

Create Streets Briefing Paper

August 2021

Samuel Hughes



Living tradition

Adding to our heritage with more homes
and sustainable intensification

Foreword by Christopher Boyle QC

Former Chairman of the Georgian Group (2015-2020)

The mansard is one of the defining features of the Georgian and Victorian skyline. In eighteenth and nineteenth century Britain, the right of property owners to add mansards went without question: the idea that local governments would one day forbid them would have been viewed with puzzlement. The form of mansards was, however, tightly controlled by a series of Building Acts which governed their height, inclines and materials, as well as regulating their parapets, party walls, chimney stacks and dormers. These regulations led to a distinctive British tradition of mansard design, readily distinguished from those of France or Germany.

This fascinating report proposes that we allow this great tradition to be revived. On terraces on which some of the buildings have mansards already, owners of the remaining buildings would enjoy a presumption in favour of permission to add new ones, provided that they followed a design guide ensuring that the new mansards conformed to the best traditions of historic mansard design. On terraces on which none of the buildings have mansards yet, residents would be able to vote for the right to add them, with the same proviso.

It is profoundly important that we cherish our architectural heritage, a cause on which I worked during my five years as Chairman of the Georgian Group. Cherishing this heritage involves fighting the demolition of historic buildings, just as it involves fighting alterations that would damage their character. But it can also involve adapting and extending historic buildings in ways that respect and enhance them. This report offers us an opportunity to do just this, extending our historic building stock to provide much needed space for homes, and doing so in a manner of which the Georgians and Victorians would have eminently approved.

Endorsements

The Georgian and Victorian roofline developed gradually, with residents adding mansards when space became scarce. This was generally undertaken with an understated respect for the original building. These proposals would allow us to recommence this longstanding practice while avoiding insensitive additions. They would let homeowners add mansards, while ensuring that those mansards meet the highest historic standards and adding positively to the appearance and density of streets to which they would be introduced.

Robert Adam, Chair of INTBAU UK, a branch of the International Network for Traditional Building, Architecture and Urbanism

This proposal shows that it is possible for us to add to Georgian and Victorian buildings in a way that is in keeping with their character, and that augments the great heritage we have inherited. It could be an important contribution to the living traditions of British architecture.

Ben Bolgar, Prince's Foundation

HTA has long argued that sensitive rooftop extensions can complement a historic building, while providing badly needed space for homes and helping to support sustainable urbanism. This report is a valuable contribution to the debate on how we can make this possible more frequently.

**Ben Derbyshire, Chair of HTA Design LLP,
Immediate Past President of RIBA**

The traditional mansard roof has long been an elegant and effective way of providing extra floor space on a limited building footprint. In this paper, Hughes deftly brings this long-overlooked solution right up to date with this carefully considered and exhaustively researched proposal, packed with practical advice and guidance.

Hugh Kavanagh, Chair of Irish branch of the International Network for Traditional Building, Architecture and Urbanism

Roof extensions are often hugely valuable for those who live in them: they may mean a private bedroom for each child in a family, or prevent a family from regretfully leaving a street due to lack of space, or to provide a flat for a young professional who needs to move to an inner city for work. They also support sustainable urbanism by allowing more people to live within walking distance of town centres and high streets. This excellent report shows how we can make sensitive roof extensions possible more often.

Matthew Lloyd, Matthew Lloyd Architects LLP

Dr Hughes has achieved what many thought was impossible: to protect and enhance our heritage, adding more badly needed bedrooms and homes, in a way supported both by those who fight to protect heritage and by those who fight for housing. The best conservation expertise has always recognized that buildings should be organically and sympathetically adapted as times change. Hughes deftly shows one way in which that can help many families achieve their dreams.

John Myers, YIMBY Alliance

Much of Britain faces a serious shortage of housing, and we need to think creatively about sustainable ways of providing it. In our report, London's Rooftops, we argued that roof extensions are a hugely underexploited source of potential homes. Roof extensions to historic properties present special complexities, but it is possible to do them sensitively, as shown by the project we supported on Fitzroy Road. This report makes important proposals for how we might enable this to happen more often. It deserves close attention.

Dr Riëtte Oosthuizen, Head of Planning at HTA Design LLP

Places have always changed over time in response to the changing needs of the people who inhabit them. Indeed it is vital that they do if they are to remain vibrant. The mansard roof is a key element of these historic patterns and is to be found across the UK as an efficient means of extending an urban building vertically in an economic manner, without disturbing the balance and composition of the main front elevation. This scholarly paper is an important contribution to highlighting this phenomenon and we may hope that it will encourage more widespread acceptance of the mansard roof once more, properly detailed, as an appropriate way of accommodating change in our historic urban areas.

Hugh Petter, Director ADAM Architecture

This excellent proposal would generate opportunities for small builders, support gentle densities in walking distance of struggling high streets, and create badly needed space for homes – while maintaining the highest standards of respect for architectural heritage. It is a win-win reform, of exactly the kind The Entrepreneurs Network has long championed.

Philip Salter, The Entrepreneurs Network

This common sense proposal offers a practical way to substantially increase the UK's housing stock with strong local support - supporting gentle densities around high streets and town centres and maintaining the utmost respect for our architectural heritage. It stands in some of the best traditions of British urbanism.

Will Tanner, Onward

These brilliant proposals offer a way of preserving and enhancing the Georgian and Victorian heritage of this country. They would allow residents to add mansards that respect the existing character of the building and the street, just as the Georgians and Victorians did before us. This report shows that it is possible to extend overcrowded homes in a way that adds to our architectural and urban heritage.

