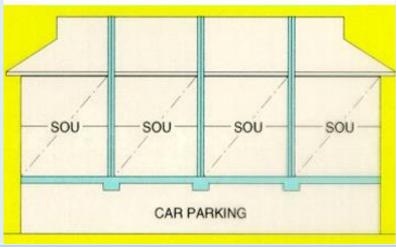
Construction Technology 2 Study Notes 16265

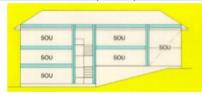
TOPIC 1: Building types, regulation, materials handling

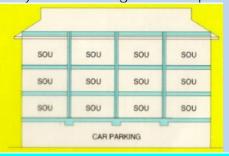
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Topic	Notes
Built	- Main types of registration :
environment	 Torrens title: The owner of the block of land owns anything
regulation for	built over it (individual freehold ownership).
multi-	 Strata title: Where a property developer buys the land and
residential	builds, say, 20 apartments. When gradually sold, there is a
construction	group ownership (each individual has ownership over
	airspace).
	- NOTE: Strata title registration must have sound and fire
	resistance (more time must be considered if a higher building).
	Building
	Unit
	Land
	Land
	Torrens title Strata title
Compartmen-	- Dwellings are joined via:
talisation for	o 1 or more common walls ('party walls').
fire and sound	o 1 or 2 common floors (in multi storey buildings).
between	- These walls/floors define SOLE OCCUPANCY UNITS (SOU).
dwellings	- SOLE OCCUPANCY UNITS defined by the NCC: A room or
ŭ	other part of a building for occupation by one or joint owners,
	lessees, tenants, or other occupiers, to the exclusion of others.
Main types of	- Can be single storey but usually two storey houses joined in a
multi-unit	continuous row by a f/s common wall.
residential –	- Under strata title.
row	- As pictured, the lines (aqua) dividing the building are the
houses/town	elements that MUST meet fire/sound resistant requirements.
houses/ mews	Also, these boundaries must extend into the roof to stop the
	passage of smoke/flames to another SOU OR f/s resistance can
	go horizontally across the ceiling.
	In between (garage example) is a common areaOnce in SOU – Only ONE wall dividing one unit from the next.
	- Office in 300 - Offig ONE wall dividing one utill from the flext.



Main types of multi res – home units (apartments)

- Main difference: Multi-storey.
- Contains individual sole occupancy units each divided by a f/s common wall.
- Under strata title.
- More complex (shared stairways and underground carpark).





Regulatory involvement – mainly Local Government

MANDATORY REGULATION (sets minimum standards: NCC) – Not best practice.

- Responsible for the approval of building development.
- Enforces the way building impact on the environment and community.
- Controls conditions of approval: Physical form, usage and impact on public/environment.
- Development approval has caveats: Working hours, public safety, waste management, traffic management.
- Separate from construction code = WorkCover (regulates worker safety onsite).

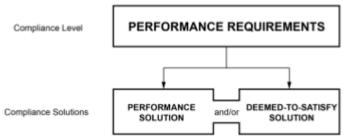
National Construction Code NCC

- Provides a regulatory framework for MINIMUM standards of technical performance of building work including: Health and amenity of buildings, safety of buildings, sustainability of buildings.
- The NCC allows FLEXIBILITY about how performance requirements are achieved, and thus allow DIFFERENT Building Solution options.
- PERFORMANCE REQUREMENTS: Interested in the OUTCOME rather than the means of attaining the outcome (PRESCRIPTIVE).
- E.G. Performance: Water cannot be let in because it will harm the health of the occupants. Prescriptive: Shows how to achieve

- the requirements (materials/methods).
- The performance requirements are applied to 10 building classes, the classification is determined by the PURPOSE (E.G. Class 2 building, f/s resistance requirements are different to a hospital/office/shed).
- Multi-unit residential buildings fall under class: 1, 2, 3 and 9C (aged care) buildings.
- For MULTI-USE buildings, each part must be classified SEPARATELY, except if a part represents <10% of floor area.

CLASS 2 - Apartments
CLASS 2 - Apartments
CLASS 2 - Apartments
CLASS 6 - Shops
CLASS 7a - Carpark
CLASS 7a - Carpark

- MUST UNDERSTAND HOW PERFORMANCE REQUIREMENTS ARE DEALT WITH IN THE BCA.
- NOTE: Performance requirements are the ONLY mandatory part in the hierarchy (as pictured).
- Compliance solutions: Different ways of providing performance requirements.
- DEEMED TO SATISFY: A traditional approach that has been assessed and meets performance requirements.
- PERFORMANCE SOLUTION: Any new non-DTS solution (so long as evidence is provided that it can achieve the same performance standards) 'Assessment methods' (comparison, testing).



The role of Australian Standards (and similar) in providing DTS options

- Australian standards work out minimum standards (size, acceptable vary) – GUIDELINES UNLESS the NCC claims it to be 'deemed to satisfy'.
- Australian Standards give more detail as to the requirements (materials/processes) to follow.
- BEST PRACTICE IS DIFFERENT: It is used to try and define the BEST quality level of materials/process and may cost more to do Not involved with the NCC.