

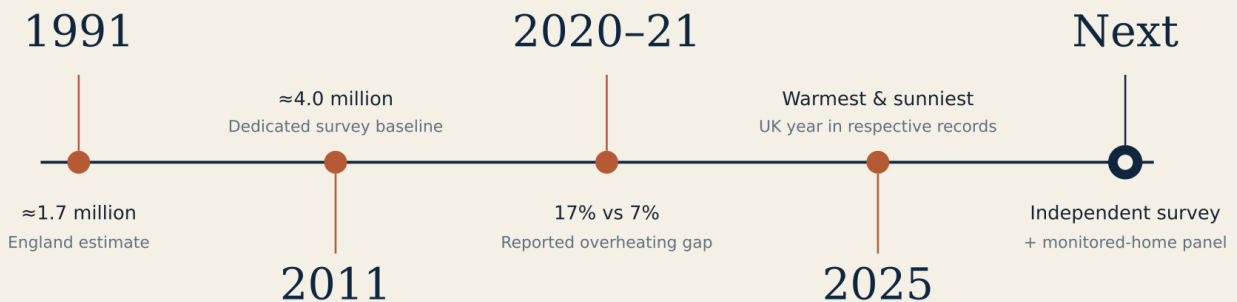
**BASELINE RESEARCH REPORT**

# The UK Conservatory Comfort Index 2026

Evidence review, national baseline and methodology for an annual measure of conservatory comfort

**EVIDENCE TIMELINE**

The stock grew. The climate changed. Measurement st



1991 and 2011 figures: English housing surveys · 2020-21: EHS subjective overheating · 2025: Met Office climate record

|                                                                      |                                                                      |                                                           |
|----------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------|
| <div>4.0 million</div> <div>English households estimated, 2011</div> | <div>17% vs 7%</div> <div>Reported overheating, with / without</div> | <div>2025</div> <div>UK's warmest and sunniest year</div> |
|----------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------|

Published by SnugRoof Thermal  
Research cut-off: 25 July 2026  
Geographic scope: United Kingdom, with England-only findings identified

# Contents

- 01 Executive Summary
- 02 Introduction
- 03 Methodology
- 04 State of UK Conservatories
- 05 Summer Overheating
- 06 Winter Heat Loss
- 07 Condensation
- 08 Energy Costs
- 09 Common Homeowner Problems
- 10 Construction Types
- 11 Modern Insulation and Comfort Methods
- 12 Planning and Building Regulations
- 13 Expert Analysis
- 14 Key Findings
- 15 Proposed Annual Index
- 16 Conclusions
- 17 Media Materials
- 18 Complete Bibliography

## Reading the evidence

Every dated statistic is labelled by geography and observation year. The report does not publish fabricated county scores or a 2026 UK stock count.

# Important note on the 2026 edition

This report is an evidence review and the methodological foundation for a future annual UK Conservatory Comfort Index™. It does not publish county, local-authority or national composite scores.

That restraint is deliberate. No current public dataset measures conservatory prevalence, construction, orientation, heating, overheating, condensation and actual use together across the UK. The most recent nationally representative government study found during this review that was dedicated to conservatories used fieldwork from 2010-11 and covered England, not the whole UK.<sup>[1]</sup> Publishing precise 2026 county rankings from the currently available evidence would therefore create false accuracy.

The report distinguishes:

- observed evidence from government surveys and climate records;
- modelled evidence from recognised building-performance studies;
- contextual evidence about the wider housing stock; and
- proposals for data that should be collected in future index editions.

This desk research was prepared for publication by SnugRoof Thermal. SnugRoof Thermal supplies conservatory ceiling insulation services, but no proprietary sales data, customer testimonials or product-performance claims have been used to calculate the findings.

# The central finding

The UK has a large but poorly measured stock of conservatories. The best dedicated national evidence located for this review estimated that 18.3% of English households - approximately 4.0 million households - had a conservatory in 2011.<sup>[1]</sup> The same study found that 77% of conservatories had some form of heating, 56% of heated conservatories were heated every day in winter, and only 20% of heated conservatories were never heated in winter.<sup>[1]</sup>

Those findings matter because the standard regulatory concept of a conservatory is a space thermally separated from the dwelling. Under the English guidance applicable to existing dwellings, a ground-floor conservatory no larger than 30 m<sup>2</sup> may be exempt from energy-efficiency requirements only when, among other conditions, the separation from the house is retained and the dwelling's heating system is not extended into it.<sup>[2]</sup> In practice, the government's 2011 survey found widespread heating and extensive day-to-day use.<sup>[1]</sup>

# A room caught between two seasons

Conservatories are exposed to unusually high solar gains because a substantial proportion of their envelope is glazed or translucent. That can be useful in mild conditions but creates a difficult balancing problem:

- in summer, solar radiation can raise internal temperatures rapidly;
- in winter, large areas of thermally weak roof and wall material can increase heat transfer;
- during cool, humid conditions, low internal surface temperatures can increase the likelihood of surface condensation if moisture and ventilation are not controlled.

The national overheating evidence is already clear. In the English Housing Survey 2020-21, households with a conservatory were more than twice as likely to report that part of their home became uncomfortably hot as households without one: 17% compared with 7%.<sup>[3]</sup> Every household in that survey that reported overheating somewhere in the home and had a conservatory reported overheating in the conservatory.<sup>[3]</sup>

The climate context is moving in the wrong direction. The Met Office reports that 2025 was the UK's warmest year in the observational series beginning in 1884 and its sunniest in the series beginning in 1910. The decade 2016-2025 was 0.51°C warmer than 1991-2020 and 1.33°C warmer than 1961-1990; it was also 4% sunnier than 1991-2020.<sup>[4]</sup> For Greater London, days above 30°C and nights above 18°C were more than four times as frequent in 2016-2025 as in 1961-1990.<sup>[4]</sup>

This is not merely a conservatory issue. Modelling commissioned by the Climate Change Committee estimated that around 55% of the existing UK housing stock - 15.7 million homes - failed its bedroom overheating criterion under current climate conditions.<sup>[5]</sup> The Climate Change Committee's 2026 risk assessment states that the proportion of existing homes at risk of overheating rises to more than 90% under a 2°C global-warming scenario.<sup>[6]</sup> Conservatories should therefore be understood as an exposed part of a much wider national adaptation problem.

# The evidence gap

The most important research finding is a gap rather than a number: the UK does not currently maintain an annual, conservatory-specific national dataset.

The 2011 Energy Follow-Up Survey remains invaluable, but it cannot establish how many conservatories exist in 2026, how many have been upgraded, how many have had their thermal separation removed, or how regional comfort has changed. EPC data are useful for describing the wider housing stock, but EPC coverage is incomplete and a thermally separated conservatory is normally excluded from the dwelling calculation under SAP methodology.<sup>[7][8]</sup> Planning data are also incomplete for this purpose because many conservatories fall within permitted development rights and never generate a planning application.<sup>[9]</sup>