Traditional Architecture Group

The most important firms of today rely on intangible capital – ideas, intellectual property, organisational investments and networks. All of these mean that cities, and the agglomeration they create, are growing more, not less, important. But Britain struggles to create enough housing in the urban areas where it is most needed. This excellent proposal would contribute to addressing this, allowing sensitive extensions in areas where housing tends to be especially scarce. It shows how we can reconcile the protection of architectural heritage with the benefits of this kind of gentle intensification.

Stian Westlake, author of Capitalism Without Capital

This excellent proposal will help the Government achieve many key objectives. It will mean a major increase in housing space where it is most needed, it gives more power to local people, it will boost employment, and it will create beautiful new development. It should be less controversial than equivalent measures and is exactly the sort of policy that the Government should include in the forthcoming Planning Bill.

Alex Morton, Head of Policy at the Centre for Policy Studies

This considered proposal to encourage a resurgence in the building of mansard roof extensions on appropriate houses is timely. It will respond to new permitted development rights for upward extensions and incorporates a clear and specific 'design code' which will ensure the quality of their appearance. It will complement the desirability of gentle densification of suburban areas and increase residential accommodation at a time of need. In addition to providing more rooms in a house or a 'granny flat' as is suggested, the upward extension may allow the creation of a garden (or semi-basement) flat in some instances.

Brian Waters, Principal of BWCP Architects, Chairman of the London Planning & Development Forum, Past President of the Association of Consultant Architects

The proposals in Strong Suburbs have the potential to make a difference for those affected by the high cost of housing, and to help ensure that everyone has a decent place to live. This paper suggests a valuable extension to those proposals, and would help add new housing in central locations where it is most needed.

Shreya Nanda, Institute of Public Policy Research

The proposed Renewal areas are still challenging for the Government's reform agenda. This is an interesting extension of the approach suggested in Policy Exchange's Strong Suburbs paper to older properties, which might form an element of those.

Richard Blyth, Head of Policy at the Royal Town Planning Institute

To bring down rents to an affordable level we need a range of tools to create more homes, and, done right, expanding existing housing plays a crucial role. While all renters should benefit from this policy, tenants who face disruption from such developments need protection and we welcome the support that they would get under this proposal.

Dan Wilson Craw, Deputy Director, Generation Rent

I welcome this proposal as a way of achieving standards in adding living space to buildings of historic importance, improving on the saw-tooth effect of having some mansards where others would be suitable, and giving control of implementation by street votes to local residents.

Peter Eversden, Chairman of the London Forum of Amenity and Civic Societies

Renters face horrific unfairness and bad conditions. Millions are priced out of homeownership. One way to help to reduce those problems is to add more to existing buildings. Not all of the extensions that would result from this proposal would be new flats, but many would be, either immediately or by later subdivision, and every one of those flats would help alleviate the housing crisis. Larger homes means more families can occupy the space they need. Crude conservation rules have blocked many new homes, and this proposal suggests one way to start to address that.

Anya Martin, Director of PricedOut

Many Georgian and Victorian skylines are the result of residents adding mansards to their homes when space became scarce. This is usually prohibited today, producing particularly strange 'sawtooth' effects on terraces where some of the houses have mansards already. The thoughtful and sensitive proposals in this report would allow this process to resume, creating precious living space, reinforcing historic urbanism, and restoring the skylines of many terraces.

Alan Baxter, Director of Alan Baxter Ltd

The addition of mansard roofs is one of the most environmentally sustainable ways of increasing living space and housing supply. They allow intensification around town centres, public transport hubs and high streets, supporting car-independent living and providing a valuable opportunity for retrofitting buildings to higher energy efficiency standards. I warmly welcome these excellent proposals on how we might allow this to happen more often.

Sam Hall, Director of the Conservative Environment Network

Development near to stations is a key way to increase demand for public transport while also creating active, safer, streets. Much of the historic housing covered by this report was built near to rail or Underground stations. The proposals in this report would allow sensitive intensification of such housing, creating much-needed living space while increasing footfall for local businesses.

Professor Tony Travers, London School of Economics

This is a brilliant proposal that would help huge numbers of families find the space they need, just as the Georgians and Victorians did before them. Mansard roofs are a traditional, attractive solution to expanding a home, that is utterly in keeping – and in many cases, already there right next door. As this report points out, many streets are in effect half complete and this proposal would allow households to complete ‘the look’ at no detriment to anyone else. Far more attractive than the rear add-ons allowed on many of these homes already, the only question is why isn’t this already allowed, as it served previous generations so beautifully well.

Lord Taylor of Goss Moor

This paper’s proposal for ‘street votes’ to add mansard roofs would offer opportunities for meaningful community engagement in planning, for increased housing density in areas of high demand, and for improved environmental performance through adapting and enhancing the 21st century livability of historic built fabric. Proposals that stand to be both impactful and achievable are precisely what is needed to deliver on targets for adaptable and sustainable construction that enhances the context in which it sits for the benefit of residents and the wider community.

Harriet Wennberg, Executive Director of INTBAU

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Living Tradition

Adding to our
heritage with
more homes

August 2021

Executive Summary

- Georgian and Victorian homeowners tended to add mansard storeys to their homes when space became scarce. This is not normally permitted today, despite the acute scarcity of space.
- There are many streets on which some of the houses already have mansard extensions, often added before permission for mansards ceased to be granted. This tends to result in an ugly 'sawtooth' effect.
- On streets like these, there ought to be a presumption in favour of letting the remaining residents add mansards, provided that the new mansards follow a strict design guide requiring that they match the highest standards of traditional mansard design, even where previous mansards have not met this high standard.
- Other streets have no mansards, despite comprising the kind of houses to which a mansard would historically have been added under conditions of space scarcity. On such streets of flat fronted houses with parapets, the residents should be allowed to create a presumption in favour of permission to add mansards through holding a street-level vote. These mansards would also be required to follow a strict design guide.
- The guide will include explicit rules governing pitch, height, materials, parapets, partywalls, dormer windows and chimneys, defining a 'fast-track to beauty'. Wherever useful rules will be illustrated diagrammatically and with photographs of good practice. Original materials must be reused where possible.
- Some mansard extensions will become new homes, while others will provide vital space for growing families or vulnerable relatives. In this way they will make a small but significant contribution to alleviating the national housing shortage without contentious greenfield or high-rise development.

