**False Alarms:**

- Dust generated on building construction sites can cause false alarms. The red plastic bag is intended to protect the smoke module during the building construction phase.
- This smoke alarm is designed to minimise false alarms. Smoking will not normally set off the alarm unless smoke is blown directly into the alarm.
- Combustion particles from cooking may set off the alarm if the alarm is located close to the cooking surface.
- Because large quantities of combustion particulates are generated from fires or grilling an alarm with a Heat Control device is preferable near a kitchen environment.
- If the alarm does sound, check for a fire before silencing the alarm. If a fire is discovered, escape quickly and call the Fire Brigade.

**Develop and Practise a Plan of Escape:**

- Make a floor plan indicating all doors and windows and at least two escape routes from each room. Second story windows may need a rope or chain ladder.
- Plan a family meeting and discuss your escape plan, showing everyone what to do in case of fire.
- Determine a place outside your home where all of you can meet, if a fire occurs.
- Familiarise everyone with the sound of the smoke alarm and practice leaving your home when they hear it.
- Practice a fire drill at least every six months, including drills at night. Practice alarms allows you to identify any problematic areas. You may not be able to reach your children. It is important that they know what to do!

**What to do when the Alarm Sounds:**

- Leave immediately by your plan of escape. Every second counts, so don’t waste time getting dressed or picking up valuables.
- If hot, or if you see smoke seeping through cracks, don’t open that door. Use your alternative exit. If inside door is cool, place your shoulder against it, open it slightly and be ready to slam it shut if heat and smoke rush in.
- Stay close to the floor as it is smokier. Breathe shallowly through a wet cloth if possible.
- Once outside, go to your selected meeting place and make sure everyone is there.
- Dial the Fire Brigade from your neighbour’s home - not from yours!
- Don’t return to your home until officials say that it is safe to do so! For additional information on fire safety, contact your local Fire Brigade.

**Disclaimers:**

1. This product must be installed by a licensed electrician.
2. For indoor use only
3. This product should not be installed in areas exposed to constant vibration, temperature fluctuations, or areas of high humidity.
4. This product contains no serviceable parts and no attempt should be made to repair this product. If the product is faulty it should be discarded.
5. Severely electromagnetic interference from other products may cause malfunction of this product.
6. This product is intended for domestic or similar uses. It is not suitable for use in an environment heavily laden with dust.
7. This product has a 10 year design life. At the end of this time it should be replaced. The date of Manufacture is coded on every alarm in the form 06/04-15 March 2013.
8. This product has been designed to operate in ambient temperatures: 0°C to 60°C.
9. This product is not suitable for marine environments such as areas subject to salt spray and/or frost.
10. This product is not suitable for installation in hazardous and/or corrosive areas.
11. This product has been designed for domestic or similar uses and is not suitable for a commercial installation.
12. The material in this product may vary in colour from batch to batch. Colour matching from one batch to another cannot be guaranteed.
13. Electrical installations periodically receive transient over voltages. This product has been designed to minimise the effect of such voltages on connected equipment. It may not give full protection for extreme over voltage transients such as those resulting from a close lightning strike.
14. This product has been designed to operate on a nominal supply voltage of 230V – 240V a.c. ±6%.
15. This product must be installed and used as per these instructions.
16. After installation this product must be tested as required by the appropriate government and/or statutory regulations.
17. This product utilises intellectual property in the form of registered designs, trademarks, and/or patents. Such intellectual property remains the property of Legrand in all cases.
18. Legrand reserves the right to modify the specification of this product at any time.

**Specifications:**

- Cat No.: 643085 (Photoelectric)
- Frequency: 50Hz
- Backup Battery: 9V battery included (recommended replacement: Enervon S22, Duracell MN 1604 or MK 1605)
- Temperature Range: +0°C to +60°C
- Humidity Range: 10-95% at 20°C
- Siren Sound Level: > 85 dB at 2 metres
- Unit Size: Ø162 ± 4mm
- Maximum Lifespan: 10 years

