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Understanding Green Building

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Introduction

Green building is the application of structures in a building that will enable ¹ efficient use of resources such as land, water, energy, and air. It involves the adoption of materials and designs that are friendly to the environment. The building should be supportive of human life, be sustainable, and pose no threats to other aspects of the environment during its entire life cycle. The construction should adopt environmentally friendly materials, and use maximizes resources (Howe, 2010). The building should minimize the amount of energy, and water used in it. These buildings are entirely different from contemporary structures which do not put into consideration aspects of environmental conservation. Contemporary building uses a large amount of energy, releases most of its waste into the environment, and consumes large quantities of water in its operations.

Green building electrical appliances

Green building appliances are almost like others but have slight differences in terms of resource utilization. The electrical appliances are optimized to allow less use of energy. The green appliances in a building include energy saving bulbs, mobile phones, and computers among others. However, these devices and appliances have been optimized to increase their capacity to use less energy. Since green machines look like other appliances, they are differentiated by a star label to indicate an appliance's efficiency in energy conservation.

Green building energy saving measures

Retrofitting can be used to improve the energy utilization efficiency of an existing building. This involves the installation of energy-efficient fixtures and increasing the building's insulation to improve the heating and cooling efficiency of a building (Howe, 2010). Energy

used in the manufacture of insulation has significantly dropped with the advent of new technology. Proper installation of HVAC systems and air conditioning system in a building can significantly reduce the amount of energy used in heating and cooling of a building. Installing windows facing the sun helps to increase the building's heat without much use of electrical energy. A green building should make use of energy saving appliances to improve their energy saving abilities.

Water appliances and saving measures in a green building

The basic tools that consume water in an ordinary building include dishwashers and clothes washers. These two accounts for a considerable percentage of water used in a household. However, in a green building, these appliances have been optimized to consume less amount of water increasing in work performance. The toilets and showers are other areas where water is used in a household. Water wastage in a house can be reduced by recycling and reusing water. Recycling can be done by biological treatment to make it clean and able to be used again (Barberán et al. 2013). This increases the efficiency of water utilization in a household. The method of biological water treatment can be used to manage their water consumption and reduce the amount of waste released to the environment.

Sustainability of construction materials

Green buildings use renewable materials in most of its construction. Most of their construction materials are biodegradable; hence they do not spoil the environment after demolition (Kibert, 2016). The materials improve the health of its resident through their energy conservation capability and reduce costs incurred in maintenance and replacement (Howe, 2010). These materials are different compared to traditional materials which are deficient in the

conservation of water, and energy. Traditional materials do not use resources sparingly and are not environmentally friendly. They are not eco-friendly.

Conclusion

The fast advancement of technology has led to the development of green technology. Green technology has made it possible to conserve resources such as energy and prevent environmental pollution. The green structures save the environment by minimizing the amount of resources utilized in a particular construction. It enables buildings to be eco-responsible in the whole of their life cycle.

References

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