- Extensions would tend to be carried out by small builders, providing an important source of work for a part of the building sector that has often been excluded from larger projects.
- By supporting gentle densities around town centres and in existing towns and settlements, this policy would foster walkability and car independence, bring more custom to struggling high streets and make better use of our existing homes and streets.
- Such adaptation should facilitate the path to net zero by improving energy efficiency and, in some cases, helping to provide funding for the expensive retrofitting that heat pumps will often require.
- If 5% of the 4.7 million pre-1919 homes in England each use the policy to add two new bedrooms, that would add 470,000 more bedrooms. If half of those bedrooms mean the house is subdivided into another maisonette, that would add 120,000 homes, often in areas of greatest need. A 10% takeup would double that.
- The new developer levy should be imposed on mansards permitted under the policy, creating substantial revenues for local authorities that they can use to provide more affordable housing locally.



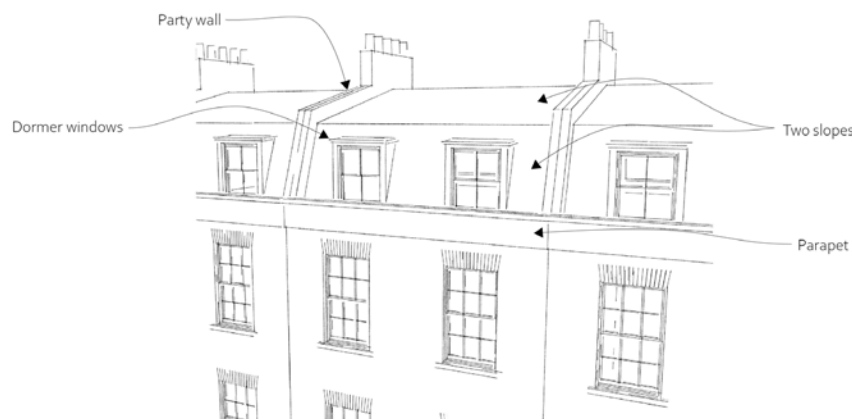
Mansard roofs

Introduction

Until the twentieth century, virtually all British houses had pitched roofs. When space was scarce, people started to convert the attics that such roofs create into living space, adding dormers and gable windows to admit light. Pedestrian towns tended to become densely populated, so this happened often. Dormers are recorded in London from the fifteenth century, and became widespread in the early modern period, as can be seen by the painting of London Bridge by Samuel Scott in 1757.¹

The 'mansard' is a specific kind of roof storey. Its name comes from that of the French Renaissance architect François Mansart (1598-1666), by whom it is supposed to have been invented. What distinguishes the mansard is that it has two slopes, the lower steep and the upper shallow. The basic advantage of the mansard is that it creates more usable floor space by raising the ceiling height, without significantly adding to the visual burden on the streetscape in the way a full extra floor sometimes does. Building a roof with two slopes required considerable skill, so essentially mansards were built once homeowners' demand for space outweighed the cost of building them.

The mansard swiftly became popular all over Europe. In Georgian Britain, some urban houses were built with mansards from the start, but many homeowners added them over time, replacing the notoriously leaky 'butterfly roofs' with which terraced houses were otherwise often fitted. This process continued through the nineteenth century. Successive Building Acts tightly regulated the materials, windows, party walls, parapets and roof pitches of these structures. Under their influence, a distinctive style of mansard developed in Britain, easily distinguishable from its French prototypes.²



¹ John Schofield and Geoffrey Stell, 'The Built Environment 1300-1540' in *The Cambridge Urban History of Britain*, Vol 1: 600-1540.

² For discussion, especially of London, see Dan Cruickshank (1975), *London: The Art of Georgian Building*.

As mentioned above, Georgians and Victorians tended to add mansards whenever their desire for space exceeded the cost of doing so. Today, much of Britain faces an acute housing shortage, so desire for space in inner urban areas is often great. A mansard adds around 30 square metres of floorspace to an average urban house, and Inner London floorspace costs at least £7,500 per square metre. This means that a typical Inner London mansard would be worth about £225,000. Build costs, by contrast, are unlikely to exceed £75,000. Under such conditions, it is inconceivable that the Georgians or Victorians would have left any building without a mansard to which one could comfortably be added.

Remarkably, however, large numbers of buildings remain mansard-less, even where housing shortages are most acute. The broad reason for this is the way in which the planning system developed in mid-twentieth century Britain. For complex reasons related to the then-prevalent desire for urban 'dispersal', the planning system tended to freeze the frontages and heights of existing neighbourhoods in whatever form it found them in, channelling population growth into greenfield developments or high-rise instead. One aspect of this is that it has tended to prevent the addition of roof storeys to existing buildings. An oddity of many Inner London skylines is thus the 'sawtooth' effect of streets on which some houses but not others have mansards. What we see here is in fact a street frozen in transition: property values had risen enough before modern times for the addition of mansards to begin, but the process had been paralysed before it was complete.



