VOLTEX®

AU/ NZ SMOKE ALARM INSTALLATION REQUIREMENTS

IMPORTANT: This is a simplified document and provided as an indicative guide only and it is not to be relied upon in any way as a subsitute for further research, investigation and legal advice. Always check against the latest NCC Building Code of Australia and any other local regulatory provisions.

WARNING: Smoke alarms must always be installed in accordance with local building codes and national standards. Smoke alarms cannot detect smoke through a closed door. It is recommended that smoke alarms should be installed on each storey and located in sleeping areas and in hallways between bedrooms and the remainder of the dwelling.

Do not install photoelectric smoke alarms in garages, kitchens, or in areas where combustion particles, fumes, steam, or dust may cause nuisance alarms. In these locations, a heat alarm is recommended as a more suitable alternative.

Note: Heat alarms are not currently supplied by Voltex.

IMPORTANT: If you live in a house with more than one level, install a smoke alarm on the ceiling at the head of the stairway connecting the levels. On those levels where sleeping areas are located additional smoke alarms may be required between the sleeping areas and the path of exit.

IMPORTANT: The best protection is provided when smoke alarms are interconnected.

Local Fire & Emergency Services all recommend that you install a Photoelectric type Smoke Alarm complying with AS 3786:2014

- Ionisation smoke alarms are typically more effective at detecting fast flaming fires, which burn and spread quickly. Photoelectric smoke alarms are typically more effective at detecting slow smouldering fires, which may burn for hours before bursting into flame.

Only WORKING smoke alarms save lives: Smoke detectors are important to ensure the safety of you and your loved ones. Proper maintenance of these devices could prove to be lifesaving.

These tips will help to make sure your smoke alarms perform as intended – when you need them the most:

- Mains powered smoke alarms also have back-up batteries – check with the manufacturer if your model has batteries that need to be replaced regularly, or whether it has a re-chargeable battery.
- A short, low beep every 60 seconds indicates the battery power is low and the battery (or smoke alarm) needs replacing. Change your smoke alarm batteries every 12 months on either April 1st (QLD, WA, NT) or at the end of daylight saving (NSW, ACT, VIC, TAS, SA), and use a long-lasting alkaline battery.
- Smoke alarms should be tested monthly by pressing the test button (with a broom handle if out of normal reach).
- Smoke alarms should be vacuumed regularly – at a minimum once a year – to clean the vents.
- Fire Services recommend that you replace your smoke alarm (both battery powered and 240V hard-wired types) after ten years as it may start to fail after this period. A year of manufacture date is displayed on all smoke alarms. It is also recommended the date of installation be written on the base of the smoke alarm with a permanent marker for later reference.

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AU/ NZ SMOKE ALARM INSTALLATION REQUIREMENTS

ACT

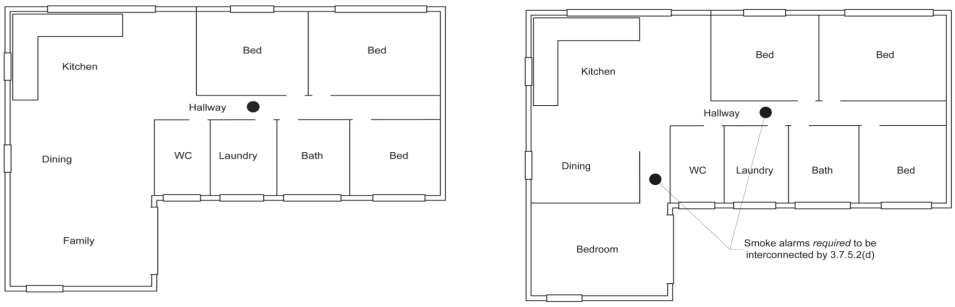
New smoke alarm installation in a Class 1a building (house, duplex, villa or town house) at a glance
Note: For guidance only. Always check with the latest NCC Building Code of Australia and local regulations.

