
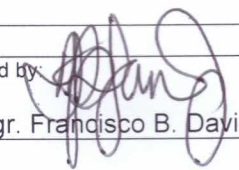

	ENERGY EFFICIENT BUILDING RENOVATION AND CONSTRUCTION GUIDELINES	Date Created: July 1, 2022 Supersedes: -NA-
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I. PURPOSE

The purpose of these guidelines is to streamline the energy efficiency standards during construction and/or renovation of a building or a portion of an area in the campus.

II. SCOPE

These guidelines are applicable to all employees and tenants.

III. DEFINITIONS

Energy Efficient Building

Involves constructing, upgrading or renovating buildings That are able to get the most work out of the energy that Is supplied to them by taking steps to reduce energy loss

CMDO

Campus Maintenance, Development and Operations

IV. RESPONSIBILITY AND AUTHORITY

Head of Campus Maintenance Office

Responsible to develop or evaluate energy-related projects or program to reduce energy costs or improve energy efficiency during designing, building, or renovation stages of construction

Head of CMDO

Responsible for the approval of energy efficient building renovation and construction proposed by the Hed of Campus Maintenance Office

Purchasing Head

Responsible for the bidding process related to building renovation and/or construction projects including the purchase of materials that will meet the energy efficiency standards of the University.



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V. DETAILS OF REFERENCE GUIDELINES

The University is committed to implement the energy-efficient practices and guidelines for the construction and/or renovation of a building through the following initiatives:

1. Wall and Ceiling Insulation
Wall and ceiling insulation
Installation of wall and ceiling insulators is a requirement of the University when constructing or renovating a building to keep the building cool especially during hot or warm weather.
2. Airwell
Existing airwells are maintained to ensure proper ventilation for the corridors.
3. Thick Walls
Installed thick walls and choice of building materials with insulation to increase energy efficiency. Thick walls will serve as energy regulators, gradually releasing the accumulated heat from the day throughout the cooler evening hours.
4. Control Interior Climate
The airconditioning units are maintained between 22 to 24 degrees Celsius to help control and optimize interior climates for enhanced air quality and energy efficiency.
5. Air Tightness
Ensuring all doorways, windows and external walls are airtight in the offices and classrooms to boost a building's energy efficiency.
6. Thermographic scanning of the circuit breakers and panel boards
Conduct a yearly thermographic scanning of circuit breakers and panel boards to identify and rectify the hotspots
7. Insulation of aircon refrigerant pipes
Regular checking and repairing of the insulation of refrigerant pipes
8. Energy Efficient LED lights
Replace and install LED lights in all buildings to conserve energy
9. Inverter Airconditioning Units
Replace and install inverter airconditioning units in all offices, function rooms and classrooms to conserve energy.
10. Motion Sensor Automatic Lights for Indoor parking and open grounds
Installation of motion sensor automatic lights for indoor parking area and open grounds

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11. Solar powered lights for open grounds
Installation of solar powered lights along outdoor parking area and open grounds
12. Equipment and Appliances
Purchase modern equipment and appliances that requires less energy.

VI. PERFORMANCE INDICATOR

To ensure that the materials and/or equipment to be purchased will be based on this policy.

VII. REACTION PLAN

Continue applying building standards in Mapua University by creating more projects to make the University an energy-efficient campus.

VIII. REPORTORIAL REQUIREMENTS

Report Title	Frequency of Update	Responsible Personnel
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IX. REFERENCE DOCUMENTS

Document Code

Title