
14. Use white roofing materials for low-slope roofs
15. Avoid particle board cabinet boxes - use formaldehyde-free medium density fiberboard, plywood or wheat board for cabinet boxes
16. Use reclaimed or sustainably harvested wood for flooring
17. Specify on-demand hot water system rather than a whole house re-circulating hot water loop
18. Specify dual flush toilets
19. Recycle Job Site Construction and Demolition Waste
20. Salvage all removed doors and windows for future reuse
21. Use treated wood that does not contain Chromium, CCA or Arsenic for exterior exposed framing and sill plates
22. Specify drip irrigation system for landscaping to save water, and indigenous xeriscaping plants that require little water

23. Incorporate permeable paving at all driveways and exterior hard surfaces
24. Reuse concrete form boards, or reusable slip forms
25. Insulate foundations before backfilling
26. Specify engineered lumber instead of solid sawn lumber
27. Use OSB for subfloor and sheathing
28. Install a whole house water filter
29. Provide dimmers and occupancy sensors on all light switches
30. Design south and west facing walls to have a high thermal mass material (concrete or masonry).
31. Specify all appliances to be high level EnergyStar models

Goals to achieve Sustainable High Performance Buildings:

1. Establish a collaborative team approach during the design phase, assuring cooperation among building owner, facility manager, users, designers, building department and contractors
2. Engage the local community at all stages of the process
3. Educate building users on the philosophy, strategies and controls included in the design, construction, and maintenance of the building
4. Establish a mind set that places a high value on preservation of existing buildings and materials
5. Design buildings that are energy-efficient

6. Consider embodied energy of all products used in the construction and completed building
7. Consider the true cost of a building's impact on the local and regional environment
8. Consider life-cycle costs of all products specified, that is, the cost of manufacture, operation, maintenance and disposal
9. Create opportunities for interaction with the natural environment
10. Maximize use of local building materials
11. Minimize demolition
12. Minimize construction waste
13. Create buildings that can easily be reconfigured and reused
14. Create buildings with healthy indoor environments
15. Use low-tech products and systems
16. Eliminate use of non-renewal energy sources