

Green Library: An Innovative Approach

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Abstract

Global warming is an alarming problem in current times. as a result of it multiple problems like increases of temperature, pollution, lack natural resource etc can be seen. To maintain natural beauty various new idea like to construction of green building. This paper discusses what green library is, its role, importance, standard, method & type of green library.

Keywords: - Green, Library, IGBC, LEED, Ventilation

Introduction

The movement of green library started in 1990 because every sector works to maintain environment stability and security. In few years this movement has become very popular. Many organizations working to create green library. According to the online dictionary of library and information science (ODLIS) Green Library is define as , "A Library designed to minimize negative impact on the natural environment and maximize indoor environmental quality by means of careful site selection ,use of natural construction material and biodegradable products ,conservation of resources (water, energy ,paper),and responsible waste disposal." Now, in India the theme of green library is very popular and people are transforming present library building into green library buildings. Green library is environment friendly library, because it maximum avoids artificial component or tools used for library services & facility & hence the green library is positive initiative in library & information science.

Why Green Library?

- Less Construction Cost
- Easy availability of energy resource
- Reduce the carbon footprint.
- Reduce paper use
- Encourage carpooling
- Reduce water use
- Eliminate phantom power
- Use the roof
- Green renovations
- Team up and rethink
- Conservation of electricity

- Human safety and comfort.
- Maintain good air quality

Objective of Green Library

- To explain importance of green library
- To improve of green library
- To introduce various techniques & method for green library
- To enhance awareness of people.
- To motivate green library movement.

Method to create Green Library

• To Use Fiber – Cement Siding.

Its construction equipment & Use of fiber cement siding is innovative method to save external portion of library from heat ,water .This method is very beneficial, strong , environment conservative .Its available in form sheet which is very popular due to lot of advantage.



Source :-

https://www.google.com/search?biw=1137&bih=675&tbo=is&ch=&sa=1&ei=3kN-XIm0PKbAz7sP7-Wt0AU&q=fiber+cement+siding&oq=FIBER+CEMENT+SIDING&gs_l=img.1.0.0l10.11840.30327..35598..0.0..139.3074.0j26.....0....1..gws-wiz-img.....0..0j24j0i10j24j0i67j0i10.txI0JSKzMDY#imgrc=aGiHVuZIOROxYM:

- **Water Harvesting & conservation.**

Library can plan the water harvesting & conservation by collecting water. This movement save the water & make library area green



Source :-

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- **To Use Compact Fluorescent Bulb (CFLs Bulb)**

This method save electricity because CFLs bulb consume less electricity & life of CFLs bulb is more than other bulb. For creation of green library CFLs bulb are used which are environment friendly. Now a day's library uses CFLs bulbs and save electricity.



Source

https://www.google.com/search?rlz=1C1CHBD_enIN801IN801&biw=1137&bih=675&tbo=isch&sa=1&ei=XPGAErPez7sPv_pasyAU&q=cfls+bulbs+WITH+SOCIAL+MESSAGE&oq=cfls+bulbs+WITH+SOCIAL+MESSAGE&gs_l=img..0.0..133.76...0.0.0.0.0.....0....1.gws-wiz..img.JxL2JwdCT2s#imgrc=aAObXT0qY8WssM

- **Equipment :- Insulation**

This method is working respectively to the climate change ,hence now a day this method has become more popular. This method gives pollution free green environment to the green

library. Use of insulation increase building life & help environment conservation.



Source :-

https://www.google.com/search?rlz=1C1CHBD_enIN801IN801&biw=1137&bih=675&tbo=isch&sa=1&ei=60R-XJWoILfCz7sPj-Sv6AI&q=INSULATION+FOR+GREEN+LIBRARY&oq=INSULATION+FOR+GREEN+LIBRARY&gs_l=img..3...39468.51317..51764..1.0.0.314.3937.0j26j1j2.....0....1.gws-wiz..img.....0i67j0j0i10j0i5i30j0i8i30j0i24.Z_G-6y6Pv7#imgrc=jgzQOz3S2dy7OM

- **Ventilation System**

Library is body bone of social development , Hence to provide best services is the duty of library professionals. Proper ventilation systems provide fresh air to users. Ventilation systems sustain environment changes.