Type

- Photoelectric type, Ionisation type or Combination of the two (AS 3786:2014)
- If replacement - 240V mains powered with battery back-up or Non-removable 10-year battery powered type (only like for like)
- If leased or sold - 240V mains powered with battery back-up or Non-removable 10-year battery powered type
- If a new build - 240V mains powered with battery back-up (where consumer power is supplied to the building)

Alarm locations

- In any storey containing bedrooms, every corridor or hallway associated with a bedroom, or if there is no corridor or hallway, in an area between the bedrooms and the remainder of the building; and
- Each other storey not containing bedrooms.



Mounting

- On or near the ceiling in a position with special care to avoid a dead air space. If it is not practical to install the smoke alarm on the ceiling, then it may be installed on the wall between 300mm to 500mm below the ceiling.

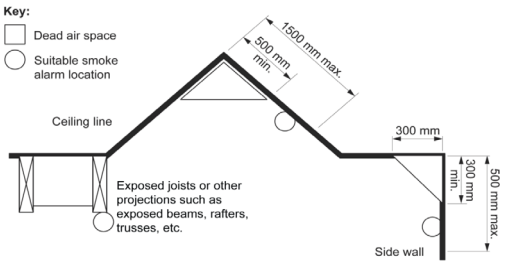


Diagram 1 – Installation of smoke alarms to avoid dead air space

Interconnection

- Recommended
- For New Builds or Renovated Dwellings constructed on an application for a building permit made after 01-05-2015 there is a requirement under the National Construction Code (NCC) - Building Code of Australia (BCA) that where there is more than one alarm, smoke alarms must be interconnected.

Further information
https://esa.act.gov.au/cbr-be-emergency-ready/smoke-alarms

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AU/ NZ SMOKE ALARM INSTALLATION REQUIREMENTS

NT

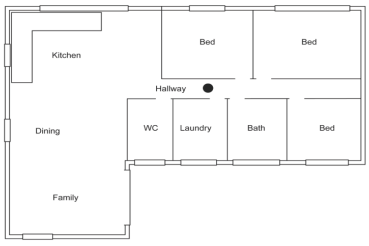
Smoke alarm installation in a Class 1a building (house, duplex, villa or town house) at a glance
Note: For guidance only. Always check with the latest NCC Building Code of Australia and local regulations.

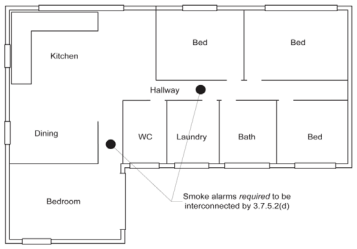
Type

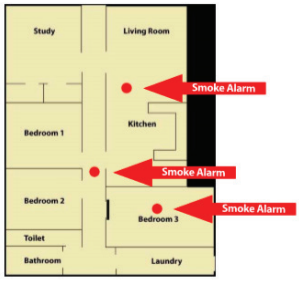
- Photoelectric type (AS 3786:2014)
- If replacement - 240V mains powered with battery back-up or Non-removable 10-year battery powered type (only like for like)
- If leased or sold - 240V mains powered with battery back-up or Non-removable 10-year battery powered type
- If movable dwelling such as caravans or temporary accomodation (including safari-style tents) - 240V mains powered with battery back-up (where consumer power is supplied to the building)
- If a new build - 240V mains powered with battery back-up (where consumer power is supplied to the building)

Alarm locations

- In any storey containing bedrooms, every corridor or hallway associated with a bedroom, or if there is no corridor or hallway, in an area between the bedrooms and the remainder of the building;
- Inside any room where somone sleeps with the door closed;
- Each other storey not containing bedrooms; and
- For multilevel install an additional alarm in the stairway between each level.







Mounting

- On or near the ceiling in a position with special care to avoid a dead air space. If it is not practical to install the smoke alarm on the ceiling, then it may be installed on the wall between 300mm to 500mm below the ceiling.

