

Local Energy Advice Demonstrator (LEAD) Project: Green Heritage Homes

Level 0 Pre-App Phase II Case Studies: 2025- 2026

Case Study Fifteen: Slim-profile double glazing, vacuum glazing, internal wall insulation

**All Level 0 pre-app case studies have been anonymised in accordance with GDPR requirements*

History and building type

Building age: c.1820

Building type: Terraced dwelling (converted to flats) (mid-terrace)

Grade listing: Grade II (group listed)

Wall construction type: Bath stone ashlar

Existing retrofit measures: None

Previous Applications for Listed Building Consent (LBC): None

Proposals & Matters Discussed:

- Works in first floor flat for replacement of existing single glazed sash windows with more energy efficient glazing – proposed slim-profile double glazing in rear bay window, vacuum glazing in front elevation.
- Associated matters discussed on site, including opportunities for internal wall insulation and material improvements to address damp and mould (e.g. replastering works and ventilation upgrades).

Heritage Assessment:

- Existing windows are 1-over-1 sash windows. Windows in the front elevation appear to be older and may be later 19th century additions, though there is some evidence of later alteration and insertion of modern glazing. Rear sash windows are likely mid-20th century additions where the bay window was added by this date. Further assessment would be required to indicate the approximate age of the existing windows and whether they are considered to be of historic interest.
- Existing joinery is in poor condition and requires further assessment by an experienced joiner to assess whether this could be repaired and retained, or would require replacement.
- There is a cooker hood in the kitchen used as ventilation, but this currently discharges into the loft space rather than via an external flue. An external flue could be located to minimise visual impact to the building. The existing roof is finished in non-historic concrete tiles.
- Removal of modern plaster (e.g. cementitious, gypsum) and replastering in lime would be acceptable.

Possible Retrofit Options:

- Replacement of existing windows with slim-profile double glazing/vacuum glazing, pending further assessment of historic interest.
- Upgrades to existing ventilation system in kitchen (e.g. cooker hood) to make sure emissions are properly discharged out of the building.

Listed Building Consent:

- Installation of internal wall insulation, and alterations to or replacement of existing windows would require listed building consent. Similarly,

works to remove plaster and re-plaster walls throughout the property would require consent.

- Alterations to upgrade a new ventilation system would require consent where proposing material alterations including the installation of a new external flue.

Measures Discounted:

- Internal wall insulation would not be considered acceptable where this would require removal or covering over of retained historic internal finishes such as cornicing and skirting boards. Installation would likely result in harm to or loss of historic fabric.

What Next?

The appropriateness of replacing existing windows would require further assessment as part of an application to identify the age and condition of existing windows and justify their replacement. Proposals would need to demonstrate that any harm to the listed building would be outweighed by public benefit.