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GREEN BUILDING

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ABSTRACT

Green building is slowly becoming more accepted but it is not occurring fast enough and needs a booster to help it integrate into modern society more efficiently and effectively. Green buildings will ensure that the environment stops being devastated at its current rate and that there will still be forests populating the Earth fifty years from now and beyond. Consumers, designers, and builders have many alternative energy sources that they are able to choose from and implement into their homes and buildings if they choose to construct green buildings or convert existing buildings into green buildings. To assist the shift into green building, the United States Green Building Council established Leadership in Energy and Environmental Design (LEED) to provide the public with a framework on building sustainable, green buildings. The adoption of green building can be achieved through the use of teaching, quality and availability, incentives, and government regulation.

I. INTRODUCTION

Today, everyone seems to be talking "green" and "sustainable". When it comes to water-efficiency and water conservation, these terms represent extremely important trends affecting design professionals, building owners and managers, manufacturers, end-users, water utilities, government and certainly the water-efficiency practitioner.

Opinions and definitions vary from individual to individual on the meaning of the terms "green" and "sustainable". The Alliance for Water Efficiency offers a few definitions from other sources to improve understanding of what is meant by these terms.

II. DEFINITIONS

Green Building -

A holistic approach to design, construction, and demolition that minimizes the building's impact on the environment, the occupants, and the community.

III. SUSTAINABLE DEVELOPMENT -

A pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but in the indefinite future.

A systematic approach to achieving human development in a way that sustains planetary resources, based on the recognition that human consumption is occurring at a rate that is beyond Earth's capacity to support it.

A practice that 'meets the needs of the present without compromising the ability of future generations to meet their own needs'.

IV. GUIDELINES AND STANDARDS

Many jurisdictions (municipalities and other local authorities and state governments with the power to mandate, approve, disapprove, or influence project design and construction) are developing guidelines and minimum standards for new construction and renovations. These actions mandate or "suggest" design or construction practices, technologies, performance thresholds and metrics in a variety of categories including, but not limited include.

Typical water use efficiency categories within many of the national green building programs include

- Plumbing fixtures and fixture fittings
- Residential appliances (clothes washers, dishwashers)
- Water treatment equipment (softeners, filtering systems)
- Landscape & landscape irrigation
- Pools, fountains, and spas
- Cooling towers
- Decorative and recreational water features
- Water reuse & alternate sources of water (greywater, rainwater and storm water, cooling condensate and cooling tower blowdown, foundation drain water)
- Specialty processes, appliances and equipment (food service, medical, laboratories, laundries, others)
- Metering & sub metering
- Once-through cooling
- Vegetated green roofs
- Building water pressure

It is important to understand the difference between green building standards and green building guidelines, because while guidelines do provide thresholds for efficiency, compliance is usually voluntary. On the other hand, standards provide definitive efficiency thresholds, but are written in language that is enforceable and is also readily adopted by reference into codes and other regulations.

For a more complete discussion of guidelines vs. standards and for a comparison of the provisions within the various national initiatives,.

Water efficiency practitioners must become involved in the larger green building task. Because many local green building programs fail to consider or emphasize water efficiency, instead focusing on other important

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environmental issues, there is a need to bring water efficient practices, designs, and products to the attention of the sponsors and originators of these programs.

V. CONCLUSION

Green building is a financially, health, and most importantly environmentally responsible idea that more people need to adopt. The United States Green Building Council developed LEED in order to help customers, designers, and builders to work together to create buildings with the minimal impact on the environment possible. Many building materials and renewable energy sources exists to lessen one's impact upon the environment. Through educating, making environmentally products more readily accessible and reliable, and by providing government incentives it is possible to encourage more people to adopt green building and all of the benefits that come along with it.

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