# What can be said with confidence

1. Conservatories are widespread. The last dedicated representative government estimate was about 4.0 million English households in 2011.<sup>[1]</sup>
2. They are often heated. The same study found heating in 77%, with 56% of heated conservatories heated every winter day.<sup>[1]</sup>
3. Their use is seasonal. Seventy per cent were used six or seven days a week in summer, but 59% were used less than once a week in winter.<sup>[1]</sup>
4. Overheating is disproportionately reported. Seventeen per cent of households with a conservatory reported overheating, compared with 7% of households without one, in EHS 2020-21.<sup>[3]</sup>
5. Climate exposure is increasing. Recent UK decades are warmer and sunnier, while high-temperature extremes are becoming more frequent and intense.<sup>[4]</sup>
6. Energy cost makes uncontrolled heating expensive. From 1 July to 30 September 2026, Ofgem's Great Britain price-cap averages were 7.33 p/kWh for gas and 26.11 p/kWh for electricity, including VAT.<sup>[10]</sup> The exact cost of any conservatory depends on its geometry, fabric, ventilation, heating system, controls and use; a national "typical saving" cannot be claimed without measured before-and-after data.
7. Condensation requires a whole-system response. Insulation can raise internal surface temperatures, but changes to insulation and airtightness can also alter moisture paths. Adequate ventilation and correct detailing remain essential.<sup>[11][12]</sup>
8. No single retrofit is universally best. Shading, solar-control glazing, ventilation, internal ceiling insulation, full insulated roof replacement and behavioural controls solve different parts of the problem. Structure, moisture, fire safety, ventilation, planning and building-control implications must be checked for the individual property.<sup>[13][14]</sup>

# Recommendation

The first scored UK Conservatory Comfort Index™ should be built from:

- a new, independently administered annual survey of conservatory households;
- a monitored-home panel measuring temperature and relative humidity;
- Met Office HadUK-Grid climate data;
- UKCP climate projections;
- EPC and housing-stock data used only with explicit coverage corrections;
- energy-price data from Ofgem and the UK Government;
- a published scoring codebook, uncertainty intervals and external methodological review.

Until those inputs exist, the responsible publication is a national evidence baseline - not a league table.

The British conservatory sits awkwardly between a garden room and a conventional heated room. Its defining benefit - large areas of glazing or translucent roof - also creates its central comfort problem. Solar energy passes through transparent or translucent material, while heat is transferred through the roof, glazing, frames, floor and junctions. The result is a space whose indoor conditions can respond quickly to outdoor temperature, sun, wind and household behaviour.

Official energy methodology recognises this distinction. The Government's Standard Assessment Procedure states that a thermally separated conservatory is excluded from the dwelling calculation. A non-separated conservatory or other large glazed area is treated as part of the dwelling, with its glazed elements included in heat-loss and solar-gain calculations.<sup>[7]</sup> This is a technical distinction with practical consequences: the separating doors, heating arrangement and pattern of use can materially change how the space interacts with the house.

The public debate is often reduced to the phrase "too hot in summer and too cold in winter". The phrase is familiar because it describes a real building-physics tension, but repetition is not evidence. This report tests the claim against national surveys, climate observations, regulation, housing data and peer-reviewed research.

There is no single uncontested overheating threshold for every domestic setting.

Government-commissioned EFUS research notes the limitations of a fixed bedroom threshold and explains why adaptive thermal-comfort approaches are increasingly used for occupied living spaces.<sup>[34]</sup>

The report has four purposes:

1. to establish what credible evidence currently says about UK conservatory comfort;
2. to identify what is not known;
3. to provide journalists and homeowners with carefully qualified, sourceable findings; and
4. to establish a transparent method for a future annual UK Conservatory Comfort Index™.

## 2.1 Research questions

The review examined:

- How common are conservatories?
- How are they heated and used?
- What evidence links conservatories with summer overheating?
- What mechanisms drive winter heat loss and condensation?
- How should energy costs be discussed without inventing savings?
- Which construction and retrofit options are available?
- Which public datasets can support a repeatable annual index?
- Where are the evidence gaps large enough to prevent scoring?

## 2.2 Source hierarchy

Sources were prioritised in this order:

1. legislation, statutory guidance and UK Government statistics;
2. ONS, Met Office, UKHSA and Climate Change Committee publications;
3. government-commissioned technical research;
4. Historic England and Energy Saving Trust guidance;
5. peer-reviewed academic research;
6. professional building-control or technical guidance.

Commercial installer claims were not used as evidence for savings, temperatures, U-values or national prevalence.

## 2.3 Inclusion and exclusion

Included evidence had to be relevant to at least one of the following:

- UK conservatory prevalence, construction, heating or use;
- residential overheating, heat loss, moisture or retrofit;
- UK climate observations or projections;
- official energy, EPC, housing-stock, planning or regulatory data.

The review excluded:

- uncited "millions of conservatories" claims from commercial websites;
- temperature claims based on single installations;
- quoted bill savings without a documented baseline, monitoring period and counterfactual;
- county rankings inferred from search volume;
- planning-application counts presented as a count of conservatories;
- extrapolations of the 2011 England percentage to the whole 2026 UK housing stock.

## 2.4 Limits of the review

This is a desk-based evidence review, not a new field survey or monitored-building study. It therefore cannot:

- estimate the number of UK conservatories in 2026;
- measure the prevalence of polycarbonate, glass, insulated or solid roofs today;
- determine average internal conservatory temperatures;
- calculate a representative annual energy saving from any retrofit;
- rank counties or local authorities.

The word UK in the title describes the intended national programme and the scope of the climate and methodology review. Several of the strongest conservatory-specific statistics are England-only and are labelled as such.

## 3.1 The best available national baseline

The Department of Energy and Climate Change's 2011 Energy Follow-Up Survey interviewed 2,616 English households, including 436 households reporting a conservatory. After weighting, it estimated that 18.3% of English households - 3.999 million households - had a conservatory. The 95% confidence interval for the percentage was 16.6% to 19.9%.<sup>[1]</sup>

The same report presented a historical series showing growth from approximately 1.7 million conservatories in 1991 to around 4.0 million in 2011.<sup>[1]</sup> The underlying historical points came from the English House Condition Survey, English Housing Survey and EFUS, meaning the series should not be casually extended beyond 2011.

Figure 1 note: Government survey estimates for England; these are not 2026 estimates.<sup>[1]</sup>

### Call-out statistic

18.3% of English households - about 4.0 million - were estimated to have a conservatory in 2011.<sup>[1]</sup>

## 3.2 Heating

The EFUS findings challenge the assumption that conservatories are normally unheated buffer spaces:

| Measure                                                        | England, 2011 estimate | Evidence note                              |
|----------------------------------------------------------------|------------------------|--------------------------------------------|
| Conservatories with heating                                    | 77%                    | 95% CI: 73%-81%                            |
| Heated conservatories connected to central heating             | 55%                    | Percentage of heated conservatories        |
| Heated conservatories using storage or direct electric heating | 42%                    | Included portable electric heaters         |
| Heated every day in winter                                     | 56%                    | Percentage of heated conservatories        |
| Never heated in winter                                         | 20%                    | Percentage of heated conservatories        |
| Heated to the same temperature as the house                    | 45%                    | Among heated conservatories used in winter |
| Heated to a lower temperature than the house                   | 39%                    | Among heated conservatories used in winter |

Source: Energy Follow-Up Survey 2011; confidence intervals and exact bases are reported in the original publication.<sup>[1]</sup>

## 3.3 Separation from the dwelling

Around 91% of surveyed dwellings with conservatories had a separating door. Of households with a separating door, 83% said it was kept shut in winter.<sup>[1]</sup> Ninety-five per cent of conservatories opened into a living room, kitchen/diner, dining room or kitchen, so poor separation can affect frequently occupied parts of the dwelling.<sup>[1]</sup>

The evidence does not show that every open door causes excessive energy use. It shows that the interface between conservatory and dwelling is common, consequential and suitable for direct measurement in a future index.

## 3.4 Use through the year

| Frequency of use           | Summer | Winter |
|----------------------------|--------|--------|
| Six or seven days per week | 70%    | 23%    |
| One to four days per week  | 19%    | 18%    |
| Less than once per week    | 11%    | 59%    |

Source: Energy Follow-Up Survey 2011, England.<sup>[1]</sup>

This is one of the strongest available indicators of a winter "usability gap": frequent use fell from 70% in summer to 23% in winter, while infrequent use rose from 11% to 59%.<sup>[1]</sup> It does not prove that temperature was the only cause. Furniture, daylight, household routines and the purpose of the room may also affect use. A future annual survey should ask directly why the room is avoided.