An extreme 'sawtooth' effect

An illustration of the interest there would be in such opportunities is provided by the case of Fitzroy Road in Primrose Hill. Fitzroy Road was an extreme example of a 'sawtooth' street, on which just one mansard had been built before the local authority ceased giving permission for new ones. Working with the architectural firms BWCP and HTA Design, the residents petitioned the council to allow them to add matching mansards of their own. After a long process, the Council granted permission, on condition that every house not only add an identical mansard, but that they do so simultaneously. Despite these extremely stringent requirements, the owners agreed, and every household entered a joint contract to build the extra floor in 2012.

Fitzroy Road is not the only example of movement in this area. In recent years, a number of local authorities have begun to countenance new mansards, provided that those mansards follow strict design rules that guarantee that they match the building's existing character.³ Pimlico's Draft Neighbourhood Plan proposes that in-keeping mansards be permitted in much of the area. The leading residential architecture practice HTA has produced a compelling report *London's Rooftops: The Potential to Deliver Housing*, illustrating best practice in this area.⁴ Despite this shift, however, new mansards remain the exception, and in many areas they are still wholly prohibited - as poor quality design should be.



Fitzroy Road, London

³ See e.g. Tower Hamlets (2015) *Mansard Roofs Guidance Note*. Westminster (2004), *Roofs: A Guide to Extensions and Alterations on Domestic Buildings*; Camden Council (2017), *Camden Planning Guidance: Altering and Extending Your Home*. Cf. Georgian Group (1991), *Guide No. 9: Roofs*.

⁴ HTA Design LLP (2016), *London's Rooftops: The Potential to Deliver Housing*, available at <http://www.apexairspace.co.uk/wp-content/uploads/2017/03/HTA-P-Rooftop-Development-Report.pdf>.

In this paper, I propose enabling residents to opt into mansard development, allowing our historic neighbourhoods to complete the transition that the planning system interrupted, if their residents so wish. Where a 'sawtooth' effect already exists, the remaining mansardless residents should be allowed to restore uniformity to the street by adding mansards that (a) match the size and pitches of the existing mansards and (b) conform to the highest traditions of British mansard design. On terraces where there are currently no mansards at all, residents should be allowed to agree to change this, voting for a right to add mansards provided, once again, that those mansards match the best examples from our national building tradition. Some will choose to maintain the street as it is, but it is likely that many will support mansard proposals. In this way, we will create that most precious resource - space - where it is most needed, without compromising in any way the beauty of our heritage.

There is now general acknowledgement that many parts of Britain face a housing shortage, and that creating more housing in those areas is a key national objective. It is also generally recognised that delivering housing in a traditional 'gentle density' format has profound advantages, fostering walkability, car independence and mixed uses. When people live in relatively central neighbourhoods, it is far more likely that they can walk to work or to local shops. This benefits their personal health, brings custom to struggling high streets, and reduces the impact that heavy reliance on cars has on the wider environment.⁵

The present proposal will create housing space in areas where it is acutely needed. It will also reinforce the existing 'gentle density' urbanism of these areas. Georgian and Victorian neighbourhoods are normally already mixed use and highly walkable, and because towns have subsequently expanded around them, they have relatively central locations. Allowing them to intensify means more people will have the opportunity to live car-independently, walking to work and to local high streets, with all the benefits this brings. This proposal will also generate significant growth in the construction sector, creating jobs at a range of skill levels, and opportunities for the small builders that specialise in projects of this kind. It should be stressed that this proposal only applies to the kinds of flat-fronted houses with parapets where such mansard extensions are wholly historically appropriate if designed well. The strict limits on eligibility are set out in paragraph 17 of the Detailed Proposal, below.

⁵ For an exploration of the health and well-being benefits of 'gentle density' see Boys Smith (2016), *Heart in the Right Street*. The concept was cited in the influential 2020 report of the Building Better Building Beautiful Commission, *Living with Beauty*, and supported in the *Planning for the Future* White Paper.

It may be thought, however, that our proposal will not really help with the housing shortage, because it allows only the expansion of existing houses, rather than the creation of new ones. It is absolutely true that the policy proposed here could not be the only or the main way of increasing our housing stock, and that more powerful instruments are needed by which this can be achieved on a larger scale.⁶ But it should nonetheless be clear that the proposals developed here would make a contribution to alleviating the housing shortage. There are several reasons for this:

- Some mansard floors will be used as new apartments, especially in buildings that have already been converted for multiple occupancy.
- Some mansards will be used as space for relatives who would otherwise occupy a separate dwelling ('granny flats'), meaning that there is a net gain in dwellings.
- Some mansards will accommodate one or more lodgers, who would otherwise have needed a dwelling of their own.
- When houses with mansards are resold, they may well be split into flats, even if they are not initially used for this purpose.
- Finally and crucially, adding bedrooms to existing houses is a contribution to relieving the housing shortage. Our shortage is not simply a matter of having too few dwellings, but also of having too few dwellings of adequate size: we could build indefinitely many studio apartments without meeting the housing needs of Britain's families. The costs of living in small houses were detailed in Shelter's powerful report, *Full House*.⁷ Many of the mansards permitted under this policy will turn two-bedroom houses into four-bedroom ones, creating hundreds of thousands of homes fit for growing families.

The Georgian and Victorian terrace is one of the world's great traditions of vernacular residential architecture. Recent research has highlighted its enduring popularity with the British people, and it has formed a model for recent proposals on suburban intensification.⁸ This great tradition should be cherished. The present proposal outlines a way of making the best possible use of this living heritage, and of passing it on to future generations not only preserved, but enhanced.

⁶ I have developed proposals on this in my report with Ben Southwood for Policy Exchange, *Strong Suburbs* (2021). Also see the proposals of the Building Better Building Beautiful Commission and Boys Smith (2019) *More Good Homes*.