**Installation:**

- WARNING: In the interests of safety, a licensed electrician, in accordance with the relevant requirements of AS/NZS 3006, must install this smoke alarm and all wiring.
- This alarm must be wired to a continuous 230-240V a.c. 50Hz circuit. Ensure all wiring. WARNING: In the interests of safety, a licensed electrician, in accordance with the relevant requirements of AS/NZS 3006, must install this smoke alarm and all wiring.
- Incorrect wiring to the smoke alarm will damage the unit and invalidate the warranty. See wiring diagrams.
- The red plastic bag is intended to protect the sensor module during the building construction phase.
- A maximum length of 300 metres of wire can be used in interconnected smoke alarms. Spacing between interconnected smoke alarms must not exceed 30m per alarm. Minimum wire cross section 1.00mm²
- Interconnected smoke alarms must be connected to the same final sub-circuit.
- Do not connect AC power wires to I interconnect terminal. This may damage the smoke alarm.
- Do not connect DC power wires to I interconnect terminal. This may damage the smoke alarm.
- Do not connect the interconnected wire to any device, except the I interconnect terminal of another 643084 or 643085 smoke alarm. Interconnection with other brands or models may cause damage or result in a false or fire risk.
- Up to a limit of 20 smoke alarms may be interconnected.
- Not interconnected with HPM 645 or 645 ionisation smoke alarm
- IMPORTANT: READ ALL INSTRUCTIONS BEFORE INSTALLATION. NO USER SERVICEABLE PARTS INSIDE THIS SMOKE ALARM. Do not attempt to repair the smoke alarm yourself. Not to be used with non-pure sinusoidal power sources.

**Warning:**

- There are four terminals in the supply terminal block, marked A, B, N and EU/0P. It is important that the alarm be wired correctly to ensure correct operation. Incorrect wiring to the smoke alarm will damage the unit and invalidate the warranty. See wiring diagrams.

**Customer Service**

For all Customer Service and Technical Support enquiries please call Monday to Friday during business hours.

Legrand Australia
1300 347 777
www.legrand.com.au

Legrand New Zealand
0800 726 091
www.legrand.co.nz

ABN: 31 002 102 641

**Warranty**

Legrand will honour all statutory guarantees that you as a consumer are entitled to rely upon under the Australian and New Zealand Consumer Laws against a manufacturer including a guarantee that any products Legrand has manufactured or imported are of acceptable quality.

To make a claim under any statutory guarantee (or other warranty) you should first contact the supplier, contractor or retailer from whom you purchased the products.
INSTALLATION INSTRUCTIONS

PROFESSIONAL PHOTOELECTRIC SMOKE ALARM

WARNING:

The test could cause irreparable damage to the internal circuitry of the smoke alarm.

5.

4.

2.

Mounting Instructions:

3. Once removed, keep the red plastic bag away from babies and children to ensure the screws are fully tightened.

Plastic Bag:

4. Do not remove the red plastic bag until the smoke alarm is ready to be connected to the ceiling (if using). We recommend using a vacuum cleaner to clean the exterior of the smoke alarm.

EXAMPLE OF MULTIPLE ALARM WIRING:

Connecting the Interconnect terminal to any supply conductor will cause irreparable damage to the alarm; failure to operate or shock hazard and will void the warranty of the alarm.

WARNING:

Under no circumstances must an insulation resistance test be carried out on a circuit to which a smoke alarm is connected.

The test could cause irreparable damage to the internal circuitry of the smoke alarm and make it inoperative.

The warranty would be void under such circumstances.

Mounting Instructions:

1. Strip the Active/Neutral and Interconnect (if used) wires back to the strip length shown above.

2. When mounting, the connector must be flush on the base as indicated and ensure the screws are fully tightened.

3. Clip the flip to prevent accidental contact with the live terminals.

4. Screw the mounting base to the ceiling/wall using the plugs and screws provided or No.3/8-inch screws.

5. When installing on a wall, the mounting hinge must be on the left hand side.

6. Do not remove the red plastic bag until the smoke alarm is ready to be commissioned.

Commissioning:

1. Remove the red plastic bag from the sensor module. Refer to the "Plastic Bag" section above before removing the red plastic bag.

2. Install the 9V battery. Push the battery firmly into the contacts. The sensor unit will not latch to the mounting base unless battery is installed.

3. Turn on the mains power and check the green LED function. Green LED should glow to show main power present. Red LED will pulse every 60 seconds (approx.) to indicate correct operation and the battery is OK.

4. Press the Test/Flash button for 5 seconds to check that the alarm works.

Recommended locations of Alarms:

- General requirements for Australia in National Construction Code.
- There may be additional requirements in your area. Please check for any special requirements in your area with the relevant regulators.

- Install at least one alarm for each separate sleeping area. Try to cover the exit path as the bedrooms are usually further from an exit. If there is more than one smoke alarm, install additional alarms in each sleeping area in the immediate vicinity of bedrooms.

- Install at least one alarm to protect any stairs as staircases act like chimneys for smoke and heat.

- Install at least one alarm on every floor level.

- Install an alarm in every room where a smoker sleeps as additional protection.

- Install an alarm in every room where electrical appliances are operated (i.e. portable heaters or humidifers) as additional protection.