## 3.5 What has changed since 2011?

Publicly available evidence cannot answer that question reliably. Since 2011, glazing, roof systems, energy prices, homeworking, climate exposure and retrofit activity have changed, but no equivalent annual national conservatory survey has measured the combined effect.

That makes the 2011 figures a baseline, not a current stock estimate.

## 4.1 Direct evidence from households

The English Housing Survey 2020-21 reported that 1.9 million households, or 8%, said at least one part of their home became uncomfortably hot. Among households with a conservatory, 17% reported overheating, compared with 7% among those without one.<sup>[3]</sup>

Figure 2 note: Subjective overheating reported in the English Housing Survey 2020-21. "Subjective" means the respondent reported uncomfortable heat; it is not a monitored temperature threshold.<sup>[3]</sup>

The survey's striking room-level finding was that every household reporting overheating somewhere in the home and having a conservatory reported overheating in that conservatory.<sup>[3]</sup> This should not be misreported as "all conservatories overheat". The base was households that both had a conservatory and had already reported overheating somewhere in the dwelling.

## 4.2 Why highly glazed rooms are exposed

Overheating risk is governed by the balance between heat entering, heat generated inside and heat leaving. In a conservatory, the important variables include:

- glazed area and solar transmittance;
- roof material;
- orientation;
- external shading and internal blinds;
- ventilation opening area and whether openings can be used safely;
- outdoor temperature and solar radiation;
- thermal mass;
- air leakage;
- occupancy, lighting and appliances;
- thermal separation from the main dwelling.

Approved Document O for new residential buildings explicitly limits unwanted solar gains and requires an adequate means of removing heat. Its simplified method considers glazing area, orientation and shading.<sup>[15]</sup> However, Part O does not apply to a conservatory added to an existing residential building after that building was constructed.<sup>[16]</sup> This leaves a large existing stock outside the new-build overheating regime.

## 4.3 The national climate signal

The Met Office's State of the UK Climate 2025 provides a clear observed trend:

- 2025 was the warmest year in the UK series from 1884;
- the latest decade, 2016-2025, was 0.51°C warmer than 1991-2020;
- the same decade was 1.33°C warmer than 1961-1990;
- 2025 was the sunniest UK year in the series from 1910;
- 2016-2025 was 4% sunnier than 1991-2020 and 10% sunnier than 1961-1990;
- high-temperature extremes have become more frequent and intense.<sup>[4]</sup>

Sunshine is not a direct measure of indoor discomfort, and annual temperature does not determine the performance of an individual room. Together, however, the observations strengthen the case for measuring highly glazed spaces rather than assuming historic patterns remain valid.

## 4.4 Wider-home modelling

Arup's modelling for the Climate Change Committee used CIBSE TM59 criteria and representative UK housing archetypes. It estimated that around 55% of the existing UK housing stock - 15.7 million homes - failed the bedroom overheating criterion under current climate conditions.<sup>[5]</sup> This result is modelled, not a survey count, and it concerns bedrooms rather than conservatories. Its relevance is contextual: overheating is already a mainstream housing-stock problem.

The study stresses that retrofit effectiveness depends on the conditions of the individual building and recommends building-specific investigation and, ideally, dynamic thermal modelling.<sup>[5]</sup> That warning is especially relevant to conservatories because orientation, glazing and ventilation can differ sharply between otherwise similar homes.

## 4.5 Health context

This report does not attribute national heat mortality to conservatories. The health evidence nevertheless explains why indoor overheating deserves serious treatment. ONS estimated that 4,507 deaths in England in 2022 were associated with the hottest days; the statistic is experimental and carries a 95% confidence interval of 3,363 to 5,587.<sup>[17]</sup> UKHSA states that the principal health impacts during heat events are associated with cardiovascular and respiratory disease.<sup>[18]</sup>

The responsible conclusion is therefore not that conservatories cause heat deaths. It is that rooms with documented disproportionate overheating sit within a national indoor-heat risk that is becoming more important.

## 5.1 The physics

Fabric heat transfer can be described in simplified form as:

$$\dot{Q} = U \times A \times \Delta T$$

where:

- $\dot{Q}$  is the rate of heat transfer in watts;
- $U$  is thermal transmittance in  $\text{W/m}^2\text{K}$ ;
- $A$  is area in  $\text{m}^2$ ; and
- $\Delta T$  is the indoor-outdoor temperature difference in kelvin.

The formula shows why a large area of relatively conductive glazing or roof material matters: heat transfer increases with both U-value and area. Actual energy consumption additionally depends on air leakage, ventilation, solar gain, thermal mass, heating efficiency, controls, set-point and occupancy. SAP uses a fuller whole-dwelling calculation rather than the simple formula alone.<sup>[7]</sup>

## 5.2 What the national survey found

EFUS compared metered gas use in homes with and without conservatories. Median annual gas consumption was 18,200 kWh for gas-heated homes with a conservatory and 13,400 kWh for homes without one.<sup>[1]</sup> But conservatory homes were also larger on average - 94 m<sup>2</sup> compared with 77 m<sup>2</sup> - and the report found they were not statistically more likely to fall into the highest decile of total or per-square-metre gas consumption.<sup>[1]</sup>

This is an important correction to simplistic claims. The raw difference does not prove that the conservatory caused an extra 4,800 kWh of gas use. Dwelling size and other characteristics confound the comparison.

### What journalists can safely say

Government research found that homes with conservatories used more gas at the median, but they were also larger, and the study did not find conservatory homes disproportionately represented among high gas users after examining total and per-square-metre consumption.<sup>[1]</sup>

## 5.3 Separation and heat loss from the house

The regulatory emphasis on thermal separation reflects the way conservatories are modelled. If a conservatory remains thermally separated, SAP treats it as outside the dwelling calculation. If it is not separated, its glazed elements are included in both heat-loss and solar-gain calculations.<sup>[7]</sup>

In England, the 2021 edition of Approved Document L states that the exemption for a ground-floor conservatory up to 30 m<sup>2</sup> depends on retaining the wall, door or window separating it from the dwelling and not extending the dwelling heating system into it.<sup>[2]</sup> The 2026 edition continues the principle that removing thermal separation or extending the dwelling heating system causes the conservatory to be treated as an extension.<sup>[19]</sup> Applicable transitional arrangements and devolved-nation rules must be checked for the specific project.

## 5.4 Winter comfort is not identical to energy efficiency

A room can feel cold even when total household energy use is not exceptionally high. Comfort is influenced by:

- air temperature;
- internal surface temperatures;
- radiant asymmetry from cold glazing;
- draughts and air leakage;
- floor temperature;
- humidity;
- clothing, activity and duration of use.

The annual index should therefore measure both energy demand and experienced comfort. EPC score alone cannot tell journalists whether a particular conservatory is pleasant to occupy.

## 6.1 How it forms

Condensation occurs when moist air encounters a surface at or below its dew-point temperature. In a conservatory, glazing, frames, roof panels and junctions can become the coldest internal surfaces. Risk rises when moisture production is high, surface temperatures are low and ventilation is inadequate.

Government ventilation guidance states that adequate ventilation is needed to limit moisture and pollutants, and warns that without it mould and indoor air pollution may become hazardous.<sup>[20]</sup>

Government health guidance says a more energy-efficient property is less likely to suffer condensation, provided it is adequately ventilated.<sup>[21]</sup>

## 6.2 Wider housing evidence

The English Housing Survey found that 1.4 million dwellings, or 5% of the stock, had a damp problem in 2024. Serious condensation, at 3%, was more prevalent than rising damp, at 1%, or penetrating damp, at 2%.<sup>[22]</sup> These are whole-home figures, not conservatory-specific rates.