⁷ Shelter (2004), *Full House: How Overcrowded Housing Affects Families*. https://assets.ctfassets.net/6sxvmndnnpnos/6dU8FFbZ6RnSk6DbnDOMHb/61e30884aff47a789891b2dce54fcbc7/Full_house_overcrowding_effects.pdf

⁸ See e.g. Jack Airey (2018), *Building More, Building Beautiful* and Nicholas Boys Smith (2016), *Heart in the Right Street*.



Detailed proposal

Where a street already has some mansards, national planning policy should permit the remaining houses to add mansards of their own, provided the houses are eligible (see below), and provided that the added mansards conform to a National Design Guide for mansards. Where a street does not have any mansards, residents should be able to vote for the permission or a presumption in favour of permission to add them to add them, again provided they conform to the National Design Guide. In detailed form, this proposal is as follows:

Definitions

1. For present purposes a 'street' is defined as each stretch of public road starting or ending at a crossroads or as a minor road at a T-junction.⁹
 - 1.1. The 'street' includes the buildings on the corner.
 - 1.2. A street is treated as terminated if the continuous stretch of buildings is broken by a bridge wider than 3 metres. This applies to the street running beneath and over the bridge.¹⁰
 - 1.3. A house is counted as being on a street if any part of its plot boundary runs along the street.
 - 1.4. Where there are no buildings on one side of the road, the 'street' may be bounded by a junction with a minor road on the side with buildings.
2. The ground floor for the purposes of counting storeys in the provisions below is the floor with the main entrance from the street, even if there are steps up to it.


⁹ I draw here and elsewhere on work in Samuel Hughes and Ben Southwood (2021), *Strong Suburbs*.

¹⁰ So long as there are no houses underneath or on top of the bridge, respectively.

Normal planning permission

3. Many streets already have some roof storeys that were added before the planning system emerged, creating an awkward gappy or 'sawtooth' effect. In such cases, owners of the remaining houses should be allowed to add roof storeys that restore uniformity to the street. National planning policy should provide that eligible houses (see definition below) should receive permission to add a mansard conforming to the National Guide for Mansards on streets where there is already one roof storey on the same side of the street, and on the same storey, or on a higher storey, as the potential future mansards.¹¹
4. Where the existing roof storey(s) are in a style common in the area at the time of the building's construction, new mansards should match them. 'Match' here means 'replicate with regard to external appearance', not 'aesthetically harmonise according to the judgement of officials'. Homeowners may of course seek to add mansards of the latter kind, but to do so they must make a normal planning application, as at present.
5. Insofar as the existing roof storey(s) are not in a style common in the area at the time of the building's construction, new mansards should normally follow the National Design Guide for Mansards outlined below. However:
 - 5.1. Where the existing roof storey(s) are more shallow-pitched than is specified in the National Guide, the permitted roof storeys must follow the shallower pitch. However, where they exceed the pitch specified in the National Guide by more than 5 degrees, the National Guide must be followed instead.
 - 5.2. Similarly, where the existing roof storey(s) are single-sloped, the permitted roof storeys must also be single-sloped.
 - 5.3. New mansards should have the same number of windows as existing roof storeys.

¹¹ For the purposes of this provision, only an existing roof storey that protrudes to any extent above a line rising backwards at an elevation of 60 degrees from a point 15 inches behind the inner foot of the parapet is counted.

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6. It may be that there are multiple roof storeys on the street which either have different pitches or window numbers (hereinafter 'form'). In such cases the following rules apply:
 - 6.1. If there is a roof storey adjacent to a given developing property, its form must be emulated;
 - 6.2. If there are adjacent roof storeys on each side, the form of the one of which there is more on that side of the street must be emulated;
 - 6.3. If there are none adjacent, the most common form on that side of the street must be emulated;
 - 6.4. If there are equal numbers, that which occurs nearer to the house in question (measured by the number of plots) must be emulated;
 - 6.5. And if there are two equally near, the resident may choose between them.
 7. Note that a street with one or more existing shallow-pitched roof storeys would be entitled to hold a vote on permission for full mansards in accordance with the National Guide, just like any other street.

Vote rules

8. Streets with buildings eligible under the conditions in paragraph 17 below, but ineligible for the simple planning permission above, may vote for the right for eligible houses to add mansards. This should be achieved through a general statutory enabling provision in the forthcoming Planning Bill, followed by secondary legislation that can be amended and improved upon in the light of experience.
9. Mansards permitted through a vote must be compliant with the National Design Guide. If they wish, street proposals may make further specifications regarding the form of permitted mansards, beyond those in the National Guide.
10. On some streets, one side already has one or more mansards while the other side does not. In such cases, a proposal may cover only the side that does not have existing mansards, or it may cover both sides.
11. A proposal must be submitted to the Local Authority by persons resident and registered to vote in at least three different homes on the street or street side.
12. Notice must be circulated to all residents covered by the proposal, and a nationally fixed time limit given for other proposals to be submitted. If more than one qualifying proposal is submitted, residents vote on each one.
13. All street (or street side) residents on the electoral roll are eligible to vote. Each commercial property¹² also has one vote, exercisable by the ratepayer. Nobody apart from residents and ratepayers is eligible: absentee landlords are thus not included.
14. The vote is passed if (1) at least 50% of votes cast are in favour, (2) residents from at least 50% of households have voted, and (3) a resident in each of at least half of the voting households voted in favour.¹³
15. If the vote fails to pass, no new vote may be held for at least three years.

¹² The number of separate premises should be assessed in the same way as for business rates.

¹³ A further rule could be applied that at least 50% of those who have been resident for more than three years must vote in favour.

Legal effect

16. Such votes could be given legal effect by either of two means:

16.1. Through national policy, so that in exceptional cases local councils can require amendments to the planning application to achieve more sympathetic or harmonious design, without reducing the additional built space that is indicated under national policy; or,

16.2. Just as for the proposals in *Strong Suburbs*, a successful vote could produce equivalent legal effect to a Local Development Order or Neighbourhood Development Order that is in force. That will reduce the costs for councils of having to deal with multiple planning applications.