Source :-

https://www.google.com/search?rlz=1C1CHBD_enIN801IN801&biw=1137&bih=675&tbo=isch&sa=1&ei=60R-XJWoILfCz7sPj-Sv6AI&q=VENTILATION+SUSTEM+FOR+GREEN+LIBRARY&oq=VENTILATION+SUSTEM+FOR+GREEN+LIBRARY&gs_l=img..3...8706.22168..22544...0.0.0.127.4203.0j37.....0....1.gws-wiz..img.....0j0i67j0j0i10j0i10i24.17mlT9m2ek#imgrc=v2GQVe55S86LgM

- **Use of solar energy**

Now a days various solar energy equipment are available in market , In these solar equipment solar energy is converted into electrical energy for the use of library .This solar energy can be use for solar lamp.



Source

https://www.google.com/search?biw=1137&bih=675&tbo=isch&sa=1&ei=C2t_XPeDB4WbmfgMhqaqDQ&q=use+of+solar+energy&oq=use+of+solar+energy&gs_l-img_3..0110.57335.62229..62604...0.0..0.135.2198.0j19.....0....1..gws-wiz-img.....0i67.6NbFQoQtVJU#imgrc=FvBkh8JS98itM

- **Maximum plantation in library Area.**
Tree plantation is the need of today .Government also implements various activities of tree plantation. To save library building area from heat, tree plantation is necessary, Due to tree plantation library temperature is maintained .Tree plantation prevents pollution and increases beauty of library.



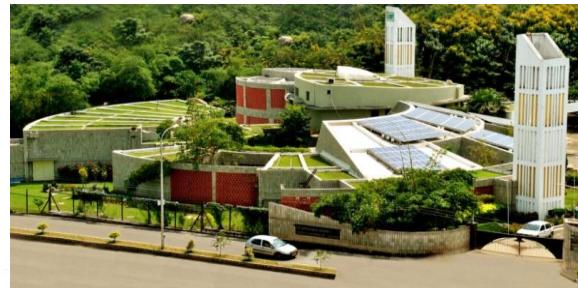
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Beside we discuss definition & objective of green library, now which national & international standard are used to create & maintain green library are follows.

- **IGBC (Indian Green Building Council)**
To promote a theme of green library Indian industrial association established green building association in 2001.This association continuously worked for propagation of Idea of green building. To promote idea of green building many association & enhancing environmental awareness . Many state

government, central government & world green building council are working .For Ex Sohraji Godrej Green Business Centre In Hyderabad



Source :- <https://www.ciiblog.in/cii-igbc-spearheading-the-green-building-movement-in-india/>

- **LEED (Leadership In Energy and Environmental Design)**

LEED is international authorized association which implement programme of green building certification. LEED WAS established in 1993 by NRDC senior scientist Robert K Watson .US green building council Established LEED hub to increase use of Leadership In Energy and Environmental Design. LEED use scorecard for evaluation as follow

40-49 Certified
50-59 Silver
60-79 Gold
80+ Platinum

- **Energy star,** Green globe & Green seal are international organizations, which used in preservation of environment.

Minneapolis public library:-

In 2006 Minneapolis public library has 18560sq .fit green roofs in the downtown city reducing rainwater runoff, heating and cooling load.



Green Library in National Level: - There are few example of green library working in India.

- National Library Of India, Kolkata
- YCMOU university library
- Mumbai university library
- Delhi university library

**Source :-**

https://www.google.com/search?biw=1137&bih=675&tbo=isch&sa=1&ei=l2t_XK7mO-zAz7sP8-mU2AE&q=DELHU+UNIVERSITY++LIBRARY+GREEN&oq=DELUH+UNIVERSITY++LIBRARY+GREEN&gs_l=img.3..2535.1828.8.18640...0.0.0.167.5217.0j45.....0....1..gws-wiz-img.....0.0i67j0j0i8i30j0i24j0i10j0i5i10i30j0i10i24.uwsL5ClzWYs#imgrc=x_LoQ_jEUNmGrM

Green Library In International Level:- In age of information technology ,human being faces various natural problem hence library professional take positive initiative i.e. green library. Green library is supportive to economy & ecology. There are few example of green library working in world.

- National library ,Singapore
- Minneapolis public library
- Dexter Library, Ashland.
- Harper woods public library
- Seattle central library
- Fayetteville public library

Conclusion

In present stage library faces many problem like space, fund and manpower, It also faces natural problem like air, water ,temperature. Green library is an innovative idea which maintains the balance in environment .In this paper various methods to create green library are discuses. Green library is new positive initiative to use green library equipment & method used for conservation of environment .Use of green library method gives positive message to students & innovative society to how save the environment.

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