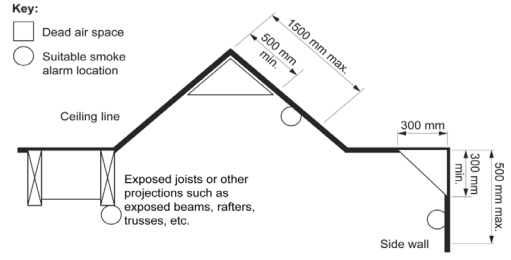


Diagram 1 – Installation of smoke alarms to avoid dead air space

Interconnection

- Recommended
- For New Builds or Renovated Dwellings constructed on an application for a building permit made after 01-05-2015 there is a requirement under the National Construction Code (NCC) - Building Code of Australia (BCA)

Further information

https://pfes.nt.gov.au/fire-and-rescue-service/fire-safety/smoke-alarms

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AU/ NZ SMOKE ALARM INSTALLATION REQUIREMENTS

NSW

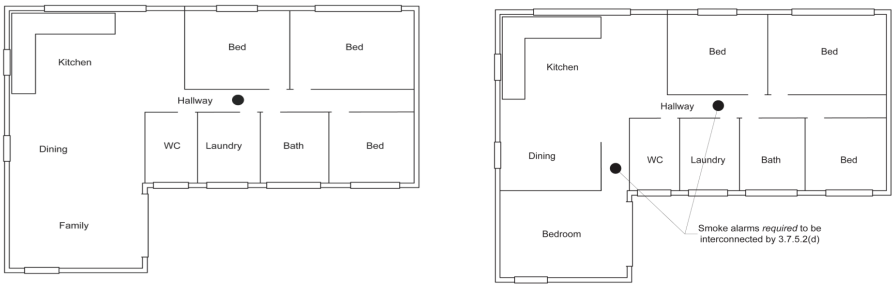
Smoke alarm installation in a Class 1a building (house, duplex, villa or town house) at a glance
Note: For guidance only. Always check with the latest NCC Building Code of Australia and local regulations.

Type

- Photoelectric type, Ionisation type or Combination of the two (AS 3786:2014)
- If replacement - 240V mains powered with battery back-up or Non-removable 10-year battery powered type (only like for like)
- If leased or sold - 240V mains powered with battery back-up or Non-removable 10-year battery powered type
- If a new build - 240V mains powered with battery back-up (where consumer power is supplied to the building)

Alarm locations

- This includes owner occupied homes, rental properties, relocatable homes, caravans and camper-vans or any other residential building where people sleep.
- In any storey containing bedrooms, every corridor or hallway associated with a bedroom, or if there is no corridor or hallway, in an area between the bedrooms and the remainder of the building; and
- Each other storey not containing bedrooms.



Mounting

- On or near the ceiling in a position with special care to avoid a dead air space. If it is not practical to install the smoke alarm on the ceiling, then it may be installed on the wall between 300mm to 500mm below the ceiling.

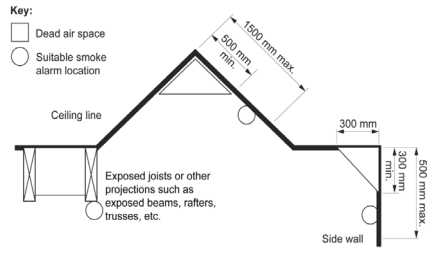


Diagram 1 – Installation of smoke alarms to avoid dead air space

Interconnection

- Recommended
- For New Builds or Renovated Dwellings constructed on an application for a building permit made after 01-05-2015 there is a requirement under the National Construction Code (NCC) - Building Code of Australia (BCA)