The same survey's household interviews produced a broader measure: 30% reported some problem with condensation, damp or mould in 2024.<sup>[23]</sup> The difference between the 5% inspected-stock measure and 30% self-reported measure is not a contradiction. They use different definitions and methods; both should be labelled accurately.

## 6.3 Insulation and moisture must be designed together

Insulation can raise the temperature of internal finishes and reduce surface-condensation risk. It can also make adjacent cavities or external layers colder and change where water vapour condenses. Air gaps, continuity, ventilation paths, vapour-control strategy and junction detailing therefore matter.

Energy Saving Trust warns that adding roof insulation can make an unheated roof space cooler and increase or worsen condensation unless ventilation is maintained.<sup>[11]</sup> Historic England similarly warns that unsuitable insulation can impede drying and cause moisture accumulation, particularly in traditionally constructed buildings.<sup>[12]</sup> Its guidance recommends hygrothermal modelling where the likelihood of moisture accumulation, condensation or mould needs to be assessed.<sup>[24]</sup>

The implication is blunt: "add insulation" is not a complete specification.

## 7.1 The 2026 price context

For a typical direct-debit customer in England, Scotland and Wales, Ofgem's average price-cap rates from 1 July to 30 September 2026 were:

| Energy      | Unit rate   | Daily standing charge |
|-------------|-------------|-----------------------|
| Electricity | 26.11 p/kWh | 57.19 p/day           |
| Gas         | 7.33 p/kWh  | 29.04 p/day           |

Rates include 5% VAT and vary by region, payment method and meter type.<sup>[10]</sup>

These rates show why heating method matters. At the cap averages, one delivered kWh from a direct electric resistance heater is charged at the electricity unit rate, while a gas boiler consumes gas at the lower gas unit rate but converts it to useful room heat with losses. Heat pumps operate differently because they move heat and can deliver more heat than the electrical energy they consume; actual performance varies with system and conditions.<sup>[25]</sup>

## 7.2 What cannot be claimed

No credible national dataset identified in this review supports a single statement such as:

- "insulating a conservatory saves £X per year";
- "a conservatory loses X% of a home's heat";
- "a particular ceiling system reduces temperatures by X°C".

Such a claim requires, at minimum:

- pre- and post-retrofit monitoring;
- weather normalisation;
- heating-use and set-point records;
- room geometry and fabric description;
- treatment of rebound effects, such as using the room more often after improvement;
- an appropriate comparison or counterfactual.

Without these controls, a fall in a bill could reflect weather, tariff, occupancy or behaviour rather than the retrofit.

## 7.3 A defensible future cost measure

The index should publish two separate metrics:

1. modelled annual conditioning requirement, in kWh/m<sup>2</sup>, using standard occupancy and weather; and
2. reported or metered household spend, with tariff and usage explicitly stated.

The modelled metric allows comparison between buildings; the metered metric reflects real life. Mixing them produces misleading "average savings".

The evidence supports a set of recurring problem categories, but not a current national prevalence for each one.

| Problem                                  | Evidence status                                                    | What should be measured annually                                         |
|------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------------|
| Uncomfortably hot in summer              | Directly supported by EHS conservatory comparison <sup>[3]</sup>   | Hours above adaptive threshold; days room avoided                        |
| Difficult or expensive to heat in winter | Heating and seasonal-use evidence supported by EFUS <sup>[1]</sup> | Heating hours, set-point, energy input, operative temperature            |
| Condensation on cold surfaces            | Mechanism well established; no national conservatory rate          | Hours above RH threshold; surface temperature; visible condensation days |
| Glare and excessive brightness           | Plausible consequence of glazing; no national rate found           | User rating by season and orientation                                    |
| Rain noise                               | Commonly reported commercially; no robust national rate found      | User rating and measured internal sound level                            |
| Draughts                                 | Building-physics mechanism; no national conservatory rate          | Air-permeability or tracer test; user rating                             |
| Seasonal loss of usable floor area       | Supported indirectly by EFUS use-frequency shift <sup>[1]</sup>    | Number of unusable days and stated reasons                               |
| Heat spilling into adjacent rooms        | Mechanism depends on separation and use                            | Door state, adjacent-room temperature and airflow                        |

This table intentionally distinguishes between an evidenced national finding and a sensible research question. A media-quality report should not turn plausible complaints into invented prevalence statistics.

## 9.1 Polycarbonate roofs

Multiwall polycarbonate roof sheets are lightweight and translucent. Their performance varies by sheet thickness, number of walls, coatings, edge condition and installation. The 2026 index should not assign one U-value to "polycarbonate" without recording the actual system.

## 9.2 Glazed roofs

Glazed roofs range from older units to modern insulated glass with low-emissivity coatings and solar-control properties. Relevant measures include whole-unit U-value, solar-energy transmittance or g-value, visible-light transmittance, frame fraction and orientation. Approved Document O's use of glazing area, orientation, g-values and shading demonstrates why thermal transmittance alone does not determine summer comfort.<sup>[15][16]</sup>

## 9.3 Solid or tiled replacement roofs

A replacement solid roof changes the weight, opacity, insulation and sometimes the regulatory status of the structure. LABC guidance warns that replacing a translucent roof with a solid roof requires consideration of the existing structure's ability to carry increased loads and may cause the space to cease being an exempt conservatory.<sup>[13]</sup>

The design should address:

- structural capacity of frames and foundations;
- roof loading and restraint;
- thermal continuity;
- ventilation and condensation;
- fire performance;
- daylight reduction;
- building-control approval;
- planning or listed-building consent where relevant.

## 9.4 Internal insulated ceilings

An internal insulated ceiling is installed beneath the existing roof, typically creating a lined internal surface and a cavity incorporating insulation and battens. Systems vary materially. Their performance depends on the declared thermal characteristics of the insulation, air spaces, workmanship, air movement, junctions and vapour-control strategy.

Multifoil products require particular care. Reflective insulation often relies on adjacent air spaces, and its declared performance must be based on an appropriate test and calculation method rather than an unsupported thickness comparison.<sup>[26]</sup> Product-specific certification and the complete build-up should be assessed; a generic claim for all multifoils is not defensible.

## 9.5 Orangeries and hybrid structures

Orangeries and hybrid roofs combine solid perimeter or insulated sections with rooflights or glazed areas. Because the solid-to-glazed ratio varies, the label alone does not predict performance. The index should classify envelope areas rather than rely on marketing names.

