

# NCC 2019 Section J6

Artificial Lighting and Power

NCC 2019 Section J Compliance - Energy Efficiency changes are coming.  
Are you informed and do you know what it means for your business?

## Why the change?

Section J6 of the NCC deals with the minimal standards for energy efficient lighting design. The section has been revised to achieve substantial increases in energy efficiency reducing greenhouse emissions and reduce building costs.

## When does it take effect?

The changes came into effect from 1st May 2019 however provision is given for an additional 12 month transition period. Implementation will commence from 1st May 2020.

## What are the changes?

- Requirements for track lighting have been simplified
- Lighting used solely for indoor plant growth (ie. green walls) is exempt
- Lighting in fire stairs/passageways/ramps must be controlled by a motion detector
- Lift lighting must be switched off when not used for 15 minutes.
- Illumination Power Density (IPD is the watts per square metre required to light a space) allowances have been reduced:
  - Retail spaces - ↓36%
  - Board and conference rooms - ↓50%
  - Carparks (general) - ↓67%
  - Corridors - ↓37.5%
  - Courtrooms - ↓62.5%
  - Entry lobbies - ↓40%
  - Healthcare areas - ↓up to 88%
  - Kitchen and food preparation areas- ↓50%
  - Library areas - ↓up to 79%
  - Museum - ↓69%
  - Offices lit to <200Lx - ↓64%
  - Office lit to >200Lx - ↓50%
  - Restaurant, cafe, bar, hotel etc - ↓22%
  - School - ↓44%

For a full list of the changes, refer to the following table.

## What do I need to do for my business?

Contact us at [info@lpa-lighting.com](mailto:info@lpa-lighting.com) to learn more about the changes. From adjustment factors such as colour temperature (CCT), colour rendering index (CRI), lighting control devices and our range of energy reduction solutions; we can work with you to assist you in understanding the changes, making sure your project meets the new standards and the design intent.

Speak with us today.

Space	OLD NCC	NEW NCC
Auditorium, Church and Public Hall	10	8
Board Room and Conference Room	10	5
Carpark - General	6	2
Carpark - entry zone (first 15 m of travel) during the daytime	25	11.5
Carpark - entry zone (next 4 m of travel) during the day	25	2.5
Carpark - entry zone (first 20 m of travel) during nighttime	25	2.5
Common rooms, spaces and corridors in a class 2 building	8	4.5
Control room, switch room and the like - intermittent monitoring		3
Control room, switch room and the like - constant monitoring	9	4.5
Corridors	8	5
Courtroom	12	5
Dormitory of a Class 3 building used for sleeping only	6	3
Dormitory of a Class 3 building used for sleeping and study	9	4
Entry Lobby from outside the building	15	9
Healthcare - children's ward and emergency department	10	4
Healthcare - examination room	10	4.5
Healthcare - examination room in intensive care and high dependency ward	13	6
Healthcare - all patient care areas including wards and corridors	7	2.5
Kitchen and food preparation area	8	4
Laboratory - artificially lit to ambient level of 400 lux or more	12	6
Library - stack and shelving area	12	2.5
Library - reading room and general areas	10	4
Lounge Area for communal use in a Class 3 building or Class 9C (aged care building)	10	4.5
Museum and gallery - circulation, cleaning and service lighting	8	2.5
Office - artificially lit to an ambient level of 200 lux or more	9	4.5
Office - artificially lit to an ambient level of less than 200 lux	7	2.5
Plant room where an average of 160Lx vertical illuminance is required on a vertical panel such as switch rooms	5	4
Plant rooms with a horizontal illuminance target of 80Lx	5	2
Restaurant, Café bar, hotel lounge and a space for the serving and consumption of food or drinks	18	14
Retail space including a museum and gallery whose purpose is the sale of objects	22	14
School - General purpose learning areas and tutorial rooms	8	4.5
Sole Occupancy unit of a Class 3 or Class 9C (aged care) building	5	5
Storage with shelving no higher than 75% of the height of the aisle lighting	8	1.5
Storage with shelving higher than 75% of the height of the aisle lighting	10	1.5
Service area, locker room, staff room, cleaner's room, rest room and the like	5	1.5
Toilet, locker room, staff room, rest room and the like	6	3
Wholesale storage and display area	10	4
Stairways, including fire-isolated stairways	7.5	2
Lift cars	9	3
in areas not listed above, the maximum illumination density is -		
(a) for an illumination of less than 80lx	7.5	2
(b) for an illumination of more than 80lx and not more than 160lx	9	2.5
(c) for an illumination of more than 160lx and not more than 240lx	10	3
(d) for an illumination of more than 240lx and not more than 320lx	11	4.5
(e) for an illumination of more than 320lx and not more than 400lx	12	6
(f) for an illumination of more than 400lx and not more than 480lx	13	10
(g) for an illumination of more than 480lx and not more than 540lx	14	10
(h) for an illumination of more than 540lx and not more than 600lx	15	10
(h) for an illumination of more than 600lx and not more than 800lx		11.5

\*\* Sourced from NCC 2019 Building Code of Australia - Volume One