Building eligibility

17. Eligibility conditions should be refined with the help of the relevant national amenity societies. Approximately, however, a building is eligible if:

17.1. Was built after 1700 and before 1918. Alternatively the Government may wish to extend eligibility to 1948 to cover suitable terraced and parapeted buildings from this period;

17.2. Has a parapet running the entire length of the front and any side facade facing the street (excepting chimneys);

17.3. Has no front gable or half-dormers;

17.4. Has no existing mansard storey at the front or on either side facing a street;

17.5. Is at least two storeys high;

17.6. Is semi-detached or part of a terrace of at least three buildings. For these purposes a terrace is a row of buildings that share party walls of at least one storey, i.e. are not detached. Semi-detached houses may only add mansards simultaneously;

17.7. Has a built footprint of no more than 100 square metres, excluding cellars and areas; or, is comprised of merged buildings that originally had such footprints;



- 17.8. Was originally constructed as a house, or as an individual shop or commercial premises with rooms suitable to be used as housing above; but for the avoidance of doubt excluding public buildings, churches, department stores, mansion blocks and warehouses;
- 17.9. Is not Grade II* or Grade I listed, as such assessment is better suited to the normal planning process. Buildings in conservation areas will be covered; on Grade II buildings, the local authority may withhold listed building consent if Historic England advises that any net visual harm will outweigh the public benefit from additional bedrooms, given the re-use of original materials.
- 17.10. Finally, the windows of the highest existing storey must be at least 80cm in height from the upper to lower reveal, to avoid traditionally unusual mansards over shallow 'attic' storeys. This condition does not apply on streets where other properties already have mansards.

National Design Guide

- 18. The National Design Guide for Mansards will set out a 'fast-track to beauty'. It specifies a widely accepted and admired British mansard type of the eighteenth and nineteenth centuries, which can be added to suitable buildings from that time with no risk of damage to their character. Its content effectively matches those of existing design guides used by some local authorities, such as Camden, Westminster and Tower Hamlets. It should be stressed that the type it permits is not the only beautiful type of mansard. Residents retain all existing rights to apply jointly or individually to the local authority for permission for roof extensions that do not comply with the Guide, and local authorities retain all existing rights to permit or write codes for them. The Guide is a fast track, but all existing tracks remain open. The final version of the draft will need extensive specialist input from the national amenity societies. I sketch some key elements that the Guide should include in what follows.
- 19. The National Design Guide should be richly illustrated: for any specification where it might possibly be useful, it should include both a diagram, and a photograph illustrating good practice. In the remainder of this document I outline the core specifications that the code should include, although there will be areas on which it needs to go into greater technical detail.

20. Roofs:

- 20.1. The lower slope of the mansard must have a pitch of no more than 70 degrees. The lower slope may rise no more than 2.25 metres from the finished ceiling of the preceding floor.
- 20.2. The upper slope of the mansard must have a pitch of no more than 30 degrees from the horizontal.¹⁴
- 20.3. End terraces and semi-detached buildings must be hipped, not side-gabled.
- 20.4. Joins between planes (namely the ridge, the interface of the roof slopes, and the hips) should follow local precedent from the time of the building's construction. For a slate roof, this will normally mean that they should be covered by lead flashing. On a clay tile roof, this will normally mean shaped tiles for ridges and hips.
- 20.5. The foot of the lower slope must be set back fifteen inches from the parapet. 'Juliet balconies' are forbidden on the street elevation.
- 20.6. The surface materials of the roof must match those of the original building, both in material type and colour. In most larger cities this will be some kind of Welsh slate, though in parts of the country this will certainly vary greatly. On rear elevations, photovoltaic tiles may be used, provided that they resemble so far as possible the roofing material used elsewhere.
- 20.7. Slates or tiles must be laid in the original overlap pattern.
- 20.8. The height of the mansard should not exceed 2 metres in total above the top of the lower slope. Where, on a very deep plot, it might otherwise exceed that height, the pitch of the upper slope may be lowered below 30 degrees to whatever extent is necessary to stay under the height limit. Alternatively, an 'M' roof type with a gully in the middle of the building is acceptable under these circumstances.

¹⁴ On two-storey houses or on very narrow streets, it may be that lower pitches should be required. The Government should consult on this.

21. Windows.

21.1. Windows in the lower slope must be dormers (not rooflights flush with the roof).

21.2. Windows are forbidden in any upper slope facing a street or public area. Flush rooflights may be used in upper slopes facing only towards private spaces, but they may not make up more than 15% of the roof area.

21.3. Heads of dormers must terminate at or below the interface of the lower and the upper slopes. Sills of dormers must be no higher than 85cm above the floor to ensure they are invisible from the street, as per historical precedent. If sills are below 80cm, appropriate safety provisions should be included in the design as per Building Control Alliance technical guidance, e.g. fixing the lower sash in place or installing a guard rail inside the window.

21.4. Dormers.

21.4.1. Dormers must be of a vertical dimension no larger than the windows of the preceding storey.

21.4.2. They must also be no wider than the windows of the preceding storey, except where there is a projecting bay window on the preceding storey. In such cases, dormers must not exceed the width of the bay.

21.5. On any given facade, there may be:

21.5.1. As many mansard windows as there are window bays on the preceding floor, with the mansards aligning vertically with the bays below, or;

21.5.2. One fewer mansard window than there are window bays on the preceding floor (e.g. two mansard windows for a three-bay facade). In this case the mansard windows must be evenly spaced in accordance with local precedent from the period in which the building was constructed. If there is only one mansard window, it must be in the middle of the facade.