No method should be scored on marketing claims. The future index should assess installed performance and side effects.

| Method                            | Primary purpose                                                          | Principal limitations or checks                                          |
|-----------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|
| External shading                  | Reduces solar gain before it reaches glazing                             | Wind, maintenance, planning, orientation, seasonal control               |
| Internal blinds                   | Reduces glare and some heat gain                                         | Solar energy has already entered glazing system; ventilation interaction |
| Solar-control glazing or film     | Reduces solar transmittance                                              | Daylight, winter solar benefit, glass compatibility, warranties          |
| Natural ventilation               | Removes heat when outside air is cooler                                  | Security, noise, rain, pollution and user behaviour                      |
| Mechanical ventilation            | Controlled air exchange                                                  | Design airflow, noise, energy use, maintenance                           |
| Ceiling-level internal insulation | Reduces heat transfer through roof area and can reduce radiant asymmetry | Moisture, air gaps, thermal bridges, fire and electrical detailing       |
| Full insulated roof replacement   | Changes roof fabric comprehensively                                      | Structure, cost, approval, daylight, embodied impact                     |
| Efficient, controlled heating     | Improves winter air temperature                                          | Does not by itself reduce fabric loss; running cost and emissions        |
| Active cooling                    | Lowers summer temperature                                                | Electricity demand, condensate, noise, external unit and heat rejection  |

The hierarchy for summer comfort should normally begin with reducing unwanted solar gains and using passive heat removal before active cooling. That is consistent with the approach embedded in Approved Document O and wider overheating research.<sup>[15][27]</sup>

For winter, the hierarchy begins with understanding thermal separation, draughts, roof and glazing performance, then selecting insulation and controls appropriate to the structure. Energy Saving Trust's general roof guidance distinguishes between cold-roof insulation at ceiling level and warm-roof insulation at rafter or roof-covering level; each requires appropriate ventilation and detailing.<sup>[11][28]</sup>

## 11.1 Planning

In England, a conservatory is treated as an extension for planning purposes and can often be built under permitted development rights if the relevant limits and conditions are met.<sup>[9]</sup> Permitted development rights can be restricted for flats, designated land, listed buildings, properties affected by Article 4 directions and homes created through certain changes of use.<sup>[29]</sup>

Planning-application databases therefore cannot be used to count the conservatory stock: developments that do not require an application are absent.

## 11.2 Energy-efficiency exemption

Under the English 2021 Approved Document L guidance, the energy-efficiency exemption for a conservatory added to a dwelling applies when all stated conditions are satisfied, including:

- ground-floor location;
- floor area no greater than 30 m<sup>2</sup>;
- compliant safety glazing;
- retained thermal separation; and
- no extension of the dwelling heating system into the conservatory.<sup>[2]</sup>

Homeowners should not assume that every conservatory, roof alteration or conversion remains exempt. Removing separation, changing the amount of glazing or adding a solid roof can alter the building-control position.<sup>[13][19]</sup>

## 11.3 Ventilation

Approved Document F states that a conservatory no larger than 30 m<sup>2</sup> is exempt from Part F requirements; for a larger conservatory, the guidance addresses background and purge ventilation.<sup>[20]</sup> Exemption does not repeal the physics of moisture or overheating. An insulated retrofit still needs a ventilation strategy appropriate to its use and construction.

## 11.4 Historic buildings

Historic England advises that conservatories should remain thermally separate from the main building and have independent temperature controls; if the heating system is extended into the conservatory, the work should be treated as an extension.<sup>[30]</sup>

Historic and traditionally constructed buildings require particular moisture care. Historic England warns that unsuitable insulation can impede natural drying and accumulate moisture within fabric.<sup>[12]</sup>

Listed-building consent or planning permission may also be required where alterations affect significance or appearance.

Regulations differ across England, Wales, Scotland and Northern Ireland. For example, Scottish local-authority guidance identifies replacing an existing conservatory roof with a solid roof as work commonly requiring a building warrant.<sup>[31]</sup> Project-specific advice should come from the relevant local authority or approved professional.

## 12.1 The conservatory is a systems problem

The evidence rejects one-dimensional explanations. A roof is important, but comfort is produced by the whole system:

$$\text{Comfort outcome} = f(\text{climate, solar gain, fabric, ventilation, moisture, heating, controls, use})$$

Changing one variable can improve one season while worsening another. Reducing solar transmittance may cut summer gain but also reduce useful winter gain. Increasing airtightness may reduce draughts but increase humidity if ventilation is not maintained. Adding a more powerful heater may increase winter use without fixing fabric loss. Replacing a translucent roof may improve thermal resistance but reduce daylight and increase structural loading.

## 12.2 "Warm in winter" and "cool in summer" require different proof

A product may reduce heat transfer without proving that peak summer temperature falls. Summer outcomes depend heavily on solar gain and ventilation. Likewise, a lower summer peak does not establish lower winter heating demand.

Future product studies should report at least:

- roof build-up and declared thermal performance;
- conservatory dimensions and orientation;
- glazing specification and shading;
- indoor and outdoor temperature at five-minute intervals;
- relative humidity;
- window and door state;
- heating or cooling energy;
- occupancy;
- weather-normalised pre/post comparison;
- monitoring over representative winter and summer periods.

## 12.3 The regulatory model and lived reality are not always aligned

The exemption model assumes separation and no extension of the dwelling heating system. Yet EFUS found that 77% of conservatories had heating and 55% of heated conservatories were connected to central heating.<sup>[1]</sup> That does not establish non-compliance in individual homes: heaters may have been installed under different circumstances, rules or interpretations. It does show that an "unheated buffer space" is a poor universal description of how conservatories are used.

## 12.4 The UK needs a new baseline

The dedicated national evidence is too old for 2026 market claims. The correct response is not to stretch 2011 data into a false present-day estimate. It is to repeat and extend the survey, add monitored data and publish uncertainty.

## 12.5 A commercial publisher must over-disclose

Because SnugRoof Thermal operates in the retrofit market, the annual report should:

- publish the full questionnaire and codebook;
- commission fieldwork from an independent research organisation;
- register the analysis plan before seeing results;
- include all retrofit categories, including "no intervention";
- prohibit sales leads from being collected through the research survey;
- publish negative or neutral findings;
- invite external review from a building physicist, statistician and consumer representative.

That is the difference between a credible index and branded content.

1. The last dedicated representative government survey estimated that 18.3% of English households, approximately 4.0 million, had a conservatory in 2011.<sup>[1]</sup>
2. That estimate is too old and too geographically limited to be relabelled as a 2026 UK total.
3. Seventy-seven per cent of conservatories in the 2011 England survey had heating.<sup>[1]</sup>
4. Fifty-six per cent of heated conservatories were heated every day in winter.<sup>[1]</sup>
5. Seventy per cent of conservatories were used six or seven days a week in summer, compared with 23% in winter.<sup>[1]</sup>
6. Fifty-nine per cent were used less than once a week in winter.<sup>[1]</sup>
7. In EHS 2020-21, 17% of households with a conservatory reported overheating, compared with 7% of households without one.<sup>[3]</sup>
8. The Met Office reports that 2025 was the UK's warmest year since the temperature series began in 1884 and its sunniest since the sunshine series began in 1910.<sup>[4]</sup>
9. Recent Greater London frequencies of days above 30°C and nights above 18°C were more than four times their 1961-1990 frequency.<sup>[4]</sup>
10. Part O addresses overheating in new residential buildings but not conservatories later added to existing residential buildings.<sup>[16]</sup>
11. Around 55% of the existing UK housing stock failed a bedroom overheating criterion in modelling commissioned by the Climate Change Committee.<sup>[5]</sup>
12. The raw gas-use difference between homes with and without conservatories did not prove conservatories caused higher consumption, because conservatory homes were larger and were not statistically over-represented among high gas users.<sup>[1]</sup>
13. EPC data cannot, by itself, measure conservatory comfort; coverage is incomplete and thermally separated conservatories are omitted from SAP dwelling calculations.<sup>[7][8]</sup>
14. Planning data cannot count the stock because qualifying conservatories can be permitted development.<sup>[9]</sup>
15. Insulation, airtightness and ventilation must be designed together to manage moisture.<sup>[11][12]</sup>
16. A single national savings claim for conservatory insulation is not supported by the public evidence reviewed.
17. County scores would be fabricated precision without new, geographically representative conservatory data.

18. A credible annual index is feasible if survey, monitoring, climate and housing-stock data are combined transparently.

## 14.1 Purpose

The annual index should answer:

How successfully do conservatories in each reported geography provide usable, thermally comfortable space through summer and winter, at a manageable energy cost and without persistent moisture problems?

The index should score comfort performance, not sales opportunity.