Further information
http://www.fire.nsw.gov.au/

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AU/ NZ SMOKE ALARM INSTALLATION REQUIREMENTS

QLD

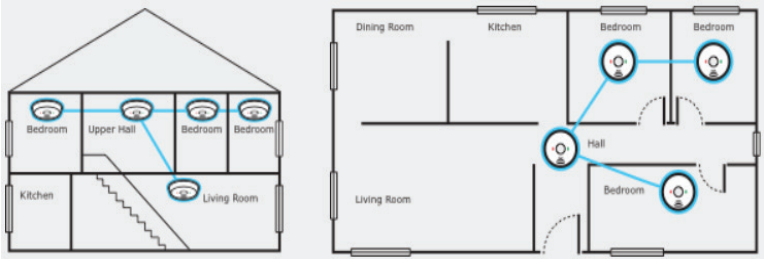
Smoke alarm installation in a Class 1a building (house, duplex, villa or town house) at a glance
Note: For guidance only. Always check with the latest NCC Building Code of Australia and local regulations.

Type

- Photoelectric type (AS 3786:2014) and not also contain an ionisation sensor (from 01-01-2017)
- If replacement - 240V mains powered with battery back-up or Non-removable 10-year battery powered type (only like for like)
- If leased or sold - 240V mains powered with battery back-up or Non-removable 10-year battery powered type
- If new build or substantial renovation - 240V mains powered with battery back-up

Alarm locations

- On each storey;
- In each bedroom;
- In hallways that connect bedrooms and the rest of the dwelling;
- If there is no hallway, between the bedroom and other parts of the storey; and
- If there are no bedrooms on a storey, at least one smoke alarm must be installed in the most likely path of travel to exit the dwelling.



Mounting

- On or near the ceiling in a position with special care to avoid a dead air space. If it is not practical to install the smoke alarm on the ceiling, then it may be installed on the wall between 300mm to 500mm below the ceiling.
- Within 300mm of a light fitting
- Within 400mm of an opening from which air is supplied or forced air ventilation
- Within 400mm of the blades of a ceiling fan

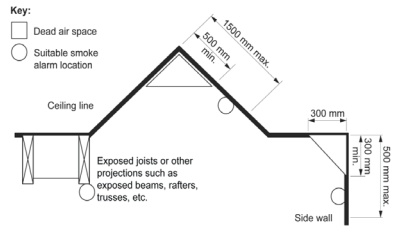


Diagram 1 – Installation of smoke alarms to avoid dead air space

Interconnection

- Mandated if new build or substantial renovation from 01-01-2017
- Mandated if leased or sold from 01-01-2022
- Mandated for all dwellings from 01-01-2027 that where there is more than one alarm, smoke alarms must be interconnected.

Further information
https://www.qfes.qld.gov.au/community-safety/smokealarms

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AU/ NZ SMOKE ALARM INSTALLATION REQUIREMENTS

SA

Smoke alarm installation in a Class 1a building (house, duplex, villa or town house) at a glance
Note: For guidance only. Always check with the latest NCC Building Code of Australia and local regulations.

Type

- Photoelectric type, Ionisation type or Combination of the two (AS 3786:2014)
- If replacement - 240V mains powered with battery back-up or Non-removable 10-year battery powered type (only like for like)
- If leased or sold - 240V mains powered with battery back-up or Non-removable 10-year battery powered type
- If a new build - 240V mains powered with battery back-up (where consumer power is supplied to the building)

Alarm locations

- In any storey containing bedrooms, every corridor or hallway associated with a bedroom, or if there is no corridor or hallway, in an area between the bedrooms and the remainder of the building; and
- Each other storey not containing bedrooms.

Mounting

- On or near the ceiling in a position with special care to avoid a dead air space. If it is not practical to install the smoke alarm on the ceiling, then it may be installed on the wall between 300mm to 500mm below the ceiling.

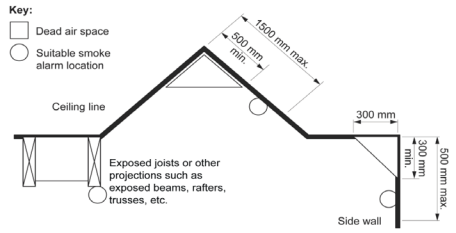

Diagram 1 – Installation of smoke alarms to avoid dead air space

Interconnection

- Recommended
- For New Builds or Renovated Dwellings constructed on an application for a building permit made after 01-05-2015 there is a requirement under the National Construction Code (NCC) - Building Code of Australia (BCA) that where there is more than one alarm, smoke alarms must be interconnected.