- 21.6. In the case of a windowless end terrace facade, there may be a maximum of one window on that side of the mansard.
- 21.7. The material of dormers must match that of the building's original windows, i.e. in most cases it must be wood with lead flashing.
- 21.8. The glazing style of the dormer windows must be one that was in common use for similar dormer windows in the building's locality at the time of its construction. In Georgian buildings, this will often mean double-hung sashes with three panes to each sash. In Victorian buildings there will be a larger variety of glazing styles.¹⁵
- 21.9. Dormer cheeks must not exceed 200mm in width.¹⁶
- 21.10. Windows must be painted to match the existing windows, i.e. in most cases white or off-white.
- 21.11. Mansard window frames and sash boxes must have traditionally moulded profiles to match those of the building's original windows.
- 21.12. To enable modern energy efficiency rules to be met, internal secondary glazing may be installed. Alternatively double glazing is acceptable, provided systems like Slimlight or Histerglass are used that closely approximate the appearance of single glazing.
22. Though many chimneys are no longer in use, chimney stacks remain an important part of buildings' character and can also be adapted to help passive ventilation. If the building has chimney stacks, they must therefore be raised to the new roof height, rising 1m from the new roof. If the original stack survives, it should be replicated. If it does not, stacks and pots should be detailed in a local style that was in common use in at the time of the building's construction. Facing materials must match the primary facing material on the rest of the building.
23. Between buildings on the same terrace, party wall parapets must rise 18 inches (45.7 cm) from the roof. These must be finished with coping in a style that was in common use in that locality at the time of the building's construction. Facing materials must match the primary facing material on the rest of the building. The join of the party wall parapets and the roof should have lead flashing.

¹⁵ In a vote proposal, streets may specify one such style that all mansards permitted thereby must use.

¹⁶ It is possible that this will be made impossible by future building regulations. If so, dormer cheeks should be limited to the lowest width that is compliant with the new regulations.

24. Parapets, where they already exist, must be retained. They must be raised up to the traditional height of 30 inches (76.2 cm) above the floor of the new upper storey if they are currently absent or lower. Parapets¹⁷ must be detailed in a style that was in common use in that locality at the time of the building's construction. Facing materials must match the primary facing material on the rest of the building.
25. Where the building has rear gables corresponding to the 'butterfly' roof type, these must be retained, and the mansard added above and behind them. This has priority over the preceding rules on parapets.
26. If a mansard extension replaces an original roof, original materials should be reused wherever it is reasonably practicable to do so.

Supporting local authorities

27. A fee of £5,000 indexed for inflation must be paid to the local authority by the owner before these permissions are used on a dwelling, and the new developer levy (regardless of any otherwise applicable exemption) paid before occupation. Assessment of the uplift in value should be by one or more surveyors by analogy with the process under the Party Wall Act. Local authorities are free to set a lower rate if they wish.
28. To ensure that local authorities do not suffer financially in the longer term, any houses that take advantage of these permissions will move up one council tax band. If the houses are already in the highest tax band, they should pay a 20% supplement.
29. This will more than reimburse local authorities for any required expenditures, as well as providing them with more resources for affordable housing, street greening, improved street cleaning, better amenities and other local service provision. These fees are still much lower than the value uplift received by homeowners, so they are unlikely to act as a major disincentive to uptake in areas of housing scarcity.

¹⁷ And, where appropriate, rear walls.

Rights to light

30. It will in practice be extremely rare that mansards will block any existing window, given the normal layouts of the housing stock in question. The following provisions will safeguard against problems in a tiny minority of cases where such problems might otherwise arise.
31. Rights to light apply. The Government should implement the recommendations of the Law Commission on rights to light.
32. Rights to light should be extended to recent windows (as opposed only to those old enough to have acquired rights to light by prescription), but only in the form recommended by the Law Commission, and for the purposes of these mansard extensions only.
33. National planning policy should specify that, where building a mansard according to the rules given here would infringe third party rights to light, local planning authorities should approve applications for modified and reduced mansard extensions that correspond as closely as reasonably possible to those proposed here, but without infringing on third-party rights to light.

Sustainability

34. A 'zero net whole life carbon condition' should be imposed on all building work, meaning that builders will have to minimise gross carbon emissions in construction, optimise energy efficiency in buildings, and offset any emissions that they do produce.¹⁸
35. Guidance should be developed to support progress to the UK's net zero target, including matters such as lifecycle carbon emissions, embodied carbon, sustainable energy, passive cooling including shade and ventilation, and low carbon heating to avoid future retrofitting, damp, and overheating. Use of local materials such as timber and stone, not concrete, will mean low carbon building.
36. Extensions will be an opportunity to ensure that buildings with poorly insulated roofs that are prone to high heat loss and gain are replaced with well-insulated roofs.