## 14.2 Unit of analysis

The primary unit should be the individual conservatory household. Results can then be aggregated to:

- UK nations;
- English regions;
- climate zones;
- construction archetypes;
- roof types;
- property-age bands.

Local-authority or county scores should be withheld until sample sizes or small-area models meet published reliability thresholds.

# 14.3 Proposed score

Use a 0-100 scale where 100 represents the strongest all-season comfort performance.

| Component                  | Weight | Core variables                                                                                        |
|----------------------------|--------|-------------------------------------------------------------------------------------------------------|
| Summer comfort resilience  | 25%    | Monitored overheating hours; hot-day exposure; solar exposure; reported unusable summer days          |
| Winter comfort resilience  | 25%    | Monitored under-temperature hours; heating degree days; reported unusable winter days; draught rating |
| Moisture resilience        | 15%    | Hours at high RH; surface-condensation days; reported mould; ventilation provision                    |
| Fabric and control quality | 15%    | Roof/glazing class; thermal separation; shading; openable area; heating controls; verified retrofit   |
| Energy affordability       | 10%    | Modelled conditioning demand; actual tariff-adjusted spend; household energy-burden measure           |
| Resident experience        | 10%    | Overall satisfaction; frequency of use; noise/glare; ability to control conditions                    |

Weights should be reviewed by an independent panel and tested through sensitivity analysis. The index must publish how rankings change under plausible alternative weights.

## 14.4 Climate inputs

Use Met Office HadUK-Grid at the finest appropriate licensed resolution. It provides consistent UK coverage informed by land observations and includes maximum, minimum and mean temperature, rainfall, sunshine, relative humidity, vapour pressure and wind speed.<sup>[32]</sup>

Proposed annual climate measures:

- number of days with maximum temperature above 25°C and 30°C;
- number of warm nights above a defined threshold;
- cooling degree hours or days;
- annual and summer sunshine hours;
- heating degree days;
- winter minimum temperature;
- relative humidity or vapour pressure;
- wind speed;
- rainfall as contextual moisture exposure.

Thresholds should be pre-specified and aligned with recognised thermal-comfort guidance. A sensitivity table should show results under alternative thresholds.

UKCP projections should be published as a separate future exposure scenario, not blended into the observed annual score.<sup>[33]</sup>

## 14.5 Housing-stock and EPC inputs

EPC data can contribute:

- median EPC score;
- property age;
- property type;
- main heating fuel;
- floor area;
- estimated energy demand and emissions where methodologically comparable.

But corrections are essential. ONS states that EPC data do not cover every home because an EPC is generally triggered by construction, conversion, sale or letting. As of March 2025, 71% of residential dwellings in England and 67% in Wales had at least one EPC since records began, with lower coverage among older homes.<sup>[8]</sup> The index should publish coverage by geography and use weighting or imputation only where assumptions are testable.

The Ministry of Housing, Communities and Local Government makes record-level EPC data for England and Wales available through bulk downloads and an API, subject to the service's access and use conditions.<sup>[35]</sup> The Government identifies SAP 10.3 and RdSAP 10.0.1 as the current methodologies at the research cut-off.<sup>[36]</sup>

EPC score should remain a contextual housing-stock variable, not a proxy measurement of conservatory performance.

## 14.6 Housing and planning inputs

Potential sources include:

- English Housing Survey and equivalent devolved-nation surveys;
- Census property-type and tenure data;
- Valuation Office Agency property attributes where licensed;
- local planning registers and Planning Data;
- listed-building and conservation-area datasets;
- ONS geography and deprivation classifications.

Planning data should measure visible development activity, not the total conservatory stock, because permitted development is not comprehensively recorded.<sup>[9]</sup>

## 14.7 New annual homeowner survey

Commission an independent survey with screening questions to identify conservatory households.

Minimum questionnaire domains:

- postcode sector or geocoded small area;
- property type and age;
- conservatory age, size and orientation;
- roof and wall material;
- glazing specification if known;
- separating doors and usual door state;
- heating and cooling equipment;
- shading and ventilation;
- retrofit history;
- use frequency by month;
- days avoided because of heat, cold, glare, noise or condensation;
- visible condensation and mould;
- energy affordability;
- satisfaction and perceived control;
- demographic variables needed for weighting and vulnerability analysis.

### Sample design

Use probability-based or carefully benchmarked quota sampling, stratified by nation, English region, urban/rural class, tenure, property type and deprivation. Conservatory ownership must be screened rather than assumed from broad homeowner panels.

Recommended reporting standards:

- publish unweighted and weighted bases;
- suppress estimates with an unweighted base below 100;
- label 100-199 as indicative;
- target at least 300-400 conservatory households per reported large geography;
- report confidence intervals;
- use design effects in variance estimation.

County reporting would require a substantially larger sample. If approximately 200 completed conservatory-household interviews were required in each of dozens of counties, the survey would run into many thousands of interviews after screening. Until funded, combine counties into climate/stock zones or use a transparent multilevel model with validation and wide uncertainty intervals.

## 14.8 Monitored-home panel

Recruit a rotating panel covering roof types, orientations, regions, property ages and retrofit states.

Minimum sensors and logging:

- indoor air temperature;
- globe or operative temperature in a research subsample;
- relative humidity;
- outdoor temperature and humidity, or matched nearby observations;
- electricity use for portable heating/cooling where feasible;
- window, vent and separating-door state in a subsample;
- five-minute logging interval;
- at least one complete summer and winter.

Sensor model, calibration, placement, missing-data rules and quality-control procedures must be published.

## 14.9 Normalisation

For each variable:

1. define whether a higher raw value is better or worse;
2. winsorise only under a published rule, such as the 5th and 95th percentile;
3. transform to a 0-100 score using fixed baseline-year reference points;
4. reverse adverse variables;
5. apply weights;
6. calculate uncertainty using survey and measurement error.

For an adverse variable  $x$ :

$$S_x = 100 \times \left(1 - \frac{x-L}{U-L}\right)$$

For a beneficial variable:

$$S_x = 100 \times \frac{x-L}{U-L}$$

where  $L$  and  $U$  are fixed lower and upper reference points, with values capped at 0 and 100.

The overall score is:

$$\text{CCI} = \sum_{k=1}^6 w_k S_k$$

where component weights  $w_k$  sum to 1.

Reference points should remain fixed for at least five years so genuine improvement is visible.

Re-scaling every year would create a relative league table in which the best area scores highly even if all areas perform poorly.

## 14.10 Missing data

- Do not replace missing monitored temperatures with subjective ratings.
- Do not infer roof type from house age.
- Use multiple imputation only for variables with defensible predictors.
- Publish the percentage imputed for every geography.
- Withhold a component if more than a pre-specified share is missing.
- Do not calculate an overall score where more than one component is withheld.

## 14.11 Geographic scoring

Climate grids should be linked to household location at a privacy-preserving geography. Household weights should then produce regional aggregates.

A future map should show:

- score;
- 95% confidence or credible interval;
- sample size;
- data year;
- whether observed, modelled or blended.

Avoid red-green maps without uncertainty. A county ranked 12th may be statistically indistinguishable from one ranked 30th.

## 14.12 Governance

Create an advisory board including:

- building physicist;
- statistician or survey methodologist;
- climate-data specialist;
- consumer representative;
- ventilation/moisture specialist;
- planning/building-control professional;
- journalist or data editor.

Publish:

- preregistration;
- questionnaire;
- data dictionary;
- weighting scheme;
- code;
- conflicts of interest;
- change log;
- external-review statement;
- correction policy.

