

Glossary of Key Terms

Modelling Class 2 Apartments: Thermal, Appliances, and the Central Hot Water Proxy

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- **Class 2 Building:** As defined in NCC Volume One, Section A6, a building containing two or more Sole Occupancy Units (SOUs), each being a separate dwelling (e.g., apartment blocks, duplexes, units above retail).
- **Deemed-to-Satisfy (DtS) Provisions:** Prescriptive requirements within the NCC that, if followed, are deemed to satisfy the NCC Performance Requirements.
- **Fixed Appliances:** Permanently installed and wired or plumbed systems within a dwelling, such as space heating/cooling units, water heaters, and major lighting systems, included in Whole-of-Home assessments.
- **HVAC:** Heating, Ventilation, and Air Conditioning systems. In Class 2 buildings, these can be ducted (centralised) or non-ducted (individual split units).
- **NatHERS:** National House Energy Rating Scheme, a star rating system that assesses the energy efficiency of residential buildings in Australia.
- **NCC:** National Construction Code, Australia's uniform set of technical provisions for the design and construction of buildings.
- **Performance Solution:** An alternative design or construction method used when Deemed-to-Satisfy provisions cannot be met, requiring formal assessment and supporting evidence to demonstrate compliance with NCC Performance Requirements.
- **Podium Parking:** A multi-level parking structure, often with commercial or residential buildings built above it, creating unconditioned spaces adjacent to lower-level units.

- **Proxy Modelling:** A simplified method, guided by NatHERS Technical Notes (e.g., Clause 12.10), to estimate energy performance using standardised default assumptions when detailed system specifications for centralised services (like hot water) are unavailable.
- **Section J:** A section of the NCC (Volume One) outlining provisions for energy efficiency in buildings, including Class 2 structures.
- **Shared Wall Impacts:** The effect on thermal performance when walls, floors, or ceilings are shared between adjacent conditioned spaces in Class 2 buildings, reducing heat transfer compared to external exposure.
- **Sole Occupancy Unit (SOU):** A single, self-contained dwelling unit within a Class 2 building, which must be assessed individually under Whole-of-Home requirements.
- **Star Band Limits:** Defined performance thresholds within NatHERS that determine a building's star rating, varying by climate zone and building class.
- **Thermal Shell:** The external envelope of a building (walls, roof, floor, windows, doors) that separates the conditioned internal space from the external environment, assessed for its thermal performance.
- **Vertical Thermal Transfer:** The movement of heat between vertically stacked units or floors in a multi-residential building, impacting energy loads for adjacent or stacked SOUs.
- **Whole-of-Home (WOH):** An assessment framework under NatHERS that accounts for the total energy use of a dwelling, including both the thermal shell performance and the energy consumption of fixed appliances (heating, cooling, hot water, lighting).
- **Zoning:** The division of a building's interior into distinct thermal areas within modelling software, based on their use, temperature profile, and heat transfer characteristics. Accurate zoning is crucial for calculating heating and cooling loads.