Further information
https://www.sa.gov.au/topics/planning-and-property/owning-a-property/smoke-alarms

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AU/ NZ SMOKE ALARM INSTALLATION REQUIREMENTS

TAS

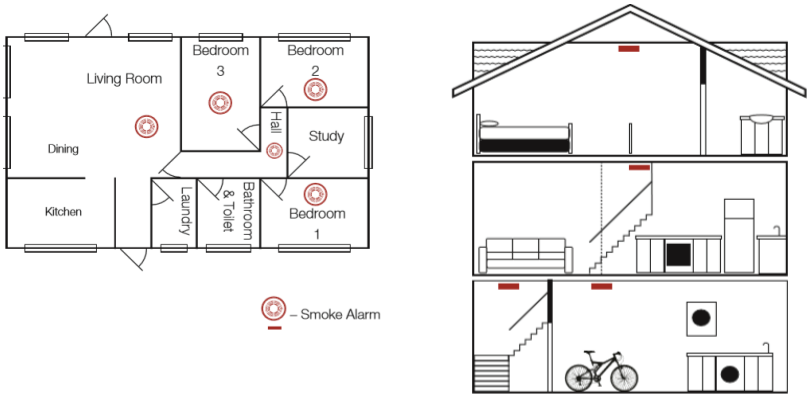
Smoke alarm installation in a Class 1a building (house, duplex, villa or town house) at a glance
Note: For guidance only. Always check with the latest NCC Building Code of Australia and local regulations.

Type

- Photoelectric type, Ionisation type or Combination of the two (AS 3786:2014)
- If replacement - 240V mains powered with battery back-up or Non-removable 10-year battery powered type (only like for like)
- If leased or sold - 240V mains powered with battery back-up or Non-removable 10-year battery powered type
- If a new build - 240V mains powered with battery back-up (where consumer power is supplied to the building)

Alarm locations

- In every sleeping area (bedroom), hallway and living area
- For multi-level homes on the ceiling at the top of the stairway connecting levels



Mounting

- On or near the ceiling in a position with special care to avoid a dead air space. If it is not practical to install the smoke alarm on the ceiling, then it may be installed on the wall between 300mm to 500mm below the ceiling.

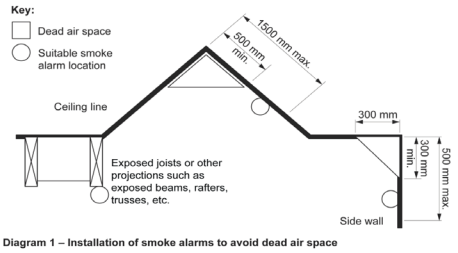


Diagram 1 – Installation of smoke alarms to avoid dead air space

Interconnection

- Recommended
- For New Builds or Renovated Dwellings constructed on an application for a building permit made after 01-05-2015 there is a requirement under the National Construction Code (NCC) - Building Code of Australia (BCA) that where there is more than one alarm, smoke alarms must be interconnected.

Further information
http://www.fire.tas.gov.au/Show?pageId=colSmokeAlarm

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AU/ NZ SMOKE ALARM INSTALLATION REQUIREMENTS

VIC

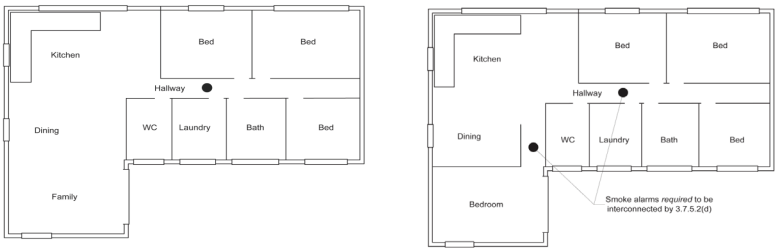
Smoke alarm installation in a Class 1a building (house, duplex, villa or town house) at a glance
Note: For guidance only. Always check with the latest NCC Building Code of Australia and local regulations.