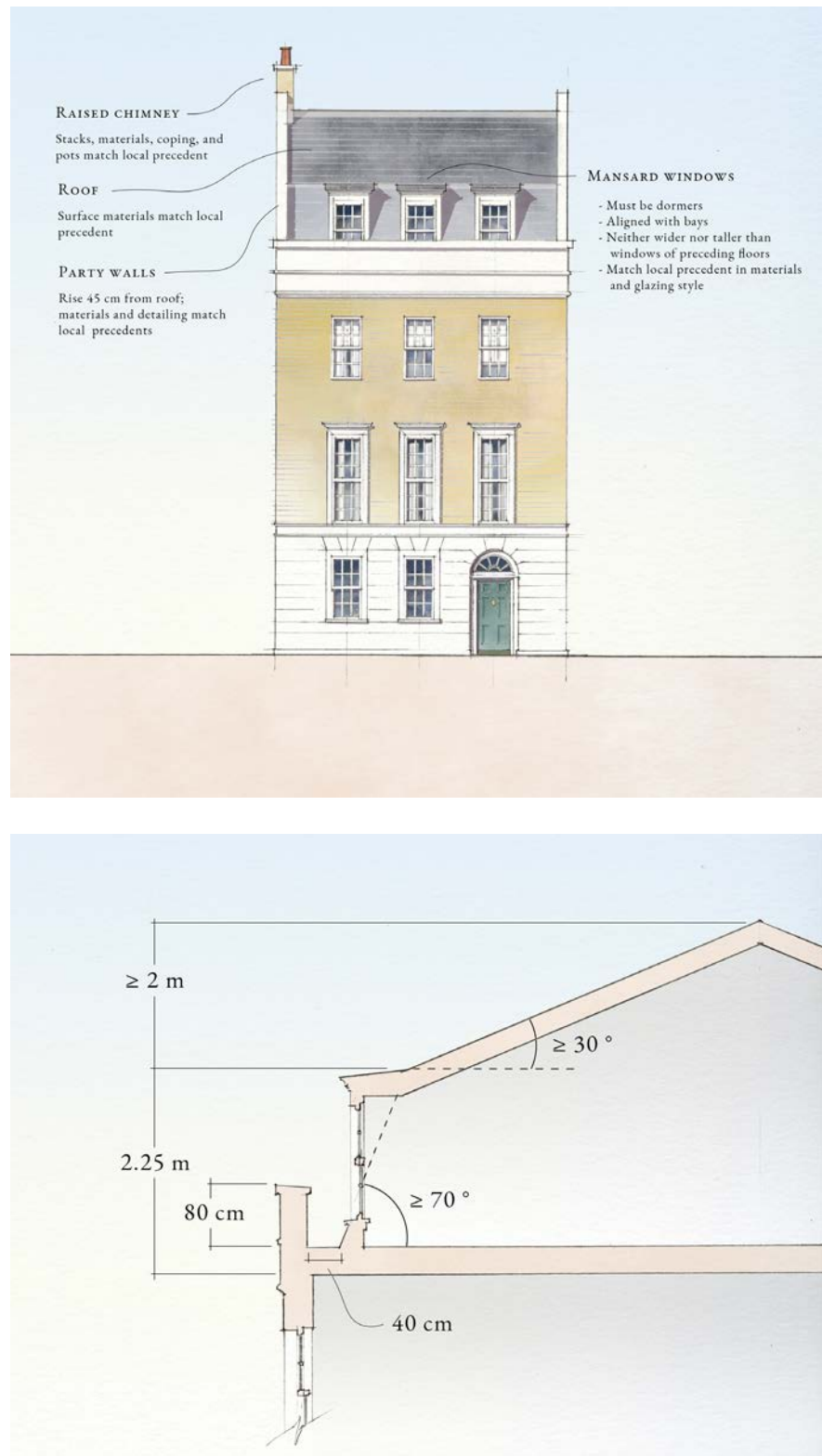
¹⁸ See UKGBG, *Net Zero Carbon Buildings: A Framework Definition* (2019) for discussion of this definition.

Tenant protection

37. To ensure that tenants can wholeheartedly support the reform, the permission should be subject to the requirement that before the work is carried out, in addition to standard protections, any resident tenant must be refunded six months' of rent, or have given consent.

Drawing on expertise

38. The final version of the Guide will need extensive specialist input, as will the eligibility conditions. The relevant statutory consultees, namely the Georgian Group and the Victorian Society, should be generously funded to provide this. Funding for expertise from non-governmental organisations like SAVE Britain's Heritage will also be necessary, as well as specialist practitioners like the Traditional Architects Group and the Institute of Historic Building Conservation.



Elevation and section illustrating guide requirements. By Michael DeMaagd Rodriguez.

Appendix: Compensation

It may be that compensation provisions are appropriate for neighbours on other streets. If so, they should take the following form.¹⁹

1. Neighbours on other streets should be eligible for compensation if the implementation of mansard permissions causes building over a 30 degree angle of elevation from the boundary of their plot. Below this, losses in asset value will be negligible.
2. An owner implementing mansard permissions should be required to make an initial compensation offer on the basis of annexed final proposed designs or the completed building. That offer should correspond to 150% of the loss of market value caused by development using the additional permissions granted by the vote.
3. If recipients believe the offer is too low, they can require that a surveyor nominated by the RICS make a second assessment of that value, acting as a valuer and without giving reasons. Both parties are then legally required to accept the result of the second assessment, whether it is lower or higher than the original one. It is treated as a finding of fact from which no appeal lies.
4. The fee of the RICS surveyor is fixed at £2000 (possibly varied by region), increased annually by the Secretary of State on the advice of the RICS. If the RICS surveyor's assessment is less than or equal than that corresponding to the initial compensation offer, the neighbour bears the cost of the RICS surveyor. If it is greater, the party implementing vote permissions bears the cost.
5. It is likely that those implementing permissions will normally make generous offers to avoid delay, and thus that neighbours will not normally have any incentive to require a second assessment. Their power to do so, however, will ensure that initial compensation offers are normally generous.



About the Author

Dr Samuel Hughes is a Research Fellow at the University of Oxford, where he works on a range of themes around architecture and urbanism. He is a Fellow of Create Streets. Earlier this year he co-authored the report *Strong Suburbs* for Policy Exchange, investigating possibilities for community-led suburban intensification. He was educated at Oxford and Cambridge Universities, and has spent time as a research visitor at the University of Tokyo, the Humboldt University of Berlin, and the University of Notre Dame.

¹⁹ These provisions are modelled on those in my recent report for Policy Exchange with Ben Southwood, *Strong Suburbs*.

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