## 14.13 Publication schedule

| Stage               | Timing                                                  |
|---------------------|---------------------------------------------------------|
| Method consultation | September-October                                       |
| Survey fieldwork    | January-March                                           |
| Winter monitoring   | December-March                                          |
| Summer monitoring   | June-August                                             |
| Climate-data freeze | Following spring when complete annual grid is available |
| Analysis and review | April-June                                              |
| Annual publication  | July                                                    |

The index year should refer to publication year, while every input should display its observation period.

The evidence supports the familiar description of the conservatory as a room vulnerable to seasonal extremes, but it also demands more precision than the market usually provides.

England had an estimated four million conservatory households in 2011. Most surveyed conservatories had heating. Use was much higher in summer than winter. Households with conservatories were more than twice as likely to report overheating as those without one in EHS 2020-21. Meanwhile, the UK climate has become warmer and sunnier, and overheating risk across the housing stock is rising.<sup>[1][3][4][6]</sup>

What the evidence does not support is equally important. It does not provide a current 2026 UK stock count, county comfort rankings, a universal retrofit saving or a single temperature reduction that applies to every installation.

The first duty of the UK Conservatory Comfort Index™ is therefore to measure what is currently missing. The proposed annual programme combines household experience, monitored conditions, climate exposure, housing stock and affordability. If independently administered and fully transparent, it can turn an under-researched domestic space into a legitimate area of building-performance and climate-adaptation evidence.

The 2026 conclusion is not a league table. It is a mandate for better data.

# UK conservatories face a growing comfort problem - but the national data are more than a decade out of date

The best dedicated government estimate located by the UK Conservatory Comfort Index™ 2026 found that 18.3% of English households - about four million - had a conservatory in 2011.<sup>[1]</sup> Three-quarters had heating, and 56% of heated conservatories were heated every day in winter.<sup>[1]</sup>

More recent English Housing Survey evidence found that households with a conservatory were more than twice as likely to report overheating as those without one: 17% compared with 7% in 2020-21.<sup>[3]</sup>

The climate pressure is increasing. The Met Office says 2025 was the UK's warmest year in records from 1884 and its sunniest in records from 1910. The latest decade was 0.51°C warmer and 4% sunnier than 1991-2020.<sup>[4]</sup>

Yet the UK has no current annual dataset measuring how many conservatories exist, how they are constructed, how often they overheat or become too cold, and what households spend making them usable.

SnugRoof Thermal's report therefore refuses to fabricate a 2026 county league table. Instead, it proposes an independently administered annual index combining:

- monitored temperature and humidity;
- a nationally representative conservatory-household survey;
- Met Office climate data;
- EPC and housing-stock information;
- energy-price and affordability measures.

The report's key message is that conservatories are a material but neglected part of the UK's housing adaptation challenge. A credible national index is possible, but only after new measurement - not by stretching 2011 evidence into fake 2026 precision.

Media-use caveat: The four-million estimate and heating statistics apply to England in 2011. They must not be described as a current UK total.

# UK conservatory comfort data "stuck in 2011" as overheating risk rises

New evidence review finds conservatory households reported overheating at more than twice the rate of homes without one - but rejects fabricated county rankings

MILTON KEYNES, 25 July 2026 - The UK lacks current national data on whether millions of domestic conservatories remain usable through hotter summers and expensive winters, according to a new evidence review published by SnugRoof Thermal.

The UK Conservatory Comfort Index™ 2026 found that the most recent dedicated, nationally representative government research located during the review used English fieldwork from 2010-11.

That study estimated that 18.3% of English households - approximately four million - had a conservatory. It found that 77% had heating, and 56% of heated conservatories were heated every day in winter.<sup>[1]</sup>

More recent English Housing Survey data show a disproportionate overheating problem. In 2020-21, 17% of households with a conservatory reported that part of their home became uncomfortably hot, compared with 7% of households without a conservatory.<sup>[3]</sup>

The report says the data gap is becoming more serious as the climate changes. The Met Office confirmed that 2025 was the warmest UK year in the temperature series beginning in 1884 and the sunniest in the sunshine series beginning in 1910. The decade 2016-2025 was 0.51°C warmer and 4% sunnier than 1991-2020.<sup>[4]</sup>

The report does not publish county rankings. It concludes that no current public dataset measures conservatory prevalence, roof type, orientation, heating, overheating, condensation and use at the level needed for credible local scores.

Instead, it publishes a methodology for a future annual index combining an independent household survey, monitored indoor temperature and humidity, Met Office climate data, EPC and housing-stock data, and energy affordability.

Proposed quote for Andy Younan's approval before release:

"The honest finding is that Britain has a major conservatory comfort question and an outdated evidence base. It would have been easy to manufacture a colourful county league table. It would also have been worthless. The next step is proper independent measurement."

The report also warns against generic savings claims. It found no public national evidence supporting one universal annual bill saving or temperature reduction from conservatory insulation. It recommends weather-normalised before-and-after monitoring for any future performance claim.

## Key figures

- 18.3% of English households, about 4.0 million, were estimated to have a conservatory in 2011.<sup>[1]</sup>
- 77% of those conservatories had heating.<sup>[1]</sup>
- 56% of heated conservatories were heated every day in winter.<sup>[1]</sup>
- 70% were used six or seven days a week in summer, compared with 23% in winter.<sup>[1]</sup>

- 17% of households with a conservatory reported overheating in EHS 2020-21, compared with 7% without one.<sup>[3]</sup>
- 2025 was the UK's warmest and sunniest year in the respective Met Office series.<sup>[4]</sup>

## Notes to editors

1. The 2011 conservatory prevalence and heating findings apply to England, not the whole UK.
2. The four-million estimate should not be presented as a 2026 stock count.
3. "Reported overheating" is a subjective English Housing Survey measure, not a monitored temperature threshold.
4. The full report includes source links, methodological caveats and a proposed scoring framework.
5. SnugRoof Thermal is a commercial conservatory-insulation provider. The 2026 report uses no proprietary sales data or customer performance claims.

1. Britain's Conservatory Data Is Stuck in 2011 as Summers Get Hotter
2. Homes With Conservatories Twice as Likely to Report Overheating
3. The Four-Million-Room Blind Spot in Britain's Climate Plans
4. Why Britain Cannot Yet Name Its Most Uncomfortable Conservatory County
5. Seventy-Seven Per Cent of Conservatories Had Heating, Government Study Found
6. The Seasonal Room Divide: 70% Frequent Summer Use, Just 23% in Winter
7. UK's Warmest and Sunniest Year Sharpens Conservatory Overheating Question
8. New Report Rejects "Fake Precision" in Conservatory Comfort Rankings
9. Conservatory Retrofit Claims Need Real Monitoring, Report Warns
10. From Garden Room to Climate Risk: The Case for a National Conservatory Index

# 1. The Seasonal Usability Gap

Visual: Two side-by-side conservatory silhouettes, summer and winter. Data: Frequent use, six or seven days a week: 70% summer versus 23% winter. Infrequent use: 11% summer versus 59% winter.<sup>[1]</sup>

Caveat: England, 2011.

## 2. The 17% Versus 7% Overheating Gap

Visual: 100-home icon arrays for households with and without conservatories. Data: 17% with a conservatory reported overheating versus 7% without.<sup>[3]</sup> Caveat: England, EHS 2020-21; subjective overheating.

### 3. How a Conservatory Gains and Loses Heat

Visual: Cross-section showing solar gain through roof/glazing, fabric heat transfer, ventilation, air leakage, heating and the separating doors. Data: No invented percentages. Use arrows and the  $\dot{Q} = UA \Delta T$  relationship. Source frame: SAP and Approved Documents L/O.<sup>[7][15]</sup>

## 4. The Evidence Timeline

Visual: 1991 → 2011 → 2020-21 → 2025 → proposed 2027 index. Data: 1.7 million conservatories in 1991; about 4.0 million in 2011; overheating comparison in 2020-21; warmest/sunniest climate record in 2025.<sup>[1][3][4]</sup> Message: The stock grew, the climate changed, but dedicated national conservatory measurement stopped.