Type

- Photoelectric type, Ionisation type or Combination of the two (AS 3786:2014)
- 240V mains powered with battery back-up (if constructed after 01-08-1997 or a substantial renovation and a consumer mains source is supplied to the building)
- 240V mains powered with battery back-up or Non-removable 10-year battery powered type (if constructed before 01-08-1997)

Alarm locations

- In any storey containing bedrooms, every corridor or hallway associated with a bedroom, or if there is no corridor or hallway, in an area between the bedrooms and the remainder of the building; and
- Each other storey not containing bedrooms.



Mounting

- On or near the ceiling in a position with special care to avoid a dead air space. If it is not practical to install the smoke alarm on the ceiling, then it may be installed on the wall between 300mm to 500mm below the ceiling.

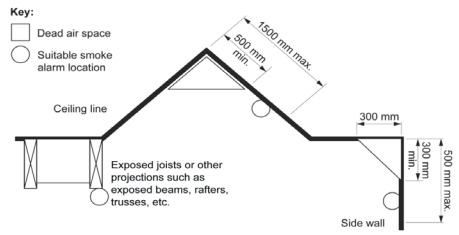


Diagram 1 – Installation of smoke alarms to avoid dead air space

Interconnection

- Recommended
- Mandated for New builds (from 01-05-2014)

Further information
https://www.frv.vic.gov.au/smoke-alarms

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AU/ NZ SMOKE ALARM INSTALLATION REQUIREMENTS

WA

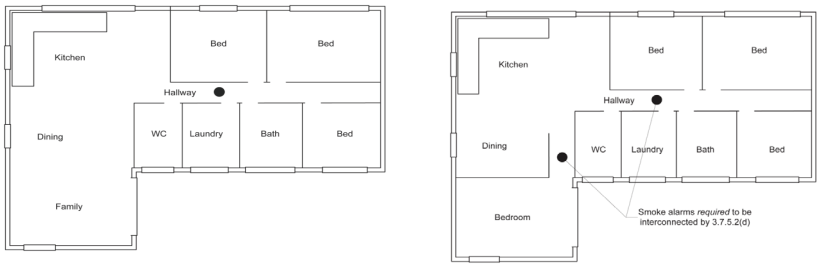
Smoke alarm installation in a Class 1a building (house, duplex, villa or town house) at a glance
Note: For guidance only. Always check with the latest NCC Building Code of Australia and local regulations.

Type

- Photoelectric type, Ionisation type or Combination of the two (AS 3786:2014)
- 240V mains powered with battery back-up (Non-removable 10-year battery powered type may only be used if mains power is not connected to the building or there is no hidden space to run the necessary wiring (e.g. concrete ceiling)
  Note: It is unlawful to install battery powered smoke alarms just because it is more convenient to do so. In a multi-level home where it is permitted to use a battery powered smoke alarm because the ground floor is concrete, the owner may not install a battery powered alarm on the upper floor ceiling where there is sufficient space to run the electrical wiring. The use in other circumstances must be approved by local government.

Alarm locations

- In any storey containing bedrooms, every corridor or hallway associated with a bedroom, or if there is no corridor or hallway, in an area between the bedrooms and the remainder of the building; and
- Each other storey not containing bedrooms.



Mounting

- On or near the ceiling in a position with special care to avoid a dead air space. If it is not practical to install the smoke alarm on the ceiling, then it may be installed on the wall between 300mm to 500mm below the ceiling.