- Install an alarm in every room where someone sleeps with the door closed as additional protection. The closed door may prevent the alarm from waking the sleeper.

- Smoke, heat and other combustion products rise to the ceiling and spread horizontally. Mounting the alarm on the ceiling in the centre of the room places it closest to all points in the room. Ceiling mounting is preferred in ordinary residential construction.

- For mobile home installation select location carefully to avoid thermal barrier that may form at the ceiling. For more details see Mobile Home Installation.

- When mounting an alarm on the ceiling install it at a minimum of 300mm from the side wall.

- When mounting an alarm on a wall, install it at a minimum of 300mm from the ceiling level but not less than 600mm from the ceiling and any corner base line.

- When mounting an alarm at the apex of a sloping ceiling it should be located at a minimum of 500mm from the apex but should not exceed 1500mm (two diagrams).

- Locate smoke alarms at both ends of a hallway if the hallway is more than 9m long.

- The performance of smoke alarms mounted on a wall is not reliable and is not recommended when ceiling mounting can be implemented.

Operation, Testing and Maintenance:

OPERATION

The smoke alarm is operational once all wires are properly connected; the smoke alarm is silent. Install smoke alarms as recommended (refer to RECOMMENDED LOCATIONS).

- If mobile homes that are not well insulated extreme heat or cold can be transferred from the outside through poorly insulated walls and roof. This may create a thermal barrier that prevents smoke from reaching a smoke alarm mounted on the ceiling. In such units, install the smoke alarm on the most distant partition between 300mm and 600mm from the ceiling.

- If you are not sure about the insulation in your mobile home, or if you notice the walls and ceilings are either too hot or cold, install an alarm on a inside wall.

- For further information, see SINGLE FLOOR plan. We recommend that the smoke alarm be tested after each journey.

A mobile home may not act as a substitute for basic prevention.

Avoid These Locations:

- Do not place alarm in the following locations:

  - The garage. Gas released when you start your automobile may cause false alarms.

  - In front of forced air supply ducts used for heating and air-conditioning and other high air-flow areas.

  - In the peak of an "A" frame type of ceiling.

  - In areas where temperature may fall below +0ºC or rise above +40ºC.

  - In dusty areas, dust particles may cause smoke alarm to false alarm or fail to alarm.

  - We do not recommend installation in or directly adjacent to areas of high condensation such as bathrooms & laundries due to potential for false alarm.

Battery:

BATTERY INSTALLATION

The smoke alarm uses a 9V battery to automatically provide back-up power to the alarm (i.e. AC power fails). The battery will operate the alarm for approximately one or three months with AC power off.

- USE ONLY BATTERIES AS SPECIFIED IN THE PRODUCT LABEL. USE OF A DIFFERENT BATTERY MAY HAVE A DETRIMENTAL EFFECT ON OPERATION OR MAY CAUSE THE BATTERY TO EXPLODE.

- USE ONLY THE FOLLOWING 9-VOLT ALKALINE BATTERIES FOR REPLACEMENT: EVEREADY/ENERGIZER S2 SURECEL ALGARL METAL.

- Battery can only be inserted in one direction. Ensure polarity is correct.

- Push battery firmly into contacts.

- Incase of intermittent beeping, please re-install battery ensuring the gap from battery edge (terminal end) to plastic terminal tip, is not more than 2mm.

- In case the battery is not covered by warranty.

BATTERY REPLACEMENT

- To replace battery, unlatch unit from mounting base and remove the battery from compartment. Replace the old battery with a fresh one and close unit.

- Verify that the green LED is on. Test the smoke alarm.

- To ensure proper operation, the battery should be replaced once a year.

- Smoke alarm cannot be closed properly without battery in place.

The Limitations of Smoke Alarms:

- Smoke alarms cannot provide an alarm if smoke does not reach the alarm. Therefore, smoke alarms may not sense fires starting in chimneys, walls, or roofs, on the other side of a closed door, or on an different floor.

- If the alarm is located outside the bedrooms, or on a different floor, it may not wake up smoke sleepers. A smoke alarm in the bedroom, is therefore recommended as additional protection.

- Smoke alarms have been significant in saving lives in many parts of the world. However, U.S. Government research indicates that they may not give early warning in up to 35% of fires. Hence, the use of this product does not act as a substitute for basic prevention.

- Although smoke alarms can help save lives by providing early warnings of a fire, they are not a substitute for an insurance policy.

- This smoke alarm alone will not alert the hearing impaired. Use special purpose smoke alarm with lights or vibrating devices, for those hard of hearing.