



Glossary of Key Terms

Lighting Plans for Assessors: From Drawing to Data Entry

Glossary of Key Terms

- **Audit-Readiness:** The state of an energy assessment project where all inputs, assumptions, and decisions are thoroughly documented and traceable, allowing for a transparent and defensible review by an auditor.
- **BERS Pro:** One of the three major NatHERS-accredited software tools used by assessors to model a building's energy performance.
- **Class 1 Dwellings:** A building classification within the NCC, typically referring to a single detached house or one of a group of attached dwellings, each being a sole occupancy unit (e.g., townhouses, duplexes).
- **Class 2 Buildings:** A building classification within the NCC, typically referring to a building containing two or more sole-occupancy units (e.g., apartments, multi-unit dwellings).
- **CFL (Compact Fluorescent Lamp):** An energy-efficient fluorescent light bulb designed to fit into standard incandescent light sockets; often less efficient than modern LEDs.
- **Compliance Targets:** Specific energy performance benchmarks or requirements that a building design must meet to comply with national construction codes and energy efficiency regulations.
- **Control Types:** Mechanisms that manage the operation of luminaires, such as dimmers (adjust brightness), PIR (Passive Infrared) sensors (detect motion for automatic switching), or standard on/off switches. These affect assumed energy usage.

- **CPD (Continuing Professional Development):** Ongoing education and training that professionals undertake to maintain and enhance their skills and knowledge in their field.
- **Default Values:** Pre-set, conservative energy consumption figures or assumptions for lighting (e.g., wattage, density) specified by the NatHERS Technical Note, to be used when specific product documentation is unavailable.
- **Downlight Density Rule:** A NatHERS default assumption for Class 1 dwellings, stating that if a lighting plan is missing or unclear, one downlight per 5 square metres of floor area should be assumed.
- **Energy Load Metrics (MJ/m²/annum):** The standard unit of measurement for a building's total operational energy consumption, expressed in megajoules per square metre per year. It quantifies energy use across all services, including lighting.
- **Feature Lighting:** Decorative or accent lighting designed to highlight specific architectural elements or create a particular aesthetic, often requiring specific consideration in energy assessments if fixed.
- **FirstRate5:** One of the three major NatHERS-accredited software tools used by assessors to model a building's energy performance.
- **Halogen:** A type of incandescent light bulb that uses a halogen gas to improve efficiency and lifespan compared to traditional incandescent bulbs, but is significantly less energy-efficient than LEDs.
- **HERO:** One of the three major NatHERS-accredited software tools used by assessors to model a building's energy performance.
- **HVAC (Heating, Ventilation, and Air Conditioning):** The systems responsible for controlling the indoor climate of a building. Often the largest energy consumers in a Whole-of-Home assessment.
- **LED (Light Emitting Diode):** A highly energy-efficient and long-lasting semiconductor light source, widely used in modern lighting installations.
- **Luminaire:** A complete lighting unit, including the lamp (bulb), the fixture, and any other components necessary for its operation. Also referred to as a light fitting.
- **Luminaire Datasheets:** Technical documents provided by manufacturers or suppliers that detail the specifications of a luminaire, including its wattage, type, and performance characteristics. Essential for verifying non-default inputs.

- **MJ/m²/annum:** See "Energy Load Metrics."
- **Mounting Styles:** The method by which a luminaire is installed, such as recessed (flush with surface), surface-mounted (attached to surface), or pendant (suspended from ceiling).
- **NatHERS (Nationwide House Energy Rating Scheme):** An Australian scheme that assesses the energy efficiency of residential buildings, providing a star rating from 0 to 10 based on predicted energy use.
- **NatHERS Technical Note v20241023:** An official document outlining the technical requirements and methodologies for conducting NatHERS assessments, including specific guidance on default values for lighting.
- **NCC (National Construction Code):** Australia's primary set of technical provisions for the design and construction of buildings, including energy efficiency requirements.
- **PIR Sensor (Passive Infrared Sensor):** A type of motion sensor that detects infrared radiation (heat) emitted by objects, often used to automatically switch lights on or off in response to occupancy.
- **Reflected Ceiling Plan (RCP):** An architectural drawing that shows the layout of items located on the ceiling, as if viewed from above by a mirror on the floor. Useful for verifying luminaire placement and quantities.
- **Wattage (W):** A measure of electrical power consumed by a luminaire. Lower wattage generally indicates higher energy efficiency for a given light output.
- **Whole-of-Home (WoH) Assessments:** An expanded energy assessment framework under NatHERS that accounts for the total energy consumption of a residential building, including the building's thermal shell, fixed lighting, hot water systems, and other regulated services.
- **Whole-of-Home Efficiency Factors:** Parameters and metrics used within the WoH framework to ensure that lighting and other service inputs reflect realistic and compliant energy use.