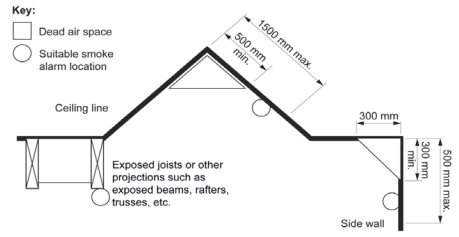


Diagram 1 – Installation of smoke alarms to avoid dead air space

Interconnection

- Recommended
- For New Builds or Renovated Dwellings constructed on an application for a building permit made after 01-05-2015 there is a requirement under the National Construction Code (NCC) - Building Code of Australia (BCA) that where there is more than one alarm, smoke alarms must be interconnected.

Further information
http://www.dfes.wa.gov.au/safetyinformation/fire/fireinthehome/pages/smokealarmlegislativerequirements.aspx

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AU/ NZ SMOKE ALARM INSTALLATION REQUIREMENTS

NZ

Smoke alarm installation in a household unit

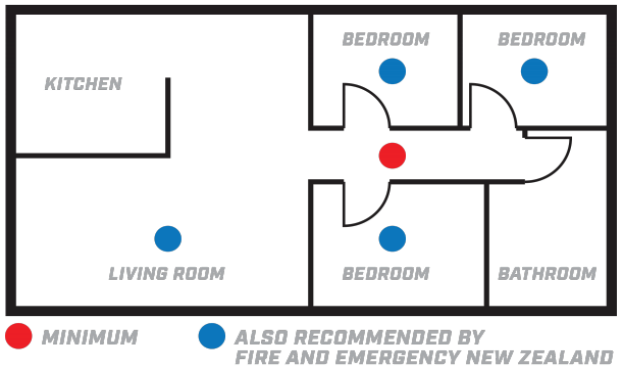
Note: For guidance only. Always check with the New Zealand Building Code and local regulations.

Type

- Photoelectric type, Ionisation type or Combination of the two (AS 3786:1993; ISO 12239:2003 or BS EN 14604:2005)
- 240V mains powered with battery back-up or Non-removable 10-year battery powered type

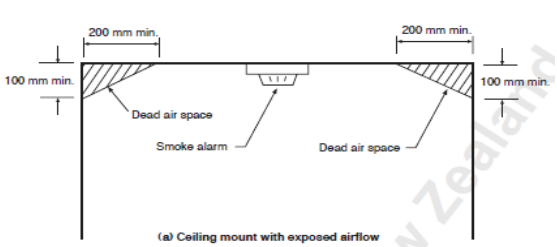
Alarm locations

- In multi-storey units, there shall be at least one smoke alarm on each level within the household unit.
- On levels containing the sleeping spaces, the smoke alarms shall be located either:
  - i) In every sleeping space, or
  - ii) Within 3.0 m of every sleeping space (bedroom) door. In this case, the smoke alarms must be audible to sleeping occupants on the other side of the closed doors.
- In all cases, so that the sound pressure level complies with that specified in NZS 4514.

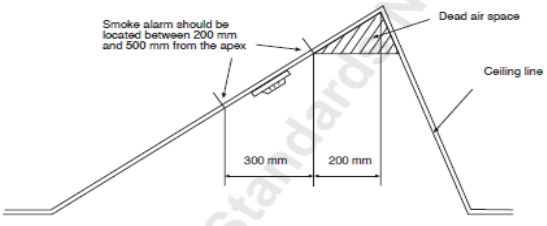


Mounting

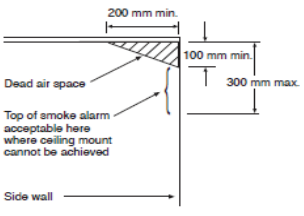
- Smoke alarms shall be installed on or near the ceiling. The placement shall be in accordance with NZS 4514.



(a) Ceiling mount with exposed airflow



(b) Ceiling mount – sloping ceiling



(c) Ceiling mount not available

Interconnection

- Recommended (the interconnection of individual smoke alarms should be considered if audibility is a problem).

Further information

https://fireandemergency.nz/at-home/smoke-alarms/

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