

FIRE SAFETY STATEMENT

Proposal : Infill Single Storey Rear Extension
at
Address : 14 New Town, Codicote,
Hitchin, SG4 8UG



1. Building Description

The property is a two-storey mid-terrace dwelling with a pitched roof and existing loft space. The proposed works include:

- An infill single-storey rear extension to form a reception area with a main entrance and rear bathroom.
- Reconfiguration of the ground floor to include an open-plan kitchen and living area at the front.
- Minor internal changes on the first floor, including connecting an existing bathroom to a bedroom to create an ensuite.
- Conversion of the existing loft into a bedroom with one rooflight; no dormer is proposed.

The total height and footprint of the property remain broadly in keeping with existing adjoining dwellings.

2. Means of Warning and Escape

2.1 Fire Detection and Alarm System

- A Grade D1 / LD2 system will be installed in accordance with **BS 5839-6:2019**, consisting of:
 - Mains-powered, interlinked smoke alarms in the hallway, landing, and loft area.
 - A heat detector in the kitchen.
 - All alarms will have battery backup and be interconnected.

2.2 Escape Routes

- The primary means of escape will be via the main entrance door located within the new rear reception area.
- Ground-floor windows in habitable rooms will comply with Approved Document B, Volume 1, providing escape openings with a minimum clear opening of 0.33m² and minimum dimensions of 450mm x 450mm.
- The first-floor and loft bedroom windows will also serve as emergency egress windows where required, with a maximum cill height of 1.1m above floor level.
- The staircase connecting all floors will remain enclosed with FD30-rated doors on habitable rooms, providing a protected route to final exit.

3. Internal Fire Spread (Linings and Structure)

- Internal wall and ceiling finishes will achieve:
 - Class 0 (European Class B-s3,d2) for walls and ceilings.
- The new single-storey extension and loft structure will use materials with 30-minute fire resistance to prevent fire spread between compartments.
- Any new floor construction between habitable rooms and loft conversion will provide minimum 30 minutes fire resistance, complying with Table B3 of Approved Document B.
- Structural elements (beams, columns, and supporting members) in the loft conversion will be protected to achieve R30 performance.

4. External Fire Spread

- The proposed extension maintains a distance greater than 1m to any boundary, ensuring compliance with Approved Document B, Section B4 regarding external fire spread.
- External walls will have non-combustible finishes or achieve Class A2-s1,d0 reaction to fire rating.

- The rooflight in the loft will be constructed from fire-rated glass or positioned to prevent fire spread to adjacent roofs.

5. Access and Facilities for the Fire Service

- The property has direct access from New Town (public road), providing sufficient appliance access within 45m of all points of entry, in accordance with Approved Document B5.
- The front driveway and public street allow for fire appliance positioning, with clear access width >3.7m.
- A mains water hydrant is available within 90m, as per local fire service standards.

6. Compartmentation and Fire Doors

- 30-minute fire-rated doors (FD30) will be fitted to the loft bedroom, first-floor bedrooms, and living areas opening onto the protected stair route.
- The bathroom on the ground floor (rear) does not require a fire-rated door as it is non-habitable.
- Fire-stopping measures (intumescent sealant and collars) will be installed around all pipe and cable penetrations.

7. Emergency Lighting and Signage

- Domestic dwellings of this scale are exempt from dedicated emergency lighting systems; however:
 - The protected stair enclosure will have adequate natural or artificial lighting with LED fittings on independent circuits.
 - Illuminated exit signage is not required under Approved Document B for single-family dwellings.

8. Firefighting Equipment

- A fire blanket will be installed in the kitchen area near the cooking zone.
- At least one 1kg dry powder or CO₂ fire extinguisher will be provided near the entrance and kitchen.

9. Construction and Compliance

- All building works will be carried out in accordance with:
 - **Building Regulations 2010 (as amended)** — Approved Document Part B: Fire Safety (2020 edition).
 - **BS 9991:2021** — Fire safety in the design, management, and use of residential buildings.
 - **BS 476** and **EN 13501** for material fire resistance testing.
- A Building Control Officer or Approved Inspector will inspect and certify compliance prior to completion.

10. Conclusion

The proposed development at 14 New Town, Codicote, Hitchin has been designed to ensure appropriate fire safety measures are in place.

The scheme provides suitable means of escape, adequate detection and warning systems, fire-resisting construction, and safe access for emergency services.

Therefore, it complies with the functional requirements of Approved Document B (Fire Safety) under the Building Regulations 2010 (as amended).