## 5. What the Annual Index Would Measure

Visual: Six-segment wheel. Segments: summer resilience 25%, winter resilience 25%, moisture 15%, fabric/controls 15%, affordability 10%, resident experience 10%. Caveat: Proposed methodology, not a published 2026 score.

Each item below is written to remain accurate when used alone. Keep the source-year and geography in the artwork or caption.

1. About 4.0 million English households were estimated to have a conservatory in 2011 - 18.3% of households.<sup>[1]</sup>
2. The estimated number of English conservatories rose from about 1.7 million in 1991 to about 4.0 million in 2011.<sup>[1]</sup>
3. 77% of conservatories in the 2011 England survey had some form of heating.<sup>[1]</sup>
4. 55% of heated conservatories were connected to household central heating in the 2011 survey.<sup>[1]</sup>
5. 42% of heated conservatories used storage or direct electric heating, including portable heaters.<sup>[1]</sup>
6. 56% of heated conservatories were heated every day in winter.<sup>[1]</sup>
7. Only 20% of heated conservatories were never heated in winter.<sup>[1]</sup>
8. 45% of conservatories heated in winter were heated to the same temperature as the rest of the house.<sup>[1]</sup>
9. Around 91% of homes with a conservatory had a separating door.<sup>[1]</sup>
10. Among households with a separating door, 83% kept it shut in winter.<sup>[1]</sup>
11. 70% of conservatories were used six or seven days a week in summer - but only 23% in winter.<sup>[1]</sup>
12. 59% of conservatories were used less than once a week in winter.<sup>[1]</sup>
13. In EHS 2020-21, 17% of households with a conservatory reported overheating, compared with 7% without one.<sup>[3]</sup>
14. 2025 was the UK's warmest year in the Met Office series dating to 1884.<sup>[4]</sup>
15. 2025 was the UK's sunniest year in the series dating to 1910.<sup>[4]</sup>
16. The UK decade 2016-2025 was 0.51°C warmer than 1991-2020.<sup>[4]</sup>
17. The same decade was 4% sunnier than 1991-2020.<sup>[4]</sup>
18. In Greater London, days above 30°C and nights above 18°C were more than four times as frequent in 2016-2025 as in 1961-1990.<sup>[4]</sup>
19. EPC data are not a census: as of March 2025, 71% of English and 67% of Welsh dwellings had at least one EPC since records began.<sup>[8]</sup>
20. The most honest 2026 conservatory finding is a data gap: there is no current public dataset capable of producing defensible county comfort scores.

<sup>[1]</sup>: Department of Energy and Climate Change, Energy Follow-Up Survey 2011: Report 6 - Conservatories (published 2013). [PDF](#)

<sup>[2]</sup>: HM Government, Approved Document L, Volume 1: Dwellings - 2021 edition incorporating 2023 amendments, paragraphs 0.14 and 10.12-10.13. [PDF](#)

<sup>[3]</sup>: Department for Levelling Up, Housing and Communities, English Housing Survey 2020-21: Subjective Overheating and Construction Type Factsheet. [PDF](#)

<sup>[4]</sup>: Met Office, State of the UK Climate 2025 summary, published 15 July 2026. [Web page](#)

- [5]: Arup for the Climate Change Committee, Addressing Overheating Risk in Existing UK Homes (2022). [PDF](#)
- [6]: Climate Change Committee, A Well-Adapted UK: Climate Change Risk Assessment 4 - Independent Assessment (2026). [Publication page](#)
- [7]: Department for Energy Security and Net Zero / BRE, SAP 10.2: The Government's Standard Assessment Procedure for Energy Rating of Dwellings, sections 3.3.3-3.3.4. [PDF](#)
- [8]: Office for National Statistics, Energy efficiency of housing in England and Wales: 2025. [Web page](#)
- [9]: Planning Portal, Planning Permission - Conservatories. [Web page](#)
- [10]: Ofgem, Energy price cap unit rates and standing charges, 1 July to 30 September 2026. [Web page](#)
- [11]: Energy Saving Trust, Roof and loft insulation guide. [Web page](#)
- [12]: Historic England, Insulating Walls in Historic Buildings. [Web page](#)
- [13]: Local Authority Building Control, Solid Roofs to Conservatories or Porches: Guidance Note. [PDF hosted by Test Valley Borough Council](#)
- [14]: HM Government, Building work, replacements and repairs to your home. [Web page](#)
- [15]: HM Government, Approved Document O: Overheating (2021 edition). [PDF](#)
- [16]: Ministry of Housing, Communities and Local Government, Approved Document O: Overheating - Frequently Asked Questions, question 1. [Web page](#)
- [17]: Office for National Statistics, Climate-related mortality, England and Wales: 1988 to 2022. [Web page](#)
- [18]: UK Health Security Agency, How to keep cool and stay well during hot weather (2026). [Web page](#)
- [19]: HM Government, Approved Document L, Volume 1: Dwellings - 2026 edition, paragraphs 10.13-10.14. [PDF](#)
- [20]: HM Government, Approved Document F, Volume 1: Dwellings - 2021 edition, paragraphs 1.1 and 3.21-3.24. [PDF](#)
- [21]: UK Government, Understanding and addressing the health risks of damp and mould in the home (updated 2026). [Web page](#)
- [22]: Ministry of Housing, Communities and Local Government, English Housing Survey 2024 to 2025: Introduction and key findings. [Web page](#)
- [23]: Ministry of Housing, Communities and Local Government, English Housing Survey 2024 to 2025: Housing quality. [Web page](#)
- [24]: Historic England, Risks of Energy Efficiency Interventions in Buildings of Traditional Construction. [Web page](#)
- [25]: Office for National Statistics, Energy efficiency of housing in England and Wales: 2025 - Heat pumps and glossary. [Web page](#)
- [26]: Local Authority Building Control technical working group, Use of Multi-Foil Insulation. [PDF hosted by South Holland District Council](#)
- [27]: Al-Rasheed, M. et al., Domestic overheating risks and mitigation strategies: The state-of-the-art and directions for future research, Energy and Buildings (2023). [Repository copy](#)
- [28]: Energy Saving Trust, Typical insulation measures - Insulation toolkit. [Web page](#)

- [29]: UK Government, Permitted development rights for householders: Technical guidance. [Web page](#)
- [30]: Historic England, Energy Efficiency and Historic Buildings: Application of Part L of the Building Regulations to Historic and Traditionally Constructed Buildings (2025). [Publication page and PDF](#)
- [31]: Dumfries and Galloway Council, Work That Requires a Building Warrant. [PDF](#)
- [32]: Met Office, HadUK-Grid. [Dataset overview](#) and [available datasets](#)
- [33]: Met Office, UK Climate Projections (UKCP18). [Web page](#)
- [34]: Department for Business, Energy and Industrial Strategy, Energy Follow-Up Survey: Thermal comfort, damp and ventilation (2021). [PDF](#)
- [35]: Ministry of Housing, Communities and Local Government, Energy Performance of Buildings Data. [Data service](#)
- [36]: Department for Energy Security and Net Zero, Standard Assessment Procedure (updated 8 June 2026). [Web page](#)

# Suggested citation

SnugRoof Thermal (2026), The UK Conservatory Comfort Index™ 2026: Evidence review, national baseline and methodology for an annual measure of conservatory comfort, published 25 July 2026.

# Editorial contact

SnugRoof Thermal [snugroofthermal.co.uk](https://snugroofthermal.co.uk)