



GRIHA WORKSHOP

Poornima University



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IV TH YEAR:

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2. SHRISTI AGARWAL
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GRIHA WORKSHOP CONDUCTED AT POORNIMA UNIVERSITY ON 02-08-2017

GRIHA Council, is mandated to promote development of buildings and habitats in India through GRIHA. GRIHA Council an independent platform for the interaction on scientific and administrative issues related to sustainable habitats in the Indian subcontinent. It was founded by TERI (The Energy and Resources Institute, New Delhi) with support from MNRE (Ministry of New and Renewable Energy, Government of India) along with a handful of experts in the sustainability of built environment from across the country.

TERI-GRIHA framework was initially developed by TERI for new commercial, institutional and residential buildings. The rating was further modified when it was adopted by MNRE as GRIHA. Over 330 projects across India of varying scale and function are being built based on GRIHA guidelines. The Centre for Environmental Sciences and Engineering, IIT Kanpur (2009) and Suzlon 'One Earth' Office Complex (2010), Pune have been certified at GRIHA 5 Stars. Furthermore, ITC Grand Chola and several projects of Infosys are 5 Star GRIHA rated.

GRIHA Council conducts awareness workshops on Green Buildings and GRIHA rating system to all the registered project teams. The online certification tool at www.grihaindia.org further helps the project team to educate themselves on their specific roles in developing project specific documentation.

GRIHA Council conducts awareness workshops on Green Buildings and GRIHA rating system for all the registered project teams. The one-day workshops are occasions for project teams to draw up road maps for getting the highest possible GRIHA rating for their projects. The self-evaluation tool of the on the GRIHA website also serves repeated reality check for the project to see the status of accomplishment by the project. The online certification tool at www.grihaindia.org further helps the project team to educate themselves on their specific roles in developing project specific documentation and assists as a project monitoring mechanism for the specific purpose of documenting project requirements.

Introduction

A number of softwares were introduced in the session of workshop which are used to analyze building subjected to day lighting, load calculation, wind analysis, etc.



1. Eco tech



2. Rhino

Rhinoceros

ENERGY STIMULATION SOFTWARE:

1. Transis stimulation tool

The workshop aimed at Sustainability and Day lighting design of building.

Assignment 1: To analyze the amount of day light entering in a room

Mode of conduct:

A floor plan was provided with windows and vents located and marked.

Code provided: SP- 41 (HANDBOOK ON FUNCTIONAL REQUIRMENT OF BUILDING PART 1)

About the manual calculation:

Provided window width- w

1m on each side of window is taken into account.

Let- a and b (a=b=1m on each side of window)

$$Q= W+a+b$$

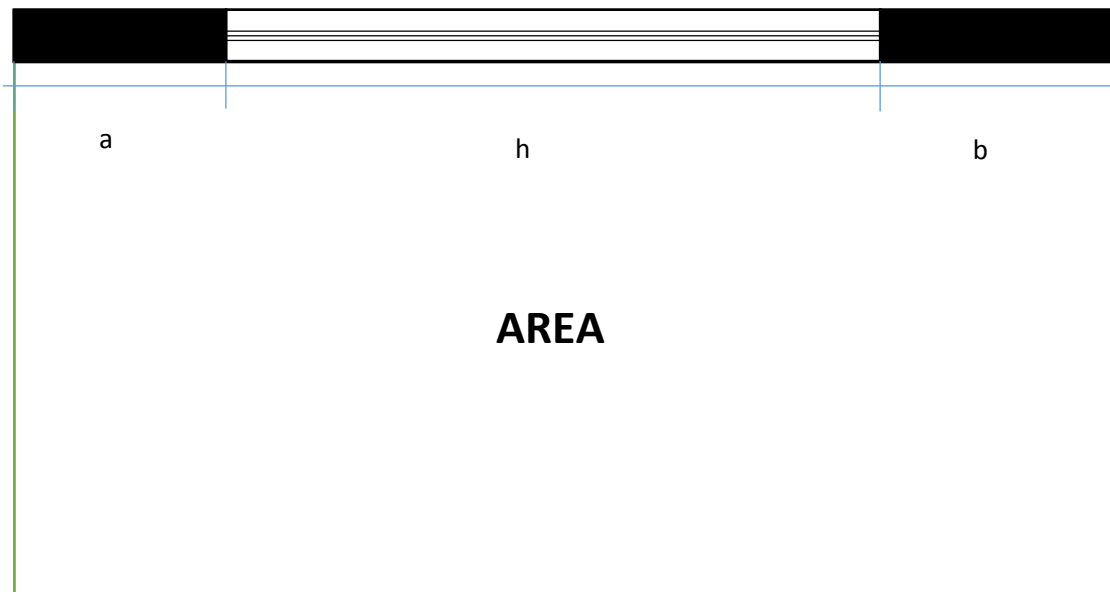
Lintel level is provided as – h

Thus lintel level is doubled for calculation

$$H = h \times 2$$

For day lighting area calculation:

$$\text{Area} = Q \times H$$



Thus area is calculated of the marked rooms and a total daylight area is recorded.

Other assignment:

- **ACCOUSTIC ANALYSIS OF THE BUILDING:**

A noise dosimeter is a specialized sound level meter intended specifically to measure the noise exposure of a person integrated over a period of time.

- **LIGHT ANALYSIS OF THE BUILDING:**

The lux is the SI derived unit of illuminance and luminous emittance, measuring luminous flux per unit area. It is equal to one lumen per square metre.

- **HUMIDITY ANALYSIS OF THE BUILDING:**

To measure humidity (RH) hygro meter is used from 0% (dry) to 100%(when any more moisture comes out as precipitation or fog) cooler air holds less moisture so the RH level will normally be higher at night.

WATER SUPPLY ANALYSIS1:

The water-saving and energy-saving design is particularly important to architectural design. In this process of water supply and drainage design, we should take corresponding solutions and countermeasures, in order to realize saving water and reducing waste.

